सत्यमेव जयते

FINANCE COMMISSION IN COVID TIMES

Report For 2021-26



XV FINANCE COMMISSION

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LIST OF ABBREVIATIONS

ACA	additional Central assistance
ACS-ARR gap	average cost of supply and average revenue realized gap
ADCs	Autonomous District Council
ADB	Asian Development Bank
ANMs	auxiliary nurse midwife
ASHA	accredited social health activists
ATBs	auction treasury bills
AT&C	aggregate technical and commercial
ATR	action taken report
AYUSH	ayurveda, yoga and naturopathy, unani, siddha and homeopathy
BE	budget estimate
BPL	below poverty line
BRICS	Brazil, Russia, India, China, South Africa
CAG	Comptroller and Auditor General
CAPFs	Central armed police forces
CBDT	Central Board of Direct Taxes
CBIC	Central Board of Indirect Taxes and Customs
CENVAT	Central value added tax
CGA	Controller General of Accounts
CGST	Central GST
CHC	community health centre
CRF	Calamity Relief Fund
CSS	Centrally sponsored schemes
CPCB	Central Pollution Control Board
CPSEs	central public sector enterprises
DBT	direct benefit transfer
DCRF	Debt Consolidation and Relief Facility
DDMA	District Disaster Management Authority
DDMF	District Disaster Mitigation Fund

DDRF	District Disaster Response Fund
DDW&S	Department of Drinking Water and Sanitation
DNB	Diplomate of National Board
DISCOM	distribution companies
DPSEs	defence public sector enterprises
DRI	Disaster Risk Index
DTH	direct to home
EAP	externally aided projects
EBR	extra budgetary resources
e-POS	electronic point of sale
ETF	exchange traded funds
ECF	Economic Capital Framework
FCI	Food Corporation of India
FRBM Act	Fiscal Responsibility and Budget Management Act
FTAs	free trade agreements
GDP	gross domestic product
GNP	gross national product
GPDP	Gram Panchayat Development Programme
GSDP	gross state domestic product
GST	goods and services tax
G-Sec	Government Security
GVA	gross value added
HLEG	High Level Expert Group
HPC	High Powered Committee
HPCL	Hindustan Petroleum Corporation Ltd
HWC	health and wellness centres
ICDS	Integrated Child Development Scheme
ICMR	Indian Council of Medical Research
ICU	intensive care units
IDA	International Development Association
IEBR	internal and extra budgetary resources
IFMS	Integrated Financial Management System

IGST	Integrated GST
IIFCL	India Infrastructure Finance Company Ltd.
IMF	International Monetary Fund
IMR	infant mortality rate
IRFC	Indian Railway Finance Corporation
ITBs	intermediate treasury bills
KPI	key performance indicators
LPG	liquefied petroleum gas
MCF	Million-Plus Cities Challenge Fund
MCI	Medical Council of India
MoAFW	Ministry of Agriculture and Farmers' Welfare
MoD	Ministry of Defence
MoHUA	Ministry of Housing and Urban Affairs
MoPR	Ministry of Panchayati Raj
MDG	Millennium Development Goal
MFDIS	Modernisation Fund for Defence and Internal Security
MFN	Most Favoured Nation
MHA	Ministry of Home Affairs
MMR	maternal mortality ratio
MoEF&CC	Ministry of Environment & Forest and Climate Change
MOOC	massive open online courses
MoSPI	Ministry of Statistics and Programme Implementation
MoU	memorandum of understanding
MTEF	Medium Term Expenditure Framework
MTFP	Medium Term Fiscal Policy
NABARD	National Bank for Agriculture and Rural Development
NAFCC	National Adaptation Fund for Climate Change
NAMP	National Air Monitoring Programme
NAPCC	National Action Plan on Climate Change
NBE	National Board of Education
NCA	normal Central assistance
NCAP	National Clean Air Programme

NCCD	National Calamity Contingent Duty
NCCF	National Calamity Contingency Fund
NDHM	National Digital Health Mission
NDMA	National Disaster Management Authority
NDMF	National Disaster Mitigation Fund
NDRF	National Disaster Response Fund
NDRMF	National Disaster Risk Management Funds
NEH	North-Eastern and Himalayan
NEP	National Education Policy
NFCR	National Fund for Calamity Relief
NFSA	National Food Security Act
NGO	non government organisation
NHM	National Health Mission
NIDM	National Institute for Disaster Management
NIF	National Investment Fund
NIPFP	National Institute of Public Finance and Policy
NMAM	National Municipal Accounting Manual
NMC	National Medical Council
NPA	non-performing assets
NRDWP	National Rural Drinking Water Programme
NRHM	National Rural Health Mission
NSSF	National Small Savings Fund
NSSO	National Sample Survey Organisation
NSO	National Statistical Office
OECD	Organisation for Economic Cooperation and Development
ONGC	Oil and Natural Gas Corporation
OROP	one rank one pension
PA	provisional accounts
PDNA	Post-Disaster Needs Assessment
PEFA	Public Expenditure And Financial Accountability
PFC	Power Finance Corporation
PFMS	Public Finance Management System

PGI	Performance Grading Index
PHC	primary health centre
PM-ASBY	Prime Minister's Atmanirbhar Swasth Bharath Yojana
PMFBY	Pradhan Mantri Fasal Bima Yojana
PMGSY	Pradhan Mantri Gram Sadak Yojana
PMJAY	Pradhan Mantri Jan Arogya Yojana
PMSSY	Pradhan Mantri Swasthya Suraksha Yojana
PMUY	Pradhan Mantri Ujjwala Yojana
PM-KISAN	Pradhan Mantri Kisan Samman Nidhi
POCSO	Protection of Children from Sexual Offences
POL	petrol, oil, lubricants
PPE	personal protective equipment
PSE	public sector enterprise
RBI	Reserve Bank of India
RE	revised estimates
REC	Rural Electrification Corporation
RNR	revenue neutral rate
RRB	Regional Rural Bank
RTS	Representative Tax System
SAPCC	State Action Plans on Climate Change
SBA	Special Banking Arrangement
SBM-G	Swachh Bharat Mission (Grameen)
SCA	special Central assistance
SDG	Sustainable Development Goal
SDL	State Development Loan
SDMA	State Disaster Management Authority
SDMF	State Disaster Mitigation Fund
SDRF	State Disaster Response Funds
SDRMF	State Disaster Risk Management Funds
SEZ	special economic zone
SFC	State Finance Commission
SFDRR	Sendai Framework for Disaster Risk Reduction

SGST	State GST
SHG	self-help group
SIDM	State Institute for Disaster Management
SPA	special Plan assistance
SRS	Sample Registration System
TARC	Tax Administration Reform Commission
TCS	tax collection at source
TDS	tax deduction at source
TFR	total fertility rate
ToR	terms of reference
TPDS	targeted public distribution system
U5MR	under five mortality rate
UDAY	Ujjwal DISCOM Assurance Yojana
UIP	Universal Immunisation Programme
UNDP	United Nations Development Programme
UPSC	Union Public Service Commission
VAT	value-added tax
WACR	weighted average coupon rate
WEO	World Economic Outlook
WHO	World Health Organization
WRI	World Resource Institute

Chapter 1

Introduction

"The future depends on what we do in the present." – Mahatma Gandhi

The Unusual Context

"Never let the future disturb you. You will meet it, if you have to, with the same weapons of reason which today arm you against the present."

— Marcus Aurelius, Meditations

1.1 The title of this Finance Commission's report is Finance Commission in Covid Times. The title itself brings out the exceptional context in which this report is being submitted.

1.2 The global economy is facing the most unprecedented shock in post-war history. Some compare it with the Global Financial Crisis or the 1918 Spanish flu pandemic, but, in some sense, it is actually like both and more. The shock is different than anything we have previously experienced in generations. It moved fast – our world, after all, has never been more deeply interconnected. And so did we – the speed of scientific understanding of the virus and collaboration in finding a solution has also been unprecedented. Nonetheless, Covid-19 is changing our economies and societies perhaps permanently.

1.3 This crisis has real and psychological dimensions that feed on and amplify each other. The fear of such a virulent virus and the elemental uncertainty about social contact were not prevalent during any previous recession. The Covid-19 shock also has the unique feature that the response – virus control and social distancing measures – itself constrains economic activity in ways that are unprecedented, at least in post-war history. Illness and the fear of illness have created both demand and supply-side shocks. These disruptions are unevenly distributed across the physical and digitally mediated sectors, and have created cascades of longer-run impacts on education, inequalities, economic geography, business structure, employment, social capital and more that we will be undoubtedly managing for years to come. However, we are seeing, in the process, both new opportunities and challenges – distributed economic geography, for example – along with visible fault lines such as security of livelihoods. The logic of biology, with exponential growth rates, little respect for status, hierarchy and socially created attitudes, as well as a duration far beyond any flood, earthquake or other similarly sized shock, stretches our understanding and overrides our traditional methods of disaster response.

1.4 The International Monetary Fund projects global gross domestic product (GDP) to

contract by 4.4 per cent in 2020.[1] This is certainly the deepest recession since at least World War II and, in some ways, the most complex with both short- and long-term effects that differ across economic sectors. Massive policy support has helped sow the seeds for global recovery, but we can certainly expect further surprises. And we are also still in the stabilisation phase – the key risk to global recovery is the continued rise in globally confirmed cases of Covid, with new surges in outbreaks in several parts of the world. Sustained virus control and economic recovery will remain a daunting challenge until a vaccine is approved and becomes widely available. Researchers around the world, including in India, are developing more than 150 vaccines and several of them are in advanced stages for trials of safety and effectiveness. Our nation is a global leader in the scale and speed of vaccine production. While uncertainties are high, it is likely that a vaccine will be developed in the finite future.

1.5 Our choices in how to invest for the growth phase will come next. And, with these, we must not only remedy the damage but think ahead to the future. We do not expect the world to return to the way it was before. The new normal will not be the old normal. The psychological effects of seeing a known, but abstract, risk becoming real will last and manifest itself in how we travel, socialise and invest. The economic and social effects of gaps in education, health, closure of businesses, and dramatic acceleration of the digital, the remote and the automated world will remain with us. But we do expect new opportunities to emerge in the rebound, whether it be through digital leadership and analytical innovation for smarter human development, health-protecting biotechnology and pharmaceutical advances informed by both traditional wisdom and cutting edge, clean technology for thriving in a zero-carbon future or, simply, the inevitable post-Covid shuffling of supply chains and locations. We may not see these changes clearly, and the post-Covid horizon may appear too distant for comfort, but we must prepare now and be ready.

1.6 It certainly makes our task more difficult. In this spirit, and in this time, we seek not only to fulfil the traditional mandate of the Finance Commission to allocate revenues across levels of government, but also to put in place and reinforce the structures, habits and building blocks to increase our adaptability as a nation, a Union of States, and a partner in a more sustainable global trajectory for human development.

1.7 The initial and ongoing response to the virus focused, and must continue to emphasise, on containment and control. Like several countries, the virus situation has continued to dramatically escalate in India as well. The Government of India took strong measures to combat the spread of the virus very swiftly, and imposed among the most stringent lockdowns across the world. Lockdown management was decentralised significantly through classified containment zones, and strict enforcement measures controlled the spread of the virus in these zones. Not surprisingly, amid one of the world's toughest lockdowns and rising public anxiety about the virus, India saw a sharp deterioration in economic activity. The National Statistical Office reported a staggering 23.9 per cent year-on-year drop in real output for the April-June quarter of 2020, with probably a sharper decline in the informal sector. It must be pointed out that

[1] *World Economic Outlook, October 2020*

considering the severity of our lockdown, in many ways, this compares somewhat favourably to many other countries which did not have such a severe lockdown, but equally experienced a sharp contraction during this period such as the United Kingdom, the United States and Brazil.

1.8 Looking back, this crisis came just as the Indian economy was beginning to stabilise after a prolonged slowdown – attributable to global factors and credit stresses in the domestic financial sector, but also to a painful transition from challenges in the implementation of a succession of major policy changes, including the introduction of the 2017 national goods and services tax (GST). Indeed, the possible economic recovery gave way to the Covid shock.

1.9 However, we must not dwell only on the present. We must look ahead. From that perspective, it is clear that we must invest now in building greater agility – greater ability to move and think quickly and easily, in a world that is characterised by increasingly rapid change. It is against this truly unprecedented global context, and its domestic macroeconomic and fiscal backdrop, and with these goals in mind, that the Fifteenth Finance Commission of India submits its report to the President of India.

1.10 In a departure from past practices, it does so in four volumes. Volume I and II, as in the past, contain the main report and the accompanying annexes. Volume III is devoted to the Union Government and examines key departments in greater depth, with the medium-term challenges and the roadmap ahead. Volume IV is entirely devoted to the States. We have analysed the finances of each State in great depth and have come up with State-specific considerations to address the key challenges that individual States face.

Constitutional Mandate and Consultative Approach

The Commission's Mandate

1.11 The Fifteenth Finance Commission (FC-XV) was constituted by the President under Article 280 of the Constitution on 27 November 2017 to make recommendations for the period 2020-25. Shri N.K. Singh, former Member of Parliament and former Secretary to the Government of India was appointed as the Chairman of the Commission. Shri Shaktikanta Das, former Secretary to the Government of India and Prof. Anoop Singh, Adjunct Professor, Georgetown University were appointed full time Members. Dr. Ashok Lahiri, Chairman (non-executive, part time) Bandhan Bank and Dr. Ramesh Chand, Member, NITI Aayog were appointed as a part-time Members. Shri Arvind Mehta was appointed as Secretary to the Commission. Shri Ajay Narayan Jha, former Finance Secretary, Government of India, was later appointed as Member with effect from 1 March 2019 in place of Shri Shaktikanta Das. Over the course of the Commission's tenure, this and other changes in membership were subsequently notified by President's Order (Annex 1.1 to 1.5).

1.12 The Commission's terms of reference (ToR) are noted in Annex 1.1, but it is worth mentioning several points that constitute wider terms of reference compared to previous

Commissions. The Commission was tasked not only with determining the distribution between Union and States of the net proceeds of taxes, but also reviewing and commenting on the design of fiscal principles for various grants that are typically provided alongside revenue shares. We were, in particular, asked to consider performance-based incentives to support and motivate the efforts of State and/or local governments – the "appropriate level of government"– in a variety of policy areas.

1.13 Paragraphs 4 (ii), 5, and 7 of the ToR, on the terms of grants to be considered provided us with an opportunity to shift the incentive structure underlying fiscal transfers in order to reward – and motivate – self-reliance, innovation and the full exercise of capabilities across all levels of government for credible, collaborative federalism. It is worth noting that several of the items mentioned in Paragraph 7 (i-ix) are among the most complex challenges that India faces, like other nations facing accelerating environmental, social and technological change. These must be addressed.

1.14 After the distribution of the net proceeds of taxes, the second core function entrusted to the Finance Commission is to determine the principles which should govern grants-in-aid, assess the needs of States in relation to such norms developed and applied to both revenue effort and desirable levels of expenditure and thereafter recommend grants in specific sums. Thus, tax devolution and grants-in-aid are the two constitutional instruments in the hands of the Commission for transfer of funds from Union to States. The sharing of revenue has, since the inception of the Finance Commission, provided States with sufficient stability of unconditional revenue to pursue their diverse development objectives. Within the second, we welcome the opportunity to shift to a new paradigm of performance – and innovation – in achieving these prerequisites for advancing India's development.

1.15 We note that though performance incentives may not have been explicitly mentioned in the ToRs of past Commissions, many of them have used performance as a criterion for both devolution and in allocation of some of the grants-in-aid. We have deliberated on the aforementioned ToRs in detail, learnt from analysis of their experience and tried to address them in Chapter 10.

1.16 One lesson from the past is that publicly available measurement and data, which are essential foundations for performance incentives, remain critical. We must see and recognise performance to measure it in transparent ways. Continued investment in accurate, credible, authoritative and publicly available data on the state of the outcomes we seek will expand our nation's ability to discuss and use such mechanisms.

1.17 A number of additional notifications were issued. The Commission was originally asked to make its report covering a period of five years commencing from 1 April 2020. However, based on notification No.S.O.2691(E) dated 29 July 2019 (Annex 1.6) the date for submission of the report was extended by one month, that is 30 November 2019, and also a paragraph was inserted in the original ToR after paragraph 9. "9A. The Commission shall also examine whether a

separate mechanism for funding of defence and internal security ought to be set up, and if so, how such a mechanism could be operationalised."

1.18 Later, the Commission, vide order No.S.O.4308(E) dated 29 November 2019 (Annex 1.7), was intimated about the following changes:

(i) The Commission shall submit two reports, namely a first report for financial year 2020-21 and a final report for an extended period of 2021-22 to 2025-26."

(ii) Date of submission for first report is 30 November 2019.

(iii) Date of submission of final report by 30 October 2020 covering a period of five years commencing from 1 April 2021.

1.19 The Commission submitted its first report covering the financial year 2020-21 to the President on 5 December 2019. The Report of the Commission covering the financial year 2020-21, commencing from April 1, 2020, together with an Explanatory Memorandum on the action taken on the recommendations of the Commission, was then laid on the Table of the House, in pursuance of Article 281 of the Constitution (Annex 1.40).

1.20 During its full tenure, the Commission held 151 meetings on dates indicated in Annex 1.23.

The Consultation Process

1.21 The Commission, while formulating its work plan, undertook extensive consultations with multiple stakeholders to address the ToR. In seeking international best practice, extensive interactions were held with multilateral institutions (Annex 1.27) including the International Monetary Fund, World Bank, Asian Development Bank, the Organisation for Economic Cooperation and Development (OECD) and UNDP. List of presentations made and study submitted by them, which are also available on our website, is available at Annex 1.22A.

1.22 In keeping with earlier practice, the Commission had extensive consultations with State Governments, Ministries and Departments of the Union Government and other stakeholders and opinion makers. In order to obtain detailed inputs on the ToR, six committees were also constituted under the directions of the Commission.

1.23 We constituted an Advisory Council to assist the Commission in enhancing its understanding of the complexities involved, on broader issues as well as those specified in the ToR, and enabling it to make appropriate recommendations. We also constituted some other committees of experts in specific subjects like agriculture, health, defence. The details of the committees constituted by us and a list of their meetings are outlined in Annex 1.15 to 1.20.

1.24 Also, the practice of structured interactions of the Commission with economists and economic administrators was widened to include key policy makers as well as experts from a range of other social sciences. Consultations with experts continued throughout our tenure

(Annex 1.27). Select experts and scholars were invited to share their ideas and knowledge and provide suggestions on the ToR, particularly those which were introduced for the first time. These interactions provided insights into the latest research and perspectives on various critical subjects having a bearing on public finances. The Commission invited suggestions and comments on its ToR from the general public (Annex 1.13 and 1.14). The Commission also had the benefit of receiving views on various issues relating to the ToR from a large number of eminent personalities from various walks of life, who met the Chairman, Members and Secretary of the Commission. The list of the Chairman's meetings with eminent personalities/organisations is placed in Annex 1.24 and the list of the Commission's meeting with individuals/organisations is in Annex 1.25B. The list of the Commission's meeting held with Ministries/Department of the Union Government is in Annex 1.26.

1.25 Before undertaking visits to the States, meetings were held with the respective Accountants General of each of the States, including erstwhile State of Jammu and Kashmir (Annex1.28). The Accountants General provided us with objective assessments of the strengths and weaknesses of the public finances of their respective States, in particular their fiscal and financial health, efficiency in resource mobilisation and expenditure. They also provided insights into the performance of various sectors, financial health of public sector enterprises and, importantly, of the local governments in these States. This was followed by a detailed presentation by the Commission's Secretariat on the fiscal issues of the State concerned. These, as mentioned earlier, are fully reflected in Volume IV of this Commission's report.

1.26 We place on record our deep appreciation for the support and inputs provided by the Comptroller and Auditor General (CAG) in facilitating our interaction with the Accountants General and for the detailed views on the ToR of the Commission. Detailed discussions on various issues were also held with the CAG over multiple meetings.

1.27 The Commission visited the headquarters of the Reserve Bank of India (RBI) in Mumbai on 8 May 2019 to discuss issues related to macroeconomics, financial stability and the cost of borrowing of the Union and States. The other issues pertaining to market-driven borrowing cost, debt trajectories of States and recapitalisation of banks were also discussed during the meeting. We are thankful to the Governor, RBI, for all the cooperation and support extended.

Consultations with the States

1.28 Consultations with the State Governments and other stakeholders in the States have been an essential and enduring feature for all previous Finance Commissions. We covered all twenty-eight States and held at least four meetings in each of them. The meeting with the Chief Minister, Ministers and officers of the State Government was an important feature of the State visits. Separate meetings were held with elected representatives of panchayats and municipalities, representatives of research institutes, trade and industry and representatives of recognised national and state political parties in the States. Anticipating the break in the schedule of State

visits that was likely to arise due to elections for the Lok Sabha and some State legislative assemblies, we planned, coordinated and completed visits to twenty-seven States before October 2019. Our visit to the twenty-eighth State was concluded in January 2020.

1.29 Due to meticulous planning we had adequate time to apply ourselves to addressing the issues raised by the States and undertake the consolidated assessment of their resources and needs and still meet the deadline for submission of both our reports to the President. The itineraries of the State visits are placed in Annex 1.30. A list of meeting with nodal officers of the State is placed in Annex 1.29. We extend our deep appreciation and gratitude to the State Governments for making extensive arrangements to ensure fruitful discussions and for their warm hospitality during our visits.

Consultation with the Union Government

1.30 The meetings with the Ministries and Departments of the Union Government were generally held between January 2018 and July 2020 (Annex 1.26). As the ToRs given to us is unique in many ways, and the Commission was tasked with handling diverse issues, several rounds of ministerial-level discussions were held with more than thirty Ministries/ Departments. We tried to leave no stone unturned in fully understanding and deliberating upon the many issues involved. We therefore decided to include many of the results of our work with key Ministries/Departments in a separate volume. Thus, Volume III of the Report covers the essence of our work on the key Ministries/ Departments which may be insightful for the readers.

1.31 The Commission made a courtesy call on the Prime Minister on 6 March 2018 and the Union Finance Minister on 4 December, 2017. We again met Union Finance Minister on 13 January 2018 for a detailed discussion. This provided us with an opportunity to exchange views on several issues before us (Annex 1.25A).

Studies

1.32 The Commission undertook a robust analytical approach to the issues and subjects and had assigned studies to research organisations and institutions, both national and regional. In order to obtain an overview of State finances from local experts, we commissioned studies for every State, generally through universities and institutions located in those States. Thus, we could obtain studies on the economy of each State. The reviews focused on the revenue capacities of the States, along with measures taken for improving their tax ratios, analysis of the States' own non-tax revenues, review of their expenditure patterns and analysis of their deficits, manner of financing and debt. In particular, these studies covered the performance of the States on several parameters, including fiscal consolidation efforts, potential for additional resource mobilisation, performance of public sector enterprises, and performance of the power sector, among the issues covered in the ToR. Further, these studies gave us a better understanding of the unique

characteristics of individual States. A list of State studies is at Annex 1.21.

1.33 Studies commissioned on various issues related to fiscal federalism and inter-governmental transfers were examined by the Economic Adviser's team under the supervision of the Commission (Annex 1.22). All studies are available on our website for public access.

The Debt and Fiscal Paradigm

1.34 Based on extensive internal and external consultations, cross country experience, and several rounds of discussions and deliberations, the Commission believes that the ratio of public debt to GDP should continue to serve as the medium-term anchor for fiscal policy in India, with fiscal deficit as the operational target, as recommended by the Fiscal Responsibility and Budget Management (FRBM) Review Committee in 2017, and accepted by the Parliament in 2018.

1.35 A credible and transparently measured fiscal policy framework is one that is rule-based, with clearly delineated affordances to ensure resilience in the face of change. We must be firm, but flexibly so, to avoid fragility.

1.36 Central to a credible framework is the concept of an anchor, which ties down the final goal of policy and helps the expectations of economic agents adjust accordingly. By acting as a constraint on policy discretion, an anchor dis-incentivises time inconsistencies, including pressures from diverse special interest groups. Central to resilience, however, is the ability to adjust that anchor in specific ways in exceptional circumstances. As we have often seen, many a ship has been set entirely adrift and dashed on the rocks by storms that snapped their anchor ropes; thus, bounded flexibility, a bit more play than required in normal times, is needed and is an important buffer against this outcome.

1.37 Fiscal uncertainty is now at an all-time high amid the pandemic. Nominal GDP and government revenues are already contracting in 2020-21, and placing distinct upward pressure on Union and State fiscal and debt positions. This upward pressure is unavoidable, at a time when growth destruction must be mitigated and income support extended. This is reason to consider flexibility. These are extraordinary times.

1.38 Yet, we believe that in the medium term, fiscal policies must be embedded in caution rather than exuberance, in restraint rather than profligacy. Therefore, while positive interest-growth differentials and adverse debt dynamics would be inevitable over the next two-three years, we recommend a declining trajectory for total public debt in ratio of GDP towards the later part of the award period. Importantly, what would also reassure markets is to build such a credible fiscal plan once the recovery firmly takes hold, which would entail return to a path of debt and fiscal consolidation over the medium-term.

1.39 It is also essential to ensure that the needed additional expenditure at this time is invested

well in strengthening the fundamentals for an economy and society to rebuild in any of the post-Covid scenarios. We must also ensure that the recovery efforts do not just build back the past, but seize new opportunities; these include the likely relocation of global production to India and the potential for greater familiarity with remote work to drive a more distributed economic geography, rather than continued growth of the largest cities alone. For this reason, we have prioritised investments in that most fundamental form of capital: human capital, through health and education, especially to the children who form the most vulnerable sub-set of the population, as well as additional attention to climate change and environmental risks, such as air pollution. We have also, as we discuss further below, adopted a new stance of rewarding outcomes, while maintaining the level of fiscal support for States and local governments, and to innovate in achieving them. Throughout the report, we have emphasised outcomes, with States free to choose inputs suited to local context. This is an important re-orientation that opens up lots of possibilities for innovation but also creates new demands on the systems for measuring and attributing outcomes.

1.40 Our forecast assumes a gradual return to a trend real GDP growth of around 7 per cent; we do assume scarring effects for workers and businesses to look less severe than feared. At the same time, the Commission was cognisant of the need to account for the uncertainties and risks in both directions following the unprecedented global shock. Therefore, the Commission preferred to work with three scenarios, and accordingly a range for both debt and headline deficit, instead of fixed numbers. The three scenarios are given in Table 1.1.

Table 1.1: Range of Union Government's Fiscal Deficit (% of GDP)

	2021-22	2022-23	2023-24	2024-25	2025-26
In case economic recovery is slower than assessed	6.5	6.0	5.5	5.0	4.5
If our macro-economic assessment holds	6.0	5.5	5.0	4.5	4.0
In case economic recovery is faster than assessed	6.0	5.5	5.0	4.0	3.5

1.41 The Commission is fully aware that in the context of parliamentary democracies, providing a range for, say, fiscal deficit would get operationalised at the upper end of the range; yet, there was consensus to provide flexibility in the proposed framework, to allow the Union and State Governments (Table 1.2) to navigate through the crisis, and its consequences for balance sheets of households, businesses and governments. The Commission recommends three windows to allow greater flexibility to the States: (a) additional unconditional borrowing space in the first two years of the award period to compensate for the loss of tax revenues; (b) an additional borrowing of 0.5 percentage of GSDP to be allowed to the States in case they meet the criteria for

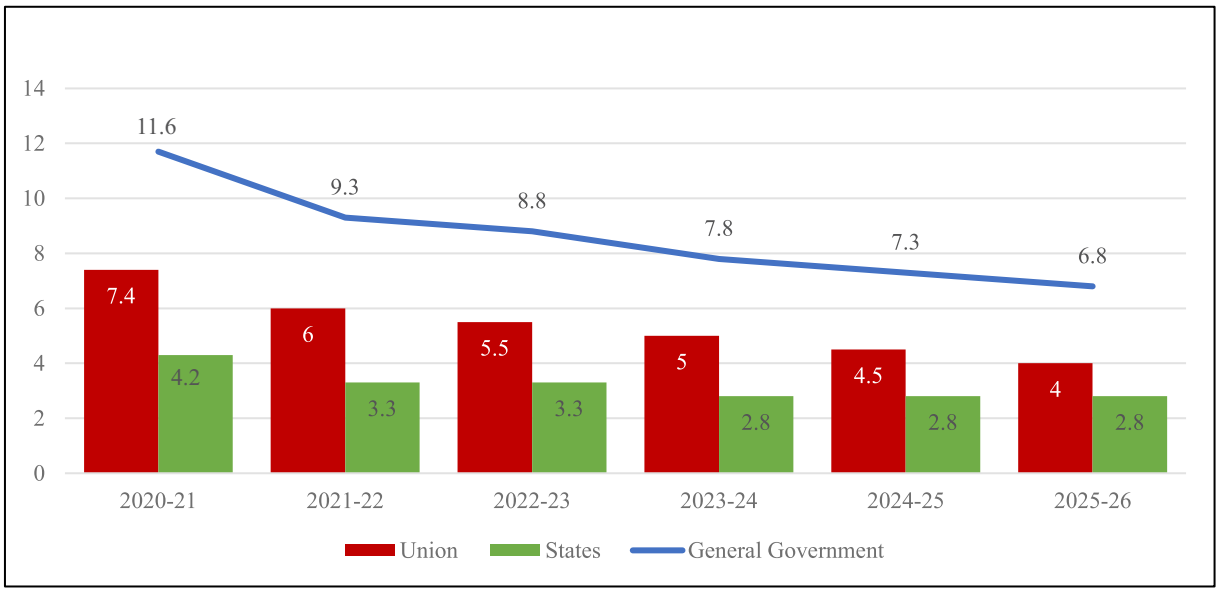
power sector reforms; (c) building on the FC-XIV recommendation, we are also allowing the States to utilise any unutilised borrowing space in the subsequent years within our award period.

Table 1.2: Range of all-State Fiscal Deficit under the Recommended Space for Borrowing

(% of GSDP)

	2021-22	2022-23	2023-24	2024-25	2025-26
Upper limit (if all States use the full borrowing space available)	4.5	4.0	3.5	3.5	3.0
Lower limit (States, on an average, reach the current FRBM limit)	3.0	3.0	3.0	3.0	3.0

Figure 1.1 Fiscal Deficit as % of GDP



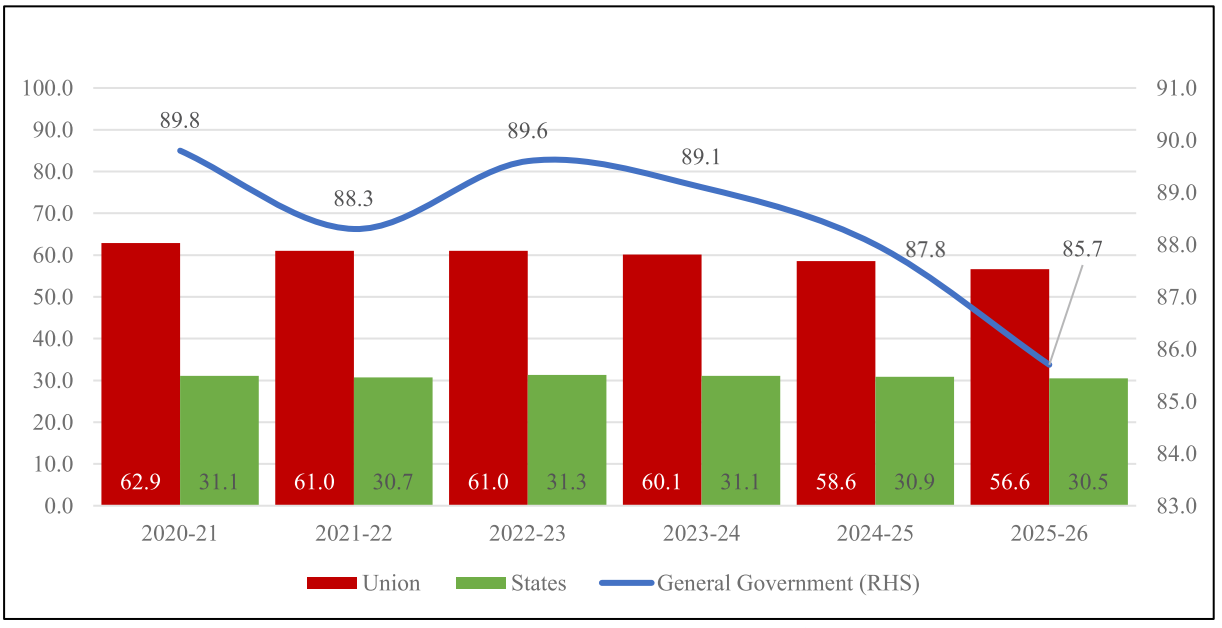
1.42 We have provided higher fiscal room to both the Union and the States to deal with the current pandemic and economic recovery in later years. Accordingly, general government fiscal deficit which is expected to be around 11.6 per cent of GDP in 2020-21 has been given a glide path reaching 6.8 per cent of GDP in the terminal year (Figure 1.1).

1.43 To sum up this part, the indicative consolidated debt trajectory of the general government which allows room for manoeuvre can be seen in Figure 1.2.

Towards Co-operative Federalism: Balancing Needs and Performance

1.44 Given India's vibrant federal structure, increased devolution of resources from the Union to the States under the previous Finance Commissions, and the fact that total State expenditures as a percent of GDP are greater than that of the Union, State finances have become a crucial lynchpin of India's fiscal framework. Overall, as stipulated by the FRBM Act, 2003 (as amended in 2018), we believe that the States must partner with the Union Government in pursuit of medium-term consolidation of debt and firmly place India's sovereign debt to GDP ratio on a sustainable footing in the medium term. They must partner with the Union Government in developing new ways to support their residents, the economy as a whole and India's global engagements. Hence, the debt and fiscal trajectory of the general government in Figure 1.2 envisages this partnership of both the Union and the States to achieve the key features of macroeconomic stabilisation by way of sustainable levels of debt and fiscal deficit.

Figure 1.2 Debt Trajectory during 2020-26 (% of GDP)



For general government debt, inter-governmental transactions have been adjusted. These include the stock of Union Government loans to the States, the stock of NSSF securities and Treasury Bills held by the State Governments.

1.45 When India gained independence, active state intervention was envisaged to reduce disparities across regions. Transfer of resources from the Union to States was the main mechanism to achieve these goals. In order to maintain predictability and stability of resources, especially during the pandemic, we recommend maintaining the vertical devolution at 41 per cent – the same as in our report for 2020-21. Our vertical devolution is in line with the recommended share in devolution of the FC-XIV. We have only made the required adjustment of about 1 per cent due to the changed status of the erstwhile State of Jammu and Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir.

1.46 We believe, as outlined in the concerned chapter, that "stability and predictability of resources is the most essential component of good long-term budgeting and fiscal marksmanship for both the Union and the States. Certainly, this requires the Union and the States raising their resource availability through a number of sources, especially through the higher tax-GDP ratio, which is low relative to comparable countries. It is, therefore, our considered view that there should be broad continuity in the availability of resources through the divisible pool." We also believe that "this level of vertical transfers will allow appropriate fiscal space for the Union as well to meet its demands as well as maintain an adequate level of unconditional resources to the States."

Horizontal Sharing

1.47 The level of development of a state is a function of complex factors, which include historical, cultural and sociological characteristics. Additional financial resources are certainly needed to help a state develop, but the ability to effectively use those resources is undoubtedly more crucial, and is a distinctive feature visible across states. Poor administration and weak institutions in a state, for example, clearly under optimise allocated resources. This Commission seeks to harmonise the principles of expenditure needs, equity and performance in determining the criteria for horizontal sharing by broadly assigning appropriate weightages. The need-based principles would clearly include the criteria of population, area, forest and ecology. The equity-based principles envisage income distance which, as in the past, continues to be assigned high weightage. In respect of the performance criteria, we have assigned weightages to demographic performance as well as tax and fiscal efforts. The logic of this broad classification has been explained in the concerned chapter.

1.48 We have, therefore, proposed a scheme of allocation of resources across States, that takes into account both their development needs as well as past performance, where the latter aims to incentivise better performance, and to allocate resources where they can be used most effectively. Specifically, our newly introduced parameter of 'demographic performance' is designed to be an umbrella performance reward in areas relating to population control, as well as better outcomes in the sectors of education and health – including better nutrition outcomes. A significant body of health literature suggests that lower birth rates are related to reductions in the infant mortality rates too.

1.49 Taking into account a number of factors, and extensive consultations, the Commission recommends giving weight of 12.5 per cent to the criterion of 'demographic performance'.

Table 1.3: Horizontal Devolution Criteria and Weights

Criteria	Weight (%)
Population	15.0
Area	15.0
Forest & ecology	10.0
Income distance	45.0
Tax & fiscal efforts	2.5
Demographic performance	12.5
	100

Grants-in-aid

Revenue deficit grant

1.50 Several discussions within the Commission, and with outside experts, including policy makers, suggested "revenue deficit" (defined as the difference between revenue or current expenditure and revenue receipts, that includes tax and non-tax) to be an important goal post in the day-to-day policy making process. The distinction between revenue and capital accounts is, in fact, rooted in the history of budget making process, and in the Constitution of India. Revenue deficit grants emanate from the requirement to meet the fiscal needs of the States on their revenue accounts that remain to be met, even after considering their own tax and non-tax resources and tax devolution to them. There can be no formula-based horizontal devolution which can meet the needs of each of the twenty-eight States whose cost disabilities and fiscal capabilities are so vastly different from each other. Therefore, we recommend an allocation of 1.92 per cent of the gross revenue receipts of the Union as revenue deficit grants to specific States. The revenue deficit grants aggregate to Rs 2,94,514 crore, with gradual tapering off during the award period.

1.51 The composition of our award reflects the intention of laying relatively significant emphasis on grants in aid and, within that, on performance-linked grants. Besides revenue deficit grants, we have recommended grants and incentives for various sectors. These grants revolve around four main themes. The first is social sector, where we have focused on health and education critical to a large and particularly vulnerable subset of the population. Both these sectors face unprecedented challenges with the pandemic and are both public goods with huge multiplier benefits for human capital and growth. Second is the rural economy, where we have focused on agriculture and the maintenance of rural roads. The rural economy plays a significant role in the country as it encompasses two-thirds of the country's population, 70 per cent of the total workforce and 46 per cent of national income. Third, governance and administrative reforms under which we have recommended grants for judiciary, statistics and aspirational districts and blocks. Fourth, we have developed a performance-based incentive system for the power sector, which is not linked to grants but provides an important, additional borrowing

window for States. Undoubtedly, the economic and social returns from having a well-functioning, financially stable and environmentally sustainable power distribution sector are more important than ever before.

1.52 To put this in historical perspective, we note that the type and size of grants-in-aid have varied over a period of time. There have been five different types of grants: (a) revenue deficit grants, (b) grants for local governments, (c) grants for disaster management, (d) sector-specific grants and (e) State-specific grants. Except for the revenue deficit grants, these were often conditional and performance based. The size of the grants varied from 26.1 per cent of total transfers under the FC-VI to 7.7 per cent of total transfers under the FC-VII. While the FC-XIII recommended grants amounting to 15.15 per cent of total transfers, the FC-XIV recommended 11.97 per cent of total transfers as grants-in-aid.

1.53 In practice, except for the revenue deficit grants, the actual flow of funds remained generally less than recommended amounts by the end of the award period, which indicates that the revenue deficit grants were predictable and assured while others were not. Some conditional grants for local governments faced challenges of conditionalities and timely release. Apart from the original conditions prescribed by Commissions, additional conditions were prescribed by the Union, and even by some States, thereby diluting the original intent of the recommendations of past Commissions. We have tried to avoid these complications by keeping our recommendations simple, yet focused on the most fundamental of capacities: timely audited accounts and effective use of property taxes to boost self-reliance and long-term sustainability.

1.54 During our deliberations, we observed that grants-in-aid can make corrections for cost disabilities and other redistributive requirements which are possible to address only to a limited extent in any devolution formula. Besides, grants-in-aid are pre-determined in absolute terms and remain fixed. They are better targeted and may be used to equalise the standards of basic social services. We have also tried to link many of our grants with performance-based criteria that may catalyse public services of primary importance in the national interest. Some of these public services sometimes receive low priority from States in spite of their wider benefits for the economy as a whole. These grants have also helped us to address our wide-ranging items in our ToR. We have accordingly recommended several categories of grants-in-aid amounting in aggregate to Rs 10,33,062 crore.

Collaboration

Social Sector

1.55 The outbreak of the Covid-19 pandemic has brought to fore the multiple challenges being faced by the health sector, including low investment, inter-regional disparities especially in undernourishment and hunger, supply side problems of doctors, paramedics, hospitals, and inadequate numbers of primary healthcare centres like sub centres, primary health centres and

community health centres. Hence, the second most important grant after revenue deficit grants recommended by us relates to the health sector, aggregating more than Rs. 1 lakh crore spread over three components. The details of health grants amounting to Rs. 31,755 crore are discussed in Chapter 9. Health grants to the local governments, amounting to Rs. 70,051 crore, which are discussed in Chapter 7 is a part of the overall thrust towards cooperative federalism by involving and motivating all levels of government. In this spirit, we have noted that several proposals sent by State Governments in respect of State-specific grants also assign high weightages to improving the health infrastructure. We have also recommended State-specific grants for health amounting to Rs. 4,800 crore. These grants will also help to build resilience against future pandemics by building critical care hospitals and public health labs. In this, we have made clear the important role that the third tier of government must play in primary health care. We have also tried to address the gap in shortfalls of specialists and paramedics through these grants.

1.56 For addressing the pandemic situation, and building further resilience to shocks, the FC-XV, for the first time, took a deep dive into the health sector. Overall, we envisage enhanced public outlays for the health sector, and also propose the creation of an All India Health Service. Recognising the urgency to address the ongoing pandemic, we have also sought to frontload the financial resources assigned for the health sector. The flexible and somewhat enlarged fiscal space both for the Union and the States in the initial years of our award, hopefully, will also enable them to incur additional expenditure on the health sector.

1.57 The pandemic has also created new challenges in the field of education for our young learners. State Governments across the country shut down schools and colleges as an immediate measure to slow the spread of the pandemic. The closure of schools and universities will not only have a short-term impact on the continuity of learning for students but will also have far-reaching economic and social consequences. Hence, this has prompted us to provide a grant for technology related solutions especially for higher education to promote learning through direct to home channels and online modules. There is also a dearth of professional courses in regional languages, thus creating hindrances for many coming from rural areas. Thus, we have also recommended grants for this purpose. Another prime area of concern in the field of education is the poor learning outcomes of school children which exist even after 100 per cent gross enrolment at primary levels. Also, there are issues relating to equity and access outcomes. We have therefore, recommended incentive grants for States to improve these outcomes of school education using the Performance Grading Index (PGI) of the Ministry of Education. Undoubtedly, creativity and innovation can only come when curriculum can be imparted in their regional language (matribhasha) and, therefore, we have sought to embed this in our proposals on higher education.

Rural Economy

1.58 Under our second theme, we have recommended grants pertaining to incentivising agriculture reforms and enhancing agri-exports. This grant targets some of the most daunting

challenges of the agricultural sector where cooperation is needed with the States. This includes land reforms, sustainable and efficient use of water in agriculture, export promotion and providing a push to more remunerative crops like oilseeds, pulses and wood products. We have also recommended grants for the Pradhan Mantri Gram Sadak Yojana (PMGSY) roads, considering their inadequate maintenance after the end of the post-construction five-year maintenance period. At the same time, studies have proved several advantages of last mile connectivity like improved prices for agricultural products and better access and learning outcomes of school education. Thus, improvement in the condition of PMGSY roads complements the other grants recommended by us by providing access to various important social and economic services.

Governance and Administrative Reforms

1.59 Under the third theme, we have focused on administrative and governance reforms that often do not get due priority from State Governments. We have recommended grants to strengthen the judiciary that is the foundation of any peaceful and progressive nation. These grants will expedite the judicial process by operationalising fast track courts for speedier justice delivery in cases of heinous crimes, civil cases of marginalised people, five-year-old property cases, and economic offences, as well as special fast track courts for cases under the Protection of Children from Sexual Offences Act, 2012.

1.60 Most emerging and developing nations are embracing decentralisation as the form of governance to achieve higher economic efficiency, better accountability and higher satisfaction of local population. As local officials have better knowledge of local conditions and are more accessible, closer and accountable to their constituents, they have the means and the incentives to be more responsive.

1.61 In order to further empower local governments, the Commission recommends substantially enhanced resources available to them, compared to any earlier periods. In line with the overall spirit of this report to create a balance between needs and performance, the allocation of funds to local governments is generally linked to certain performance criteria. For instance, online submission of annual accounts for the previous year, and audited accounts for the year before, is an entry level criterion for grants (except health grants) to all local governments; similarly, the notification of minimum floor rates for property taxes is an additional condition for grants to urban local bodies. Further, we propose to earmark significant portion of resources to local governments with the goal of improving primary health care services, water and sanitation, rainwater harvesting, air quality and, importantly, a "challenge fund" for developing the fifty cities with population of over a million (Million-Plus cities). We also lay emphasis on disposal of waste - also critical for better air quality in more efficient ways, extracting value addition as well as seeking partnership from private entities.

1.62 Also, considering the importance of data and statistics in today's world, we have

recommended grants for improvements in statistics. The role of quality statistics and data is very crucial for any policy making, its implementation and subsequent monitoring. Besides these, we also believe that incentivising, in a transparent manner, administrative units like districts or blocks, which are below the national average in critical parameters, on the basis of performance can be an effective tool of improvement in governance. Hence, we have recommended grants for aspirational districts and blocks that will be entirely performance-based.

Power Sector

1.63 Under our fourth theme, we have focused on power sector reforms by providing additional borrowing limits for States based upon a performance matrix targeted at improving the functioning of distribution companies (DISCOMs). The DISCOMs have remained a persistent strain on State finances and the overall performance of the power sector. In most States, the improvements in the distribution segment are incomplete and this segment has been the weakest link in the entire value chain. The DISCOMs have long faced questions of financial sustainability on account of below-cost tariffs to different consumer groups, supply of un-metered, free electricity to agriculture, States not providing the promised subsidies to the utilities, high aggregate technical and commercial (AT&C) losses, and poor regulatory governance. We expect that this access to additional financing will incentivise States to undertake policies towards efficient working of the power DISCOMs. A viable and well-functioning distribution sector is a pre-requisite for attracting investment to expand capacity and provide reliable, sufficient power to avoid bottlenecks for growth. It is a pre-requisite for being able to attract the partners required to move quickly to newer, cleaner, more cost-effective forms of energy.

National Considerations

1.64 Given the geopolitical uncertainties, we also addressed the ToR on defence and internal security. There can be no two opinions that defence is a national priority of highest importance for the integrity and sovereignty of the country. It is the inescapable obligation of every citizen and stakeholder to contribute towards strengthening the bulwark of security, both internal and external. Moreover, law and order, national security and peace are pre-requisites for economic prosperity and sustainable growth. In order to address the specific ToR, we propose to create a non-lapsable pool for the defence and internal security sector under the Public Accounts of India with standard reporting and audit requirements, with the goal to ensure that committed capital expenditure of the sector can be met in a predictable way. The non-lapsable fund would undoubtedly give greater predictability for enabling critical defence capital expenditure.

1.65 Lastly, we have recommended State-specific grants to help States meet special burdens or obligations of national concern. These span across six broad areas: (a) social needs, (b) administrative governance and infrastructure, (c) conservation and sustainable use of water,

drainage and sanitation, (d) preserving culture and historical monuments, (e) high cost capital infrastructure and (f) tourism.

Reforms of Fiscal Architecture

1.66 In terms of medium-term fiscal reforms, we analysed in depth the structural "tax gap" for India. In line with literature on the topic, we estimate a large gap in India's tax collections of more than 5 per cent of GDP, compared to its potential. We recommend a series of urgent operational and policy changes to bridge this gap which include, among other steps, correcting the inverted duty structure in GST, addressing defects in the IT system for GST and facilitating complete invoice matching and reviewing exemptions, thresholds and concessions in income tax.

1.67 The thinking on fiscal architecture has changed globally. Most countries have multiple fiscal rules and, in many cases, with provisions to allow fiscal space for exogenous shocks. These are complemented with independent fiscal councils, escape clauses and automatic correction mechanisms to impart transparency, flexibility and credibility to the framework. Building on the recommendations of the FRBM Review Committee, the Commission highlights the fact that India's twenty-first century fiscal architecture would need to have three pillars that reinforce each other: fiscal rules across the levels of government which set the institutional and budgetary framework for fiscal sustainability; an overarching public financial management system which provides complete, consistent, reliable and timely reporting of the fiscal indicators that are part of the first pillar; and fiscal institutions - in particular, an independent assessment mechanism so as to provide assurance and advice on the working of the other two pillars.

1.68 We recognise that the FRBM Act needs a major restructuring, given the current challenges both in relation to debt and fiscal deficit. Given continuing uncertainties, the architecture of the FRBM Act needs to be fundamentally restructured keeping in mind contemporary realities, the uncertainties and challenges and based on evolving international practice. Towards this objective, we have recommended the constitution of a High-powered Inter Governmental Group for a new fiscal consolidation framework. It needs to be inter-governmental for reasons explained in the chapter. Both the Union and the States need to be active partners and collaborators to achieve macroeconomic stability. While the FRBM Review Committee made a number of far-reaching suggestions for the Union Government, the issue of a similar enabling framework for States was left to the Finance Commission. In the current context, given these uncertainties, an inter-governmental group would need to revisit this issue with an open mind.

Organisation of the Rest of the Report

1.69 The rest of the report is organised as follows. Chapter 2 ("Inter-governmental Fiscal Relations: Lessons from International Experience") discusses inter-governmental fiscal relations across the global landscape, with lessons for India. Chapter 3 ("Setting the Context: Analysis of

the Past") reviews the Union and State finances as well as inter-governmental transfers during 2011-12 to 2020-21. Chapter 4 ("Pandemic Times: Analysis for the Future 2021-26") lays out the projection of the finances of the Union and State Governments for 2021-2026. Chapter 5 ("Resource Mobilisation") discusses operational and urgent policy changes needed to fill India's tax gap. Chapter 6 ("Towards Co-operative Federalism: Balancing Needs and Performance") presents the underlying principles, and the Commission's key recommendations on vertical and horizontal devolution. Chapter 7 ("Empowering the Local Governments") proposes steps to enhance the resource envelope and further empower urban and local bodies. Chapter 8 ("Disaster Risk Management") recommends State-wise allocation of funds for disaster management. Chapter 9 ("Pandemic and Beyond: Building Resilience in the Health Sector") discusses proposed grants for the health sector. Chapter 10 ("Performance-based Incentives and Grants") prescribes revenue-deficit grants as well as performance-linked grants for other sectors. Chapter 11 ("Defence and Internal Security") focuses on the resource pool for the defence sector. Chapter 12 ("Fiscal Consolidation Roadmap") presents the recommended fiscal roadmap of the Union, the States and general government for the next five years. Finally, Chapter 13 ("Fiscal Architecture for Twenty-first Century India: Fiscal Rules, Financial Management and Institutions") lays out the details of the three pillars needed to bring India's fiscal architecture to twenty-first century international standards - fiscal rules, public financial management, and the need for an independent assessment mechanism.

Conclusions

1.70 We have done our utmost to gather the advice and perspectives of world-class experts within India and abroad, State Governments, sector leaders and other stakeholders in India's success during times that have been more turbulent than any Finance Commission has faced. We have addressed our ToR with a series of recommendations on adjusting the nation's fiscal architecture to meet the needs of unprecedented times, over the course of these reports.

1.71 To summarise, we have allowed for some flexibility in the previously set debt and borrowing ceilings, but we have argued that such flexibility must be strictly bound and additional borrowings be invested with a clear eye to future growth. We have proposed a system of grants that helps to support and motivate such investments, while meeting the needs of States in the present crisis. We have laid out the core pillars for a fiscal architecture that can better harness India's resources, raise the quality of public spending and deliver broad-based, resilient growth.

1.72 While the title of the report of this Commission is Finance Commission in Covid Times, the graphic on the cover page shows the two sides of the Scale, namely the Union and the States, as being equitably balanced. In doing so, we recognise that, "through the combination of the Finance Commission's recommended transfers and the Union's voluntary transfers to various schemes the States are already receiving about half of the gross-revenue receipts." In this broader sense, the States' expectation of financial transfers from the Union are being significantly met. It

has been the endeavour of this Commission to ensure that in terms of our approach, the consultative process and the financial allocation, as well as the flexibility in observing the fiscal trajectory, its recommendations aptly meet this desirable objective of evenly balancing the Union and the States.

1.73 Overall, this report seeks to achieve responsible, efficient, equitable, and inclusive growth for India, amid an unparalleled global and domestic macroeconomic backdrop. As Einstein said "In the midst of every crisis lies an opportunity." This Commission envisions a next generation fiscal architecture and a system of inter-governmental transfers to enable India to utilise this opportunity to be ready, agile, and to thrive in what lies ahead.

1.74 Last, but not least, the philosophy of federalism transcends the relationship bound in mere fiduciary obligations. Federal partnership must embrace the broader context and seek wider ways in which the Union and the States can act in concert to address national priorities – social, economic, attitudinal – addressing emerging challenges and never allowing the broader vision to be masked by just the sharing of financial resources. Einstein, in a different context, had said that, "Not everything that can be counted counts and not everything that counts can be counted." A working federation counts.

Chapter 2

Intergovernmental Fiscal Relations: Lessons from International Experience

This chapter reviews intergovernmental fiscal relations across the global landscape, thereby providing a context in which to assess how India's fiscal federalism has developed. The recent Covid-19 crisis risks bringing about changes in fiscal federalism given its magnitude, the inability of sub-national governments to absorb the fiscal costs on their own and the asymmetric regional impact of the crisis.

Globally, resource availability has long been a critical challenge for meeting equalisation needs, and this is now accentuated by the shock on government revenues from the sharp drops in gross domestic output resulting from the Covid crisis. The chapter compares India's relatively low revenue ratio and the need to bring this closer to that of other emerging markets, thereby better meeting rising developmental needs.

India's vertical fiscal gap has been high relative to other federations, reflecting the mismatch between revenue and expenditure decentralisation, and this has risen over time. This makes the horizontal fiscal imbalance at the sub-national level a critical determinant of devolution, given India's relatively high heterogeneity across States, as is now becoming more evident in their very differentiated health capacities to address the immediate consequences of the Covid crisis.

Although there is much diversity in the approaches that federations have used in horizontal devolution, most have used cost or revenue equalisation systems to identify per capita equalisation determinants. In contrast, India's equalisation system has used a macro-indicator approach. This approach, which is necessitated by data limitations, has some unique factors that seek to combine elements of revenue capacity and expenditure need or cost, including population levels, among the macro indicators in the devolution formula.

In addition to the formula-based transfers, countries have also used discretionary, specific-purpose transfers to meet infrastructure needs, as India also has done. International experience suggests that these transfers are more effective and progressive if they are based on well-designed output or outcome-based indicators, rather than input- or process-based transfers, and this is also becoming more evident in assessing how sub-national governments are meeting the Covid health crisis. These are areas where this Finance Commission has made recommendations to improve the output impact of specific transfers.

The need for accountability and efficient public financial management becomes more critical during public finance crises as that currently being faced across the global landscape. To limit these tensions, many countries have quickly put in place new and innovative coordination

mechanisms, involving governance and fiscal tools, to tailor support to the different regional impacts of the current crisis and ensure continuity of fiscal federalism governance.

The chapter then looks at the third tier of government in other federations and a key lesson that emerges is to build more resilient and locally-sourced revenues of local governments to meet rising urbanisation needs, especially on account of health and education, anchor local government finances on a sound footing and limit moral hazard. At the same time, in order to be leveraged through market borrowing, such a framework needs reliable and transparent market information about local government finances, areas where this Finance Commission has made a set of new recommendations.

Trends in Fiscal Federalism

2.1 The design of inter-governmental fiscal relations across the global landscape has typically depended on political and economic considerations. Hence, its complexity has been driven by resource availability and the broader decentralisation framework governing taxation, spending assignments and institutional arrangements – in many cases (including in India) depending on the constitutions of individual countries. Over time, inter-governmental relations have demonstrated institutional continuity, although exogenous shocks (such as now being experienced with the Covid-19 crisis) have been a trigger for institutional and policy change. Nevertheless, common principles and lessons can be drawn from international experience, providing useful context in assessing how India's fiscal federalism has developed and equalisation objectives met, given much-needed investment in its health, education, and physical infrastructure, and the catalytic effects on growth and regional inequality. In doing this, much support was provided by this Commission's meetings with, and presentations by, the International Monetary Fund (IMF), the World Bank, the Organisation for Economic Cooperation and Development (OECD), and the Asian Development Bank (ADB).

2.2 Recent history has witnessed a gradual process of fiscal decentralisation, with a trend shift in the distribution of expenditures and revenue toward sub-national governments. This shows up in the rising vertical devolution of shared taxes to States and other sub-national bodies. However, large scale crises such as economic depressions, financial shocks and global pandemics constitute critical junctures during which transformative changes in inter-governmental relations can follow, resulting in greater centralisation in fiscal relations, such as during the Great Depression. The 2008 Global Financial Crisis also witnessed a centralising effect on federal relations with the implementation of large stimulus packages financed predominantly by the centre (although generally executed by sub-national governments).[1] This centre-led policy response to the Global Financial Crisis was generally accompanied by increased conditionality in

[1] However, the stimulus packages have generally fallen short of making up for the revenue shortfalls faced by states and municipalities during critical junctures. In the United States, during the recession of 2008-09, the federal government disbursed aid to states through the American Recovery and Reinvestment Act, but this was not enough to make up for the shortfall. This is likely to happen again during the current pandemic, resulting in contractionary policy by the states and affecting areas of social support.

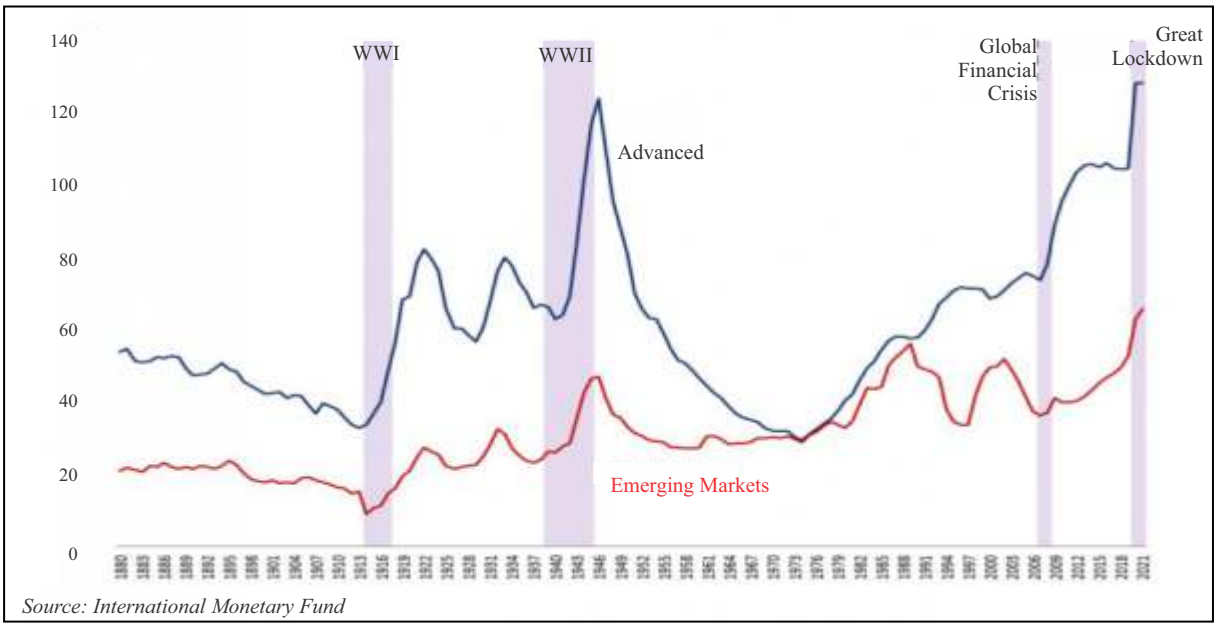
inter-governmental grants and transfers, followed by the tightening of regulations on sub-national borrowing and spending in order to deliver fiscal consolidation. This consequently reduced sub-national policy making and fiscal-financial management autonomy.

2.3 The Covid-19 crisis is different from the economic and financial crises the global economy has previously faced. However, the scope and speed of the resulting downturn, and the marked different impact across regions and municipalities, are without modern precedent and are significantly worse than any recession since World War II. In its early stages, the primary objectives of the health crisis have been to boost resources for health care and provide emergency lifelines to people and firms affected by social distancing. As the health crisis and social distancing measures recede, the objective is shifting to providing stimulus and support for economic recovery, carefully balanced with securing the additional revenues needed to restore fiscal sustainability once growth is put on an upward path. Given that regional and local governments are at the front lines of the current crisis, and are principally responsible for social protection and other public order services highly impacted by the crisis, the shock on sub-national government finances has magnified the economic consequences.

2.4 Thus, sub-national governments have faced a "scissors" effect, with significantly declining revenues (from tax bases linked to the economic cycle as well as tax policy decisions to contain the impact on businesses and individuals) and rising spending pressures in critical areas of their responsibility, especially health, education and social security. These effects have been compounded by borrowing constraints and fiscal rules applicable to sub-national governments. As federal fiscal capacity and sustainability vastly exceed those of other levels of government, it has triggered unprecedented centre-led fiscal and monetary support programmes globally.

2.5 Central fiscal tools have taken the primary role, in differentiated forms across countries, with different budgetary and debt-related implications. From a representative sample of over fifty countries, total global fiscal support has been split almost evenly between above-the-line measures, with a direct effect on revenue and expenditure such as deferral of taxes and cash transfers, and below-the-line support, which includes public sector loans, equity injections and government guarantees. Overall, these have stopped short of making up for the rising revenue shortfalls being faced by sub-national governments. Generally, emerging markets have deployed much smaller fiscal support than advanced countries, constrained to some extent by limited fiscal space. Global public debt is reaching its highest level in recorded history, at over 100 per cent of global gross domestic product (GDP), in excess of post-World War II peaks (Figure 2.1).

Figure 2.1: Soaring Global Public Debt



Source: International Monetary Fund

2.6 The fiscal tools have been accompanied by central banks generally using the fiscal side of their balance sheets to expand their monetary policy, lending, liquidity support and regulatory roles beyond their responses during the global financial crisis – trying to provide liquidity support to state and local governments and backstop their debt, buying corporate debt from the secondary (and junk-bond) market and easing bank regulatory restrictions on liquidity and loan classification. As a result, monetary policy has become accommodative across the board, with unprecedented support from major central banks and monetary easing in emerging markets including, in many cases, their first time use of unconventional policies.

2.7 This raises the tension between the need to centralise responses during the pandemic and dealing with the highly asymmetric regional impact of the crisis that could widen regional inequalities. Specifically, are there risks that the crisis will trigger institutional changes in fiscal federalism that lead to lasting greater centralisation in inter-governmental fiscal relations in the post-Covid period, when fiscal consolidation will likely again become the priority, as it did after the global financial crisis? The tension is that greater centralisation might work against the need for increased spending at the sub-national levels on healthcare, education and infrastructure to tackle inequalities. As such, there is the risk that premature, pro-cyclical fiscal tightening by sub-national governments during the current Covid crisis could create important headwinds to growth and be particularly disruptive for low-income households and the unemployed, thereby also widening income inequalities.

2.8 To limit these tensions, many countries have quickly put in place new and innovative coordination mechanisms, involving governance and fiscal tools, to tailor support to the different regional impacts of the current crisis – especially in meeting varying regional health infrastructure needs, supporting small and medium enterprises and avoiding disjointed responses

across different levels of government. Efforts are also being made to address pre-existing weaknesses and bottlenecks in public financial management systems and set up improved reporting mechanisms to ensure financial transparency and accountability that would help reprogramme budget allocations and accelerate the reallocation of funds to the front lines of the Covid crisis. Without improving the adaptability and responsiveness of public financial management systems, the costs to the economy from misdirected resources and inefficient resource use will compound the effects of the Covid crisis.

2.9 All these measures have generally involved setting up inter-territorial commissions, with exchange platforms, to support cooperation among different levels of government. In many G-20 countries, these are in addition to the permanent institutional features that already exist in their inter-governmental fiscal relations.[2] For example, in Australia, an inter-governmental body has been formed (the "National Cabinet"), including the Prime Minister and state Premiers, which meets weekly to coordinate nationally consistent health and fiscal policy responses to the crisis. In Europe, countries have generally formed task forces to manage the crisis between national and regional governments. Many countries have also adopted "emergency bills" to suspend fiscal rules, enhance flexibility in sub-national regulatory frameworks, and support local finance through grants to states and municipalities (in some case by front loading policy funding).

2.10 However, it is already apparent that these steps will generally fall short of meeting the immediate needs of sub-national governments. Much depends on the resilience of resource availability at different levels of government, that is driving the scissors effect of the Covid crisis on sub-national governments that could significantly affect their long-term fiscal sustainability. It is important to note that countries are likely to see a significant decline in their average tax to GDP ratio in 2020, as happened during the global financial crisis, accentuated at state and local governments. Estimates on tax buoyancy suggest that tax revenues could contract more strongly than economic output. This will have lasting implications – after the 2008-09 financial crisis, for many countries it took an average of eight years for revenues to recover to their pre-crisis level. All of this also makes progress towards the Sustainable Development Goals (SDGs) even more challenging.

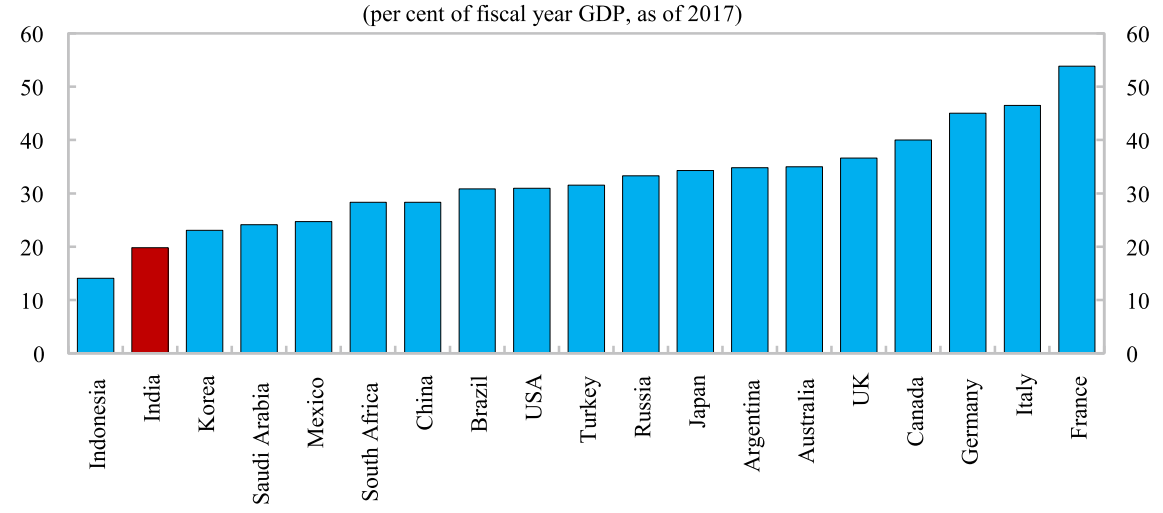
Resource Availability

2.11 Well before Covid-19, resource availability had been a persistent challenge for many federations to devolve funds to meet the spending needs at the sub-national levels. Although tax revenue has been rising over time in many emerging markets and low-income countries, India's general government revenue as a percentage of GDP is among the lowest of the BRICS countries[3], much below the OECD average, and has little redistributive impact, given the much smaller proportion of the population that pays income and property taxes. (Figure 2.2)

[2] Unlike India, a number of countries have had permanent bodies in the structure of their institutional fiscal arrangements. Among these, Australia's Commonwealth Grants Commission has always had permanent staff, and similarly so in South Africa and Mexico.
[3] Brazil, Russia, India, China, South Africa

Figure 2.2: G20: General Government Total Revenue

(per cent of fiscal year GDP, as of 2017)



Sources: IMF, World Economic Outlook, and staff calculations.

2.12 The tax revenue of the Union and States in India stood at about 17 per cent of GDP in 2018-19 and has remained broadly constant since the early 1990s, but is now coming under pressure during the Covid-19 crisis. At the same time, cesses and surcharges earmarked by the Union Government have grown over time, amounting to about 15 per cent of its gross revenues, reducing the proportion of Union revenues eligible for transfers to States from the divisible pool. Given international trends, there is a compelling case for raising India's tax ratio from both macroeconomic and redistributive perspectives, especially at the sub-national level. This is essential for building fiscal space, meeting social protection and infrastructure needs and driving inclusive growth.

2.13 In contrast to India, tax revenue has been rising in other emerging markets and low-income countries by narrowing the untapped revenue potential, or the tax gap relative to tax capacity. International experience confirms that significant increases in tax revenues (0.5 per cent of GDP per year) in emerging markets are achievable over relatively short periods of time - about three years. However, it is important this is done through less distortive and more efficient taxes that allow for progressivity and improved market certainty. In particular, the effects of the current pandemic heighten the imperative to support longer-term tax capacity building, and the importance of mobilising revenues in the aftermath of the current crisis.

2.14 Based on the experience of fifty-five episodes of large tax revenue increases, the following are the main lessons from the reform patterns that have sparked and sustained such increases in other emerging market economies:[4]

[4] These experiences are summarised in Revenue Mobilisation Episodes in Emerging Markets and Low-Income Countries: Lessons from a new Dataset, IMF, Working Paper, WP/18/234, November 2018

(i) Undertake revenue administration reforms in parallel with tax policy changes.

(ii) Broaden the base for both direct and indirect taxes by reducing exemptions and improving compliance.

(iii) Shift focus to indirect taxation, through the value-added tax, with simplification and greater efficiency being the key drivers of significant revenue gains, without imposing a higher burden on the poor.

(iv) Sustain the revenue increase episodes through administration reforms in key compliance areas, including risk-based audits, filing and reporting.

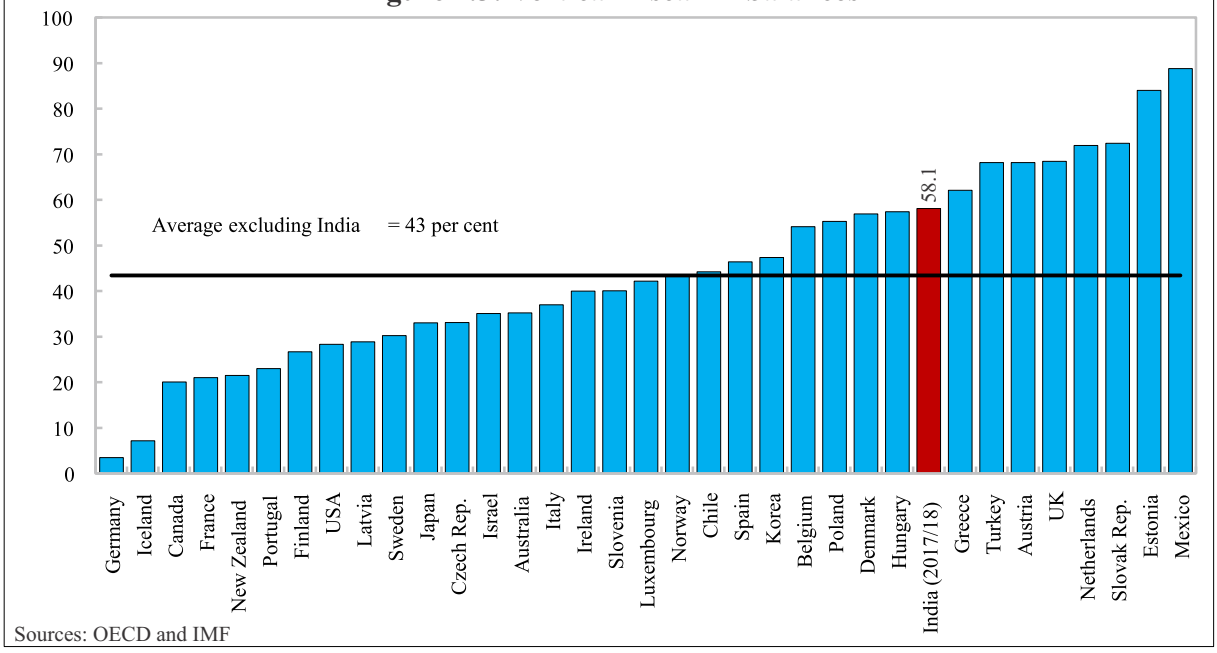
(v) Build revenue from local government property taxes, that is steadily increasing in emerging markets, with better definition of property rights and more empowered municipalities.

2.15 International experience confirms that comprehensive tax reforms can be implemented without imposing higher, and politically sensitive, burdens on the poor, provided this is done with greater progressivity in the tax structure. The move to the landmark goods and services tax (GST) in India is an important step in this direction, following the general global shift to value-added taxes. Experience also points to the room to build its progressivity and yield by continuing efforts to simplify its structure and rationalise its exemptions, without burdening the poor. International experience also points to the need for a broad reform of property, personal income and corporate taxes that would complement the GST reform in a way that supports economic growth and empowers sub-national governments to better respond to local needs. The recent move to bring India's corporate tax rate more in line with international standards should help remove obstacles for business development and attract foreign investment. Most importantly, the driver of these reforms must be base-broadening and rate-reducing measures, with parallel steps to increase the capacity and expertise of the tax administration at all three tiers of government.

Vertical Fiscal Gap

2.16 The vertical fiscal gap sums up the shortfall of sub-national own-revenue relative to their expenditure (Figure 2.3). This mismatch between expenditure and revenue decentralisation varies significantly across countries and is strongly related to the degree of revenue decentralisation that has generally increased over time, partly reflecting the rising revenue capacity of sub-national governments in many countries. While the average vertical gap has been around 40 per cent in the OECD, there has been significant diversion around the average, ranging from 6 per cent to 82 per cent. On average, the vertical gap is lower in federations than in unitary countries, reflecting the usually greater revenue-raising ability of state-level governments in federations.

Figure 2.3: Vertical Fiscal Imbalances



Sources: OECD and IMF

2.17 However, India has a larger (and rising) vertical gap than most federations, reflecting the reality that many States have relied heavily on transfers from the Union rather than on own tax revenues to finance their expenditures. This reflects the large vertical imbalances stemming from the effective assignment of expenditure and revenue powers between the Union and the States. Typically, inefficiency in meeting the vertical gap (resulting in vertical imbalance) shows up in unfunded spending mandates, inadequate provision of public services (both at the sub-national level) or excessive sub-national government borrowing. Such imbalances are magnified during crises that drive a larger wedge between sub-national revenues and expenditure responsibilities, as we are seeing during the Covid crisis. In recent years, rising fiscal deficits in many States has been a key indicator of growing vertical imbalances, despite higher tax devolution from the Union, reflecting inadequate transfers to the States relative to their expenditure needs and revenue raising capacity.

Horizontal Fiscal Gap and the Equalisation Transfer System

2.18 The horizontal gap at the sub-national level reflects the heterogeneity across States. Differences between States in their revenue capacities and public service spending needs yield horizontal fiscal gaps across jurisdictions that need to be filled by the equalisation transfer system which typically tries to minimise horizontal fiscal imbalances.

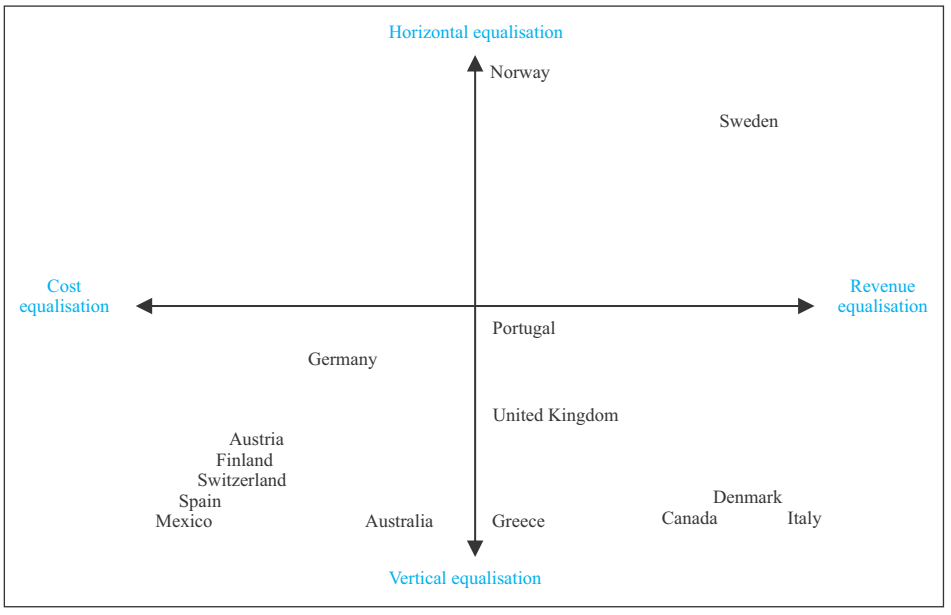
2.19 International experience confirms the diversity of approaches to defining the equalisation transfer system.[5] The common underlying principle is to provide unconditional transfers from the

[5] Forman, K., S. Dougherty and H. Blöchliger (2020), "Synthesising good practices in fiscal federalism: Key recommendations from 15 years of country surveys", OECD Economic Policy Papers, No. 28, OECD Publishing, Paris, https://doi.org/10.1787/89cd0319-en.

federal government to the states, differentiated according to their measured fiscal capacity, thereby insuring also against long-term regional fiscal shocks. Well-designed equalisation systems limit, as much as possible, moral hazard implications that would arise if the system creates incentives for states to influence transfers. International best practice is for equalisation transfers to be formula-based, avoiding discretionary changes that could respond to short-run political purposes, with infrastructure transfers being generally handled separately by discretionary and generally conditional payments. India's equalisation systems have followed this approach, with Finance Commission transfers largely being unconditional, formula-based and predictable for five years.

2.20 There are three broad approaches to measuring fiscal capacity for formula-based transfers: (a) expenditure equalisation based on needs/costs of public services; (b) revenue equalisation measured by the ability of the state to raise revenue from one or more sources; and (c) macro-indicators covering broader economic or non-economic indicators that approximate fiscal capacity where data constraints make it difficult to apply the other approaches. The systems adopted by federations have been influenced to a large extent by measurement problems and the extent of diversity of conditions and policies of individual states. For example, revenue equalisation may be difficult to implement if state tax bases are very heterogeneous and full expenditure equalisation would depend on a host of relative state-wise factors and be difficult to estimate. Revenue or expenditure equalisation practices have been the most common, although there is much diversity in the approaches that federations have used as well as in the assessment of their effectiveness. Key lessons from experience suggest that complexity in the approach adopted could raise moral hazard risks, reduce transparency and erode public support.

Figure 2.4: Comparison of Equalisation Systems



Source: OECD Fiscal Network Estimates

2.21 Figure 2.4 shows the pattern of equalisation arrangements that have developed within and across countries.[6] Fiscal equalisation systems can be divided into vertical and horizontal systems, and systems that equalise revenue differences and those that equalise cost differences. The horizontal axis depicts the cost versus revenue equalisation dimensions (the more to the left, the more `cost-oriented' the system, to reduce differences in the cost of providing public services) and the vertical axis depicts the percentage of horizontal equalisation to total equalisation (the higher the value, the more horizontal the system). Most systems are a mix of horizontal and vertical, and revenue and cost equalisation systems:

(i) In most OECD countries, equalisation systems are established in law and are periodically reviewed. For example, in Canada and Germany, equalisation is put in the Constitution.

(ii) Some systems (like Spain and Mexico) are mainly vertical and cost-equalising, while Sweden leans towards horizontal and revenue equalisation, but most find themselves along the middle of both axes.

(iii) Canada's equalisation principle measures fiscal capacity solely by the ability of a state to raise revenues using the Representative Tax System (RTS) approach.[7] Equalisation payments are made only to provinces with below-average revenue raising capacity.

(iv) Australia and Switzerland equalise both revenues and expenditures. In Australia, all GST revenues are collected by the central government and transferred to states according to each state's equalisation entitlement based on both revenue and expenditure equalisation. Revenue equalisation uses the RTS approach, and expenditure equalisation uses both needs and costs as estimated by the Australian Grants Commission.

(v) Germany partially equalises revenue capacities and supplements it by using macro indicators of special needs.

(vi) In South Africa, the Financial and Fiscal Commission (an advisory body mandated by the Constitution) measures the standard costs of selected public services as the basis for determining expenditure needs and recommends their use, but the country's Ministry of Finance still mainly uses a macro-based approach.

2.22 India's equalisation has used a macro-indicator approach with some unique factors that seek to combine elements of revenue capacity and expenditure need or cost:

(i) Equalisation applies to Union-State transfers from a shareable pool of predetermined size. This divisible pool is smaller than gross revenues and does not include defined cesses, surcharges and non-tax revenues. Nor does it include conditional transfers by the Finance Commission (or other Union sources) in support of State

[6] The data in figure 2.4 reflect country responses to questionnaires sent by the OECD and summarised in OECD: Fiscal Federalism 2014: Making Decentralisation Work.

[7] Under this approach, states' equalisation entitlements are based on the amount of revenue that would be raised by applying common tax rates to a given set of tax bases used in the states.

expenditure programmes. For example, in 2015-16, about 32.6 per cent of State revenues were from Union transfers, subject to equalisation[8]. The remaining 67.4 per cent consisted of own revenues and specific transfers, neither of which are equalised.

(ii) Although it is simpler to implement than the revenue and expenditure equalisation systems used in some OECD federations, India's equalisation methodology does not directly reflect State fiscal capacities. It has generally been based on five macro-indicators, each with its own weight in the formula, reflecting approximations to States' needs and revenue-raising capacity. Among the indicators used, per capita State income is a proxy for revenue capacity, while population approximates needs, and area and forest cover approximate expenditure costs.

(iii) Since GST revenues are not equalised, they are bound to lead to differences in the revenue-raising capacity among States. Instead, GST revenues have been guaranteed for the first five years, as a transition measure, and the approach does not involve their equalisation using the RTS approach. This is in contrast with the Australian example, where all GST revenues are allocated among states according to a combined revenue and expenditure equalisation approach. Instead, in India, State GST revenues are allocated based on the principle of destination or consumption.

(iv) Equalisation transfers have generally been far from proportional to population in the Indian system (reflecting the use of a macro-based approach in which population comprises only about one-third of the weight). This is anomalous to the extent that the cost of public services increases proportionately with population. It is also in contrast with the way in which revenue-capacity and expenditure-needs equalisation are implemented in federations elsewhere, where entitlements are typically calculated on a per capita basis, so that total entitlements are strictly proportional to population.

(v) The second concern is the co-existence, for some time, of the 1971 and 2011 population levels as macro-indicators in the equalisation formula, with a much higher weight being given to the former. The motivation for doing so was to reward States which have been more successful in containing their population growth rates, but it risks making equalisation transfers less responsive to existing population levels. This was changed in the first report of this Commission, with the 2011 population level being adopted as the relevant macro-indicator with a separate factor for population control.

(vi) In the longer run, moving to a system of revenue and/or expenditure equalisation has many advantages, given that these are better measures of State fiscal capacity than macro-based measures, and would thereby help achieve fuller equalisation. Using these to calculate per capita equalisation entitlement would take population fully into account. Data limitations remain a constraint, and such a major change would have to be subject to a reasonable transition. In any event, a key challenge is to use factors that cannot be easily

[8] Rao, M Govinda (2017), "The effect of Intergovernmental Transfers on Public Services in India," National Institute of Public Finance and Policy, Working Paper no. 218, New Delhi.

influenced by State policies, to help avoid moral hazard risks.

Conditional or Incentive-based Fiscal Transfers

2.23 While equalisation transfers are a key tool to meet deficiencies in the fiscal capacity of States to provide public services and to address horizontal fiscal imbalances, they are not the appropriate instrument for regional development or policies relating to education, health and poverty reduction, or indeed for meeting special social protection needs, as is being witnessed during the current Covid crisis. As such, countries have used discretionary, specific-purpose central government transfers with attached conditions to address varying state infrastructure needs, for broader regional development and social policy, and also to drive fiscal performance and administrative changes (Figure 2.5). Many countries have already voted on additional (temporary) budgetary transfers to support sub-national governments that will face large additional spending pressures due to Covid-19. However, judging from past experience, such as during the Global Financial Crisis, central fiscal transfers in many federations fell short of meeting shortfalls in tax revenue at sub-national levels.

Figure 2.5: Inter-governmental Transfers

General Purpose Transfers

(i) Typically, no conditions allowed

(ii) Aim to close vertical fiscal imbalances, or equalise state/local fiscal capacities

(iii) Typically mandated by law

(iv) Usually formula based, with need-based allocation criteria (demographics, land area, income gap etc.)

(v) Preserve state / local autonomy

Specific Purpose Transfers

(I) Could be attached conditions:

(a) Either input based (require certain type of spending; e.g. current or capital)

(b) Or output based, (require certain results, e.g. operational or service delivery)

(ii) Aim to promote national priorities /objectives

(iii) Typically discretionary (not formula based)

(iv) Influences state/local programmes and performance

2.24 International experience has clear lessons about the kind of conditions that better ensure the effective use of discretionary transfers, while also addressing concerns of political influence and softening budget constraints.

2.25 Input or process-based conditions have traditionally been more common in such transfers. These have focused on the intended use of funds, such as the type of education spending, or on the service process involved, such as on school enrolment. Countries have also

often used input-based matching transfers to subsidise benefit spill overs. One example is South Africa, which provides matching transfers to teaching hospitals to compensate for state under-spending on tertiary education and health care services that benefit non-residents. Another example is the United States, which provides matching capital grants to states for highway construction, with matching rates varying by state fiscal capacity.

2.26 However, given issues of fungibility and related factors, there is growing consensus that rigid and excessive input-and process-based controls have not been effective in delivering efficient service delivery and outcomes. In the current Covid crisis, such weaknesses in fiscal transfers risk the ability to manage and meet changing health service needs.

2.27 Rather, international experience conveys that output-based conditions are more efficient in ensuring the use of funds to achieve the desired results. For instance, in service delivery, the output could be increasing high school graduation rates to achieve the outcome of increased supply of skilled professionals, without tying the funds to required inputs like the number of teachers. Thus, output-based grants have conditions on outputs, as opposed to outcomes, because outcomes can be influenced by factors other than state performance, and states should be held accountable only for factors under their control. For instance, supply of skilled professionals could be influenced by external factors such as emigration. Canada's health transfer programme (CHT) is viewed as a simple and effective output-based conditional federal transfer.

Box 2.1: Countries with Output/Process-based Conditional Transfers

Education:

(I) Brazil: Grants based on school enrolment to top-up the share of state/local revenue earmarked for primary education, if the earmarked amount per student is less than the national standard.

(ii) Chile: Per-student grant to all schools is topped up by a 25 per cent additional grant for giving salary bonus to teachers in best performing schools based on national achievements scores.

(iii) Indonesia: Operating grants for schools based on school age population are supplemented by a matching capital grant for constructing school buildings to improve access to primary education nationally.

(iv) Uganda: Grants are given for increased school facilities (desks, classrooms) to targeted levels and for school enrolment.

Health Care:

(i) Brazil: Per-capita grant for basic benefits is topped up by grants for hospital admissions and ambulatory care.

(ii) Rwanda: Grants for hospital cases admitted, staff bonuses and facility improvement.

2.28 As a result, reforms are taking place in many countries to shift to output-based transfers that measure service delivery performance. Countries have given priority to developing output-based conditions on education and health care transfers (including to set minimum standards in health care and education service delivery). The methods adopted, at least initially, have involved topping up other specific-purpose transfers and block grants with output-based transfers (Box 2.1).

2.29 Such reforms to adopt output-based conditions have generally been accompanied by steps to give states greater flexibility to deliver services, alongside greater accountability and clearer specification of roles and responsibilities, as well as reforms to improve transparency and the governance and implementation capacity of states.

2.30 However, shifting to output-based conditions does pose operational challenges, especially in low-income countries and states. These challenges range from the availability of institutional capacity to timely measurement of results to the ability of enforcement. As conditionality moves from inputs to process to outputs, it gets increasingly harder for states to achieve them. If some states have lower institutional capacity, perhaps the conditionality should differ by state capacity. Relatedly, in many African as well as South-East Asian developing countries, performance-based grants are increasingly being used to improve local institutional capacity. For instance, Tanzania and the Philippines adjust capital grants by good public financial management practices.

2.31 Achieving compliance is largely a function of transfer design — setting the right conditions, performance targets and incentives. In case of non-compliance with grant conditions even after taking effective design into account, various methods of penalties may be adopted, including the reduction, withholding, repayment, return or refund, reallocation of funds, or instituting financial corrections. Alternatively, rather than penalising weak performance ex-post, conditional transfers could be designed to reward good performance such as by topping up unconditional grants for high performing states.

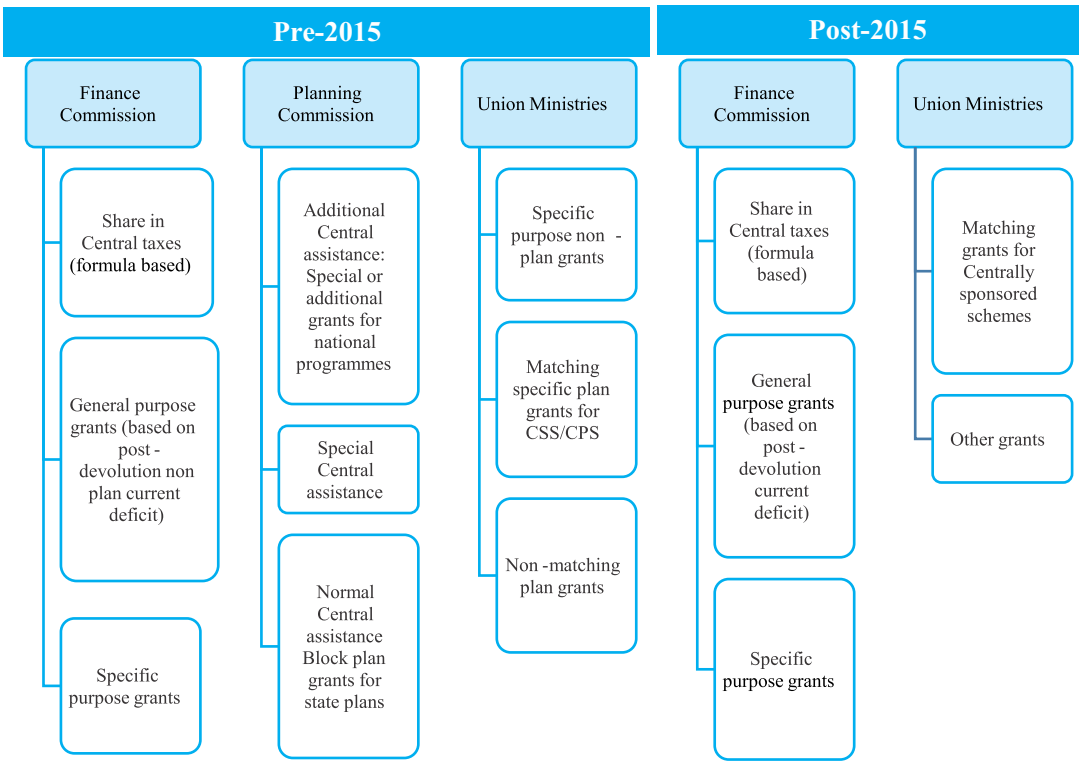
2.32 Many of these issues and concerns arise in the Indian experience as well, although they need to be assessed against the recent changes in the transfer architecture (Figure 2.6).

2.33 Reflecting the wide disparity of Indian States (especially those that were classified as `special category'[9]), as well as the growing importance of local governments in public service delivery, specific-purpose transfers (outside the unconditional general-purpose transfers linked to tax devolution) have been large – recognising constraints on the equalisation that could be achieved through tax devolution. Seven out of fourteen Finance Commissions recommended State-specific grants, but the share given by the Union ministries has remained much larger. The use of fiscal responsibility and fiscal governance as conditionalities in the specific-purpose transfers by recent Finance Commissions has been growing. The Twelfth Finance Commission (FC-XII) made the enactment of fiscal responsibility and budget management legislations a

[9] The special category states were mainly in the North East, with very small revenue bases, and high government spending mostly financed by government transfers.

condition for State Governments to receive debt relief, and subsequent Commissions stipulated conditions on local body transfers linked to building financial management and auditing. [10]

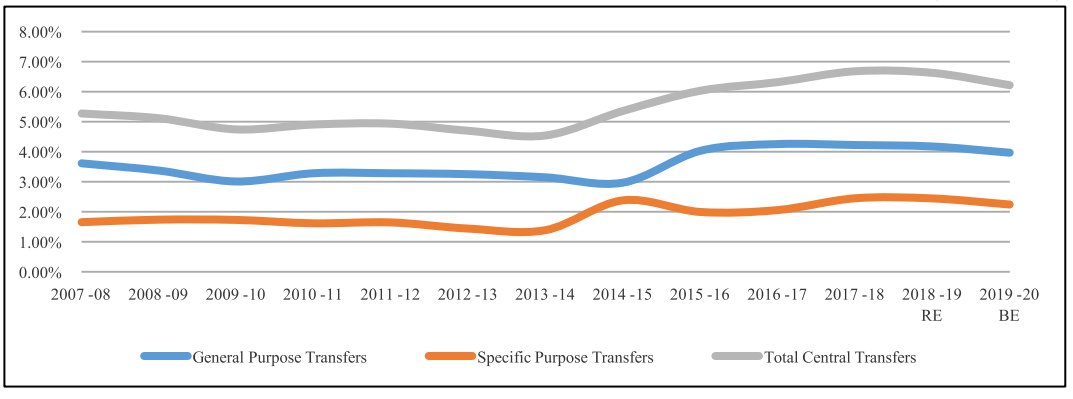
Figure 2.6: Institutional Structure for Inter-governmental Transfer in India



2.34 However, the share of these specific-purpose transfers is declining, following the recommendations of the FC-XIV and the abolition of Plan transfers following the dissolution of the Planning Commission (Figure 2.7). Nevertheless, they still account for about 30 per cent of total transfers, equivalent close to 2 per cent of India's GDP.

Figure 2.7: Central Transfers to States in India

(% of GDP)



Source: Union budget documents and Finance Accounts for various years

[10] FC-XII recommended that state legislations should, among other things, provide for the elimination of revenue deficit by a given deadline, and reducing fiscal deficit to or below a target level

2.35 Concerns arise because, even after some recent consolidation, India's specific-purpose transfers have been channelled through a large number of discretionary cost-sharing Centrally sponsored schemes (CSS) and non-matching Central sector schemes. They are not generally linked to outcomes, and are input- or process-based, and give rise to the usual concerns associated with such conditionalities. The concerns result, in part, from the large number of schemes, their concurrence with State responsibilities and their burdensome matching requirements, especially for States with lower fiscal and institutional capacity.

2.36 Significantly, recent studies conclude that India's specific-purpose transfers, especially those given by the Union ministries, detract from the equalising focus of the transfers extended by the Finance Commissions, and are probably regressive, in the sense that they are positively correlated with per capita incomes of the states.[11] This is of particular concern in the case of education and health care, which are crucial to build convergence in human capital standards across States. Thus, there is a strong need to build institutional capacity in the States and shift to well-designed output-based transfers, while rationalising the multiplicity of Union schemes. This could be done by moving in the direction of equal per capita transfers with general output-based conditions attached to them that reflect the need to build institutions.

The Third Tier

2.37 International cross-sectional studies point to a sharp contrast in the degree of decentralisation to the third tier between the developed and developing countries, with significant correlation with population and per capita GDP.[12] Developing countries are typically characterised by a higher degree of fiscal centralisation. One critical aspect of centralisation is the disparity between state and local level governments in their expenditure commitments and access to revenues - closely related with the devolution of functions - and their administrative capacity. This reflects the reality that local governments in federations have typically derived their power from intermediate (that is, state-level) governments, rather than the Constitution. As a result, state governments have a high degree of discretion in determining sub-provincial fiscal management. India's experience mirrors these characteristics.

2.38 However, there is a clear trend in emerging markets to strengthen local government finances. This trend has also been driven by the global rise of urbanisation, as in India, in line with per capita GDP. Urbanisation has added to the challenges faced by local governments, especially municipalities, to finance public infrastructure and services, as well as for the devolution of functions and finance.[13,14] For example, even in China, where vertical fiscal imbalances have been

[11] Rao, M Govinda (2017) and "Strengthening Indian Center-State Fiscal Frameworks,' IMF Country Report No. 17/55, February 2017.
[12] These issues are reviewed in Roy Bahl and Richard M. Bird (2018), Fiscal Decentralisation and Local Finance in Developing Countries, Edward Elgar Publishing, Inc, ISBN 978 1 78643 529 3
[13] In OECD countries, 80 per cent of national populations are urbanised on average, and in developing countries, urbanisation has risen close to 60 per cent.
[14] International evidence (including recent reports in India) point to the infrastructure needs of urbanisation in developing countries rising annually to 1-2 per cent of GDP. Bahl, Roy, "Metropolitan City Finances in India: Options for A New Fiscal Architecture," International Center for Public Policy Working Paper 12-33, 2012

high, the budget law was revised in 2015 to reduce the structural shortfall of revenue relative to rising spending obligations of provinces, overcome mis-alignments in inter-governmental financing and develop a more sustainable regulatory framework on oversight and disclosure. Countries, such as Brazil, Colombia and South Africa already have national legislation on cities with specified revenue instruments.

2.39 There is, therefore, a strong case for providing adequate and effective tax sources to local governments. Although international experience suggests a trend in this direction, continuing disparities have clearly been magnified in the Covid crisis, especially for municipalities, whose revenues (taxes, user fees) have significantly declined, while their expenditures (health and other social support measures) have sharply risen. An examination of the main characteristics and best practices in meeting these challenges in local governments in federations is, therefore, in order.

Local Government Expenditure

2.40 With rising incomes, federations have generally assigned a higher portion of education and health spending to local governments. These items can be over half of local government expenditure in some OECD federations (Figure 2.8). In many countries, local governments have also become key players of investment-led growth. Local government investment spending is around a third of the total investment by the general government sector in several OECD federations (Figure 2.9). Both factors explain the emergence of large vertical imbalances in several countries, in many cases resulting in soft budget constraints. Typically, local governments that receive transfers to carry out spending on behalf of higher levels of government spend less efficiently than if they were responsible for raising revenue locally from taxation. This raises problems related to the multiplicity of expenditure responsibilities with higher levels of government and the need for periodic performance evaluation at all levels of public expenditure.

Figure 2.8: OECD Expenditure Composition
(per cent of local government expenditure)

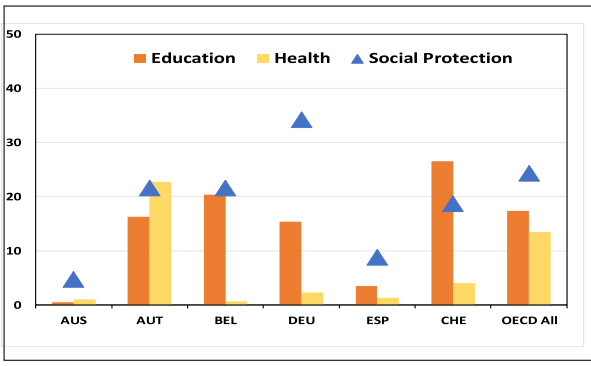
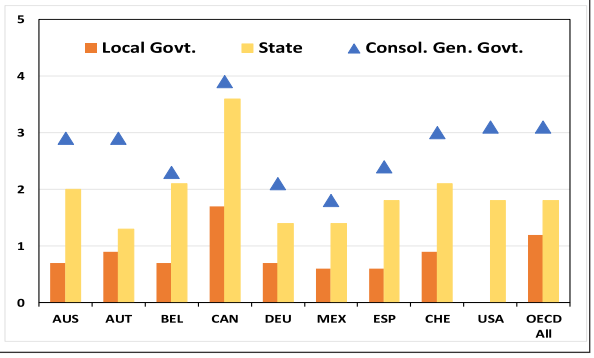


Figure 2.9: OECD Public Investment
(per cent of GDP)



Source: OECD Database

Local Government Revenue

2.41 Building locally-sourced revenues has become essential to anchor local government finances on a sound footing, limit moral hazard and pre-empt financing risks. While some countries, like Australia and Mexico, give local governments full authority to set certain tax rates without consulting upper-level governments, this is not the case in many others. In China and in India, for example, local governments have inadequate capacity and control over revenue instruments and their local government revenues (generally from user fees and property value) have been less than 5 per cent of GDP.[15] The experience of the United States, where each state can decide what tax instruments it will authorise to local governments, has clear lessons for India, where the Seventy-Fourth Amendment to the Constitution follows a similar model. In India, however, there is the added institutional challenge of building consensus across State Governments to drive the process forward consistently. In the United States and Canada, some provinces and large cities may `piggyback' an income tax on top of a state/provincial tax, using the same base and potentially the same administration.

2.42 Growing urbanisation is now changing the parameters for local government revenue, especially for municipalities, given that their infrastructure needs have risen well beyond the capacities of traditional central government revenue and transfers. Unlike rural local bodies, urban areas, especially the cities, typically have the economic power to be financially self-sufficient, with the right legal framework and supportive policies. In India, the State Finance Commissions (SFCs) need to play a much more critical role in recommending taxes assigned to municipalities and other local governments and related financial relations between the States and their municipalities.

2.43 International experience points to property taxation being among the best tax options for local governments, together with tariffs for services such as water and electricity.[16] By global standards, property tax revenues in Indian cities are a fraction of the developing country average of about 0.7 per cent of GDP, and well below the level in China. This is a reflection of the large inter-state disparities in the devolution of functional and financial powers, including the effective limitations in many States on local governments levying property taxes. In many OECD as well as emerging market countries, recurrent taxes on immovable properties has become the most important tax revenue for state and local governments. Thus, there is considerable potential in moving in this direction, and the lessons point to the need to build a framework for property taxation with universal coverage, limited exemptions, transparent and updated valuations and rates that are broadly in line with global norms.

2.44 Overall, significant revenue-raising discretion for local governments is necessary as part of the process of building local capacity to meet infrastructure needs efficiently and with fiscal discipline. Meanwhile, fiscal transfers to local governments help address their fiscal imbalances

[15] Slack, Enid and Richard Bird (2015); "How to reform the Property Tax: Lessons from Around the World, "IMFG Papers on Municipal Finance and Governance, No 21, Toronto.

[16] Many local governments impose other selective taxes on certain services and license fees on businesses; these seldom produce much revenue and experience suggests they serve little regulatory purpose too. In contrast, property taxes are less distortionary and more progressive

but there is need to incentivise building their revenue potential.

Local Government Fiscal Sustainability

2.45 Among the lessons from international experience is the importance of imposing hard budget constraints on local governments in order to contain financing risks from their large vertical imbalances, which should be covered by transfers from higher levels of government. These budget constraints have generally aimed at balancing current spending with current revenue and limiting capital expenditures to designated financing sources. However, in order to be effective, they require tight definitions, oversight and disclosure of their balance sheets to be consistent with general government fiscal targets and to avoid building up contingent liabilities. In many countries, limited oversight and expectations of bailouts has given rise to the rapid build-up of vulnerabilities in local government finances.

2.46 China is a clear example of the inherent risks of local governments dealing with structural misalignments of their revenues and expenditure obligations. After the global financial crisis, China's local governments implemented large scale fiscal stimulus by setting up unregulated financing vehicles to borrow from prohibited sources in unreported ways. China's new budget law in 2015 aimed at reforms to contain risks from local government finance, develop the bond market for local governments and better align inter-governmental revenue and spending.

2.47 In more developed countries, local governments clearly borrow from commercial banks as well as by issuing bonds, depending on the strength of their fiscal institutions and fiscal rules that helps improve credit rating and reduce credit costs. Loans and commercial debt have accounted for over half of sub-national government borrowing in twenty-nine OECD countries.[17] In Europe, these loans are mostly provided by commercial banks, whereas in the United States and Canada, there are well developed markets for local government bonds.

2.48 These considerations are especially important for large municipalities. South Africa stands out among emerging markets in its adoption of a policy framework for municipal borrowing. It has built a predictable legal framework for own-source revenue instruments in urban areas (mainly through property tax, electricity tariffs and water tariffs), while deploying equalising transfers in poor rural areas with little tax base.

2.49 At the same time, in order to be leveraged through market borrowing, such a framework also needs reliable and transparent market information about local government finances and accountability of managers. Examples include guidelines for reporting and publishing of fiscal accounts and the use of multi-year budgeting to improve fiscal policy coordination and response to shocks and alternative scenarios, consistent with best practice public financial management standards. Independent auditing of sub-national financial accounts is also an important component used in many countries. Several countries, such as Mexico, require sub-national governments to subscribe to a credit rating system in order to access financial markets.

[17] OECD, 2016

2.50 Consistent with these lessons, India has been progressively updating the 2003 Fiscal Responsibility and Budget Management (FRBM) legislation with a rule-based fiscal policy that limits government debt, fiscal deficits and revenue deficits to prescribed targets. Although borrowing by States from the market has grown over time, there are still conflicts with building fiscal sustainability, given the continuing expectations of implicit guarantees by the Union, and now under the scissors pressures from the Covid crisis.[18] As discussed later in Chapter 13, the last four Finance Commissions (and the present Commission) have made specific recommendations and set performance criteria for bringing the accounts of local governments, and their audit and disclosure, to international standards. However, India is still lagging in this respect. In particular, consistent and consolidated data on States' accounts are still not available, making India among the set of countries that does not report general government (inclusive of State accounts) fiscal aggregates.[19] In contrast, Brazil and South Africa, among other emerging market countries, provide comprehensive general government reports complying with international standards.

Conclusions

2.51 The Covid crisis risks bringing about changes in fiscal federalism given its magnitude, the inability of sub-national governments to absorb the fiscal costs on their own and the asymmetric regional impact of the crisis. In dealing with these issues, which have significant and manifold social implications, the crisis magnifies the importance of collaboration between the Union and State Finance Commissions, and building independent fiscal institutions. International experiences give India an important opportunity to benchmark its own experiences and trends to its peers and build best practices in inter-governmental fiscal relations.

2.52 Among the international challenges accentuated during the pandemic is the critical importance of resource availability for meeting equalisation needs. Resource availability and distribution during this crisis will generally shape the fiscal federal relationship during the next decade. In this context, India's revenue ratio has persisted at relatively low levels, with rising pressure to bring this closer to that of other emerging markets, thereby better meeting rising social and developmental needs.

2.53 India's vertical fiscal gap has been high relative to other federations, reflecting the mismatch between revenue and expenditure decentralisation at sub-national levels, and this has risen over time. This makes the horizontal fiscal imbalance at the sub-national level a critical determinant of devolution, given India's relatively high heterogeneity across States, as is now becoming more evident in their very differentiated health capacity to address the immediate consequences of the Covid crisis.

2.54 In addition to the formula-based transfers, countries have used discretionary, specific-

[18] A recent study assesses that bond spreads have remained relatively narrow across States despite their varying fundamentals. "Fiscal Discipline in Indian States: Market-Based and other Options" (IMF Selected Issues, July 2, 2018)

[19] Sarma, Atul and Debabani Chakravarty, Integrating the Third Tier Government in the Indian Federal System, Palgrave Macmillan, 2018, ISBN 978-981-10-5624-6

purpose transfers to meet infrastructure needs. International experience is clear that these transfers are more effective and progressive if they are based on well-designed output or outcome-based indicators, and this is becoming more evident in assessing how sub-national governments are meeting the Covid health crisis.

2.55 A key lesson from the third tier of government in other federations is to build resilient and locally-sourced revenues to meet rising urbanisation needs (especially on account of health and education), anchor local government finances on a sound footing and limit moral hazard. Consistent with these lessons, and among other steps, this Commission has recommended multiple performance criteria on transfers to the third tier to grow the property tax and institutionalise the public availability of their audited balance sheets.

2.56 Indeed, the need for accountability and efficient public financial management becomes more critical during public finance crises as that currently being faced across the global landscape. To limit these tensions, many countries have quickly put in place new and innovative coordination mechanisms, involving governance and fiscal tools, to tailor support to the different regional impacts of the current crisis. There are clear lessons for India, including to ensure consistency in the operation of the State Finance Commissions and to ensure their continuing collaboration with the Finance Commission. Overall, international experience makes clear the many advantages of continuity at the political and institutional levels between the Union and the States, so that fiscal equalisation can be closely monitored, new shocks to fiscal federalism examined and performance criteria on grants followed.

Chapter 3

Setting the Context: Analysis of the Past

The Fifteenth Finance Commission (FC-XV) reviewed the Union and State finances as well as inter-governmental transfers during the period 2011-12 to 2020-21 (BE). The period from 2015-16 onwards has witnessed fundamental changes in the architecture of fiscal federalism and the working of the fiscal system in the country. The abolition of the Planning Commission, removal of the distinction between Plan and non-Plan expendture, transformation of the indirect taxation system through the introduction of goods and services tax were accompanied by substantial enhancement of the share of the States in the divisible pool of taxes to 42 per cent by the FC-XIV.

Fiscal consolidation with a progressive glide path was substantially achieved with the fiscal deficit of the Union Government falling from 5.9 per cent of gross domestic product (GDP) in 2011-12 to 3.4 per cent in 2018-19, along with a corresponding drop in the revenue deficit from 4.5 per cent to 2.4 per cent. This consolidation has been achieved with a marginal improvement of the the tax-GDP ratio from 10.2 per cent to 11 per cent, enhancement of disinvestment receipts and reduction in revenue expenditure, largely on account of a reduction in the petroleum subsidy. The expenditure on defence services as a proportion of GDP declined from 2 per cent in 2011-12 to 1.5 per cent in 2018-19. The debt to GDP ratio improved from 51.8 per cent to 47.9 per cent over the same period. The introduction of the goods and service tax on 1 July 2017, with an assured revenue growth of 14 per cent for the States for five years, injected an element of uncertainty in the financial flows of the Union Government. The above indicators do not take into account increasing resort to deferred liabilities and off-budget borrowings to cover the Union Government's food and fertilizer subsidy commitments. Unpaid liabilities and extra-budgetary resources (EBR) affect the integrity of fiscal accounts. In a welcome move, the Union Government has started including details of EBR in its Medium-term Fiscal Policy Statement from 2019-20.

For the States, the period 2011-12 to 2018-19 saw a deterioration in the aggregate fiscal indicators for States, with the gross fiscal deficit increasing from 1.9 per cent to 2.5 per cent of GDP. The Ujjwal DISCOM Assurance Yojana (UDAY) scheme for the financial and operational improvement and revival of power distribution companies had a negative impact on the aggregate indicators of State Governments both in 2015-16 and 2016-17. The impact of UDAY was also reflected in the total debt-GDP ratio of the States, which increased from 22.6 per cent in 2011-12 to 24.3 per cent in 2016-17. The implementation of the FC-XIV recommendations saw the aggregate tax devolution to States as a proportion of GDP jump from 2.7 per cent in 2014-15 to 4 per cent in 2018-19. Despite the enhanced devolution, again as a proportion of their respective gross state domestic product (GSDP), seven of the North-Eastern and Himalayan States (including erstwhile State of Jammu and Kashmir) saw a reduction in their aggregate

transfers from the Union between 2014-15 and 2015-16, primarily on account of the reduction in grants-in-aid in the form of normal Central assistance, special Central assistance and special Plan assistance.

In inter-governmental transfers, the share of devolution in the Union Government's gross revenue receipts went up from 23.8 per cent in the FC-XIII period to 31.37 per cent in the first four years of the FC-XIV period. A compositonal shift from grants to devolution in the Union's transfers gave the States greater flexibility in their choice of expenditures.

3.1 The terms of reference (ToR) of this Commission requires us to "review the current status of the finance, deficit, debt levels, cash balances and fiscal discipline efforts of the Union and the States, and recommend a fiscal consolidation roadmap for sound fiscal management, taking into account the responsibility of the Union Government and State Governments to adhere to appropriate levels of general and consolidated government debt and deficit levels, while fostering higher inclusive growth in the country, guided by the principles of equity, efficiency and transparency. The Commission may also examine whether revenue deficit grants be provided at all" (paragraph 5). Accordingly, we reviewed the major trends in Union and State finances with a focus on the trends between 2011-12 and 2020-21 (BE).

3.2 The past five years have seen major changes in the country's fiscal landscape. The Planning Commission was abolished and replaced by NITI (National Institution for Transforming India) Aayog on 1 January 2015. The closing down of the Planning Commission effectively brought to an end a sixty-five years long era of central planning and ushered in a fundamental change in the mechanism of transfers to States. NITI Aayog, unlike its predecessor, does not play a role in determining the allocation of resources. Instead, it is designed to foster "cooperative federalism, promotion of citizen engagement, egalitarian access to opportunity, participative and adaptive governance and increasing use of technology." [1] Designed to evolve a shared vision of national development priorities with active involvement of States, "NITI Aayog (will) seek(s) to provide a critical directional and stategic input into the development process."[2] A corollary to this was the removal of the distinction between Plan and non-Plan expenditure in the Union Budget of 2017-18, on the culmination of the Twelfth Five-Year Plan in March 2017. This has been replaced by the Constitutionally mandated as well as universally accepted standard practice of classifying expenditure as revenue and capital.

3.3 The award of the Fourteenth Finance Commisison (FC-XIV) itself had been a departure from the past. It took a comprehensive view of both non-Plan and Plan revenue expenditures and increased the devolution to the States from 32 per cent to 42 per cent of the divisible pool from 2015-16 onwards. Not only did the quantum of general purpose transfers go up substantially, but there has also been a major compositional shift in the total transfers from the Union to States. As a consequence, various Plan expenditures that were earlier steered by the Planning Commission,

[1] Cabinet Secretariat Resolution, no.511/2/1/2015 dated 1st January, 2015
[2] Ibid.

such as normal Central assistance (NCA), special Central assistance (SCA) and special Plan assistance (SPA), were discontinued. On the basis of a recommendation made by a sub group of Chief Ministers constituted by NITI Aayog, the Union Government in 2016-17 also rationalised the Centrally sponsored schemes (CSS) into twenty-eight umbrella schemes, consisting of six core of the core schemes, twenty core schemes and two optional schemes.[3] Further, the medium term framework for CSS and their sunset dates have been made co-terminus with Finance Commission cycles. A major initiative relating to public finance management has been the roll out of direct benefit transfers (DBT) through the Public Finance Management System (PFMS). The other two reforms were the merger of the railway budget with general budget and advancement of the budget presentation to 1 February beginning with the budget of 2017-18.

3.4 This period has also seen a significant shift in the contours of inter-governmental fiscal relations, both with the acceptance of the recommendations of the FC-XIV and the implementation of the nation-wide goods and services tax (GST) from 1 July 2017. The sharp increase in tax devolution has resulted in the share of general-purpose transfers going up. On the other hand, steps taken by the Union Government have also altered the composition of transfers in two ways: (a) the assistance to the States through the Planning Commission route have been discontinued and (b) the States' share in CSS has been enhanced to reduce the support of the Union.

3.5 The introduction of GST is unarguably the most important structural reform in the field of indirect taxation in the country. By amalgamating a large number of Union and State taxes into a single tax, GST is expected to remove the ill effects of cascading of taxes or 'tax on tax' and pave the way for a common national market. From the consumer's point of view, the biggest advantage would be in terms of an estimated reduction in the overall tax burden. The assignment of concurrent jurisdiction to the Union and the States for the levy of GST required a unique institutional mechanism that would ensure that decisions about the structure, design and operation of the tax are taken jointly by both. The institutional development of the GST Council as one of the pillars of fiscal federalism has been a major positive in this regard.

3.6 However, unique challenges have emerged in the implementation of GST. The less-than-expected buoyancy in revenues and the difficulties in the settlement process have affected both the Union's and the States' finances. Lower GST revenues than what was expected in the initial phase could be attributed to several changes in rates, returns, shifting timelines for filing of returns, delayed introduction of anti-evasion measures such as invoice matching, reverse charge, technical glitches and cumbersome compliance processes.

3.7 This chapter has been divided into five sections. We first review the current situation prevailing due to the Covid-19 pandemic followed by a review of GST for which we have data available for the the financial years 2017-18 (nine months), 2018-19 and 2019-20. We have

[3] Report of The Sub-Group Of Chief Ministers On Rationalisation Of Centrally Sponsored Schemes, October 2015, https://www.niti.gov.in/sites/default/files/2019-08/Final%20Report%20of%20the%20Sub-Group%20submitter%20to%20PM.pdf

reviewed GST separately as it has a significant impact on both Union and State finances, and the final shape that it take will have a criticial bearing on finances during our award period. In the third section we have undertaken a review of the Union finances, followed by a review of State finances in the fourth section. We finally look at the trends of inter-governmental transfers in the last section.

Under the Shadow of the Pandemic

3.8 The world economy, already decelerating since 2017, was and continues to be severely affected by Covid-19, a novel coronavirus causing acute respiratory syndrome first reported by China in end-December 2019 as a cluster of cases of pneumonia in Wuhan in Hubei Province. Highly infectious through human-to-human transmission, it travelled widely across countries and soon acquired the status of a pandemic. By 22 October 2020, Covid-19 had affected more than 40 million people and resulted in over 1.2 million deaths in more than 210 countries. Apart from the tragic loss of life, the heavy and sudden burden of the pandemic has overwhelmed the health care system across countries and resulted in a shortage of doctor and paramedics, hospital beds, intensive care units (ICUs) and quarantine facilities. Non-Covid-19 patients have also suffered.

3.9 To contain the virus and save lives, most countries announced what the International Monetary Fund (IMF) has termed as the Great Lockdown, through quarantines and social distancing practices. The Great Lockdown has triggered, the IMF warned in June 2020, the 'worst recession since the Great Depression.' According to WEO October 2020, the world economy is likely to contract by 4.4 per cent in 2020. With no cure through medical treatment, or vaccine and prophylactic discovered so far, the future of the pandemic in terms of virulence and duration remains uncertain. The IMF expected the world economy to grow by 5.2 per cent in 2021; the level of global gross domestic product (GDP)[4] in 2021 is expected to be a modest 0.6 per cent above that of 2019 . The prognosis for the world economy is equally gloomy according to other international expert bodies such as the World Bank (-5.2 per cent in 2020 and 4.2 per cent in 2021) and Organisation for Economic Cooperation and Development (OECD) (-9.3 per cent in 2020 and 2.2 per cent in 2021 for OECD countries in the aggregate).

3.10 During the 2014-2019 period, according to the IMF's WEO data published in April 2020, the Indian economy grew at a faster pace of 6.8 per cent, vis-à-vis the world's annual average of 3.5 per cent,. Among the twenty-three large economies with more than 100 million populations or GDP over $1 trillion, in terms of annual average growth rate, India was one of the fastest growing during 2013 to 2019. Going forward, this generally encouraging picture is tempered by the pandemic and three other sobering developments.

3.11 First, as a proportion of GDP, gross fixed capital formation declined steadily from 34.3 per cent in 2011-12 to 30.8 per cent in 2017-18, and after increasing to 31.9 per cent in 2018-19,

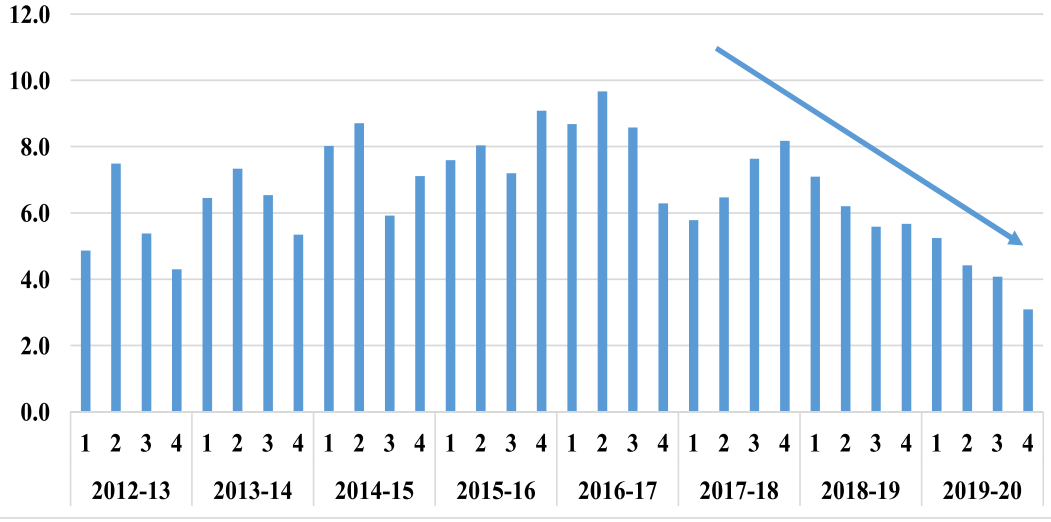
[4] World Economic Outlook October 2020, International Monetary Fund

declined further to 29.8 per cent in 2019-20. This pre-Covid deceleration in investment is likely to only get accentuated with the pandemic and affect growth.

3.12 Second is the problem of sluggish growth in scheduled commercial bank credit to the commercial sector and high non-performing assets (NPA) of banks observed since 2011-12. From a high of 20.6 per cent in 2011-12, such credit growth has declined every year to reach 7.2 per cent in 2018-19 and around 6 per cent in 2019-20.[5] This slowdown, which followed five years of high credit growth of an annual average of over 24 per cent between 2005 and 2010, was partly a result of the easy money policy in response to the Global Financial Crisis in 2008. For scheduled commercial banks, gross NPA as a proportion of gross advances increased from 2 per cent in 2008-09 to 14.6 per cent in 2017-18. It came down to 9.3 per cent in 2018-19 and, with loan moratorium and relaxed asset classification norms, further to 8.5 per cent in 2019-20. The NPA problem is particularly pronounced in public sector banks.[6] The Union Government infused Rs. 80,000 crore in these banks in 2017-18, Rs. 1.06 lakh crore in 2018-19, Rs. 70,000 crore in 2019-20. High NPA levels elevate risk aversion in banks and limit their lending behaviour. The country has seen similarly high NPAs between 1996 and 2002, which had been successfully handled by the recapitalisation of public sector banks and a buoyant economy. The adverse impact of the Covid-19 pandemic on the economy has added an element of complexity to the ongoing NPA problem.

3.13 Third is the deceleration in quarterly GDP growth, year-on-year, observed since 2016-17 (Figure 3.1). In the fourth quarter of 2019-20, the economy grew by an estimated 3.1 per cent over the corresponding quarter of the previous year. The Covid-19 pandemic hit the country at the end of this last quarter of 2019-20, when the economy was already decelerating. GDP in the first quarter of 2020-21 declined by 23.9 per cent.

Figure 3.1: Decelerating Quarterly GDP Growth
(Annual, constant prices, in per cent)



[5] *Overview in Financial Stability Report, RBI, July 2020.*
[6] *Financial Stability Report 2019.* Reserve Bank of India
https://m.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=931

3.14 The pandemic has complicated fiscal management at the Union and State Government levels and the federal fiscal arrangement in more ways than one. First, it has led to the need for higher expenditure on treatment and health-care facilities for the Covid-affected and for providing relief to those who have lost their livelihoods because of the Great Lockdown. The disruption in economic activity brought to the fore the magnitude of migrant – particularly inter-State migrant – labour in the country and the associated problems. Census 2011 reported the number of inter-State migrants at around 54 million. Roughly a half of this migration, particularly by females, may have been triggered by inter-State marriages. Migration was mostly from the poorer States to the richer States, particularly on the coast (Figures 3.2 and 3.3). With the loss of livelihoods induced by the lockdown, the migrant labourers decided to leave their mostly squalid living quarters in urban slums to the more comforting and secure place they call 'home.' Hundreds of thousands of home-bound migrant labour trudging along highways with their meagre household effects on their heads will remain an enduring visual memory of the Covid-19 pandemic. Governments had to intervene by providing food and shelter along the way, quarantine facilities once they reached home and even organise special trains to take them home. The reverse flow of migrants also brought to focus the responsibilities of the host States whose economies these migrants had been contributing to. Cash transfers as well as additional food grains were distributed free for meeting the needs of returning workers as well as others, and steps initiated to make the ration card portable across the country.

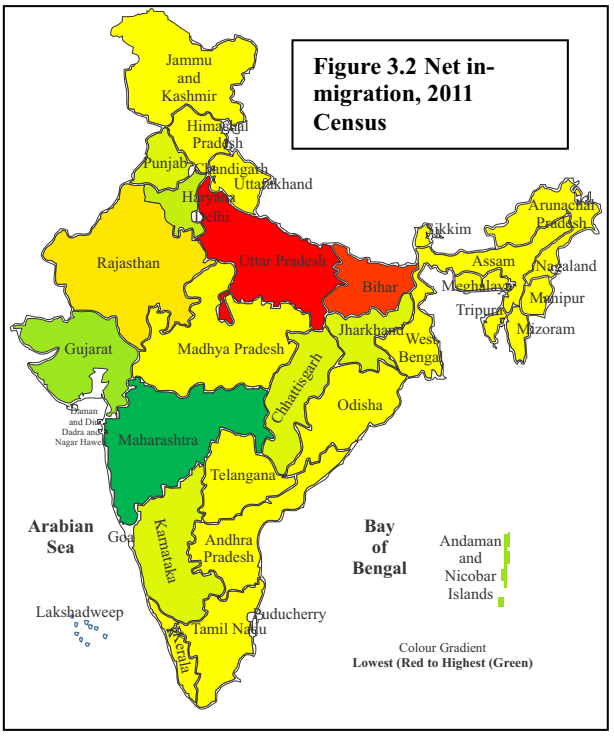


Figure 3.2 Net in-migration, 2011 Census

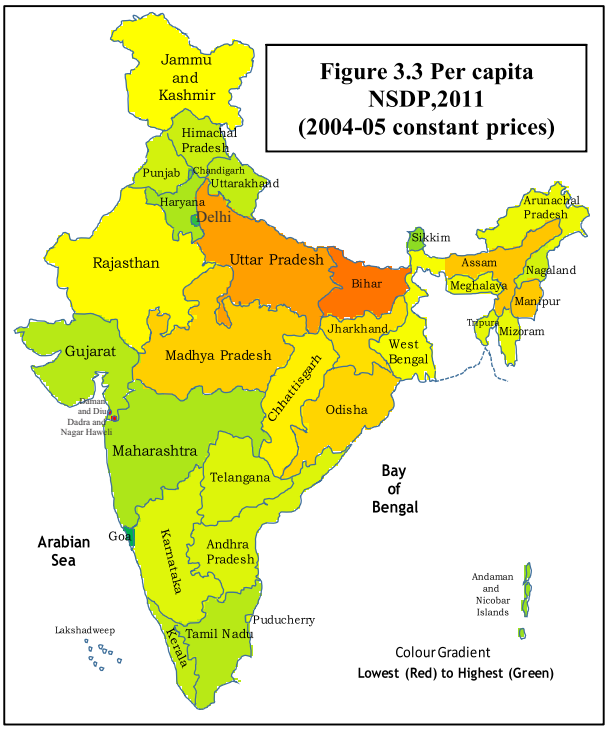


Figure 3.3 Per capita NSDP,2011 (2004-05 constant prices)

3.15 Second, the pandemic has adversely affected revenues of both levels of government. Declines in tax revenues can be particularly sharp with contraction in activity. When personal

incomes fall, people move from higher tax slabs to lower slabs and, in severe cases, even below the exemption level. Similarly, with decline in output and sales, but the burden of fixed costs and amortization of loans continuing, many businesses incur losses instead of earning profits. Thus, revenues from personal and corporate income taxes tend to decline faster than income, and buoyancy – that is percentage change in revenues for a percentage change in income – can be higher than that observed in the past with rising income. Similarly, with decline in income and activity, consumers cut back on non-essential commodities and, as a result, revenues from indirect taxes decline faster than income. In the shadow of the pandemic, governments are likely to face a twin crisis of a resource crunch with a rising trend in expenditure or what has been described as a 'scissors effect' in Chapter 2.

3.16 Third, the extent to which balance sheets of businesses have been affected and organisational and informational capital lost are not yet clear. Nevertheless, given how the pandemic has suddenly and severely disrupted economic activity, by discouraging activity that require close human contact, there is need for a fiscal stimulus. Monetary policy can resolve liquidity problems, but solvency problems require a fiscal antidote. The scope for a fiscal stimulus, however, is circumscribed by the limited and halting progress achieved on fiscal consolidation in seventeen years since the enactment of the Fiscal Responsibility and Budget Management (FRBM) Act in 2003. Most importantly, a robust expansionary fiscal policy to counteract the economic fallout of the pandemic will require an equally credible exit plan with a committed path of fiscal consolidation.

3.17 Fourth, the pandemic has magnified the challenge in a federal structure of having a healthy division of the so-called 3 Fs – finance, functions and functionaries – between the Union and the States. Because of Article 293 of the Constitution, State Governments operate under borrowing limits and, hence, budget constraints, approved by the Union Government. The budget constraint of the Union Government, by contrast, is self-imposed and, at least in the past, has been discretionary. Admittedly, being closer to the ground, the State Governments can be expected to be better equipped to counteract the impact of the pandemic by designing and implementing suitable interventions at the local level. However, the abiding objective of equalising the availability of some of the essential public goods and services and delivering them more efficiently across States can be marshalled to argue in favour of the Union's intervention. Furthermore, although the pandemic, unlike natural disasters, did not destroy physical properties and was also not a sudden one-stop event, it was a disaster alright, and the Union Government has traditionally played a major role in disaster relief. The pandemic calls for a healthy resolution of the tension between the widely acclaimed subsidiarity principle – which argues in favour of dealing with issues at the most immediate level consistent with their resolution – and the inter-state spill-over effects of public expenditure and growing Union's intervention in areas relating to the State List and Concurrent List of the Constitution.

Review of Goods and Services Tax

3.18 One of the major changes impacting the fiscal landscape of India in past few years has been the implementation of GST. A comprehensive value added tax (VAT) with a unified indirect tax structure was recommended by the Task Force on the FRBM Act headed by Vijay Kelkar in 2002. GST, which had been on the reform agenda for well over two decades, finally came into force in July 2017. After lengthy consultations and discussions with all stakeholders, it followed the passage of the Constitution (One Hundred and First) Amendment Act in 2016 and the subsequent enactment by Parliament and all the State legislatures of their respective laws to operationalise GST.

3.19 GST was envisaged to bring in considerable efficiency gains in the economy with its `one-nation-one-market-one-tax' paradigm and the attendant gains in tax-compliance, simplification of the tax structure and elimination of barriers to domestic production and trade. In terms of government finances, it was expected to improve the overall tax-GDP ratio in the medium term and lead to higher Union transfers to States. It was also historic in finally moving taxation of goods and services from the 'origin' to 'destination' principle.

3.20 One of the defining features of GST in India is the establishment of the GST Council in which Union Government as well as all State Governments and Union Territories with legislatures are represented. The Council has full decision making powers with respect to GST by majority voting. Hence, the Council is an important milestone in fiscal federalism in the country.

3.21 GST is a consumption-based value-added tax on goods and services with dual levy by both the Union and the States. In a significant move, a multiplicity of taxes levied at differential rates by the Union and State Governments on goods and services were subsumed under GST (Table 3.1).

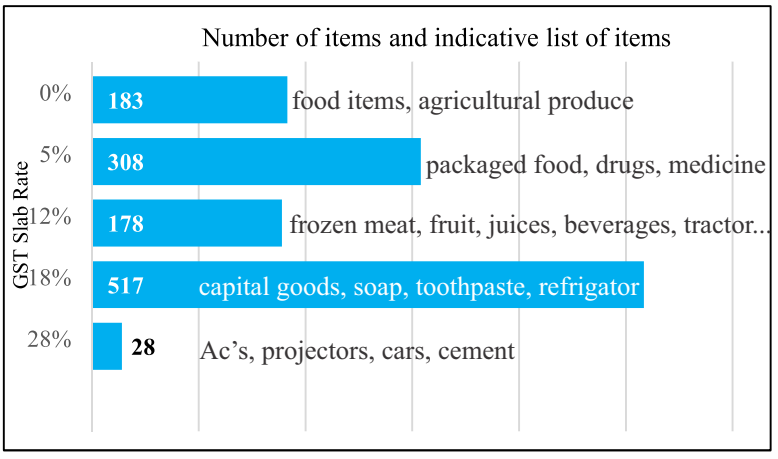
Table 3.1: Taxes Subsumed in GST and Their Rates (in June 2017)

Union Taxes	Rate (%)	State Taxes	Rates (%)
Central Excise duty	12.36	Value Added Tax (VAT)	10-14.5
Service Tax	15	Entry Tax	0-12.5
Central Sales Tax (CST)	2	Luxury Tax	3-20
Countervailing Duties (CVD)	12.36	Entertainment Tax	15-50
Special Additional Duty of Customs (SAD)	4	Purchase Tax	10-14.5
Additional excise duties	5-10	Taxes on lottery, betting & gambling	10-15

3.22 Under the present GST, both the Union and the States have concurrent powers to levy tax on a common base. States levy and collect State GST (SGST) and the Union levies and collects the Central GST (CGST). For any particular good or service or a combination of the two, the SGST and CGST rates are equal. Reference to the GST rate on a good or service is the sum of the rates of SGST and CGST, and both SGST and CGST are exactly half the GST rate. An integrated GST (IGST) is applied on inter-state movement of goods and services and on imports and exports.[7] IGST is simply a combination of SGST and CGST administered and collected by the Union Government, kept in a separate account, and distributed between the Union and States after settlement of input tax credit and verification of the destination of the goods and services.

3.23 GST rates vary considerably across goods and services. Apart from the standard rate of 18 per cent, there are three slabs of 5 per cent, 12 per cent and 28 per cent. Furthermore, some are exempted and outside the GST net, a few essentials are taxed at zero rate, and bullion is taxed at a special rate of 3 per cent (Figure 3.4).

Figure 3.4: GST Rate Structure



3.24 With many taxes subsumed under it, GST accounts for 35 per cent of the gross tax revenue of the Union and around 44 per cent of own tax revenue of the States. With gross tax revenue of the Union determining the divisible pool of taxes and, hence, transfers from the Union to the States, and changes in States' own taxes affecting their resource requirements, GST has become a critical factor in Indian federal finance. The rate structure of GST, or changes in it, have ramifications on revenues and expenditure of both the Union and the States, and by implication for the fiscal consolidation path of both the levels of government.

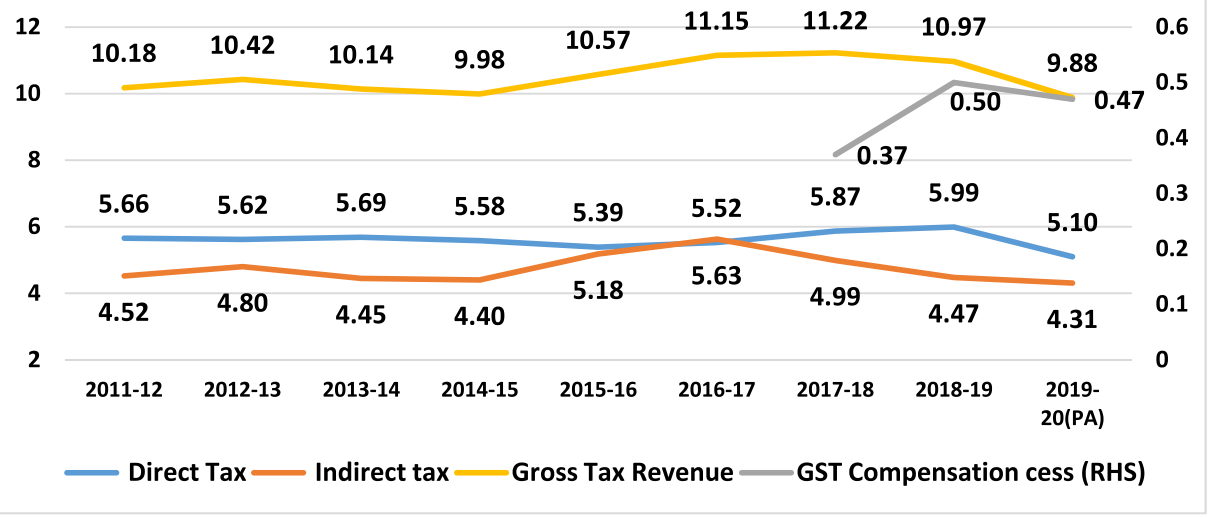
3.25 A systemic reform such as the introduction of GST takes time to stabilise. Hence, while analysing GST, data pertaining to the initial nine months (July-March) of 2017-18 of its implementation may be kept aside. That leaves us with data on monthly revenue collection and returns filing only for 2018-19. While this data limitation is, in itself, a serious constraint for analysis, the frequently changing rate structure and compliance regime adds to the challenge. Hence, while this Commission has drawn some conclusions from the available data, its focus is on the structural and design issues in GST, fiscal implications on the Union and State Governments and inter-governmental transfers.

[7] Exports are fully relieved of IGST through tax credits.

Aggregate impact and implications for the Union

3.26 The gross GST revenue collection in 2019-20 was Rs.11.93 lakh crore, which shows a moderate growth of 2.3 per cent over the gross revenue collection in 2018-19. With nominal GDP growth at 7.2 per cent in 2019-20, the GST buoyancy is observed at 0.3. Such low buoyancy is because of negative growth in collections of IGST on imports. Domestic GST collection grew by 7.7 per cent over the previous year with buoyancy just above unity. The gross GST revenue to GDP ratio for 2019-20 is 5.9 per cent.

Figure 3.5: Union Taxes (percentage of GDP)



Source: Union Receipt Budget for various years; NSO for GDP, CGA provisional accounts 2019-20

3.27 With the introduction of GST, the Union Government has gained powers to tax supply of goods while agreeing to share its service tax base with the States. As Figure 3.5 shows, the introduction of GST has had a significant impact on the Union Government's tax revenues. After excluding the GST compensation cess, indirect tax revenues of the Union have dropped to 4.31 per cent of GDP. This has been offset by a marginal increase in revenue from direct taxes. However, gross tax revenue, excluding GST cess collection, has dropped by almost 1.7 percentage points of GDP from 2016-17 levels. Such a significant fall, unless reversed, will impact tax devolution to States as well as the Union Government's fiscal health and consolidation path in the medium term. Given the already low level of tax revenues as a proportion of GDP, the observed buoyancy – percentage increase in revenue for a 1 per cent increase in GDP, disregarding any discretionary changes in the tax system – of less than unity is a disturbing feature that needs to be redressed by suitable initiatives at the Union level, both in tax policy and tax administration.

3.28 The GST law has assured State Governments guaranteed revenue growth of at least 14 per cent over the 2015-16 collection of subsumed taxes for a period of five years from the date of GST implementation. Any shortfall in this growth is being transferred by the Union Government as GST Compensation Grant from a separate cess being collected for the purpose. States' revenue on

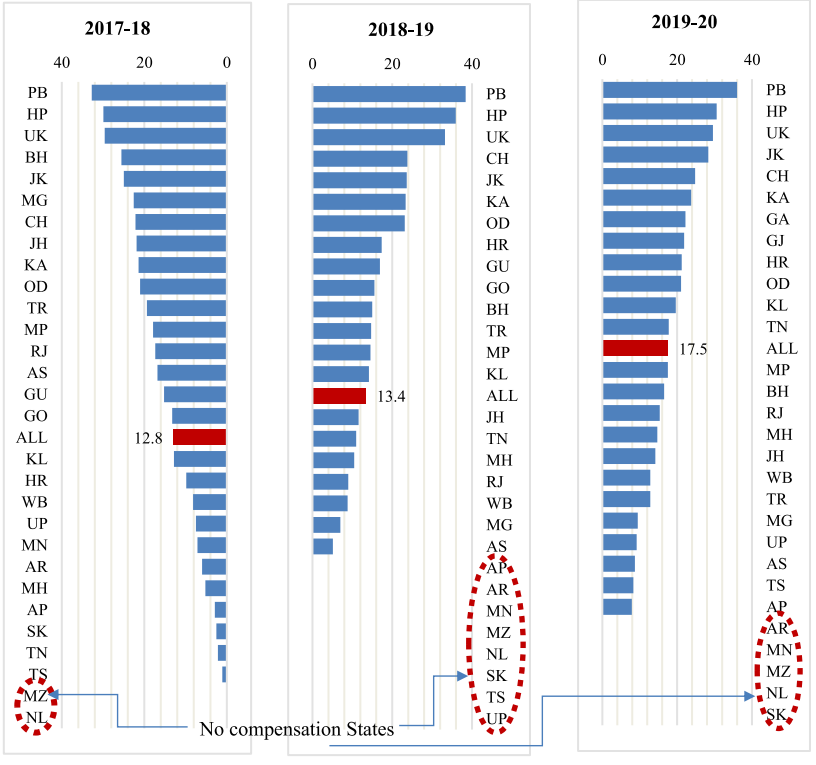
account of SGST is thus protected from 1 July 2017 to 30 June 2022.

3.29 At the time of the GST roll-out, this 14 per cent assured revenue growth would have translated into buoyancy higher than 1. The actual observed buoyancy of subsumed taxes during pre-GST years was significantly below 1. With inflation being contained under the inflation-targeting regime and some sluggishness in the economy, the nominal GDP growth itself is lower than expected. Hence, the protected revenue at an annualised rate of 14 per cent places a substantial burden on the GST system. It has led to GST compensation cess collections falling substantially short of what is required to reimburse States to the extent of their shortfall, thus either necessitating an increase in compensation cess rates or placing an additional burden on the Union Government finances.

Implications for States

3.30 State Governments, while agreeing to implement GST, have had to accept a significant reduction in their fiscal autonomy. Implications for the States vary, depending on factors like proportion of subsumed taxes in their own revenues, growth in taxes during the pre-GST regime, and State's dependence on Union transfers. For example, while, on an average, 44 per cent of States' own tax revenue got subsumed into GST in 2017-18, it ranged from 35 per cent for Andhra Pradesh to 63 per cent for the erstwhile State of Jammu and Kashmir. Similarly, VAT/sales tax, which accounted for almost two-third of subsumed taxes at an aggregate level, constituted only 50 per cent of own tax revenue in the case of Bihar and as much as 83 per cent in Jharkhand.

Figure 3.6: GST Compensation as Percentage of Protected Revenue



3.31 While the full impact of GST is yet to unfold, the first three years suggest an overall disturbing trend and a differentiated impact among States. A sum of Rs. 47,937 crore was released to States as GST compensation in 2017-18, Rs. 75,311 crore in 2018-19 and Rs.1.12 lakh crore in 2019-20. Figure 3.6 gives a snapshot of the impact of GST on individual States as well as all States in terms of shortfall in revenues as a proportion of protected level of revenue. Punjab, Himachal Pradesh and Uttarakhand remain the top three states with shortfalls in all three years. Smaller States, particularly North-Eastern and Himalayan States, appear to have done better, perhaps partly because of the move from the origin to destination principle of taxation under GST. Twenty-seven States received compensation in 2017-18, with aggregate shortfall at 12.85 per cent of the protected revenue. In 2018-19, while fewer States received compensation, with eight of them (including large states like Andhra Pradesh, Telangana, Uttar Pradesh) not needing to be compensated, the aggregate shortfall went up marginally to 13.41 per cent of the protected revenue.

3.32 Shortfall in protected revenue varied widely across years in many States. For example, Tamil Nadu's marginal shortfall in 2017-18 widened to almost 11 per cent of its protected revenue in 2018-19. Such wide swings were also seen in Maharashtra, Haryana and Goa. In 2019-20, the overall shortfall went up significantly to 17.5 per cent of protected revenues for States. Only four north-eastern states did not require any compensation in 2019-20. Large states like Uttar Pradesh, Andhra Pradesh and Telangana, which had not required any compensation in 2018-19, fell short of their protected revenues in 2019-20.

3.33 It is also pertinent to note that trend growth rate of VAT in various States in the pre-GST era was widely different. In aggregate, the trend growth rate of VAT/sales tax in all States for the 2011-12 to 2016-17 period was 12.67 per cent. But it ranged from 7.2 per cent in Bihar to 13.8 per cent in Rajasthan among the large States. The assurance of 14 per cent growth rate for five years, by treating all the States on par in terms of GST revenue growth irrespective of their wide-ranging revenue growth experiences in the past, has created another significant complication in federal finance.

3.34 A key challenge for the Commission, while projecting States' revenues for the 2021-26 period, is that the initial twenty-seven months of the award period are covered by the GST compensation scheme and the last thirty-three months are not. The issue of States with large shortfalls is discussed in greater detail in the projection of State finances in Chapter 4.

3.35 The foregoing analysis suggests that there are structural issues due to changes in the tax structure from the origin-based multiple taxation regime to the destination-based GST regime. Such structural issues may be required to be identified and readjustment may be done to minimise the fiscal and economic impact of GST.

Review of Union Finances

Fiscal Deficit

3.36 The Commission has analysed the three major fiscal indicators – fiscal deficit, revenue deficit and primary deficit – and has compared their relative performance since 2011-12 with the targets set under the FRBM Act and the revised roadmap of fiscal consolidation given by the FC-XIV. Table 3.2 brings out the profile of different fiscal indicators of the Union Government and the performance vis-à-vis the targets set by the FC-XIII, FC-XIV and FC-XV (2020-21).

Table 3.2: Profile of Fiscal Indicators of the Union Government

(per cent of GDP)

Year	Fiscal Deficit		Revenue Deficit		Primary Deficit	Ratio of Revenue Deficit to fiscal deficit%	Debt	GDP Growth (Nominal) %	GDP Growth (Real)%
	Actual	FC Target*	Actual	FC Target*					
2011-12	5.9	**4.8**	4.5	**2.3**	2.8	76.3	51.8	14.4	5.2
2012-13	4.9	**4.2**	3.7	**1.2**	1.8	75.5	51.0	13.8	5.5
2013-14	4.5	**3.0**	3.2	**0.0**	1.1	71.1	50.5	13.0	6.4
2014-15	4.1	**3.0**	2.9	**-0.5**	0.9	70.7	50.1	11.0	7.4
2015-16	3.9	**3.6**	2.5	**2.6**	0.7	64.1	50.1	10.5	8.0
2016-17	3.5	**3.0**	2.1	**2.3**	0.4	60.0	48.3	11.8	8.3
2017-18	3.5	**3.0**	2.6	**1.8**	0.4	74.3	48.2	11.1	7.0
2018-19	3.4	**3.0**	2.4	**1.4**	0.4	70.6	47.9	11.0	6.1
2019-20(RE)	3.8	**3.0**	2.4	**0.9**	0.7	63.2	49.0	7.8	4.2**
2020-21(BE)	3.5	**3.5**	2.7	**2.5**	0.4	77.1	48.7	10.0	

Source: Basic data from Union budget documents (excluding bonds) and GDP from NSO

*FC XIII ,FC XIV & FC XV (2020-21) Targets are shown in bold with no annual targets specified for the primary deficit.

** Provisional estimates of NSO,

3.37 The fiscal deficit of the Union Government declined steadily from 5.9 per cent of GDP in 2011-12 to 3.4 per cent in 2018-19, but has remained higher than the annual targets set by both the FC-XIII and FC-XIV. In two years, 2017-18 and 2018-19, the target slipped from the budgeted estimates because of specific developments: (a) in 2017-18 the structural change brought by GST meant collection of only eleven months' revenue; and (b) in 2018-19, the income transfer scheme for farmers led to breach in the announced targets. The overall trend in reduction in the fiscal

deficit has been both on account of increase in revenues and reduction in expenditure. The tax-GDP ratio went up by 80 basis points from 10.2 per cent in 2011-12 to 11 per cent in 2018-19 (Table 3.5). The decline in expenditure was a result of reduction in the subsidy outgo from 2.5 per cent of GDP to 1.2 per cent and restricting the growth in committed expenditure despite the pressure of pay and pension revision on account of the Seventh Central Pay Commission recommendations. These will be discussed in detail later in this Chapter. This correction in the fiscal deficit also needs to be viewed in the context of enhanced devolution to the States from 2015-16 onwards. However, the fiscal deficit is expected to go up substantially to 3.8 per cent in 2019-20 (RE) from the budget estimate of 3.3 per cent in 2019-20. The deviation of 0.5 per cent in the fiscal deficit in the revised estimates of 2019-20 is consistent with the FRBM Act. The increase in fiscal deficit is mainly due to decrease in gross tax revenues on account of reforms in corporate tax rates, lower disinvestment receipts and higher capital expenditure. But, as discussed in Chapter 4 of this Report, due to the onset of the Covid-19 pandemic in the last few months of 2019-20 financial year, the rise in fiscal deficit has exceeded the revised estimates. Similarly, while the fiscal deficit is budgeted to go down to 3.5 per cent in 2020-21 (BE), the ongoing pandemic and associated lock-downs have adversely impacted those estimates. A detailed analysis of the projected deficit is in Chapter 4. It is also important to note that the data is on a cash basis and disregards unpaid liabilities and extra-budgetary operations and may not reveal the full picture of fiscal balances.

Revenue Deficit

3.38 The revenue deficit of the Union Government as a proportion of GDP at 4.5 per cent in 2011-12 was brought down to 2.9 per cent in 2014-15 and further to 2.1 per cent in 2016-17. During the first two years of the FC-XIV award period, the revenue deficit as a proportion of GDP remained lower than the targets. It then rose to 2.6 per cent in 2017-18 because of a decrease in non-tax revenue from 1.8 per cent of GDP in 2016-17 to 1.1 per cent of GDP in 2017-18. The revenue deficit declined to 2.4 per cent in 2018-19 and is also pegged at 2.4 per cent in the 2019-20 revised estimates. It is budgeted to go up to 2.7 per cent of GDP in 2020-21 (BE) mainly due to an increase in revenue expenditure.

3.39 The FC-XIV had convincingly argued that the practice of reporting effective revenue deficit should be ended due to analytical problems but that, in line with international best practices, revenue deficit should continue to be reported as an indicator of government borrowing for consumption or recurrent expenditure. In the amended FRBM Act of 2018, revenue deficit as a reporting indicator has been dispensed with, but it continues to be shown as a reference indicator in the Medium Term Fiscal Policy (MTFP) statement. The effective revenue deficit has been removed as the parameter for targeting fiscal outcomes and it is not even shown as reference indicator in the MTFP Statement.

Primary Deficit

3.40 The primary deficit of the Union Government improved substantially from 2.8 per cent in 2011-12 to 0.9 per cent in 2014-15 and has been further estimated to decline to 0.4 per cent in 2018-19. This decline is in line with the reduction in the fiscal deficit (Table 3.2), as interest payments have remained steady at about 3.1 per cent of GDP (Table 3.3) during the period. The primary deficit increased to 0.7 per cent in 2019-20 (RE), but is budgeted to come down to 0.4 per cent in 2020-21 (BE).

3.41 The ratio of revenue deficit to fiscal deficit broadly indicates the extent of borrowings used for revenue expenditure. Table 3.2 also brings out this imbalance and shows that the ratio, which had improved from 76.3 per cent in 2011-12 to 60 per cent in 2016-17, deteriorated sharply in 2018-19 to reach 70.6 per cent. It is budgeted to further deteriorate to 77.1 per cent in 2020-21 (BE) due to higher revenue deficit. However, as discussed in Chapter 4, due to the onset of the Covid-19 pandemic in the last few months of 2019-20, and the projected rise in fiscal deficit, the actuals for 2019-20 and budget estimates of 2020-21 will be adversely impacted.

Sources of Fiscal Imbalance

3.42 Table 3.3 highlights the extent and sources of fiscal imbalance between 2012-13 and 2018-19. Between 2012-13 and 2018-19, as a proportion of GDP, the net revenue receipts of the Union Government decreased by about 0.6 percentage points with an equivalent decline in net tax revenue. The net tax revenue during 2015-16 declined to 6.9 per cent of GDP from 7.2 per cent in 2014-15, mainly due to an increase in the share of States in the divisible pool of taxes by 10 percentage points from 32 per cent in the first year of the award period of FC-XIV. However, the decline was partly arrested by the increase in Union excise duty on petrol and diesel during this period. There was sharp volatility in non-tax revenue collections which fluctuated between a high of 1.8 per cent in 2013-14, 2015-16 and 2016-17 and a low of 1.2 per cent in 2018-19. The non-debt capital receipts remained almost stagnant at 0.4 percent of GDP during the period from 2012-13 to 2016-17, but registered a significant increase in 2017-18 due to higher disinvestment receipts. On the other hand, the total expenditure as a ratio of GDP declined from 14.9 per cent in 2011-12 to 12.2 per cent in 2018-19. Simultaneously, the ratio of revenue deficit to fiscal deficit has shown a steady and significant decline from 2011-12 to 2016-17 by 16.3 percentage points (Table 3.2). However, the ratio has increased by 14.3 percentage points in 2017-18 due to an increase in the revenue deficit, whereas the fiscal deficit remained remained unchanged at the 2016-17 level and did not deteroriate correspondingly due to a decline in capital expenditure. The ratio improved by 3.7 percentage points in 2018-19 mainly due to an improvement in the revenue deficit.

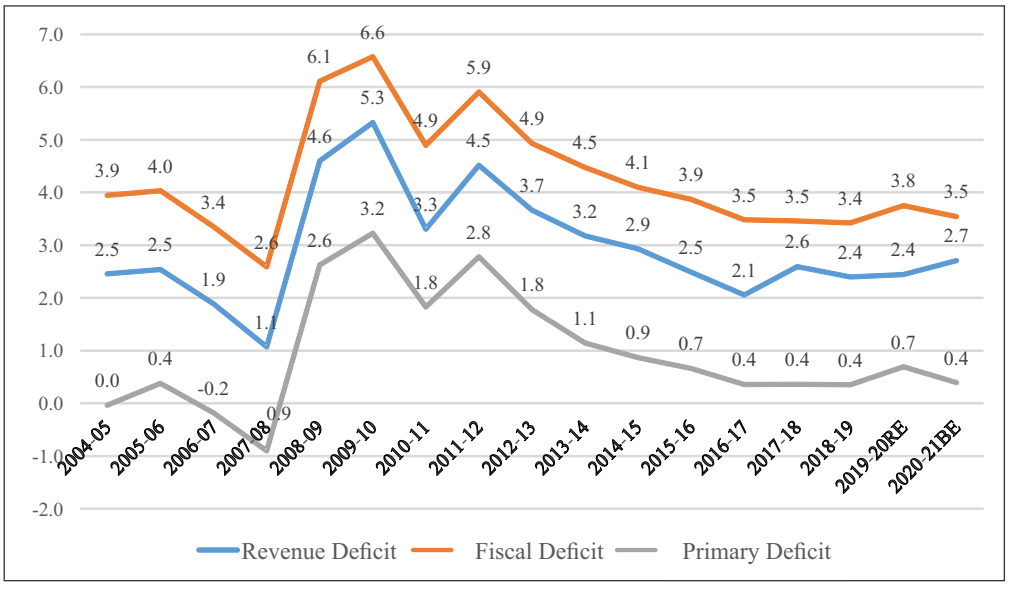
Table 3.3: Fiscal Performance of the Union

(per cent of GDP)

S. No.	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
I	**Net revenue receipts(a+b)**	**8.6**	**8.8**	**9.0**	**8.8**	**8.7**	**8.9**	**8.4**	**8.2**	**9.1**	**9.0**
a)	Non tax revenue	1.4	1.4	1.8	1.6	1.8	1.8	1.1	1.2	1.7	1.7
b)	Net tax revenue	7.2	7.5	7.3	7.2	6.9	7.2	7.3	6.9	7.4	7.3
II	**Revenue expenditure**	**13.1**	**12.5**	**12.2**	**11.8**	**11.2**	**11.0**	**11.0**	**10.6**	**11.5**	**11.7**
	of which: Interest payments	3.1	3.1	3.3	3.2	3.2	3.1	3.1	3.1	3.1	3.1
III	**Capital expenditure**	**1.8**	**1.7**	**1.7**	**1.6**	**1.8**	**1.8**	**1.5**	**1.6**	**1.7**	**1.8**
IV	**Total expenditure (II+III)**	**14.9**	**14.2**	**13.9**	**13.3**	**13.0**	**12.8**	**12.5**	**12.2**	**13.2**	**13.5**
V	**Revenue deficit (II-I)**	4.5	3.7	3.2	2.9	2.5	2.1	2.6	2.4	2.4	2.7
VI	**Fiscal deficit**	5.9	4.9	4.5	4.1	3.9	3.5	3.5	3.4	3.8	3.5
VII	**Non-debt capital receipts**	0.4	0.4	0.4	0.4	0.5	0.4	0.7	0.6	0.4	1.0

Source: Union Budget for various years and GDP from NSO

Figure 3.7 : Revenue Deficit, Fiscal Deficit and Primary Deficit of the Union Government as Percentage of GDP



Source: Union Budget Documents and GDP from NSO

Note: GDP new series (Base Year - 2011-12), back series from 2004-05 to 2010-11.

Trends of Union's Debt and Liabilities

3.43 The Union Government's liabilities as shown in Table 3.4 include all its liabilities against the Consolidated Fund of India and all public account liabilities. From the Statement of Extra Budgetary Resources in the Union Budget, the extra budgetary resources (EBR) have been included for three years – from 2016-17 to 2018-19. For 2019-20 (RE) and 2020-21(BE) EBRs have been included as per the MTFP statement presented with the budget.

Table 3.4: Outstanding Liabilities of the Union Government

(percent of GDP)

S. No.	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
I	**Public debt of which**	**39.0**	**39.6**	**39.4**	**39.6**	**40.0**	**38.8**	**38.9**	**38.7**	**40.1**	**40.0**
a)	Internal debt	37.0	37.9	37.8	38.0	38.5	37.3	37.4	37.3	38.6	38.7
b)	External debt at historical rates	1.9	1.8	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4
II	Other liabilities of which	12.8	11.4	11.1	10.5	10.1	9.5	9.3	9.2	8.9	8.6
	Reserve funds and deposits	1.5	1.4	1.4	1.5	1.4	1.4	1.5	1.6	1.6	1.7
III	**Total liabilities** (I+II)	**51.7**	**51.0**	**50.5**	**50.1**	**50.1**	**48.3**	**48.2**	**47.9**	**49.0**	**48.7**
IV.	Adjusted total liabilities of which	53.6	53.1	52.3	50.8	51.4	49.6	49.4	49.5	50.3	50.1
a	**External debt at current exchange rate**	**3.7**	**3.3**	**3.3**	**2.9**	**3.0**	**2.7**	**2.6**	**2.5**	**2.4**	**2.3**
b	**Extra budgetary resources (EBR)**						**0.1**	**0.1**	**0.5**	**0.7**	**0.8**

Source: Union Budget for various years and GDP from NSO

Note 1. Other Liabilities include National Small Savings Funds, State Provident Fund, other accounts such as special deposits of Non- Government Provident Funds and reserve funds and deposits.

2. In Total Liabilities (row III), external debt is at historical prices.

3. In adjusted total liabilities (row IV), external debt is at current exchange rate and cash balance has been adjusted. 2016-17 to 2020-21(BE) includes extra budgetary resources (fully serviced government bonds). MTFP figures for 2019-20 (RE) and 2020-21(BE).

3.44 The Union Government's liabilities, at historical rates of exchange for external debt, stood at 47.9 per cent of GDP on 31 March 2019, as compared to 51.7 per cent on 31 March 2012, in line with the long term trend of decline since 2008-09, when it was 57.3 per cent. The decline was due to reduction in the fiscal deficit as well as the high nominal growth of GDP during the period between 2011-12 and 2018-19.

3.45 After adjustment for external debt at current exchange rates, changes in the cash balance and inclusion of EBRs at the end of March 2019, the debt of the Union Government was estimated at 49.5 per cent. It is expected that Union Government liabilities will go up to 50.3 per cent of GDP in 2019-20 (RE). The Union's budget projects its liabilities to come down to 50.1 per cent of GDP in 2020-21(BE). On 31 March 2019, with only 5.1 per cent of total Union Government's liabilities denominated in foreign currencies, external debt constituted only 2.5 per cent of GDP, and the currency risk to its debt portfolio was limited. Furthermore, with public external debt entirely from official sources, it was secure from volatility in the international financial markets. The compositional shift towards marketable debt continued and the share of marketable securities in total internal debt was 84.4 per cent in end-March 2019.

3.46 The stock of contingent liabilities in the form of guarantees given by the Union Government has increased in absolute terms from Rs. 1.07 lakh crore in 2004-05 to Rs. 4.47 lakh crore at the end of 2018-19. The FRBM Act ceiling of 0.5 per cent of GDP on guarantees that can be extended by the Government during a financial year has resulted in a reduction of the ratio of contingent liability to GDP from 3.3 per cent in 2004-05 to 2.4 per cent in 2018-19. During 2018-19, gross additions at Rs. 77,728 crore were equivalent to 0.4 per cent of GDP, well within the 0.5 per cent annual limit prescribed under FRBM Rules.

3.47 Pursuant to the implementation of the recommendations of the FC-XIV on exclusion of States from the National Small Savings Fund (NSSF), the Union Government's share of investment in NSSF increased. This has led to its relatively reduced reliance on market borrowings, albeit cheaper than NSSF resources, to finance its fiscal deficit.

3.48 The Union Government amended the FRBM Act through Finance Act 2018 (Act 13 of 2018). In the reformed FRBM framework, the focus is on limiting government debt and fiscal deficit. The key amendments mandate the Union Government to:

(i) take appropriate measures to limit the fiscal deficit to upto 3 per cent of GDP by 31 March 2021;

(ii) endeavour to ensure that:

  (a) the general government debt does not exceed 60 per cent;

  (b) the Union Government debt does not exceed 40 per cent of GDP by the end of financial year 2024-25;

(iii) not give additional guarantees with respect to any loan on the security of the Consolidated Fund of India in excess of 0.5 per cent of GDP, in any financial year.

3.49 Revenue deficit and effective revenue deficit, as already mentioned, have been removed as parameters for targeting fiscal outcomes. Further, clearly defined escape clauses and buoyancy clauses, with return paths, have been included to allow deviation from fiscal deficit targets in the event of rare/ unforeseen events. These amendments will provide sufficient flexibility for necessary deviations to enhance the credibility of fiscal rules while, at the same time, preventing their violation.

3.50 The Union Government debt has been clearly defined in the new FRBM Act as:

i) the total liabilities of the Union Government on the security of the Consolidated Fund of India, including external debt valued at current exchange rates;

ii) the total liabilites in the public account; and

iii) such financial liablities of any body, corporate or other entity owned or controlled by the Union Government, which the government is to repay or service from the annual financial statement, reduced by the cash balance available at the end of the date.

In line with the above definition, the Union Budgets of 2019-20 and 2020-21 have categorised as EBRs (fully serviced government bonds) those financial liabilities of entities that are owned or controlled by the Union Government, and the repayment of principal and interest of which are through the Annual Financial Statement in the liabilties statement of the Union Government. It is instructive to note that the fiscal deficit for any year does not include such EBRs as it captures the excess of disbursements over receipts from the Consolidated Fund of India.

Deferred Liabilities and Off-Budget Borrowings

3.51 While fiscal consolidation appears commendable, it has been observed that the Union Government resorted to off-budget financing in the form of deferment of expenditure to the following year, which complicates the picture. To tide over the cash flow problems for meeting its liabilities on account of fertilizer and food subsidies, two different types of arrangements were devised. In the case of the fertilizer subsidy, the liquidity requirements of fertilizer companies arising as subsidy arrears were met through the Special Banking Arrangement (SBA). SBA is short term credit from public sector banks to meet the mismatch in budget allocations and actual amount due at the end of the financial year. The Union Government pays interest to banks at the G-Sec rate and the interest above the G-sec is borne by the fertilizer companies. In the case of food subsidy, to cover the shortfall in the budget allocation for food subsidy, the Food Corporation of India (FCI) resorts to a number of instruments such as bonds, unsecured short-term loans and NSSF loans from Union Government. This is a continuing practice that has also been highlighted by the Comptroller and Auditor General of India (CAG) in its Report no. 20 of 2018 on compliance with the FRBM Act by the Union Government. Although a continuing practice during the entire review period, this practice of short-term borrowings to finance fertilizer subsidies and lending to FCI through NSSF needs to be eliminated by making a full budgetary provision in the year of incurring such expenditures.

Revenues

3.52 Union Government revenues comprise of tax revenues net of States' share, non-tax revenues and non-debt capital receipts (Table 3.3). Net Union revenues, excluding non-debt capital receipts, increased from 8.6 per cent of GDP in 2011-12 to 9 per cent in 2013-14, but

thereafter declined to 8.8 per cent in 2014-15. In the transition from 2014-15 under FC-XIII to 2015-16 under FC-XIV, net Union revenues as a proportion of GDP declined from 8.8 per cent to 8.7 per cent. The decline was marginal, with the enhanced tax devolution to States being offset by a one-time jump in the non-tax receipts from the telecommunications sector. Collections under non-debt capital receipts as a proportion of GDP jumped from around 0.4 per cent during 2011-12 to 2016-17 to 0.7 per cent in 2017-18. Thereafter, it decreased to 0.6 per cent in 2018-19 and is expected to go down further to 0.4 per cent in 2019-20 (RE). However, such non-debt capital receipts are budgeted at a much higher level of 1 per cent in 2020-21 (BE).

Tax Revenue

3.53 The gross tax revenue to GDP ratio of the Union Government increased by 0.8 percentage points from 10.2 per cent in 2011-12 to 11 per cent in 2018-19. Table 3.5 shows the trends of major taxes relative to GDP and in relation to gross tax revenue.

Table 3.5: Performance of Major Taxes of the Union

(as per cent of GDP)

Year	Corporation tax	Income tax	Total direct tax	Customs duties	Union excise duties	Service tax	GST	Total indirect tax	Total Union revenue (Gross)
2011-12	3.7	2.0	**5.7**	1.7	1.7	1.1		**4.5**	10.2
2012-13	3.6	2.0	**5.6**	1.7	1.8	1.3		**4.8**	10.4
2013-14	3.5	2.2	**5.7**	1.5	1.5	1.4		**4.5**	10.1
2014-15	3.4	2.1	**5.6**	1.5	1.5	1.3		**4.4**	10.0
2015-16	3.3	2.1	**5.4**	1.5	2.1	1.5		**5.2**	10.6
2016-17	3.2	2.4	**5.5**	1.5	2.5	1.7		**5.6**	11.2
2017-18	3.3	2.5	**5.9**	0.8	1.5	0.5	2.6	**5.4**	11.2
2018-19	3.5	2.5	**6.0**	0.6	1.3	0.04	3.1	**5.0**	11.0
2019-20(RE)	3.0	2.7	**5.7**	0.6	1.3	0.01	3.0	**4.9**	10.6
2020-21(BE)	3.0	2.8	**5.9**	0.6	1.2	0.00	3.1	**4.9**	10.8

Continued

Table 3.5: Performance of Major Taxes of the Union (cont.)

(as per cent of Union's Gross Tax Revenue)

Year	Corp oration tax	Income tax	Total direct tax	Customs duties	Union excise duties	Service tax	GST	Total indirect tax	Total Union revenue (Gross)
2011-12	36.3	19.3	**55.6**	16.8	16.7	11.0		**44.4**	100.0
2012-13	34.4	19.5	**53.9**	16.0	17.3	12.8		**46.1**	100.0
2013-14	34.7	21.4	**56.1**	15.1	15.2	13.6		**43.9**	100.0
2014-15	34.5	21.4	**55.9**	15.1	15.5	13.5		**44.1**	100.0
2015-16	31.1	19.8	**51.0**	14.4	20.0	14.5		**49.0**	100.0
2016-17	28.3	21.3	**49.5**	13.1	22.5	14.8		**50.5**	100.0
2017-18	29.8	22.5	**52.3**	6.7	13.7	4.2	23.1	**47.7**	100.0
2018-19	31.9	22.7	**54.6**	5.7	11.4	0.3	28.0	**45.4**	100.0
2019-20(RE)	28.2	25.9	**54.1**	5.8	11.8	0.1	28.3	**45.9**	100.0
2020-21(BE)	28.1	26.3	**54.5**	5.7	11.3	0.0	28.5	**45.5**	100.0

Source: Union Budget for various years and GDP from NSO

Note: Total direct taxes include taxes on wealth, other taxes on income and expenditure and others, apart from corporation tax and income tax,.

Direct Taxes

3.54 Direct taxes as a proportion of GDP have ranged between 5.7 per cent in 2011-12 and 6 per cent in 2018-19. The policy of the Union Government on direct taxes is to broaden and deepen the base, while maintaining moderate rates and gradually phasing out exemptions. Revenues from income tax as a a proportion of GDP went up from 2 per cent in 2011-12 to about 2.5 per cent in 2018-19, with the corresponding increase in its share in gross tax revenue from 19.3 per cent in to 22.7 per cent. In 2018-19, while the share of corporation tax in total gross tax revenue decreased from 36.3 per cent in 2011-12 to 31.9 per cent in 2018-19, its proceeds as a proportion of GDP fell from 3.7 per cent to 3.5 per cent. In line with its earlier policy initiatives to rationalise corporation tax to attract investment and promote growth, in September, 2019, the Union Government reduced the tax rate to 22 per cent for domestic companies, if they do not avail of any exemption/incentive provisions. The effective tax rate for these companies shall be 25.17 per cent inclusive of surcharge and cess. Further, a new domestic company incorporated on or after 1 October 2019 making fresh investment in manufacturing has an option to pay tax at the rate of 15 per cent. This benefit is available to companies which do not avail any exemption/incentive and commence their production on or before 31 March 2023. The effective tax rate for these companies shall be 17.16 per cent inclusive of surcharge and cess. The Government has also

taken some new initiatives to mobilise resources through the levy of an additional education and health cess of 1 per cent and a 10 per cent long term capital gain tax on listed equity shares and equity-based mutual funds on capital gains exceeding Rs. 1 lakh.

3.55 Further, higher growth in direct taxes is anticipated due to better tax administration particularly with improvements in the Tax Information Network and increase in the number of tax filers. The number of return filers increased from 3.31 crore in 2013-14 to 6.33 crore in 2018-19, an increase of 91.2 per cent. The number of tax-payers also increased from 5.72 crore in 2013-14 to 8.45 crore in 2017-18, an increase of 47.7 per cent. The year-wise details of tax filers and tax-payers are given in Table 3.6. After the demonetisation exercise in November 2016, there was a widening of the tax base which resulted in a substantial increase in collection from direct taxes in 2017-18.

3.56 In order to provide significant relief to the individual taxpayers and to simplify the income tax law, the Government has brought a new and simplified personal income tax regime wherein income tax rates will be significantly reduced for the individual taxpayers who forgo certain deductions and exemptions with effect from financial year 2020-21.

Table 3.6: Persons Filing Returns and Taxpayers

(Number in crore)

	Return filers	Growth (%)	Tax payers	Growth (%)
2013-14	3.31		5.72	
2014-15	3.51	6.0	6.15	7.6
2015-16	3.91	11.4	6.92	12.7
2016-17	4.47	14.3	7.42	7.2
2017-18	5.45	21.9	8.45	13.9
2018-19	6.33	16.1		

Source : Income Tax Statistics, CBDT

Indirect Taxes

3.57 Indirect taxes, as a proportion of GDP, increased from 4.5 per cent in 2011-12 to 5.6 per cent in 2016-17, primarily because of increased collections of Union excise duties and service tax. Imposition of additional excise duties on petroleum products during 2014-15 and 2015-16, when global petroleum prices fell dramatically from US$ 111.89 a barrel in 2011-12 to US$ 46.17 a barrel in 2015-16, led to a collections going up almost three-fold from 2013-14 to 2016-17. The increase was mainly in special additional excise duty, which is not shareable with the States and is retained by the Union Government. Out of the total collection under indirect taxes (excluding the

GST compensation cess), 20.6 per cent is estimated to come from cess and surcharges during 2019-20 (RE).

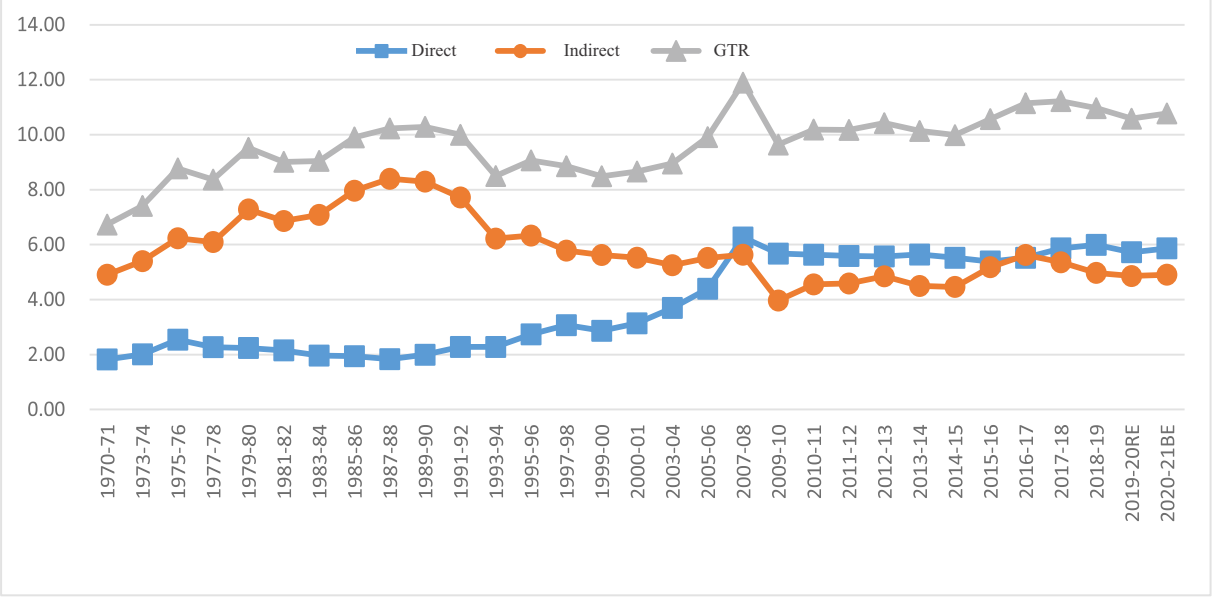
3.58 The ratio of service tax to GDP rose consistently till 2016-17, particularly after the introduction of a negative list in 2012-13. On the other hand, revenues from custom duties, as proportions of both GDP as well as gross tax revenue, have shown a declining trend after 2012-13. Major reasons for the decline are reduction in duties on many items of significant import value, including petroluem, oil and lubricants (POL), and also because of various exemptions. From 2017-18, a significant share of custom and excise duties have been subsumed under GST (except those on POL).

3.59 The introduction of GST has not as yet resulted in the expected high buoyancy in revenues from indirect taxes. During 2018-19, as a proportion of GDP, indirect taxes fell from 5.6 per cent during 2016-17 to 5 per cent, and it is expected to have remained at 4.9 per cent during 2019-20 (RE).

Changing Composition

3.60 Revenues from direct taxes overtook revenues from indirect taxes for the first time in 2007-08 (Figure 3.8). The dominance has been maintained ever since, except in 2016-17 when the two were almost equal partly because of the spike in excise collection already discussed.

Figure 3.8: Union Tax GDP Ratio: Direct Tax, Indirect Tax and Gross Tax Revenue



Source : Union Budget Documents and GDP from NSO

Revenue Foregone

3.61 The Union Government provides a large number of tax incentives for different objectives, such as promotion of exports, expansion of research and development, development of backward areas and employment generation. Units operating in special economic zones (SEZs) and notified backward areas get refunds for indirect taxes and accelerated depreciation is allowed to promote capital investment. Some sectors, such as agriculture, infrastructure, green field manufacturing, warehousing, oil and gas and renewable energy also benefit from tax concessions.

3.62 These concessions and exemptions reduce the revenue collections and adversely impact resources accruing to both Union and State Governments. However, revenue foregone, both as proportions of gross tax revenue and of GDP, has declined from 2011-12 onwards (Table 3.7). Revenue foregone as a proportion of GDP declined from 6.1 per cent in 2011-12 to 4.5 per cent in 2014-15. Similarly, revenue foregone as a proportion of gross tax revenue declined from 60 per cent in 2011-12 to 44.5 per cent in 2014-15. The decline was particularly sharp in 2015-16 because of a change in the methodology of calculating the revenue implication of tax incentives on account of custom duties and Union excise. The estimates for 2017-18 do not include the revenue foregone from excise duty, which was subsumed under GST.

Table 3.7: Trends of Revenue Foregone

(Rs. crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (Proj.)
Direct taxes	101141	102256	93047	118593	138658	155840	183580	206113	230415
Indirect taxes	432442	463979	456947	435756	148442	146264	53704	75753	81970
Total revenue foregone	**533583**	**566235**	**549994**	**554349**	**287100**	**302104**	**237284**	**281866**	**312385**
Revenue Foregone as % of gross tax revenue	60.0	54.6	48.3	44.5	19.7	17.6	12.4	13.5	14.4
Revenue foregone as % of GDP	6.1	5.7	4.9	4.5	2.1	2.0	1.4	1.5	1.5

Source: Statements of Revenue Foregone in the Union Budget documents

Note: 1. As excise duty (except that on tobacco products, crude petroleum oil, natural gas, petrol and diesel) has been subsumed in GST, the revenue impact of tax incentives for excise is being discontinued from 2017-18 onwards.

Cesses and Surcharges

3.63 FC-XIV had highlighted the somewhat problematic growing share of cesses and surcharges in Union revenues. Article 270 of the Constitution enables the Union Government to levy and retain any cess levied for a specific purpose. Article 271 empowers Parliament to levy a surcharge on any taxes which fall within the Union Government's taxing powers. Cesses are statutory levies whose proceeds are earmarked for utilisation for specific purposes. The underlying spirit for levying the cess is to serve a specific purpose and provide necessary financial impetus to a particular sector/area of the economy. Hence, the Union Government merely acts as a custodian of funds so collected in the Public Account till these are appropriated for the mandated purpose. Similarly, surcharges are meant to be levied only for short periods. Both cesses and surcharges are excluded from the divisible pool.

3.64 A large number of cesses and surcharges, except those levied on petroleum, have been subsumed into GST. The major ones are additional duty of customs and excise on motor spirit and high speed diesel oil, surcharge on pan masala and tobacco products, cess on sugar, clean enviornment cess and infrastructure cess. In the Union Budget of 2018-19 the erstwhile road cess was rechristened as the road and infrastructure cess and a social welfare surcharge was introduced. Table 3.8 shows the trend of cesses and surcharges, which constituted over 19.9 per cent of gross tax receipts in 2018-19, of which 4.6 per cent is on account of GST Compensation Cess.

Table 3.8: Cesses and Surcharges

(Rs. crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Direct taxes	29143	48862	63883	81543	40468	58840	53433	145802	155817	175807
Indirect taxes (excluding GST)	63394	72545	77387	86417	137482	172224	150529	172312	182665	195460
GST compensation cess	0	0	0	0	0	0	62612	95081	98327	110500
Total cesses & surcharges	92537	121407	141270	167960	177950	231064	266574	413195	436809	481767
Total cess & surcharge as % of gross tax revenue of which	**10.4**	**11.7**	**12.4**	**13.5**	**12.2**	**13.5**	**13.9**	**19.9**	**20.2**	**19.9**
GST compensation cess as % of gross tax revenue							**3.3**	**4.6**	**4.5**	**4.6**

Source : Union Budget Documents

3.65 The major reasons for higher receipts from cesses and surcharges in 2018-19 are: (a) increase in the health and education cess on income tax to 4 per cent from the earlier 3 per cent; (b) introduction of a road and infrastructure surcharge; and (c) imposition of social welfare surcharge of 10 per cent on the aggregate duties of customs and imported goods in place of the earlier education and higher education cess of 3 per cent on imported goods. The Union Budget of 2019-20 estimates a further increase in the ratio of cesses and surcharges to the gross tax revenue, as the rate of surcharge on income tax for individuals having income between Rs. 2 crore and Rs. 5 crore has been increased from 15 per cent to 25 per cent. For individuals earning more than Rs. 5 crore, the rate of surcharge has been increased from 15 per cent to 37 per cent.

Non-Tax Revenues

3.66 The major sources of non-tax revenues of the Union Government are dividend/surplus from central public sector enterprises (CPSEs)/public sector financial institutions/Reserve Bank of India (RBI), receipts from the telecommunications sector, interest receipts on the loans extended to State Governments and CPSEs, royalty from off-shore oil fields and fees/user charges. Table 3.9 gives the trends of non-tax revenues. The FC-XIV estimated that non-tax revenue as a proportion of GDP would remain at around 1.53 per cent, assuming a high potential of revenue from the telecommunications and petroleum sectors and dividends. However, collections have fallen short of these estimates by 0.01 percentage points during the period from 2015-16 to 2019-20 (RE). The non-tax revenue of the Union Government, which stood at 1.4 per cent of GDP in 2011-12, increased to 1.8 per cent in 2016-17. Thereafter, it declined significantly by almost 0.7 percentage points in 2017-18, mainly on account of lower telecommunications sector receipts and dividend from the RBI. It is estimated to increase to 1.7 per cent in 2019-20 (RE) mainly on account of higher dividend receipts from the RBI. In absolute terms, the highest collection of 1.8 per cent of GDP was registered in 2016-17 mainly due to record collection of 0.5 per cent of GDP from the telecommunications sector. Since then, telecommunications receipts, classified under the head 'Communication', have started declining. Dividend receipts constitute the largest source of non-tax revenues of the Union Government. Their share in non-tax revenue was 0.60 per cent of GDP during 2018-19. The dividends from RBI increased more than four-fold from Rs.15,009 crore in 2011-12 to Rs.68,000 crore in 2018-19, while dividends from the others increased from Rs. 35,599 crore to only Rs. 45,421 crore. The dividend from RBI during 2019-20 is expected to increase further to Rs. 1.47 lakh crore mainly due to excess transfers as per the revised Economic Capital Framework (ECF).

Table 3.9: Trends in Non Tax Revenues

(Rs. crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Interest receipt	20252	20761	21868	23804	25378	16229	13574	12145	11027	11042
Dividend and profit	50608	53761	90435	89833	112127	123017	91361	113421	199893	155395
of which RBI	15009	16010	33010	52676	65896	65876	40659	68000	147988	57128*
Petroleum	12581	14806	16525	14480	9492	10797	10879	14197	12061	14075
Communication	17401	18902	40114	30624	56479	70241	32066	40816	58990	33027
Road and bridges	3050	4007	5298	6103	6887	7324	9064	19866	21589	25161
Others	17780	25118	24631	33014	40897	45223	35801	35261	41955	146316
Total	**121672**	**137355**	**198871**	**197858**	**251260**	**272831**	**192745**	**235706**	**345515**	**385016**
Non tax revenue as per cent to GDP	**1.4**	**1.4**	**1.8**	**1.6**	**1.8**	**1.8**	**1.1**	**1.2**	**1.7**	**1.7**

* provisional

Source : Union Budget, Finance accounts and GDP from NSO

3.67 In the past, interest receipts on loans given to State Governments were an important component of non-tax revenue. This has declined considerably after 2005-06 when intermediation of the Union Government in loans given to State Governments was stopped, following the recommendation of the FC-XII. The interest realisation is mostly on loans of an earlier period.

Non Debt Capital Receipts

3.68 Non-debt capital receipts have two major components: recovery of loans and advances and disinvestment receipts. The quantum of recovery of loans declined from Rs. 18,850 crore in 2011-12 to Rs. 15,633 crore in 2017-18. With no fresh on-lending to the States, except the back-to-back transfer of the loans taken for externally aided projects (EAP), the receipts under this head are showing a gradual declining trend. The other source of recovery of loans is from the public sector enterprises, for repayment of loans earlier extended.

3.69 Disinvestment receipts account for a major share of non-debt capital receipts. The Union Government has adopted four methods of disinvestment: (a) minority stake sale in profit making CPSEs by selling shares via offer for sale; (b) initial public offering of CPSEs; (c) strategic disinvestment of CPSEs; and (d) exchange traded funds (ETFs)[8].

[8] An ETF is a basket of stocks that reflects the composition of an index, like Nifty 50. The trading value of an ETF is based on the net asset value of the underlying stocks that it represents. Unlike regular open-ended mutual funds, ETFs can be bought and sold throughout the trading day like any other stocks. At present, the Union Government operates two ETFs: CPSE – ETF and Bharat-22 ETF

3.70 Strategic disinvestment would imply the sale of a substantial portion of the government shareholding in a CPSE, along with transfer of management control.This method would garner maximum receipts, but is predicated on the willingness of the Government to hand over control to another entity. During 2018-19, the Union Government made strategic disinvestments of four companies and received Rs. 16,000 crore. This included the sale proceeds of Rs. 15,000 crore from the disinvestment of the government's 52.63 per cent share in the Rural Electrification Corporation (REC) to the Power Finance Corporation (PFC), another CPSE. In a similar exercise in 2017-18, government's shares in Hindustan Petroleum Corporation Ltd (HPCL) were sold to the Oil and Natural Gas Corporation (ONGC) to achieve synergies in the petroleum sector through integration of upstream and downstream companies. While the sale of the government's stake in one CPSE to another may serve many strategic purposes, proceeds from such sales are qualitatively different from sales to non-government entities. Around Rs. 69,000 crore was generated through other methods of disinvestment in 2018-19. The ETF route is also being relied upon and, at present, there are two ETFs.

3.71 In November 2005, the Union Government had constituted the National Investment Fund (NIF) into which the proceeds from disinvestment of CPSEs were to be channelised. The corpus of the NIF was to be of a permanent nature and the Fund was to be professionally managed to provide sustainable returns to the Government, without depleting the corpus. In order to align the NIF with the disinvestment policy, it was included in the Public Account of the Union Government from 2013-14 onwards and the disinvestment proceeds are to remain there until withdrawn/invested for the approved purposes.

3.72 The NIF is primarily utilised for the following purposes:

(i) subscribing to the shares being issued by a CPSE on rights basis so as to ensure that the government stake of 51 per cent in the CPSE is not diluted;

(ii) preferential allotment of shares of the CPSE so that Government shareholding does not go down below 51 per cent in all cases where the CPSEs plan to raise fresh equity to meet their capital expenditure programme;

(iii) recapitalisation of public sector banks and public sector insurance companies;

(iv) investment by the Government in RRBs/India Infrastructure Finance Company Ltd (IIFCL)/National Bank for Agriculture and Rural Development (NABARD)/Exim Bank; and

(v) investment in certain entities.

It is relevant to mention here that the FC-XIV had reiterated the recommendations made by the FC-XIII to maintain all disinvestment receipts in the Consolidated Fund for utilisation on capital expenditure. It was further recommended that the NIF should be wound up in consultation with the Controller General of Accounts (CGA) and the CAG.

Table 3.10: Non-Debt Capital Receipts

(Rs. crore)

Particulars	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2019-20 (BE)
Non-debt capital receipts	**36938**	**40950**	**41865**	**51475**	**62967**	**65353**	**115678**	**112779**	**81605**	**224967**
Recoveries of loan and advances	18850	15060	12497	13738	20835	17630	15633	18052	16605	14967
Disinvestment of equity	18088	25890	29368	37737	42132	47723	100045	94727	65000	210000
Non debt capital receipt as % of GDP	**0.42**	**0.41**	**0.37**	**0.41**	**0.46**	**0.43**	**0.68**	**0.59**	**0.40**	**1.00**

Source: Union Budget for various years and GDP from NSO

3.73 The trend in non-debt capital receipts is shown in Table 3.10. The FC-XIV had projected an increase in these receipts from 0.61 per cent of GDP in 2015-16 to 0.82 per cent in 2019-20. These have not been realised and the disinvestment receipts have fluctuated from year to year with no discernible trend. Market volatility has also affected the outcome. The Union Government has revised the target of disinvestment in financial year 2019-20 from Rs.1.05 lakh crore in the budget estimates to Rs. 65,000 crore in the revised estimates. Disinvestment is budgeted to net in a significantly higher Rs 2.10 lakh crore in 2020-21 (BE), which can be achieved only through aggressive strategic disinvestment of select CPSEs under favourable market conditions.

Trends of Expenditure

3.74 The trends in revenue and capital expenditure, along with the major components of revenue expenditure, are shown in Table 3.11. The total expenditure of the Union Government declined by over 2.7 percentage points of GDP from 14.9 per cent in 2011-12 to 12.2 per cent in 2018-19. Within overall expenditure, the revenue component declined from 13.1 per cent to 10.6 per cent and the capital component from 1.8 per cent to 1.6 per cent during the same period. The trend growth rates of revenue and capital expenditure during this period were 8.3 per cent and 10.5 per cent, respectively, which was lower than the nominal GDP growth of 11.6 per cent. Notwithstanding the implementation of the Seventh Pay Commission award, expenditure declined, as proportion of GDP, during this period mainly because of a decrease in subsidy and defence expenditure (capital and revenue) This trend is budgeted to be reversed by an increase in total expenditure as a proportion of GDP to 13.2 per cent in 2019-20 (RE) and 13.5 per cent of GDP in 2020-21 (BE). As proportions of GDP, revenue and capital expenditure are budgeted at

11.7 per cent and 1.8 per cent, respectively, during 2020-21 (BE). The projected increase in expenditure during 2019-20 and 2020-21 is mainly on account of an increase in allocations to the agriculture and allied sectors.) The major components of revenue expenditure comprising interest payments, pay and allowances, pensions, defence and subsidies are briefly analysed in the following paragraphs.

Table 3.11 Trends of Union Government Expenditure

(per cent of GDP)

Year	Revenue Exp.	Interest Payments	Pay and allowances*	Pension	Defence#	Subsidies Exp.	Capital Exp.	Total
2011-12	13.1	3.1	1.1	0.7	2.0	2.5	1.8	14.9
2012-13	12.5	3.1	1.1	0.7	1.8	2.6	1.7	14.2
2013-14	12.2	3.3	1.0	0.7	1.8	2.3	1.7	13.9
2014-15	11.8	3.2	1.1	0.8	1.8	2.1	1.6	13.3
2015-16	11.2	3.2	1.0	0.7	1.6	1.9	1.8	13.0
2016-17	11.0	3.1	1.2	0.9	1.6	1.5	1.8	12.8
2017-18	11.0	3.1	1.1	0.9	1.6	1.3	1.5	12.5
2018-19)	10.6	3.1	1.1	0.8	1.5	1.2	1.6	12.2
2019-20 (RE)	11.5	3.1	1.2	0.9	1.5	1.3	1.7	13.2
2020-21 (BE)	11.7	3.1	1.1	0.9	1.4	1.2	1.8	13.5

Includes both revenue and capital expenditure on defence services.

*Brochure on Pay and Allowances of Central Government (excluding Defence Services) and Union Budget.

Source : Union Budgets and GDP from NSO.

Interest Payments

3.75 Interest payments form the largest component of Union Government expenditure. The ratio of interest payments to net revenue receipts of the Union Government has narrowly ranged between 34 per cent and 38 per cent during 2011-12 to 2018-19. As a proportion of GDP, it has fluctuated between 3.1 per cent to 3.3 per cent. Both decline in interest rates and some fiscal consolidation have contributed to this.

Major Subsidies

3.76 Subsidies are the second largest component of revenue expenditure. The quantum of subsidies is a key determinant in expenditure management and fostering the path towards fiscal consolidation. The major explicit subsidies of the Union Government are on food, fertilizers and petroleum (Table 3.12). As a proportion of net revenue receipts, total subsidies decreased sharply from 29 per cent in 2011-12 to 14.4 per cent in 2018-19, 14.2 per cent in 2019-20 (RE) and is budgeted at 13 per cent in 2020-21 (BE). The corresponding decrease as a proportion of GDP was

from 2.5 per cent in 2011-12 to 1.2 per cent in 2018-19. But this does not correctly reflect the actual cash out-go as explained in the following paragraph. In the medium to long term, resolute measures are needed for rationalisation of subsidies. Furthermore, volatility in international oil prices is a major risk to the subsidy bill of the Union Government, particularly on liquefied petroleum gas (LPG) and fertilizer.

Table 3.12: Subsidies Relative to Union Government's Net Revenue Receipts

(per cent of net revenue receipts)

Year	Food	Fertiliser	Petroleum	Others	Total
2011-12	9.7 (0.8)	9.3 (0.8)	9.1 (0.8)	0.9 (0.1)	29.0 (2.5)
2012-13	9.7 (0.9)	7.5 (0.7)	11.0 (1.0)	1.1 (0.1)	29.2 (2.6)
2013-14	9.1 (0.8)	6.6 (0.6)	8.4 (0.8)	1.0 (0.1)	25.1 (2.3)
2014-15	10.7 (0.9)	6.5 (0.6)	5.5 (0.5)	0.8 (0.1)	23.4 (2.1)
2015-16	11.7 (1.0)	6.1 (0.5)	2.5 (0.2)	1.9 (0.2)	22.1 (1.9)
2016-17	8.0 (0.7)	4.8 (0.4)	2.0 (0.2)	2.2 (0.2)	17.1 (1.5)
2017-18	7.0 (0.6)	4.6 (0.4)	1.7 (0.1)	2.3 (0.2)	15.6 (1.3)
2018-19	6.5 (0.5)	4.5 (0.4)	1.6 (0.1)	1.7 (0.1)	14.4 (1.2)
2019-20 (RE)	5.9 (0.5)	4.3 (0.4)	2.1 (0.2)	2.0 (0.2)	14.2 (1.3)
2020-21 (BE)	5.7(0.5)	3.5(0.3)	2.0(0.2)	1.7 (0.2)	13.0 (1.2)

Source: Union Budget for various years and GDP from NSO

Note: Figures in brackets show explicit subsidies as ratio of GDP

3.77 Following the implementation of the National Food Security Act, 2013 (NFSA), food subsidy covers approximately 80 crore beneficiaries. Between 2011-12 and 2015-16, food subsidy as a proportion of net revenue receipts increased from 9.7 per cent to 11.7 per cent. The increase as a proportion of GDP was from 0.8 per cent to 1 per cent. The reported cash outflow, however, does not reflect the true impact of food subsidy. For example, in 2016-17 the cash outgo on account of this subsidy was Rs. 1.10 lakh crore (0.7 per cent of GDP), in 2017-18 Rs. 1 lakh crore (0.6 per cent of GDP) and in 2018-19 Rs.1.01 lakh crore (0.5 per cent of GDP). However, in addition, the Union Government gave loans to the FCI from the NSSF of Rs. 70,000 crore in 2016-17, Rs. 65,000 crore in 2017-18 and Rs. 97,000 crore in 2018-19. These are not reflected in the overall subsidy figures appearing in Tables 3.11 and 3.12.

3.78 Targeting of food subsidy is expected to have improved with electronic point of sale (e-PoS) devices at fair price shops authenticating beneficiaries at the time of distribution of foodgrains and also electronically capturing the quantum distributed to families. While the resulting saving from better targetting of food subsidy may have been Rs. 17,500 crore per year, there has been no reduction in allocation nor any savings in the budgeted expenditure on a net basis, as improved targetting has been offset by the inclusion of new beneficiaries in the scheme.

3.79 The long-awaited full de-control of the pricing of diesel and petrol came on 1 January 2015, and with the progessive rationalisation of excise duties on diesel and petrol, the distortionary price difference between diesel and petrol finally disappeared in early May 2020. The petroleum-related subsidies are now restricted to kerosene and LPG. While the Union Government has implemented DBT for LPG, the analogous reform of kerosene subsidy is ongoing. Kerosene allocation to States for distribution through the public distribution system has been rationalised from 2016-17 and steps have also been taken to enhance DBT coverage for kerosene. In view of these measures, the petroleum subsidy as percentage of net revenue receipts has declined from 9.1 per cent in 2011-12 to 1.6 per cent in 2018-19 and from 0.8 per cent to 0.1 per cent of GDP during the same period. Kerosene subsidy has declined steeply from Rs. 28,215 crore in 2011-12 to Rs. 3,659 crore in 2020-21 (BE). This has arguably been one of the most far-reaching expenditure reforms in the last five years. There has been, however, an increase in the petroleum subsidy outgo as a result of the Pradhan Mantri Ujjwala Yojana (PMUY). Under this scheme, about seven crore LPG connections have been provided to the below povery line (BPL) families so far since May 2016, with a support of Rs. 1,600 per connection. This may increase the subsidy burden on LPG in the future unless the subsidy regime is further rationalised to eliminate non-poor beneficiaries or there is a cap on the number of subsidised cylinders.

3.80 The fertilizer subsidy as a proportion of net revenue receipts declined from 9.3 per cent in 2011-12 to 4.5 per cent in 2018-19, and as percentage of GDP, from 0.8 per cent to 0.4 per cent . In 2016, the Department of Fertilizers chalked out a programme to implement DBT for fertilizer subsidy in a modified form through a pilot project in sixteen districts. With the introduction of neem-coating of urea from the kharif season of 2016, consumption of urea is estimated to have declined by 8.66 lakh metric tonne (MT) over 2015-16. The savings in subsidy is estimated to be approximately Rs. 12,000 per MT, resulting in a total saving of Rs. 1,000 crore.

Defence Expenditure

3.81 Expenditure on defence services, on both revenue (excluding defence services pension) and capital accounts, as a proportion of GDP, has steadily decreased from 2 per cent in 2011-12 to 1.5 per cent in 2018-19 (Table 3.11). In 2020-21 (BE), such expenditure on revenue and capital accounts, again as ratios of GDP, are estimated at 0.9 per cent and 0.5 per cent, respectively. The defence revenue expenditure in 2016-17 increased by 13.3 per cent and in 2017-18 by 12.5 per cent mainly on account of higher outgo on salaries with implementation of the revised pay scales of the three defence services. During 2018-19, it increased by a further 5.1 per cent. Between 2011-12 and 2018-19, defence revenue expenditure grew faster (10 per cent) than the increase in defence capital outlay (4.7 per cent), and resulted in a reduction of the share of defence capital outlay in total defence services expenditure (excluding defence pension) from 40 per cent in 2011-12 to 33 per cent in 2018-19.

3.82 The total defence services expenditure (including defence services pension), as a ratio of GDP, declined from 2.4 per cent in 2011-12 to 2.1 per cent in 2018-19. It is budgeted to go down to

2 per cent in 2020-21 (BE). This decline has taken place even as defence services pension, again as a ratio of GDP, increased from 0.43 per cent in 2011-12 to 0.48 per cent in 2014-15 and further to 0.57 per cent in 2016-17 due to the implementation of revised pay scales and one rank one pension (OROP). It is expected to be at the level of 0.6 per cent in 2020-21 (BE). In 2020-21 (BE), the defence services salary and pension constitute around 59 per cent of the total expenditure of the Ministry of Defence, followed by capital outlay (24 per cent) and stores, adminstration of the defence services, construction of roads and bridges and the Coast Guard organisation accounting for the balance.

3.83 The capital outlay on defence services increased at the rate of 4.7 per cent a year from 2011-12 to 2018-19. During this period, the highest annual growth of 12.2 per cent was registered in 2013-14 and the lowest (-) 2.4 per cent in 2015-16. Capital outlay as a proportion of GDP has decreased from 0.8 per cent in 2011-12 to 0.5 per cent in 2020-21 (BE). Similarly, capital outlay as a proportion of total defence services expenditure (including defence pension) has declined from 32.6 per cent to 24.9 per cent during the same period.

Pay and Allowances and Pensions

3.84 Pay and allowances (Table 3.11) of Union Government's civilian employees more than doubled between 2011-12 and 2018-19, from Rs. 95,984 crore to Rs. 2.11 lakh crore, due to the implementation of the Pay Commission's recommendations. While, as a ratio of GDP, such expenditure ranged between 1 per cent and 1.2 per cent during this period, the implementation of the Pay Commission's recommendations led to a marginal increase from 1 per cent in 2015-16 to 1.2 per cent in 2016-17. As on 1 March 2017, the strength of Union Government employees was 32.38 lakh, and went upto 32.63 lakh in 1 March 2019.

3.85 The expenditure of the Union Government on pensions, as a proportion of GDP, also increased - from 0.7 per cent in 2011-12 to 0.9 per cent in 2016-17 - due to the Pay Commission award. This includes the contribution of the Union Government under the new pension scheme (which accounts for 2.4 per cent in the total expenditure under pensions). It is expected to remain at 0.9 per cent in 2020-21 (BE).

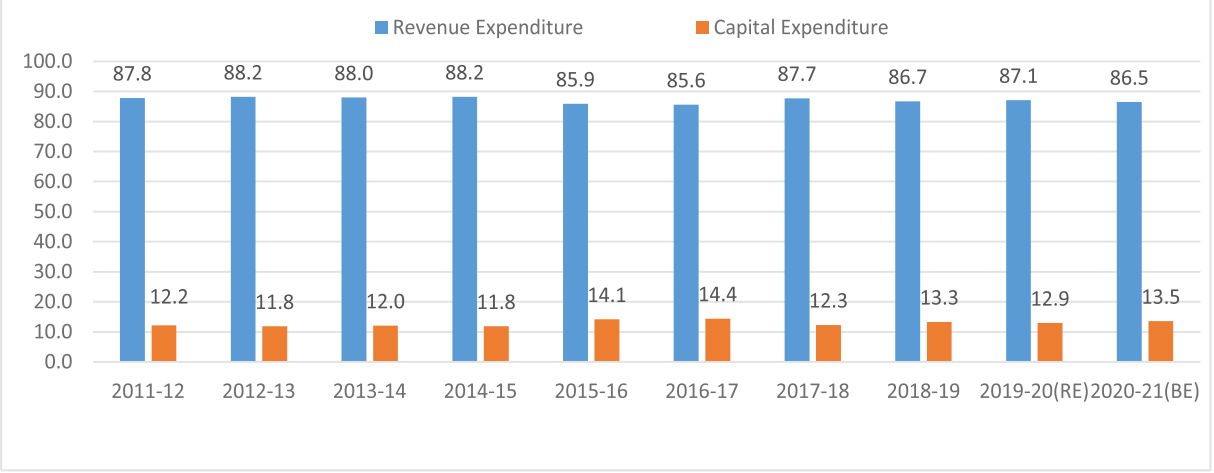
3.86 Expenditure on salary, pension and interest payments together accounted for 4.9 per cent of GDP in 2011-12 and increased to 5 per cent of GDP in 2018-19. As per budget estimates of 2020-21, it is expected to remain at the level of 5.1 per cent.

Revenue-Capital Expenditure Balance

3.87 In 2011-12, as a proportion of GDP, the Union Government's revenue expenditure was 13.1 per cent and capital expenditure 1.8 per cent. In 2016-17, the revenue expenditure declined by 2.1 percentage points to 11 per cent while capital expenditure remained at the same level, showing an improvement in the quality of expenditure. But it was shortlived; in 2017-18, while

the revenue expenditure remained at same level of 11 per cent, capital expenditure contracted by about 0.3 percentage points to 1.5 per cent, indicating a significant deterioration in the quality of Union Government's expenditure (Table 3.11). Some of this deterioration was reversed in 2018-19, when revenue expenditure declined by 0.4 percentage point to 10.6 per cent and capital expenditure increased by 0.1 percetage point. The relative share of capital expenditure in total expenditure increased from 12.2 per cent to 14.4 per cent during the period 2011-12 to 2016-17. Thereafter, it declined significantly by 1.1 percentage points cent to reach 13.3 per cent in 2018-19. The trends of revenue and capital expenditure accounts are shown in Figure 3.9.

Figure 3.9: Relative Percentage Share of Revenue and Capital Expenditure (percentage of total expenditure)



Source : Union Budgets

Review of State Finances

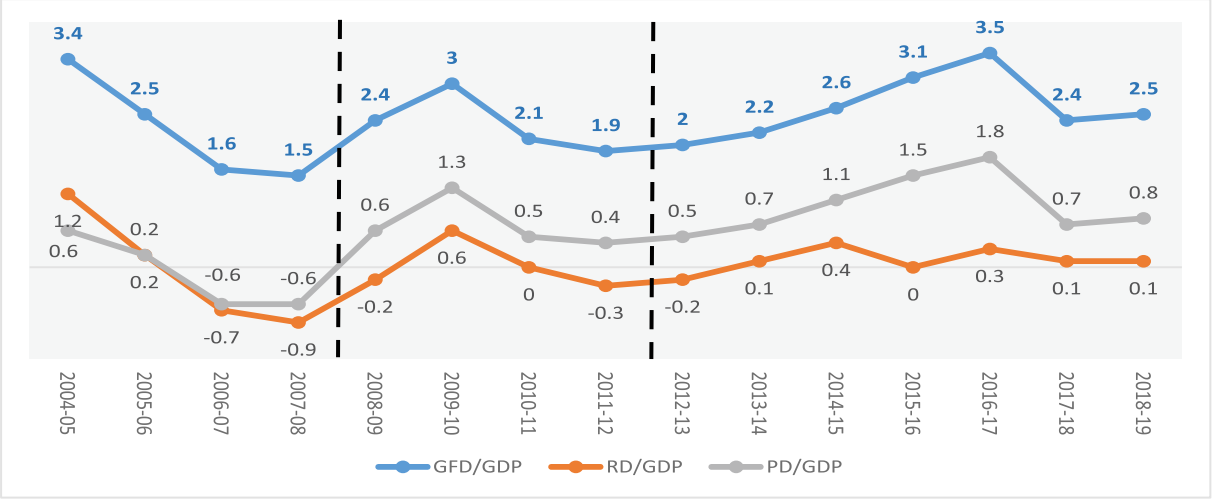
3.88 As discussed earlier, the large number of changes in public finances over the last five years have had significant implications for the finances of State Governments. The replacement of the Planning Commission with the NITI Aayog and the subsequent closing of the funding window under the Plan schemes has had varying impact on the finances of States. Similarly, the implementation of the recommendations of the FC-XIV from April 2015 and the launch of GST in July 2017 have changed the inter-governmental fiscal relations in several ways. At the level of States, three additional developments have had an impact on state finances: the implementation of the UDAY (Ujjwal DISCOM Assurance Yojana) scheme for improving the fiscal health of power distribution companies, implementation of the recommendations of state pay commissions and the increasing tendency of State Governments to waive off farm loans.

Trends in Aggregate Fiscal Indicators

3.89 Before embarking on a discussion on State finances from 2011-12, it is instructive to look at the period from 2004-05 onwards. The combined fiscal position of States can be divided into three broad phases (Figure 3.10). State finances showed a general improvement between 2004-05 and 2007-08 in the key parameters of combined fiscal deficit, revenue deficit and primary deficit. The combined fiscal deficit of all States declined from 3.4 per cent to 1.5 per cent during this period while the combined revenue deficit of 1.2 per cent turned into a surplus of 0.9 per cent. The improvement was largely on account of enhanced revenues and improvement in tax efficiency with the introduction of VAT, the debt consolidation and write-off (Debt Consolidation and Relief Facility (DCRF) facility provided by the FC-XII) and the enactment of FRBM Acts by States.

Figure 3.10: Trends in Aggregate Fiscal Indicators of States

Gross Fiscal Deficit (GFD), Revenue Deficit (RD) and Primary Deficit (PD) as a percentage of GDP



Source: Finance Accounts; GDP: NSO (2011-12 series) and NSO back-series 2004-05 to 2011-12 (Base 2011-12)

Note 1: (+) indicates deficit, (-) indicates surplus

3.90 The 2008-09 to 2011-12 period witnessed two major shocks: pay revision by States, in response to recommendations of the Sixth Central Pay Commission and the global financial crisis (2008-09). Tax devolution from the Union as well as the States' own tax revenue, as a proportion of GDP, declined between 2008 and 2010 on account of tax concessions granted to combat the anticipated downturn in the economy during the global slowdown. While slackening its own fiscal rules under the FRBM Act, the Union Government also relaxed the same for the State Governments and permitted them to borrow beyond their respecitve FRBM limits in 2008-09 and 2009-10. As a result of all these factors, as a proportion of GDP, the States' fiscal deficit increased from 1.5 per cent to 3 per cent between 2007-08 and 2009-10. However, increased transfers was one of the major reasons for the marginal improvement in fiscal indicators from 2009-10 to 2011-12.

3.91 Various factors contributed to the steady worsening of the aggregate fiscal indicators of the States from 2011-12 onwards (Table 3.13). There was a decline in their own tax and non-tax revenues. Their combined fiscal deficit breached the 3 per cent ceiling for the first time in 2015-16 and was a high of 3.5 per cent in 2016-17. Outstanding liabilities of State Governments have been registering double digit growth since 2012-13. The capital expenditure of the States increased to 3.3 per cent in 2016-17 from 2.4 per cent in 2014-15 (Table 3.15). Major policy factors like UDAY, implementation of new pay commission awards following the Seventh Pay Commision award, farm loan waivers and pending accounting issues related to GST implementation have been the main contributors to the strained fiscal health of States. Nevertheless, the States, in the aggregate, were able to bring down the gross fiscal deficit to GDP ratio below 3 per cent in 2017-18 and 2018-19. This trend was also reflected in the reduction of the primary deficit to GDP ratio. This fiscal improvement, however, came mainly at the cost of compression of capital expenditure which, as a proportion of GDP, declined from 3.3 per cent to 2.5 per cent. Both components of capital expenditure, namely capital outlay and loans and advances declined, with a sharp decline in the latter on account of power, and food storage and warehousing. In 2017-18, some States converted past loans to the power sector into grants or equity. Debt to GDP ratio remained more or less stagnant around 24 per cent between 2016-17 and 2018-19.

Table 3.13: Trends in Aggregate Fiscal Indicators of States – Deficits and Debt

(In per cent)

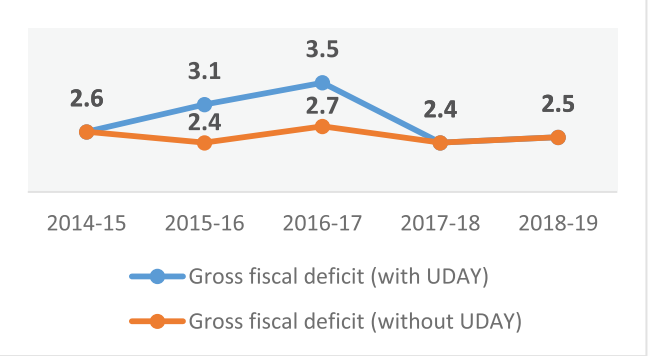
All State Aggregate	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
GFD/GDP	1.9	2.0	2.2	2.6	3.1	3.5	2.4	2.5	3.1	2.7
RD/GDP	-0.3	-0.2	0.1	0.4	0.0	0.3	0.1	0.1	0.8	0.1
PD/GDP	0.4	0.5	0.7	1.1	1.5	1.8	0.7	0.8	1.5	1.0
RD/GFD	-14.1	-10.4	4.3	14.0	1.3	7.6	5.8	5.3	24.0	5.1
Outstanding Debt & Liabilities/GDP	22.6	22.0	21.6	21.9	23.0	24.3	24.4	24.5	25.5	25.4

Source: Finance Accounts, State Budgets 2020-21; GDP: NSO (2011-12 series)

Note 1: (+) indicates deficit, (-) indicates surplus

Note 2: Outstanding debt & liabilities include internal debt of State Governments, loans and advances from the Union Government and other liabilities viz., small savings, provident funds etc., reserve funds and deposits (both interest-bearing and non-interest-bearing)

Figure 3.11: Impact of UDAY(as percentage of GDP)



3.92 A total of twenty-seven States (including the erstwhile State of Jammu and Kashmir) signed up for the UDAY scheme for the financial and operational improvement and revival of power distribution companies. Sixteen State governments took over the debt of power distribution companies (DISCOMs), while eleven signed up for only improving operational efficiencies without any takeover of debt. Under the scheme, sixteen State Governments issued bonds to take over the debt of DISCOMs and transferred these proceeds to DISCOMs in a mix of grant, loan and equity. Figure 3.11 presents the gross fiscal deficit of State Governments with and without UDAY. It can be seen that the fiscal deficit of all the States with UDAY is 3.1 per cent of GDP in 2015-16 and 3.5 per cent in 2016-17. However, when UDAY liabilities are excluded, it falls to 2.4 per cent in 2015-16 and 2.7 per cent in 2016-17. UDAY, therefore, had an impact of 0.7 per cent of GDP in 2015-16 and 0.8 per cent in 2016-17. The total debt-GDP ratio of these States also increased from 22.6 per cent in 2011-12 to 24.3 per cent in 2016-17. The capital expenditure of the States increased from 2.4 per cent in 2014-15 to 3.3 per cent in 2016-17 as the States provided support to DISCOMs largely through loans under UDAY. As the restructuring of DISCOM debt was completed in 2016-17, there was no burden on this account in 2017-18 and the fiscal deficit came down to 2.4 per cent in 2017-18.

3.93 Based on the recommendations of the FC-XIV, the Union Government implemented a basic incentive-compatible framework for State Governments to adhere to fiscal targets. The States were eligible for an additional borrowing limit of 0.25 per cent over and above 3 per cent of fiscal deficit for any given year for which debt-GSDP (gross state domestic product) ratio was less than or equal to 25 per cent in the preceding year. A further additional borrowing limit of 0.25 per cent of GSDP was given in a year if the interest payments were less than or equal to 10 per cent of the revenue receipts in the preceding year. These were subject to the condition that the State does not have a revenue deficit. Despite the availability of this window, the aggregate additional borrowings over net borrowing ceilings allowed to States under this dispensation were a modest Rs. 12,269 crore (seven states), Rs. 12,873 crore (nine states) and Rs. 12,664 crore (ten states) for the years 2016-17, 2017-18 and 2018-19, respectively.

3.94 In 2015-16, the States eliminated their aggregate revenue deficit mainly because of their larger share in the devolution of taxes following the implementation of FC-XIV recommendations. In 2016-17, the revenue deficit increased to 0.3 per cent largely because almost one-third of the aggregate expenditure by States on UDAY was in the form of grants. This reduced to 0.1 per cent in 2017-18 and remained at the same level in 2018-19.

3.95 Interest payments by State Governments, which is the difference between fiscal deficit and primary deficit, remained in the range of 1.5 per cent to 1.7 per cent of GDP between 2011-12 and 2018-19. With the steep increase in the fiscal deficit and only a marginal increase in interest payments, the primary deficit also increased from 0.4 per cent in 2011-12 to 1.8 per cent in 2016-17, but reduced to 0.7 per cent of GDP in 2017-18.

Trends in Aggregate Revenues

3.96 The aggregate revenue receipts of States as a proportion of GDP increased from 12.6 per cent in 2011-12 to 13.6 per cent in 2018-19 (Table 3.14). While aggregate own tax revenue of the States, again as a proportion of GDP, remained in the range of 5.9 per cent to 6.6 per cent of GDP from 2011-12 to 2018-19, it tapered downwards after peaking in 2012-13. The own non-tax revenue remained in the range of 1 per cent to 1.2 per cent during the same period. The bulk of the increase in aggregate revenue receipts as a percentage of GDP was mainly on account of increased devolution and grants-in-aid from the Union.

3.97 Aggregate tax devolution to States, as a proportion of GDP, increased from 2.9 per cent in 2011-12 to 4 per cent in 2018-19 and grants-in-aid increased from 2.1 per cent in 2011-12 to 2.3 per cent in 2018-19. However, it may be noted that compensation to States on account of GST is booked as grants-in-aid to States. The increased tax devolution was mainly due to the implementation of the FC-XIV's recommendations. The increase in total transfers from the Union to States was equivalent to 1.2 per cent of GDP between 2011-12 and 2018-19.

3.98 A part of the increase in grants-in-aid from the Union to the States was because of a change in methodology of disbursing the grants for various CSS. Earlier such grants-in-aid bypassed the State budgets, but from 2014-15 onwards, these were routed through the State budgets. This contributed to the increase in grants-in-aid, as a proportion of GDP, shooting up from 1.8 per cent in 2013-14 to 2.7 per cent in 2014-15. However, such grants-in-aid declined to 2.4 per cent in 2015-16 mainly due to the discontinuation of financial assistance provided to States in the form of NCA, SCA and SPA given by the erstwhile Planning Commission. But due to the compositional shift of transfers cosequent to the FC-XIV award, the overal transfers increased.

Table 3.14: Trends in Aggregate Revenue Receipts of the States

(per cent of GDP)

All State Aggregate	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Total Revenue Receipts	12.6	12.6	12.2	12.8	13.3	13.3	13.3	13.6	13.8	14.1
a. Own Tax Revenue	6.4	6.6	6.3	6.2	6.2	5.9	6.0*	6.1	6.3	6.4
b. Own Non-Tax Revenue	1.1	1.2	1.2	1.2	1.1	1.1	1.0	1.1	1.1	1.2
Total Own Revenue (a+b)	7.5	7.8	7.5	7.4	7.3	7.0	7.0	7.3	7.4	7.6
c. Tax Devolution	2.9	2.9	2.8	2.7	3.7	3.9	3.9*	4.0	3.4	3.6
d. Grants-in-Aid	2.1	1.9	1.8	2.7	2.4	2.3	2.3	2.3	3.0	3.0
Total Transfers from the Union (c+d)	5.1	4.8	4.7	5.4	6.0	6.3	6.3	6.3	6.4	6.6

* In the year 2017-18, an amount of Rs. 67,998 crore on account of IGST has been booked under devolution to States in the Finance Accounts of States.

Source: Finance Accounts, State Budgets 2020-21; GDP: NSO (2011-12 series)

3.99 Aggregate own tax revenue of States increased at a trend growth rate of 10.26 per cent between 2011-12 and 2018-19, substantially below normative levels based on longer term trends estimated by the FC-XIV. Given the already low levels of tax revenues mobilised by States, the observed buoyancy of 0.86 is disconcerting. The impact of implementation of GST on State finances has already been discussed in an earlier section. Their aggregate own non-tax revenue growing at a trend rate of 10.45 per cent also displayed a buoyancy of only 0.88, substantially below one. With increase in transfers from Union to States during the period, the States' total revenue receipts, as a proportion of GDP, showed some increase from 2011-12 to 2018-19.

Trends in Aggregate State Expenditure

3.100 The revenue expenditure of States as a percentage of GDP increased steadily from 12.3 per cent in 2011-12 to 13.7 per cent in 2018-19 (Table 3.15). A marked increase was seen in revenue expenditure as proportion of GDP from 12.3 per cent in 2013-14 to 13.1 per cent in 2014-15. A part of this may be attributed to the routing of CSS grants through the budgets of the States.

Table 3.15: Trends in Aggregate State Expenditure

(per cent of GDP)

All State Aggregate	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
I. Revenue expenditure	12.3	12.4	12.3	13.1	13.3	13.6	13.5	13.7	14.6	14.3
General services										
of which:	4.4	4.3	4.3	4.3	4.4	4.4	4.6	4.8	4.9	4.9
Interest payments	1.6	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.7
Pension	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.7	1.7	1.7
Other general services	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.6
Social services										
of which	5.0	5.0	5.0	5.1	5.4	5.5	5.3	5.4	5.9	5.8
Education	2.4	2.4	2.4	2.5	2.5	2.5	2.4	2.4	2.5	2.5
Health	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Economic services	2.6	2.8	2.6	3.3	3.2	3.3	3.2	3.1	3.4	3.2
Compensation & assignment to local bodies and aid materials	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
II. Capital expenditure	2.4	2.2	2.2	2.4	3.1	3.3	2.5	2.5	2.7	2.7
III. Total expenditure	14.7	14.6	14.5	15.6	16.4	16.9	15.9	16.2	17.3	16.9

Source: Finance Accounts,, State Budgets 2020-21; GDP: NSO (2011-12 series)

3.101 Higher revenue expenditure of the 'development' category for education, sports, art and culture, social security and welfare, relief on account of natural calamities, rural development and energy has contributed to the growth in revenue expenditure. Committed expenditure comprising pensions, interest payments and administrative services increased only marginally during this period. Interest payments increased from 1.6 per cent of GDP in 2011-12 to 1.7 per cent in 2018-19. On the other hand, expenditure on pension remained at 1.5 per cent from 2011-12 to 2016-17 but increased to 1.7 per cent in 2018-19 mainly due to implementation of the Pay Commission award.

3.102 Revenue expenditure on general services was more or less constant at around 4.4 per cent of GDP from 2011-12 to 2016-17. During this period, such expenditure on social services increased from 5 per cent to 5.5 per cent and economic service expenditure increased from 2.6 per cent to 3.3 per cent. However, there was a marked change in the composition of revenue expenditure from 2016-17 to 2018-19. While revenue expenditure on general services increased from 4.4 per cent to 4.8 per cent of GDP with increases in expenditure on interest and pensions, there was a corresponding decline from 5.5 per cent to 5.4 per cent in social services and from 3.3 per cent to 3.1 per cent in economic services.

3.103 Revenue expenditure on education (2.5 per cent of GDP) and health (0.7 per cent of GDP) remained almost constant between 2011-12 and 2018-19 (Table 3.15). Furthermore, as a proportion of total revenue expenditure, such expenditure on education declined from 19.8 per cent to 17.3 per cent while that on health increased from 4.8 per cent to 5.5 per cent. A partially redeeming feature of this change was that the reduction in the share of revenue expenditure on education was lower for States with GSDP below the national average. Importantly, the increase in the share of revenue expenditure on health was higher for these States with below average GSDP as compared to the better off States.

3.104 In 2018-19, the average per capita revenue expenditure on education for North-Eastern and Himalayan (NEH) States at Rs. 5,970 was higher than the corresponding figure of Rs. 3,267 for other States in general. Similarly, the corresponding per capita revenue expenditure on health of Rs. 1,987 for NEH States was almost double of Rs.1,035 for general States. The below-average States in each category require extra attention (Table 3.16).

Table 3.16: States Spending Less than Average Per Capita Revenue Expenditure on Health /Education (2018-19)

Social Sector	North-Eastern and Himalayan States with per capita spending less than NEH States average	General States with per capita spending less than average of general States
Education (NEH States average is Rs.5,970 and general States average is Rs.3,267)	Assam, Manipur, Meghalaya and Triputa	Bihar, Jharkhand, Madhya Pradesh, Punjab, Telangana, Uttar Pradesh and West Bengal
Health (NEH States average is Rs.1,987 and general States average is Rs.1,035)	Assam, Manipur and Uttarakhand	Bihar, Jharkhand, Madhya Pradesh, Maharashtra, Punjab, Uttar Pradesh and West Bengal

3.105 Most of the States have implemented revised pay scales following the recommendations of the Pay Commission. While this impacted the revenue expenditure of States, the overall impact on State finances was cushioned and spread over a few years by States resorting to various methods like delaying the implementation of the awards, non-payment of arrears, payment of arrears in instalments (sometimes spaced over two-three years), impounding of arrears into general provident fund accounts and partial implementation of pay commission awards with reduced allowances or allowances at pre-revised rates.

Box 3.1 : Farm Loan Waivers

An increasingly important factor, and a worrying one, that has begun to impact the finances of States are the farm loan waivers that have been announced by various States since 2014. Fortunately, after 1990 and 2008, the Union Government has not annouced any such schemes. Farm loan waivers are often justified on the grounds of falling prices of agricultural commodities and recurring droughts. The RBI Study of State Budgets (2017-18 and 2018-19) has highlighted that the debt waiver schemes of Andhra Pradesh and Telangana announced in 2014 had significant fiscal implications amounting to Rs. 24,000 crore (4.6 per cent of GSDP) and Rs. 17,000 crore (3.4 per cent of GSDP) respectively, while Tamil Nadu's loan waiver scheme of 2016 amounted to Rs. 6,000 crore (0.5 per cent of GSDP). In 2017, Maharashtra, Uttar Pradesh and Punjab sanctioned farm loan waivers of Rs. 34,000 crore (1.3 per cent of GSDP), Rs. 36,000 crore (2.7 per cent of GSDP) and Rs. 10,000 crore (2.1 per cent of GSDP) respectively. States like Rajasthan, Madhya Pradesh and Chhattisgarh announced new loan waiver programmes in 2018-19 to the tune of Rs. 18,000 crore (1.9 per cent of GSDP), Rs. 36,500 crore (4.5 per cent of GSDP) and Rs. 6,100 crore (1.7 per cent of state GSDP), respectively. Karnataka expanded its loan waiver programme from Rs. 18,000 crore announced in 2017-18 to Rs. 44,000 crore (3.4 per cent of GSDP) in 2018-19 (RBI Report 2019-20).

It is difficult to ascertain the exact amount of farm loans waived by State Governments from a perusal of the Finance Accounts. This is because individual States have different ways of treating these waivers, that often include interest subvention, in their accounts.

As per information obtained by the Commission from the States, since 2014-15, thirteen States gave no farm loan waivers, seven States (erstwhile Jammu and Kashmir, Karnataka, Punjab, Rajasthan, Tamil Nadu, Telangana and Uttar Pradesh) gave details of waivers aggregating about Rs. 79,000 crore from 2014-15 to 2019-20. However, this data cannot be relied on to gauge the actual quantum of farm loan waivers for a number of reasons. First, some of the States did not respond. Second, the data was self-reported and could not be independently verified. Third, the treatment of interest subvention varied across States. Finally, there was very little congruence between budgeted amounts and actual spends.

Besides the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) of the Union Governmnet, six States budgeted for State income support scheme in year 2019-20. Such income support schemes are relatively more inclusive and do not have the moral hazard problem that is inherent in farm loan waivers.

3.106 Aggregate capital expenditure of States as a percentage of GDP, after increasing from 2.4 per cent in 2011-12 to 3.3 percent in 2016-17, decreased to 2.5 per cent in 2017-18. A significant increase in capital expenditure was seen in 2015-16 and 2016-17, mainly on account of UDAY bonds taken over by the States. As stated earlier, the decline in capital expenditure was on account of both its components - capital outlay and loans and disbursements. For almost all States, while capital outlays (including on roads and bridges and irrigation and energy) declined, loans and disbursments came down for the power sector and for food storage and warehousing. Total expenditure of State Governments increased to 16.2 per cent in 2018-19 from 14.7 per cent in 2011-12.

3.107 Aggregate revenue expenditure of States increased at a trend growth rate of 13.52 per cent during the period 2011-12 to 2018-19. The buoyancy of revenue expenditure with respect to aggregate GSDP of States during this period was 1.14. Aggregate capital expenditure of States grew at a trend growth rate of 14.77 per cent, and resulted in an even higher buoyancy of 1.24.

State Finances: A Comparative Perspective

3.108 Annex 3.1 to 3.12 provide detailed data on fiscal indicators of States from 2011-12 to 2020-21(BE). Some important observations are:

i. In 2011-12, only six States (Haryana, Kerala, Maharashtra, Meghalaya, Punjab and West Bengal) had a revenue deficit, but the number went up to ten in 2018-19 (Andhra Pradesh, Haryana, Jammu and Kashmir, Kerala, Meghalaya, Punjab, Rajasthan, Tamil Nadu, Uttarakhand, and West Bengal) (Annex 3.1).

ii. Figure 3.12 decomposes the change in the revenue deficit-GSDP ratios of general States from 2011-12 to 2018-19. Increase in the revenue deficit can be due to three reasons: decrease in own revenue, decrease in Union transfers and/or increase in revenue expenditure. In the case of the seventeen general States (except Telangana), ten showed an increase/worsening of the revenue deficit. Further, seven general States saw a decline in own revenue to GSDP ratio over the period, fourteen saw an increase in revenue expenditure, while Central transfers as percentage of GSDP increased in all States except Goa. This implies that revenue deficit of States increased in spite of higher Central transfers as a result of the award of the FC-XIV.

iii. Seven of the eleven NEH States saw an increase in revenue deficit as percentage of GSDP during this period (Figure 3.13). Own revenue declined in five States, while revenue expenditure increased in all but five states (Assam, Manipur, Mizoram, Sikkim, Tripura). Due to the reduction in Plan grants to these States, total Central transfers as a percentage of GSDP declined in five NEH States (in percentage points) – Manipur, Mizoram, Nagaland, Sikkim, Tripura.

iv. The fiscal deficit increased in eleven of seventeen general States (barring

Telangana) and six out of eleven NEH States from 2011-12 to 2018-19. Figures 3.14 and 3.15 show a similar trend in the debt to GSDP ratio, which increased in twelve general States and four NEH States.

v. The own tax revenue to GSDP ratio reduced from 2011-12 to 2018-19 in nine general States and three NEH States (Figure 3.16).

Figure 3.12:
Increase (+) in Revenue Deficit
in General States: (2018-19 over 2011-12)

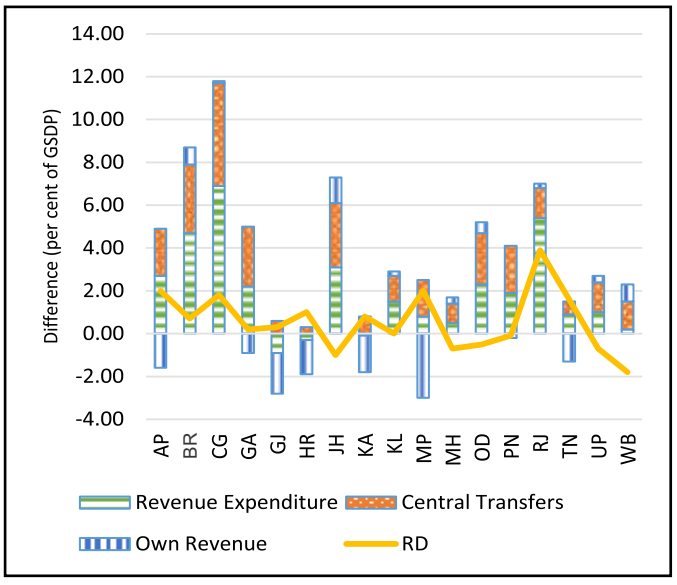


Figure 3.13:
Increase (+) in Revenue Deficit
in NEH States: (2018-19 over 2011-12)

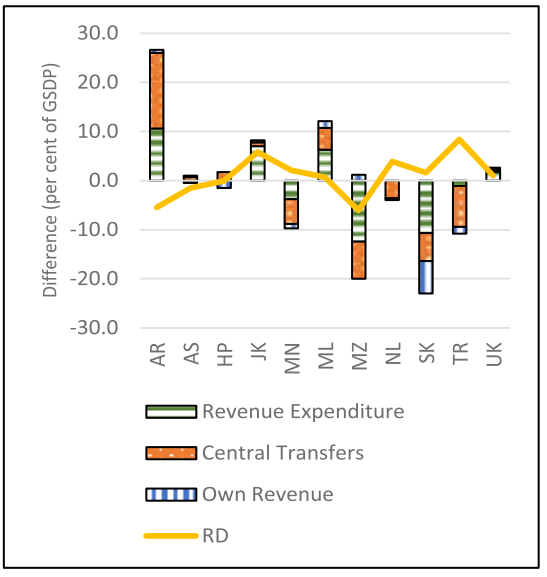


Figure 3.14: Debt/GSDP and
its Difference (+Increase/-Decrease) in General States
(2018-19 over 2011-12) (in percentage points)

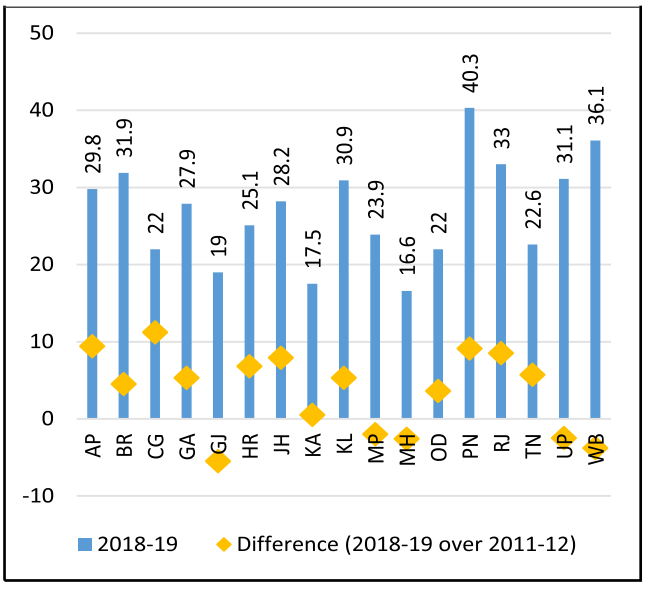


Figure 3.15: Debt/GSDP and
its Difference (+Increase/-Decrease) in NEH States
(2018-19 over 2011-12) (in percentage points)

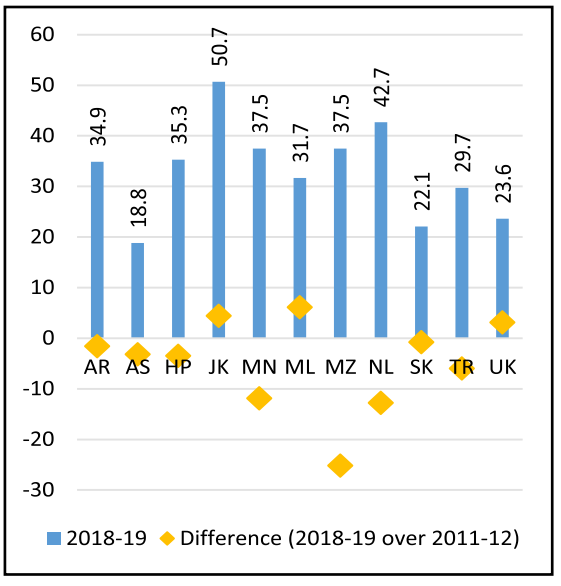
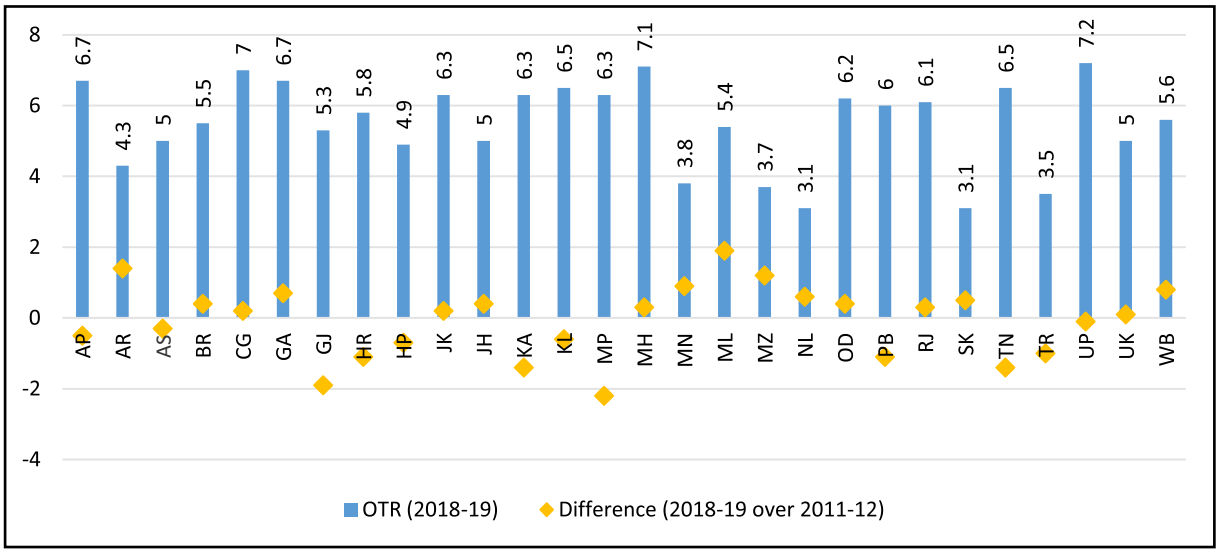


Fig 3.16: Own Tax Revenue/GSDP Ratio in 2018-19 and Difference in the Ratio in 2018-19 over 2011-12 (in percentage points) (+ Increase/- Decrease)



Per Capita Revenue Expenditure

3.109 A general purpose transfer should enable States to provide comparable level of public services to all its people. Hence, transfers should equalise expenditure levels of States to achieve the minimum standards in respect of specified services and to mitigate regional differences in social and infrastructural indicators. The FC-XIV, in its assessment, had adopted the principle of partially equalising revenue expenditures across States by making an aggregate assessment of the per capita revenue expenditure needs of States to enable all of them to spend a certain minimum expenditure within the constraints of an overall resource envelope. Keeping this in view, it is relevant to compare the per capita revenue expenditure across States (Annex 3.9). As the NEH States have a high unit cost of providing public services, the average per capita revenue expenditure in 2018-19 was Rs. 29,220 as compared to Rs. 19,206 in the general States (Table 3.17). However, there is a wide variation among the NEH States, with Assam having the lowest per capita expenditure at Rs.16,668 and Sikkim the highest at Rs. 79,191.

3.110 In the general States, per capita revenue expenditure in 2018-19 ranged between Rs.10,515 in Bihar and Rs.31,823 in Kerala. Goa, being a small and developed State, is an outlier with a per capita revenue expenditure of Rs. 72,154. Bihar, Uttar Pradesh and Jharkhand are at the bottom and, ironically, these are the three States that require a significant push in their developmental expenditure.

Table 3.17: Per Capita Expenditure

(in Rs.)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total Expenditure								
All States	10712	11981	13213	15578	17955	20363	21091	23519
General States	10287	11557	12776	15079	17532	19822	20426	22753
NEH States	17006	18251	19652	22931	24183	28319	30923	34830
Revenue Expenditure								
All States	8959	10143	11224	13155	14589	16364	17798	19842
General States	8612	9793	10857	12729	14176	15859	17246	19206
NEH States	14098	15320	16633	19438	20667	23798	25944	29220
Capital Expenditure								
All States	1753	1838	1989	2422	3366	3999	3294	3677
General States	1675	1764	1919	2350	3356	3963	3180	3546
NE&H States	2909	2932	3019	3493	3516	4521	4980	5610

Source: Finance Accounts; Population Estimates: NSO

Cash Balances

3.111 In the period under review, State Governments, in aggregate, reported sizeable cash balances in the form of intermediate treasury bills (ITBs) and auction treasury bills (ATBs). According to data provided by the Ministry of Finance, the total cash balances of all States stood at Rs.1.57 lakh crore in end March 2016, Rs.1.91 lakh crore in end March 2017, Rs. 2.11 lakh crore in end March 2018 and Rs 1.94 lakh crore in end March 2019. In this regard, the FC-XIV had observed that while it is necessary for States to keep adequate cash balances to cover risks, excessive balances entail costs, both in terms of interest payments and lower capital expenditure. It further stressed the need to analyse the reasons that lead to holding of such costly large cash balances and to take corrective action.

3.112 In 2016-17, cash balances of States amounted to 5.12 per cent of outstanding debt and 1.25 per cent of GDP, which reduced to 5.07 per cent of outstanding debt and 1.24 per cent of GDP in 2017-18. This further reduced to 4.20 per cent of outstanding debt and 1.03 per cent of GDP in 2018-19. The RBI Report on State Finances 2019-20 has shown that a few States have been parking sizeable cash balances in the more durable segment such as ATBs. Weekly auctions were also introduced with a view to even out cash flow mismatches while keeping the bare minimum cash balances. The States should ensure that the borrowing calender is calibrated to achieve the goal of minimising cash balances at the end of the year.

Trends in Inter-Governmental Transfers

3.113 While the previous sections have reviewed the finances of the Union and State Governments, it is essential to look at inter-governmental transfers which are primarily in the form of transfers from the former to the latter. The transfers can be broadly categorised as Finance Commission transfers and other transfers. For the sake of simplicity, we will refer to these other transfers as non-FC transfers. The recommendations of the FC–XIV have increased the transfers to States, and there has also been a shift in the composition of overall transfers.

3.114 The Finance Commission transfers are made under Articles 270, 275 and 280 of the Constitution, whereas the non-FC transfers are primarily made under Article 282 of the Constitution, which states that: "The Union or a State may make any grants for any public purpose, notwithstanding the purpose is not one with respect to which Parliament or the Legislature of the State, as the case may be, make laws". It is often argued that Article 282 is only a residual Article to enable the Union or a State to make a grant for any public purpose. However, over the years the transfers through the institution of the Planning Commission and for the purpose of CSS acquired a disproportionate importance in the overall transfers to States. The abolition of the Planning Commission in 2015-16 has now translated into a reduced flow under the non-FC category. However, as a proportion of the Union's gross revenue receipts, the non-FC grants, after declining from 16.77 per cent in 2017-18 to 15.45 per cent in 2018-19, increased to 18.61 per cent in 2019-20 (RE) and 18.22 per cent in 2020-21 (BE) (Table 3.18).

Quantum and Components of Transfers

3.115 The relative shares of Finance Commission transfers as proportions of gross revenue receipts and of GDP and the ratio of Finance Commision and non-FC revenue transfers to State Governments are presented in Table 3.18. For the sake of comparability, from FC-XII onwards we have included the transfers to State implementing agencies as transfers to States, though in the category of 'other transfers.' Prior to 2014-15, direct transfers to implementing agencies were not taken as part of State Finance Accounts and were captured only in the Union Government's accounts. However, to get clarity on the structural shifts in the transfer system, it was important to include the direct transfers to implementing agencies in the States as part of the total transfers to the States. The FC-XIV cited three key reasons for this: (a) States were required to make matching contributions; (b) the implementing agencies were manned by State Government officials and, in some cases, headed by ministers; and (c) the implementing agencies perform quasi-government functions of delivering public services. The Union Government recognised this and has included them in the transfers to State Governments from 2014-15 onwards.

Table 3.18: Transfers from the Union to States as Proportion of Gross Revenue Receipts

(in per cent)

Commission	Finance Commission Transfers			Other Transfer (Non-FC)	Total Transfers* (4+5)	Ratio of FC to Non-FC Transfers	Total Transfers as percentage of GDP
	Share in Central Taxes	Grants	Total Finance Commission Transfers				
1	2	3	4	5	6	7	8
FC-XII (2005-10)	22.03	4.35	26.38	21.01	47.39	55.7 : 44.3	6.03
FC-XIII (2010-15)	23.80	3.96	27.75	20.47	48.22	57.6 : 42.4	5.76
2010-11	21.68	3.12	24.79	23.87	48.66	50.9 : 49.1	6.45
2011-12	25.27	4.35	29.62	23.73	53.35	55.5 : 44.5	6.17
2012-13	24.84	3.86	28.70	19.96	48.66	59.0 : 41.0	5.74
2013-14	23.79	4.03	27.82	17.93	45.75	60.8 : 39.2	5.45
2014-15	23.41	4.28	27.70	18.57	46.27	59.9 : 40.1	5.35
FC-XIV (2015-19)	31.37	4.51	35.88	14.74	50.62	70.9 : 29.1	6.30
2015-16	29.66	4.96	34.61	13.24	47.86	72.3 : 27.7	5.93
2016-17	30.57	4.80	35.38	13.04	48.41	73.1 : 26.9	6.26
2017-18	31.87	4.37	36.24	16.77	53.01	68.4 : 31.6	6.55
2018-19	32.88	4.05	36. 92	15.45	52.38	70.5 : 29.5	6.39
2019-20RE	26.15	4.93	31.08	18.61	49.69	62.5 : 37.5	6.10
FC-XV (2020-21)							
2020-21(BE)	27.93	5.34	33.27	18.22	51.48	64.6 : 35.4	6.43

*Transfers include direct transfers to State implementing agencies.

Source: 1) Basic data from Union Budget.

2) GDP: NSO (2011-12 series) and NSO back-series 2004-05 to 2011-12 (Base 2011-12)

3.116 It is instructive to note there has been both a shift in the quantum of total transfers and its composition. The ratio of total transfers to GDP has increased from 5.76 during the FC-XIII period to 6.30 during the first four years of the FC-XIV award period. The shift is quite visible when we look at the actual figures of the five years spanning both the award periods: the ratio increased from 5.35 in 2014-15 to 6.39 in 2018-19.

3.117 The impact of increase in devolution from 32 per cent to 42 per cent can be clearly seen in the share of devolution in the gross revenue receipts, which was 23.8 per cent in the FC-XIII period and is 31.37 per cent in the first four years of the FC-XIV award period. This has, in turn, enhanced the total transfers in relation to the gross revenue receipts from 48.22 per cent to 50.62 per cent over the two periods. It may be noted that the increase in devolution (7.57 percentage point of gross revenue receipts), as intended by the FC-XIV, is only partially offset by a 5.73 percentage point decrease in non-FC transfers.

3.118 In terms of composition, the shift is more significant. While about 59.9 per cent of total transfers were through the Finance Commision route in 2014-15, this increased to 70.5 per cent in

2018-19. Though there has been some reversal in this trend in 2019-20 (RE) and 2020-21 (RE), the FC-XIV recommendations have substantially altered the landscape of federal fiscal transfers. The sharp increase in tax devolution has resulted in the share of general-purpose transfers going up significantly, but this has been offset in two ways. First, with the abolition of the Planning Commission, assistance such as NCA, SCA and SPA have been discontinued. Second, States' share in CSS has been enhanced to reduce the support of the Union Government.

3.119 Table 3.19 shows the total transfers in relation to a number of parameters such as total expenditure, gross tax revenue and the gross revenue receipts of the Union Government. In 2017-18, there is a sharp jump in the transfers as a percentage of gross revenue receipts on account of two reasons: transfer to the GST Compensation Fund amounting to Rs. 55,657 crore (2.64 per cent of the gross revenue receipts) and a Rs. 49,752 increase in CSS and Central sector scheme transfers (2.36 per cent of gross revenue receipts) to States over the previous year.

Table: 3.19: Trends and Structure of Union Transfers, Including Direct Transfers

(in per cent)

S No	Particulars	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
1	Total FC transfers as percentage of total Union transfers	50.9	55.5	59.0	60.8	59.9	72.3	73.1	68.4	70.5	62.5	64.6
2	Non- FC transfers as percentage of total Union transfers	49.1	44.5	41.0	39.2	40.1	27.7	26.9	31.6	29.5	37.5	35.4
3	Total Union transfer as percentage of total Union expenditure	41.1	41.3	40.5	39.2	40.1	45.6	48.7	52.3	52.4	46.2	47.5
4	Total Union transfers as percentage of gross revenue receipts (GTR+NTR)	48.7	53.3	48.7	45.7	46.3	47.9	48.4	53.0	52.4	49.7	51.5
5	Union transfers as percentage of gross tax revenue	62.1	60.6	55.1	53.7	53.6	56.1	56.1	58.3	58.3	57.6	59.7
6	Union transfer as percentage of divisible pool	71.1	68.9	63.5	62.3	62.9	64.9	65.9	69.4	75.1	73.3	75.6
7	Devolution as percentage of gross tax revenue	27.7	28.7	28.1	27.9	27.1	34.8	35.4	35.1	36.6	30.3	32.4
8	Cess and surcharges as percentage of gross tax revenue (Excl. GST Cess)	11.1	10.4	11.7	12.4	13.5	12.2	13.5	10.6	15.3	15.6	15.3

Source: Union Budget

Note: 1) GTR – gross tax revenue; NTR – net tax revenue

2) Union transfers include GST compensation cess

The compensation cess is estimated to be 4.1 per cent and 3.9 per cent of the gross revenue receipts for 2018-19 and 2019-20 (RE) respectively. It is also noteworthy that though the FC-XIV gave a 10 percentage point jump in the States' share of the divisible pool, when this devolution is seen in the context of gross tax revenue, the enhancement is only about seven percentage points over the two award periods.

Ceiling on Transfers

3.120 In the past, Commissions have been giving an indicative ceiling of the revenues to be transferred to State Governments as a proportion of gross revenue receipts of the Union Government. The FC-XI had for, the first time, set the norms for transfers as a proportion (37.50 per cent) of Union revenues (tax and non-tax taken together) in aggregate terms, leaving the components to be determined separately but within the overall ceiling. It was envisaged that to promote the path towards fiscal consolidation, all transfers, like tax devolution, grants-in-aid and grants in other forms like Plan grants, would be decided in the light of the prescribed ceiling and within the resource profile of the Union Government and the contemplated deficit levels. The ceiling of 37.50 per cent itself was determined with the objective that it would not disrupt finances at both levels of government.The FC-XII had increased the indicative ceiling to 38 per cent, which the FC-XIII had further increased to 39.5 per cent. However, Table 3.19 shows that the actual Union transfers have ranged between 46.3 per cent and 53.3 per cent of gross revenue receipts during the FC-XIII period. These figures include direct transfers to the State implementing agencies. The FC-XIV, in its report, observed that the indicative ceiling on transfers suggested by previous Finance Commissions did not restrain the Union Government from making larger transfers to the States. It further recommended that about 49 per cent of the gross revenue receipts could be transferred to the States during the award period in order to address the needs and expectations of the States and to ensure the prevailing level of transfers to them. Table 3.18 shows that over the first four years of FC-XIV award period, the actual transfers to the States have been 50.6 per cent of the gross revenue receipts of the Union.

Combined Revenues, Expenditures and Transfers

3.121 The proportion of transfers from the Union to the States in the combined revenues is shown in Table 3.20. The share of the Union Government (taking into account its resources net of all transfers) has been in the range of 28.3 per cent to 33.4 per cent over the period from 2010-11 to 2018-19. Similarly, the share of the States has been in the range of 66.6 per cent to 71.7 per cent of the combined revenue receipts. The total transfers also include the direct transfers that were being routed through the State implementing agencies prior to 2014-15. The devolution of Union taxes has increased from 14 per cent of combined revenue receipts in 2010-11 to 20.6 per cent in 2018-19, while the other grants have decreased from 15.4 per cent to 9.7 per cent over the same period.

Table 3.20: Relative Share of Union and States in Combined Revenue Receipts

(per cent)

1	Revenue Receipts before transfer 2	Union Revenue receipts after transfers 3	Devolution 4	Transfers FC Grants 5	Other Grants 6	Total Transfers (Dev. + Grants) 7	Revenue Receipts before transfer 8	State Revenue receipts after transfers 9
2010-11	64.7	33.2	14.0	2.0	15.4	31.5	35.3	66.8
2011-12	60.6	28.3	15.3	2.6	14.4	32.3	39.4	71.7
2012-13	60.3	31.0	15.0	2.3	12.0	29.4	39.7	69.0
2013-14	61.3	33.2	14.6	2.5	11.0	28.0	38.7	66.8
2014-15	61.0	32.8	14.3	2.6	11.3	28.2	39.0	67.2
2015-16	63.0	32.9	18.7	3.1	8.3	30.2	37.0	67.1
2016-17	64.8	33.4	19.8	3.1	8.4	31.3	35.2	66.6
2017-18	63.7	29.9	20.3	2.8	10.7	33.8	36.3	70.1
2018-19	62.7	29.9	20.6	2.5	9.7	32.8	37.3	70.1
2019-20 RE	62.5	31.4	16.3	3.1	11.6	31.0	37.5	68.6
2020-21 BE	62.3	30.2	17.4	3.3	11.3	32.1	37.7	69.8

Source: State & Union Budgets and Finance Accounts, Finance Commission Division.

Note 1: The data of transfers is taken from Union Government.

Note 2: Direct transfers to State Implementing Agencies are included in transfers.

3.122 Table 3.21 indicates the relative shares of the Union Government and State Governments in the combined revenue expenditure. The share of the Union Government has reduced from 45.2 per cent to 37.5 per cent of combined revenue expenditure between 2010-11 to 2018-19. On the other hand, the relative share of the States has increased from 54.8 per cent to 62.5 per cent over the same period.

Table 3.21: Relative Share of Union and States in Combined Revenue Expenditure

(per cent)

Year	Union including grants (FC+other)	Union excluding grants (FC+other)	Grants (FC+other)	States excluding grants (FC+other)	States including grants (FC+other)
1	2	3	4	5	6
2010-11	61.3	45.2	16.1	38.7	54.8
2011-12	59.2	44.5	14.7	40.8	55.5
2012-13	56.6	43.9	12.7	43.4	56.1
2013-14	55.8	43.9	11.9	44.2	56.1
2014-15	52.9	41.0	11.9	47.1	59.0
2015-16	50.2	40.0	10.1	49.8	60.0
2016-17	49.4	39.0	10.4	50.6	61.0
2017-18	50.3	38.4	12.0	49.7	61.6
2018-19	48.4	37.5	10.9	51.6	62.5
2019-20 RE	51.4	38.4	12.9	48.6	61.6
2020-21 BE	52.4	39.2	13.2	47.6	60.8

Source: State & Union Budgets and Finance Accounts, Finance Commission Division.

Note 1: The data of transfers is taken from Union Government.

Note 2: Direct transfers to State Implementing Agencies are included in transfers.

Summary of Union Finances

3.123 To summarise, the key features in the trends in Union finances in recent years are:

(i) The period from 2011-12 to 2018-19 was a phase of fiscal consolidation, despite challenges arising from increase in devolution. The fiscal deficit came down from 5.9 per cent to 3.4 per cent, accompanied by a simultaneous reduction in the revenue deficit from 4.5 per cent to 2.4 per cent. However, it was higher than the fiscal adjustment path recommended by both the FC-XIII and FC-XIV. The fiscal consolidation path, however, has been adversely impacted by Covid-19 pandemic in the last quarter of 2019-20 and 2020-21.[9]

(ii) The tax-GDP ratio improved by only a modest 80 basis points from 10.2 per cent to 11 per cent of GDP. About half of this was on account of buoyant income tax. At the same time, the rationalisation of corporation tax for companies resulted in a fall in the share of this tax from 3.7 per cent to 3.5 per cent of GDP. Given the already low tax-GDP ratio, the Union Government mobilising more taxes remains an imperative necessity.

(iii) Along with the improvement of the fiscal indicators, the debt to GDP ratio

[9] For a detailed review of 2019-20 and 2020-21 please refer to Chapter 12

declined steadily from 51.8 per cent in 2011-12 to 47.9 per cent in 2018-19. The decline in debt was largely due to reduction in the fiscal deficit during the period 2011-12 to 2018-19. The excess of growth of nominal GDP over the average nominal interest rate also facilitated the decline in debt-to-GDP ratio.

(iv) Both growth of GDP and growth in collection of revenues in the terminal year of current award period are expected to be below the FC-XIV estimates and adds to uncertainty of projections of both revenues and taxes.[10]

(v) Cesses and surcharges steadily increased over the review period with a direct impact on the size of the divisible pool. In 2017-18, introduction of GST saw the merger of a number of cesses and surcharges into the GST.

(vi) The dividends received from the RBI, public sector financial institutions and CPSEs have been robust and became the largest contributor under the non-tax revenue category. Within the category of dividend and profits, there is disproportionate dependence on the RBI. Interest receipts on loans outstanding from States continue to decline, since no fresh loans are being extended to them.

(vii) Disinvestment receipts, which fall under non-debt capital receipts, were well short of the estimates suggested by the FC-XIV. However, with the Government adopting different methods of disinvestment, there is scope for further improvement, though challenges of sustainability remain. While the sale of government stake in one CPSE to another may increase the cashflow under disinvestment and serve other strategic purposes, it is debatable whether such sale is as much of a 'disinvestment' as the sale to a non-government category.

(viii) On the expenditure front, there was significant contraction of more than two percentage points of GDP largely on account of the reduction in subsidies. Expenditure on subsidies, particularly on petroleum products and fertilizers, declined significantly providing fiscal space to the Union Government, but food subsidies increased on account of commitments under the NFSA and the annual increase of minimum support prices on wheat and rice, as well as the cost of carrying and handling stocks well above the buffer stock norms. This remains a challenge despite the introduction of DBT and the use of technology. The expansion of coverage of subsidised LPG to BPL beneficiaries as part of the Ujjwala scheme calls for a review of LPG subsidy to non-BPL sections and restrictions on the number of refills eligible for subsidy in this category. However, large payments to the FCI in the form of NSSF loans were not reflected in the expenditures on subsidy. In addition, the fertilizer subsidy payments were also carried over to subsequent years translating into lower expenditure during certain years.

(ix) The share of committed expenditures has been relatively stagnant, barring in

[10] Chapter 4 has a detailed review of terminal year 2019-20 and 2020-21

2017-18, due to revision of pay and pension. Unanticipated expenditures such as OROP, which have long term implications, added to the fiscal pressure. Defence expenditure declined relative to GDP and the ratio of revenue to capital expenditure gradually increased in the review period.

(x) Fiscal consolidation was achieved with a somewhat altered fiscal roadmap, but there was substitution of expenditure in some sectors through EBRs. Even if these are taken into account, there has still been a moderate fiscal correction. The recent slowdown in demand and moderation of growth will increase the pressure on the Union Government to adopt counter-cyclical measures which would be expansionary in nature and impact the fiscal indicators. Given these headwinds, the award period will be crucial as it will set the tone for the fiscal correction path during the entire period.

Summary of State Finances

3.124 The main trends in State finances can be summarised as:

i. There was a general deterioration in the aggregate fiscal position of States during the period 2011-12 to 2018-19, which was reflected in an increase in the aggregate gross fiscal deficit and revenue deficit relative to GDP by 0.6 and 0.4 percentage points, respectively. Despite this decline, States, in aggregate, have managed to keep the fiscal deficit within targets, excluding the UDAY component. However, the revenue account of few States remained under stress in spite of higher transfers from the Union Government because of declining own tax revenue and increasing revenue expenditure.

ii. The fiscal indicators for 2015-16 and 2016-17 were severely impacted by the borrowings under the UDAY programme, which is also likely to affect the expenditure during the award period on account of the interest outgo on such borrowings. Reform of the power sector remains a major concern and challenge. States will have to ensure that all the operational parameters are met within the UDAY timelines and remain extremely cautious against any slippage.

iii. The aggregate outstanding debt and liabilities, as a proportion of GDP, increased from 22.6 per cent in 2011-12 to 24.5 per cent in 2018-19.

iv. With the implementation of the recommendations of the FC-XIV, aggregate tax devolution from the Union to States as a proportion of GDP increased from 2.9 per cent in 2011-12 to 4 per cent in 2018-19. This led to an increase in untied funds to the States, thus giving them enhanced flexibility to prioritise their expenditure needs

v. The share of States in GTR of Union Government has declined from 62.1 per cent in 2010-11 to 58.3 per cent in 2018-19. This can partly be attributed to the increase in the

cesses and surcharge component of the Union Government. At the same time, there was also a 0.3 percentage point decline in the aggregate own tax revenues of the States over the period, led by some of the bigger States like Andhra Pradesh, Assam, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Punjab and Tamil Nadu. This trend needs to be reversed quickly. This decline was observed even before the introduction of GST.

vi. Shortfall in GST revenues have remained a cause of worry. States have witnessed high volatility in GST collections with differential impact on their finances. The cushion of GST compensation till June 2022 has eased the process of transition for States. However, States need to rapidly improve implementation, reduce tax evasion and under-invoicing. The States which are lagging in harnessing the potential of GST will need some structural change over the medium term to increase their own revenue.

vii. The aggregate own non-tax revenue as a percentage of GDP has remained flat for States. More effort is required from State Governments to improve non-tax revenues.

viii. The aggregate revenue expenditure as a proportion of GDP increased significantly from 12.3 per cent in 2011-12 to 13.7 per cent in 2018-19, with a marginal improvement in the social services category and moderate increase under the economic services category. Capital expenditure remained steady, but there was a modest spike both in 2015-16 and 2016-17 on account of UDAY.

ix. States' expenditure on social services, including on education and health, as a proportion of GDP has seen a steady increase over the past few years. However, there are large inter-State variations. Wide disparities in social service and economic service expenditure is quite worrying and may hinder the country's progress in achieving SDG targets.

x. Farm loan waivers and increase in subsidies have long term implications for State finances. The increasing tendency of State Governments to grant farm loan waivers is posing a burden on their budgets. The policy is expected to have a wider deleterious impact on the credit culture in a State by incentivising wilful defaults, demoralising the conscientious borrowers who regularly serviced their loans, and increasing the reluctance of banks in lending in the State. Further, each such waiver granted makes it even more difficult to reject such similar demands in the future.

Chapter 4

Pandemic Times: Analysis for the Future 2021-26

In keeping with the approach of the previous Finance Commissions, we have adopted normative principles with the objective of building fiscal sustainability in austere times. The revenue growth has been inadequate in the face of rising expenditure. Erosion of the tax-GDP ratio and virtual stagnation in non-tax revenues even before the onset of the Covid-19 pandemic have made it imperative for us to re-prioritise expenditure by both the Union and the States in our assessment. We have assessed the expenditure needs with the objective of ensuring austerity in establishment-related expenses and eliminating profligacy and leakages in the administration of subsidies and public spending through appropriate strategies. This will enable channelising the consequent savings into developmental expenditure in specified social and economic sectors to promote growth and fiscal consolidation during our award period and beyond. It is also possible, in our view, to strengthen the revenue base through institutional reform and administrative measures to enhance resources at all levels of government. These principles underpinned our assessment of the revenue and expenditure of the Union and the States.

Introduction and Context

4.1 This chapter lays out our projection of revenue, expenditure and financing requirements of the Union and the State Governments for the period 2021-26. It, thus, sets the background for our devolution scheme and fiscal consolidation roadmap presented in subsequent chapters. After setting the context, this chapter discusses the projection of the finances of the Union Government and the State Governments; it then concludes with summary and recommendations.

4.2 There are three major aspects to this Chapter. First, the projections developed were guided by the terms of reference (ToR) of the Commission, which required us to consider the following:

(i) The resources of the Union and State Governments for five years and their revenue potential and fiscal capacity.

(ii) The demand on the Union Government's resources particularly for defence, internal security, infrastructure, railways, climate change, administration of Union Territories without legislature and other committed expenditure and liabilities.

(iii) The demand on the State Governments' resources, particularly for socio-

economic development and critical infrastructure, assets maintenance, balanced regional development and the liabilities of their public utilities.

(iv) The impact of the goods and service tax (GST), payment of GST compensation to the States and abolition of a number of cesses on the finances of the Union and the States.

4.3 The immediate dimension that has a bearing on our projections is the Covid-19 pandemic and its human, economic and fiscal impact. Governments at all tiers are facing a loss of tax base, and revenue, albeit of different magnitudes. Against this, there are additional critical requirements of spending for public health management, income support and for stimulating the economy. Hence, it is essential to reprioritise expenditure, ensure accountability in spending, and lay the foundation for raising additional resources through administrative and policy reforms.

4.4 Thirdly, the changes in the principles and rules of fiscal management that have occurred in recent years have also impacted our projections. The classification of expenditure into 'Plan' and 'non-Plan' was removed from the accounts of the Union and of most of the States with effect from 2017-18. This made us take a holistic view of the spending plans on the revenue account of the Union and States. Further, the introduction of the GST closely intertwined the tax base for major indirect taxes of the Union and the States.

Finances of the Union Government

4.5 In normal circumstances, we would have projected the Union Government's finances based on the budget estimates for 2020-21, with some calibration. However, the economic contraction caused by the pandemic made us reconstruct the entire set of revenue numbers for 2020-21 before proceeding further.

Views of the Union Government

4.6 The Commission had a series of interactions with the Ministry of Finance, apart from discussions with line ministries on sectoral issues. The Ministry of Finance, on behalf of the Union Government, submitted two memoranda to us – a comprehensive one in 2019 and a concise update in 2020 in view of the changed environment. While arriving at the aggregate expenditure requirements of the Union, these documents consolidated sectoral demands and articulated spending plans under national development priorities. The line ministries made separate submissions outlining their respective demands from the Commission.

4.7 The Union Government projected an average annual growth of 9.6 per cent in its expenditure during our award period, reasoning that: (a) it is primarily responsible for achieving the sustainable development goals; (b) it is the national clearing house for spreading good ideas, schemes and actions; and (c) it alone can coordinate efficient delivery of certain public services by building national standards of performance and evaluation. The Union Government split its revenue expenditure into four mutually exclusive items: Union's commitments, national

development priorities, Finance Commission grants to State Governments and other transfers to State Governments.

4.8 Subsequent to the current drop in activity, the Union Government expects that the economy will recover on the strength of the reforms that it has undertaken. The Union Government projected that real gross domestic product (GDP) growth will improve gradually to 8 per cent in 2025-26, with an inflation assumption of around 4 per cent. Gross tax revenue was projected to grow at 13.4 per cent per annum during the entire period, with a rising buoyancy of 1.2, taking the tax to GDP ratio from 10.3 per cent in 2021-22 to 11.1 per cent in 2025-26. On the expenditure side, the Union's commitments – including interest payments, pensions and salaries, subsidies, defence and others – were projected to decline from 9.4 per cent of GDP in 2021-22 to 8.6 per cent in 2025-26. In contrast, it assessed that the spending on national development priorities, including education, health, housing, employment, water supply and sanitation, social security and welfare, agriculture, rural development, power and digital technology would need to modestly increase from 2.5 per cent of GDP to 2.7 per cent during the period. On the whole, as per the Union Government's projections, revenue expenditure will decline from 13.7 per cent of the GDP in 2021-22 to 12.4 per cent in 2025-26 while capital expenditure will increase from 2.1 per cent of GDP to 2.3 per cent.

GDP at Current Market Prices

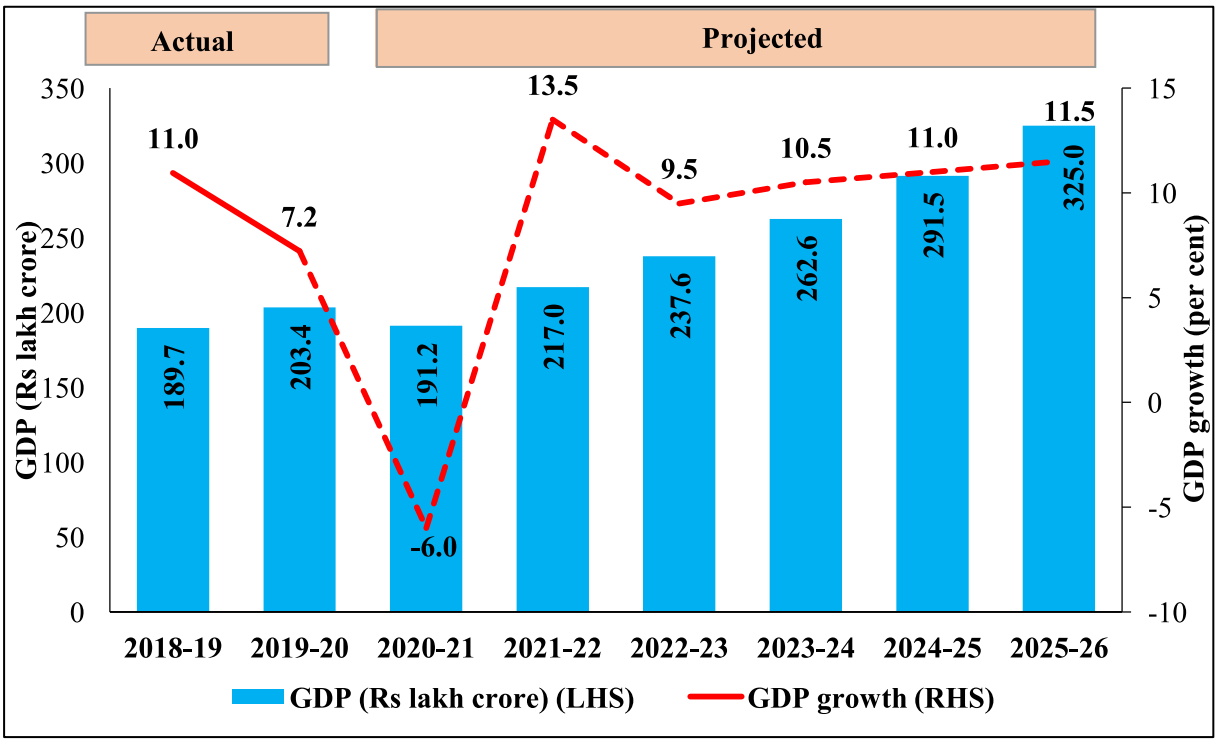
4.9 Assessment of both the expenditure needs as well as the likely revenues to be mobilised by the Union and the State Governments is closely related to the growth prospects of the economy, measured by the nominal GDP or GDP at market prices. The assessment that we presented in our Report for the Year 2020-21 has been overtaken by the Covid-19 pandemic. Considerable uncertainty remains regarding when the pandemic, which has affected all countries in the world in terms of human lives, productive capacity and economic activity, is going to abate and also the nature of recovery. The risks entail careful calibration of projecting the nominal GDP growth in the coming quarters of 2020-21 and the years of our award period.

4.10 After consultations with domain experts and considering the views of the Union Government, we have divided the entire six-year period of 2020-21 to 2025-26 into two parts. We expect heightened uncertainties to continue in 2020-21 and 2021-22; and expansion in activity from 2022-23 onwards for the balance four years of our award period. Accordingly, we have not assumed a constant nominal GDP growth throughout our award period, but have employed a differentiated growth path. We start by revisiting the projection of nominal GDP for 2020-21. In the first quarter (Q1) of 2020-21, GDP at market prices contracted by 23.9 per cent in real terms and 22.6 per cent in nominal terms. Data for the second quarter (Q2) will be available only on 27 November 2020. Available in the interim are high-frequency indicators like the index of industrial production (IIP), production of key intermediate goods, data on mobility in public spaces and revenue collections of governments. With a progressive easing of the lockdown,

many of these show a milder contraction since May. Retail or consumer price inflation has crossed 7 per cent mark in September 2020, while inflation based on the wholesale price index has moved to positive territory. Downside risks on the real economy front are likely to be associated with upside risks on the inflation front. Considering the high frequency indicators and the progressive easing of the lockdown, we project a gradual recovery in activity from Q2 to Q4 of 2020-21 and assess a contraction in nominal GDP of about 6 per cent for the full year of 2020-21.

4.11 In our view, the large contraction in 2020-21 opens up the possibility of a sharp growth recovery going forward. While the pace of the recovery is uncertain, some analysts believed that the growth recovery will have a V-shape. According to our assessment, the recovery in 2021-22 may not fully be to the level of real activity of 2019-20. However, after a decline of 6 per cent in nominal GDP in 2020-21, we project nominal GDP to grow by 13.5 per cent in 2021-22. High growth in nominal GDP in 2021-22, because of the low base in 2020-21, will be followed by a growth of 9.5 per cent in 2022-23. The four-year block of 2022-23 to 2025-26, we project, will be a period of sustained expansion of activity. Our assumptions about the levels and rates of growth of GDP at current market prices for 2021-22 to 2025-26 are given in Figure 4.1.

Figure 4.1: Nominal GDP: Levels and Growth
(Actuals till 2019-20 and projections thereafter)



Assessment of Gross Tax Revenue for 2021-2026

4.12 In making our assessment of the tax revenue for the Union Government for the period 2021-22 to 2025-26 we analysed both the tax-specific buoyancies of the past period (2011-12 to 2018-19) and the more recent decline in tax collections evident from the provisional accounts of 2019-20 and the recent tax collection data of 2020-21. The Fourteenth Finance Commission (FC-XIV) projected a trend growth rate of 15.2 per cent during 2015-16 to 2019-20. The gross tax revenue of the Union Government increased at a trend rate of 13.9 per cent per annum during 2015-16 to 2018-19. This meant an aggregate buoyancy of 1.25, similar for both direct and indirect taxes. However, there has been a sharp contraction of gross tax revenue by 3.4 per cent in 2019-20 on account of two major factors. First, the onset of the pandemic in the last month of the year dampened tax collection, which was already strained by economic slowdown. Second, revenue foregone through the reduction in the tax rate for domestic companies affected corporate tax collections significantly.

4.13 When economic activity suddenly falls during crises, evidence points to income-based taxes decelerating more steeply than consumption-based taxes. Moreover, requirements of social distancing due to the pandemic have affected consumption considerably in 2020-21. We assessed that if tax policy remained the same, the gross tax revenue of the Union would contract by 10.6 per cent in 2020-21, as against the projected contraction of 6 per cent in nominal GDP. However, post the Budget 2020-21, there was a significant change in the tax policy of the Union Government in the form of an increase in the special additional duty of excise and road cess on petrol and diesel. We have conservatively assessed that the additional revenue from this policy change will be around Rs. 80,000 crore in 2020-21, even though the Union Government projected higher collections. Considering the impact of this measure, we estimated that the gross tax revenue of the Union Government will only contract by 6.7 per cent in 2020-21, which is still slightly steeper than the GDP contraction. The impact on the divisible pool will be sharper because the increased cess collections are not sharable.

4.14 Our assessment of taxes is presented mostly in terms of growth and buoyancy. The absolute numbers are presented in Annex 4.1. A comprehensive treatment of the issues in different taxes and their revenue potential is available in Chapter 5. The projections reflected in this Chapter have assumed that the operational and administrative issues related to coverage and evasion flagged in Chapter 5 are progressively resolved during 2021-2026.

Indirect Taxes

4.15 At present, three major indirect taxes of the Union Government include Central GST (CGST), Union excise duties on petroleum products and basic customs duties. During the period 2011-12 to 2018-19, indirect taxes grew by 14.5 per cent while GDP grew by 11.6 per cent. This meant a buoyancy of 1.25 during the period. However, the higher growth in indirect taxes was partly due to efforts for mobilising additional tax resources, mostly by way of increased excise

duties and cesses on petroleum products, and less pronouncedly in service tax and custom duties. If the impact of these tax policy changes is neutralised, the growth in indirect taxes during the period appears more or less similar to the growth rate of GDP. In 2019-20, the growth in indirect taxes was only 1.6 per cent. This was because of the initial impact of the pandemic at the close of the financial year, which led to additional time being given for clearing tax dues going into the next financial year, 2020-21.

4.16 A modest expectation from the GST was that its buoyancy with respect to GDP would, at least, reflect the observed weighted buoyancy of taxes subsumed under it. However, available numbers indicate that GST buoyancy during 2017-2020 was less than that of subsumed taxes during 2011-2017. Many factors have contributed to this. Research has indicated that operational issues like weaknesses in its IT system, non-compliance in filing tax returns, inability to match invoices to the desired levels and issues in settlement of input tax credit dampen the efficiency of GST. Policy issues like inverted duty structure and successive reduction in tax rates and the consequent compromise of the revenue neutrality of GST rates have also affected the revenue performance. In our projections, we have assumed that in the next two years, the issues related to compliance with requirements of filing tax returns, streamlining of the IT platform and invoice matching will be resolved and thereafter the revenue neutrality of rates will be gradually achieved.

4.17 As per the existing GST framework, the compensation cess will be withdrawn from July 2022. However, in the light of the ongoing deliberations in the GST Council, we have assumed that this revenue will continue to be collected in some form till 2025-26. We have dealt with the deployment of the proceeds of the cess in paragraphs 4.69 to 4.71.

4.18 Union excise duty collections are now limited to those from petroleum products. The long-term growth in the consumption of petroleum products has been a stable 6 per cent per annum, which is unlikely to be substantially different during the projection period. Excise duties on petroleum products are mostly specific duties. Given this, and assuming that the rates of taxes and cesses are maintained at the current levels, revenue from excise duty on petroleum is likely to grow in tandem with the growth in consumption of petroleum products. The downside risk is that – as observed in the past – specific duties tend to get revised downwards whenever crude prices shoot up in the world market and vice versa. Our assessment of GDP growth is greater than the observed growth in consumption of petroleum products; and hence its buoyancy is assessed to be less than unity.

4.19 The collections from customs duties are limited to those from basic customs duties, as the countervailing duties and special additional duties on imports have been subsumed under GST. Growth in revenues from basic customs duties was highly volatile during 2011-12 to 2016-17. However, its growth trend, at an annual average rate of 5.9 per cent, was closely aligned to the trend growth of the rupee value of import of goods and non-factor services, which was 6 per cent during the aforesaid period. In 2017-18 and 2018-19, the import growth outstripped GDP growth, before collapsing in 2019-20. However, over a longer period, import growth tracked GDP growth

closely. Given the above, a plausible way of projecting revenue realisation from customs duties during the award period would be to link it to a buoyancy of unity with respect to GDP. However, credible cross-country analysis has indicated that streamlining of the complicated tariff structure can, without an increase in the rate structure, lead to efficiency and revenue gains. We expect that such reforms over the next five-year period will improve the buoyancy of customs duties.

4.20 Figure 4.2 summarises the discussions on projection of revenues of the Union Government from indirect taxes relative to the projected GDP growth.

Direct Taxes

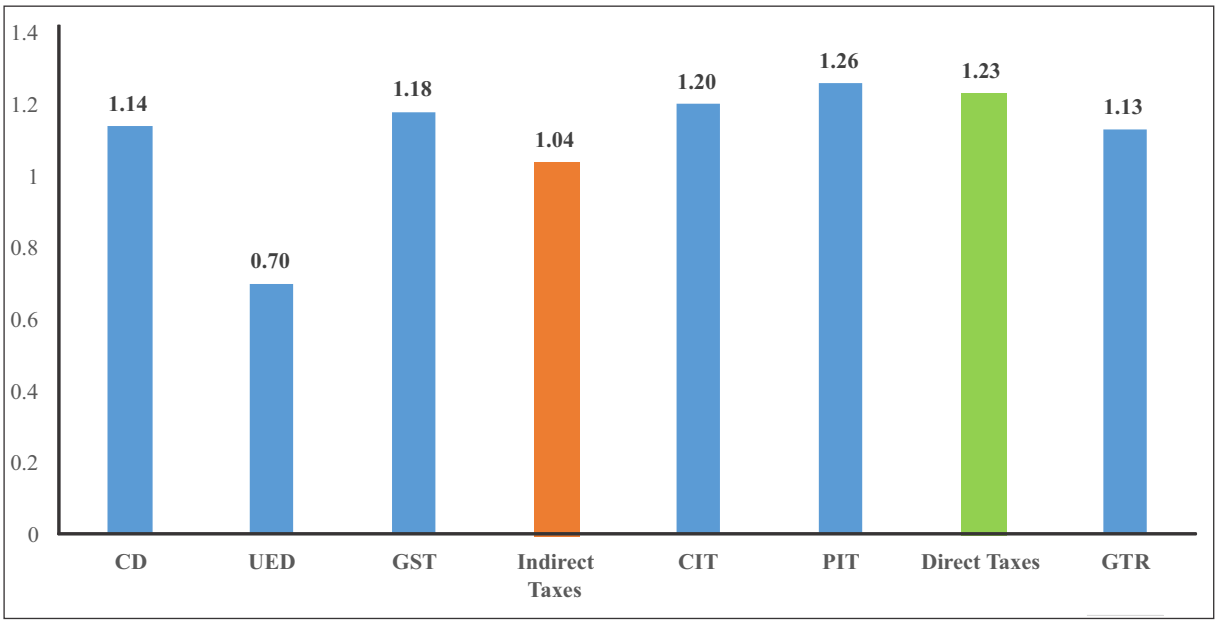
4.21 The direct tax revenue of the Union Government emanates predominantly from taxes on the income of corporations and individuals. The revenues from both personal and corporate income tax consist of basic collections and the realisation from cesses and surcharges. In 2018-19, basic collections accounted for about 87 per cent and 84 per cent of corporate income tax and personal income tax respectively. Direct taxes had a buoyancy of 1.10 during 2011-12 to 2018-19, significantly lower than 1.80 observed in the previous decade.

4.22 The number of income tax payers in different tax-paying brackets recorded an even and broad-based growth between assessment year (AY) 2012-13 and AY 2018-19. The increase in the number of income tax returns filed during this period, particularly those from the higher tax-paying brackets, is encouraging. However, we have noted with concern that the tax base is still very narrow. The number of taxpayers who filed returns in AY 2018-19 was about 5.87 crore, which was only around 4.4 per cent of the total population. Further, out of these, 40.4 per cent were in the nil tax bracket and another 52.8 per cent in the tax-bracket below Rs. 1.5 lakh.

4.23 Our analysis, presented in Chapter 5 indicates that the operations of a large number of individual proprietorships and partnerships are not effectively tracked. With the help of information from GST returns, increasing number of formal transactions and the trail of bank transactions, tax administration should be able to monitor tax compliance more efficiently and promptly. We are also of the opinion that after having brought down the corporate and personal income tax slabs to globally competitive levels, there is a need to review the myriad exemptions, incentives and thresholds. We, while making projections of income tax collections during the award period, have assumed that the measures to widen and deepen the income tax base will be scaled up during the award period.

4.24 As the economy picks up momentum, emerging out of the pandemic, the compensation of employees and profits in the organised sector is likely to improve progressively. The Department of Revenue, Ministry of Finance, in its submission to the Commission has expressed confidence that the pace of direct tax collections will also pick up gradually with improved efficiency in tax administration. Considering the above, we have adopted the buoyancy of 1.23 in direct taxes during 2021-22 to 2025-26. Figure 4.2 gives our buoyancy assumptions for specific taxes of the Union Government.

Figure 4.2: Buoyancy of the Union Government's Taxes during 2021-22 to 2025-26



Note: CD=custom duties; UED=Union excise duties; GST = Goods and Services Tax; CIT=corporation tax; PIT=personal income tax; GTR=gross tax revenue

Cesses and Surcharges and the Divisible Pool

4.25 Cesses and surcharges are currently levied on all major direct and indirect taxes, including GST. The compensation cess levied on GST, till it ceases to exist, will largely reflect the buoyancy of GST. The other cesses and surcharges, levied under provisions of Articles 270 and 271 of the Constitution respectively, will mirror the trends in the taxes on which they are levied. These cesses and surcharges (excluding GST compensation cess) averaged 13.1 per cent of the gross tax revenue during the 2016-17 to 2018-19 period. This component amounted to Rs. 3.18 lakh crore in 2018-19. With the increase in the special additional duty on excise and road cess on petrol and diesel in 2020 and with the assumption that there will be no further change in their current structure, these cesses and surcharges are estimated to average 18.4 per cent of gross tax revenue between 2021-22 and 2025-26.

4.26 The pool of tax resources of the Union required to be shared between the Union and the States – the divisible pool – excludes from the gross tax revenue the cost of collection of taxes, cesses and surcharges and tax revenue of the Union Territories. The cost of collection has remained around 0.7 per cent of gross tax revenue in recent years and is expected to remain around that level. Combining the projection of all taxes, and the items to be excluded from the divisible pool, the Commission has estimated that this pool will be around 76.2 per cent of gross tax revenue and 67.2 per cent of the gross revenue receipts (gross tax revenue plus non-tax revenue) during the projection period.

Tax to GDP Ratio

4.27 Based on our assessment, the tax-GDP ratio of the Union Government increases by 0.7 percentage point from 9.8 per cent in 2020-21 to 10.5 per cent in the terminal year of 2025-26. This will still be less than the 11 per cent tax-GDP ratio achieved in 2018-19. As we have discussed in Chapter 5, over the medium term, there should be revenue gains from administrative and procedural improvements leading to better compliance and thus bringing the tax-GDP ratio in line with trends in the recent past.

Non-Tax Revenues

4.28 The non-tax revenue of the Union consists mainly of dividends and profits from public undertakings and entities, including dividends and surpluses from the Reserve Bank of India (RBI), receipts from the auction of telecom spectrum, interest receipts and other receipts. These revenues grew at an annual rate of 5.8 per cent during the period of the FC-XIV. In a growing economy, non-tax revenue, especially of dividends and profits, can be reasonably expected to keep pace with GDP growth. But collections from some major sources have shrunk in recent years. Interest receipts of the Union, mainly from loans extended to the State Governments, are unlikely to grow during the projection period. The receipts from spectrum auctions are likely to improve as the telecom scenario improves gradually and auctions gain momentum. Likely divestment of shares of public sector enterprises (PSEs) will affect the sustainability of the dividends and profits from these enterprises. In contrast, we expect that miscellaneous receipts collected in the exercise of sovereign functions, regulatory charges, license fees and user charges for public goods and services, fines and other fees will increase significantly during the award period.

4.29 Upon careful evaluation of these considerations, we have assessed the non-tax revenues of the Union to grow at the same rate as GDP, that is, at an annual rate of 11 per cent during 2021-22 to 2025-26.

Non-debt Capital Receipts

4.30 Non-debt capital receipts have two components – recovery of loans and advances and proceeds from public sector disinvestment. With hardly any fresh on-lending to the States except for the back- to-back transfer of loans against externally aided projects, the receipts from recovery of loans and advances have been declining. We have adopted the annual amounts furnished by the Union in its revised memorandum to us.

4.31 After reaching a historical high of over Rs. 1 lakh crore in 2017-18, disinvestment proceeds declined to Rs. 94,727 crore in 2018-19 and Rs. 50, 304 crore in 2019-20 (provisional accounts). Out of the total proceeds from disinvestment between 2014 and 2020, 60 per cent was through minority stake sales, 12.2 per cent was from buyback, 20.2 per cent from strategic

disinvestment and 7.6 per cent from other means. Going forward, there are limitations to minority stake sale due to considerable disinvestment through this route in the last five years, leading to depletion of government stocks available for sale. The way forward through strategic sales will remain contingent on market appetite, resolution of issues relating to land title, lease and land use with stakeholders, issues of labour unions and the impact of the pandemic on financial markets.

4.32 Accordingly, while assessing the prospects of disinvestment proceeds, we also considered the market capitalisation of equity holdings of the Government of India available for minority sale as well as for strategic sale and the possibilities of disinvestment in unlisted PSEs. As against the disinvestment proceeds of Rs. 2.1 lakh crore budgeted for 2020-21, we have factored in only Rs. 50,000 crore, assuming that the balance will be realised only in subsequent years, when the market conditions improve. Balancing these considerations and based on inputs from the Department of Investment and Public Asset Management (DIPAM) in the Ministry of Finance, we assessed that the disinvestment proceeds will increase to Rs.1.2 lakh crore in 2021-22 and will gradually decline to Rs. 0.80 lakh crore in 2025-26.

Revenue Expenditure

4.33 The total revenue expenditure of the Union Government can be broadly classified into own revenue expenditure of the Union and transfers to State Governments and Union Territories. The accounts of 2018-19 show that 77.1 per cent of the revenue expenditure of the Union Government was its own revenue expenditure. and the remaining 22.9 was by way of transfers (excluding tax devolution).

4.34 Four components of own revenue expenditure accounted for 65.9 per cent of the Union Government's total revenue expenditure: (a) civil and defence pensions and salaries and other allowances for civil employees, account for 16.1 per cent; (b) revenue expenditure of defence services including salaries constitutes 9.70 per cent; (c) subsidies for food, fertilizer and petroleum constitute 11.10 per cent and (d) interest payments constitute 29 per cent. The Union Government's own development-oriented expenditure accounts for the remaining 11.2 per cent of total revenue expenditure.

4.35 **In keeping with the approach of the previous Finance Commissions, we have adopted normative principles with the objective of ensuring fiscal sustainability. We have been guided by the imperatives of reprioritising expenditure by economising establishment-related expenses, removing inefficiencies in the administration of subsidies, minimising leakages in public spending and channelising the resultant savings into developmental expenditure in social and economic sectors. These principles underpin our assessment of the revenue expenditure of the Union and the States discussed in subsequent sections.**

Interest Payments

4.36 Interest payments of the Union Government depend on four factors – the level of outstanding liabilities, the effective interest rate of these liabilities, incremental borrowings and the weighted interest rate of incremental borrowings. Interest payments of the Union Government grew annually at an average rate of 9 per cent during the 2014-15 to 2019-20 period.

4.37 Marketable debt accounted for 68.8 per cent of the total outstanding liabilities of the Union by end-March 2019. The weighted average coupon rate (WACR) of market borrowings remained more or less the same at around an annual average of 8 per cent during the five-year period 2008-09 to 2012-13 and the subsequent five-year period, 2013-14 to 2017-18. However, WACR has been declining steadily during the five years ending 2018-19. This trend, if sustained, will exert a downward pressure on interest payments during the 2020-21 to 2025-26 period. However, there will be an upward pressure on interest payment liabilities because of the requirements of higher fiscal deficit during the period, which is dealt with in paragraphs 4.53 and Table 4.1.

4.38 The average interest cost of the debt stock is arrived at by dividing interest payments during a year with average debt stock. Average debt stock is a simple average of outstanding debt at the beginning and at the end of the year. Considering inflation expectations and emerging interest rate scenario, we have assessed the average cost of incremental borrowings to the Union Government at 6 per cent during the period 2020-21 to 2025-26. Based on these assumptions, we have worked out that the growth of interest payments will be 9.6 per cent per annum during the period 2020-21 to 2025-26. As a proportion of GDP, interest payments will gradually decline from 3.55 per cent in 2020-21 (reassessed) to 3.31 per cent in 2025-26.

Pensions and Salaries

4.39 While assessing pensions and salaries, we kept in view the likely strain on the revenue stream of the Government and the need to observe strict fiscal discipline, particularly in non-developmental expenditure. The implementation of the recommendations of the pay commissions in the past have accounted for the peaks and troughs in pension and salary pay-outs of the Union Government relative to both its revenue expenditure and GDP. Except for the impact of pay commissions or one-off policy decisions like one-rank-one-pension of defence pensioners, growth in expenditure on pensions and salaries of the Union has been generally lower than that of aggregate revenue expenditure. The period 2021-2026 is unlikely to witness another pay commission or any drastic step-up in pensions and salaries, except normal dearness allowances and increments. We also expect that the inflation scenario will be benign during 2020-2026.

4.40 The Government of India has, as of now, frozen the dearness allowance to its employees and dearness relief to its pensioners due from January 2020 to July 2021, clarifying that this will be restored only prospectively. Based on this decision, we do not expect any growth in the salary

requirements for 2020-21 over 2019-20. In view of the strain on revenues, for 2021-22 also we expect that the Union Government will enforce suitable economy measures in its committed expenditures to off-set any increase on account of dearness and other allowances. Accordingly, we have factored in a growth rate of 1 per cent in salaries and 1.5 per cent in pensions in these two years (2020-21 and 2021-22). Thereafter, we have employed an annual growth of 5 per cent in salaries and 5.5 per cent in pensions, keeping in mind the need for annual increment of employees, dearness allowance/relief of employees and pensioners and the normatively assessed change due to attrition in the workforce. We also expect that the expenditure on government workforce will be prudently rationalised, with emphasis on functional efficiency, to stay within the means. Our projections are presented at Annex 4.1.

Defence Revenue Expenditure

4.41 Salary and allowances constitute close to two-thirds of defence revenue expenditure. In 2018-19, the expenditure on the pay and allowances of the three forces was 56 per cent of the total and another 7 per cent was spent on account of the pay and allowances of the civilians (in the defence segment). Defence revenue expenditure grew at a trend growth rate of 9.2 per cent during the period 2015-16 to 2019-20 (PA). In order to make estimates for the projection period, we have considered the budget estimates of 2020-21 as the base. The salary component was projected with the same norms employed for the projection of the salaries of other government employees during 2021-2026.

4.42 We have assessed that the non-salary component of the defence revenue expenditure should grow at a robust pace so as to ensure a reasonable level of maintenance of defence assets. Hence, we have estimated that this component of defence revenue expenditure should keep pace with GDP growth during 2021-2026.

Subsidies

4.43 Food, fertilizer and petroleum subsidies are the major subsidies of the Union Government. We have noted the steps taken by the Union Government to reform different subsidies. Measures like the automation of the supply chain of subsidised food grains and the weeding out of the ghost ration cards have helped contain the rise of the food subsidy. On the other hand, factors like expanded coverage of subsidised food grains under the National Food Security Act (NFSA) 2013, regular increases in minimum support price (MSP) of food grains and unchanged central issue prices have exerted considerable upward pressure on food subsidy. Reforms like decontrol of petroleum prices and direct benefit transfer of LPG subsidy helped to rein in petroleum subsidy.

4.44 Report 20 of 2018 of the Comptroller and Auditor General of India on Union Finances showed that the full impact of the increasing food and fertilizer subsidies was not absorbed in the

Union Budget for a number of years. The cumulative impact of the budgetary under-provision was around Rs. 3.10 lakh crore for food subsidy and Rs. 40,000 crore for fertilizer subsidy by end-March 2020. This legacy burden needs to be distinguished from the current burden of food subsidy. At the same time, we are of the view that there is adequate potential for mobilising additional resources by streamlining the administrative structure of the Food Corporation of India (FCI) and introducing efficiency measures in handling, storage and transportation of food grains.

4.45 More than three-fourth of the food subsidy is currently incurred on the operations undertaken by the FCI and the remaining portion on subsidised provision of food grains under the NFSA from decentralised procurement by States. We have assessed the current requirements of food subsidy in 2021-22 by taking into account the population coverage, per unit consumer subsidy and buffer-stocking and distribution cost. Subsequent to this, given the current levels of MSP and beneficiary coverage under food subsidy, we have assumed that any incremental growth in subsidy during 2022-23 to 2025-26 will be largely limited to indexation to inflation. Increases in the economic cost of food grains will need to be partially offset by increases in central issue prices of subsidised food grains, which is permissible under the NFSA.

4.46 The liability of the accumulated burden should be met from additional resources to be mobilised by the Union Government, through administrative and governance reforms that will release scarce resources for clearing outstanding liabilities. We expect that the Union Government will draw up an appropriate plan for introducing such measures that will ensure repayments in a time-bound manner. As we have factored in the entire current expenditure on food subsidy for the award period, the Union Government should not take further recourse to extra budgetary resources on this account.

4.47 Petroleum subsidy, currently limited to subsidised kerosene and LPG, will depend on change in consumption, revision in subsidised prices and movements in international prices and exchange rate. The consumption of LPG may increase in the projection period, but this will be associated with a reduction in the use of subsidised kerosene. Considering that the international prices of petroleum and gas are projected to remain benign in the medium term, we have adopted the modest figures of petroleum subsidy furnished in the Union Government memorandum.

4.48 Fertilizer subsidy has fluctuated around an annual average of Rs. 71,300 crore in the 2015-2020 period and it is budgeted around the same number in 2020-21. The same level has been kept for all the five years from 2021-22 to 2025-26. Thus, the inflation-adjusted value of fertilizer subsidy will decline during the period. Miscellaneous subsidies, mainly interest subsidies, accounting for about 11 per cent of the total subsidies, have been assessed to decline by 10 per cent annually from 2020-21 (BE) to 2026, allowing for a steep erosion in its real value during the period. As in the case of food subsidy, we expect the Union Government to formulate pricing and governance reforms that will eliminate recourse to extra budgetary resources.

4.49 The sum of the projection of the different components of committed revenue expenditure

yielded a growth of 6.9 per cent in the aggregate own revenue expenditure of the Union vis-a-vis an estimated 9.5 per cent growth during 2015-16 to 2019-20 (PA). This reflects the strict fiscal discipline that we recommend for the period 2021-22 to 2025-26.

Transfers to States and Union Territories

4.50 The transfers from the Union Government to the States, Union Territories and local governments on the revenue account consist mainly of schematic transfers (Central sector schemes and Centrally sponsored schemes), GST compensation and Finance Commission transfers, including revenue deficit grant, grants for disaster management, grants to the local self-governments and other specific grants.

4.51 As per the budget estimates for 2020-21, these transfers totalled Rs. 7.09 lakh crore on the revenue account. We have adopted this budget estimate with certain corrections made in the first supplementary demand for grants for the differences between the budget estimates and the approved recommendations of the Finance Commission on revenue deficit grant and disaster management grants to the States. These are charged expenditures on the Union Government and would need to be provided for. Going forward, for 2020-2026, the following assumptions have been made for transfers to the sub-national governments.

i. The schematic transfers of the Union Government in the form of centrally sponsored schemes (CSS) and central sector schemes to the State and Union Territory Governments amounted to 12.81 per cent of the gross revenue receipts of the Union Government during the award period of the FC-XIV (2015-16 to 2019-20). As per the figures derived from the provisional accounts for the Union Government for 2019-20, these transfers were approximately Rs. 2.5 lakh crore. Compared to this, the budget estimate for 2020-21 at Rs. 3.84 lakh crore was very high. We reassessed the budget estimate with a realistic downward revision to Rs. 3.46 lakh crore. For 2021-22 to 2025-26, we have pegged the schematic transfers to the States to an average of 12.82 per cent of the gross revenue receipts of the Union Government, similar to the FC-XIV period.

ii. The transfers recommended by the Finance Commission will be fully provided for. The details are in Annex 4.1 to 4.3 and in Chapter 10. Aggregate transfers to the states are presented in Annex 4.3 and 4.4.

iii. Recent deliberations in the GST Council and developments in the provision of GST compensation to the States lent credence to an assumption that the commitments of the Union for providing compensation to the States till Q1 2022-23 will be honoured, but may not be extinguished by the year 2022-23. Our treatment of GST compensation to the States is detailed at para 4.69 to 4.71 of this Chapter.

Developmental Revenue Expenditure

4.52 The remaining portion of revenue expenditure (excluding transfers to States and Union Territories) includes the non-salary, non-subsidy expenditure in different sectors by the Union Government and its institutions. This generally constitutes the developmental component of the revenue expenditure of the Union Government. In our report for 2020-21, we had assessed a growth provision equalling the projected GDP growth for this part of expenditure, considering the need to provide for important sectors like science and technology, atomic energy, external affairs and space. In 2020-21, we have assessed that this component of expenditure will go up to Rs. 4.38 lakh crore from the budgeted Rs. 3.44 lakh crore on account of significant interventions in the health sector and other sectors to fight the spread and impact of the pandemic. Keeping this mind, we have kept this component at the 2020-21 levels in 2021-22, and then applied a robust trend growth of 8.4 per cent annum during 2022-23 to 2025-26. We also expect the Union Government to review and rationalise the large number of Central sector schemes to reduce infructuous expenditure.

4.53 Our assessment of the different components of revenue expenditure of the Union results in an aggregate trend growth rate of 6.4 per cent per annum.

Capital Expenditure and Key Relativities with respect to GDP

4.54 Table 4.1 summarises the projection of the Commission of Union finances for the period 2021-22 to 2025-26.

Table 4.1: Key Fiscal Variables of the Union Government as per cent of GDP

	2019-20 PA	2020-21 BE	2020-21 Reassessed	2021-22	2022-23	2023-24	2024-25	2025-26
Gross tax revenue	9.88	10.77	9.81	9.84	9.94	10.07	10.25	10.47
Cesses and surcharges retained by the Union (except GST compensation cess)	1.55	1.65	1.92	1.88	1.86	1.85	1.84	1.85
Divisible pool	7.75	8.51	7.32	7.40	7.52	7.66	7.84	8.05
Net tax revenue to the Union	6.67	7.27	6.80	6.79	6.85	6.92	7.02	7.16
Non-tax revenue	1.60	1.71	1.35	1.35	1.35	1.35	1.35	1.35
Revenue receipts	8.27	8.99	8.15	8.15	8.20	8.27	8.38	8.51
Non-debt capital receipts	0.34	1.00	0.36	0.64	0.48	0.41	0.36	0.30
Capital expenditure	1.66	1.83	1.84	1.70	1.51	1.53	1.54	1.49
Revenue Expenditure	11.55	11.70	14.07	13.08	12.67	12.16	11.69	11.32
Fiscal deficit	4.60	3.54	7.40	6.00	5.50	5.00	4.50	4.00

i. The own revenue expenditure relative to GDP declines gradually during the projection period because: (a) the Union finances are unlikely to be impacted by another pay commission during the next five years; and (b) non-developmental components of revenue expenditure have been assessed on a normative basis that a resource-strained fiscal path demanded.

ii. We expect the Union Government will introduce additional resource mobilisation measures as indicated by us that will enable accumulated off-budget liabilities on subsidies to be cleared in a time-bound manner and eliminate further recourse to extra budgetary resources. Hence, their clearance is not built into our assessment.

iii. The share of development-oriented transfers to the States and local governments have been calibrated at a stable level despite the strain on Union finances. These include specific purpose transfers for sectors that require urgent attention and augmented investment. It is important for the Union Government to re-prioritise its expenditure and review the CSS to focus on investment in health, education, nutrition and income generation measures for faster economic recovery and long term sustainability of growth. This is also necessary, considering the constraints on the revenues of States and the expected demands on their resources to off-set the decline in the size of the divisible pool due to increase in the quantum of cess and surcharge.

iv. In our report for 2020-21, we had stressed the importance of public investment to support economic revival. This requirement is paramount in the emerging milieu. Keeping in mind the need to preserve the space for capital expenditure, and the need to support the budgets of States, we have provided for a glide path to the reduction in the fiscal deficit of the Union.

4.55 Annexes 4.1 and 4.2 present the detailed picture of our assessment of Union finances for 2021-2026.

Assessment of State Finances

Approach of the Commission

4.56 Similar to our report for 2020-21, and keeping in view the approach followed by previous Finance Commissions, past trends as well as recent developments, we have adopted normative principles and procedures for assessing the revenue and expenditure of the States. The base year (2018-19, the year for which the latest Finance Accounts are available) was calibrated with required adjustments to ensure comparability of data across States. Wherever relevant, the budget estimates of 2020-21 have also been used.

Adjustments in Receipts and Expenditure

4.57 The projection of revenue expenditure of States requires a comparable data set from the Finance Accounts. We needed to develop comparable State fiscal data for the base year, 2018-19, by making adjustments, which have been traditionally carried out by previous Finance Commissions, including the FC-XIV and by us in our first report. The details are as follows:

(i) **Lotteries:** If net receipt from lotteries (that is, receipts on lotteries at major head (MH) 0075 minus expenditure MH 2075) was positive, it was added back to the receipts. If the net receipt from lotteries was negative, it was assumed to be zero.

(ii) **Power sector:** From revenue expenditure, we deducted grants and subsidies on power (from MH 2801 and from any other head where it was booked). Revenue expenditure on account of the Ujwal DISCOM Assurance Yojana (UDAY) was also removed from MH 2801. For those States where the power sector is run commercially, the receipt on power (MH 0801) was retained. For the States where the power sector is run departmentally, if the net receipt on power (MH 0801-MH 2801) was negative, the same was taken as zero. However, if the net receipt was positive, we factored that into the assessment of receipts.

(iii) **Transport undertakings:** For the transport sector, we carried out adjustments similar to those for the power sector.

(iv) **Grants in aid from the Union Government:** We removed the following items of expenditure which were based on the Union Government grants: (a) revenue expenditure on account of scheme-based Central assistance and (b) grants-in-aids for local self-governments. The expenditure on calamity relief from MH (2245) was excluded from the base year. Considering that the States will have to provide a matching share in the State Disaster Risk Management Fund, this portion has been projected separately from 2021-22 onwards and added back to revenue expenditure.

(v) **Major State-specific subsidies and farm loan waiver:** Food subsidy and farm loan waiver have been removed from the revenue expenditure of the States in 2018-19.

(vi) **IGST transfers to the States:** The Integrated GST (IGST) amount transferred to the States in 2018-19 has been added to each State's SGST as per the ratio of an individual State's SGST to the all-States' SGST in 2018-19.

(vii) **Reserve fund expenditures:** Revenue expenditure from the reserve funds (except Consolidated Sinking Fund and Guarantee Redemption Fund) has been netted out.

(viii) **Contra entry for receipts/ payments:** Receipts/payments of contra-entry nature have been removed from both non-tax receipts and revenue expenditure. For example, in the case of irrigation projects, some States pay interest on capital, which may get reflected in own non-tax revenue as interest receipts. Entries of such a nature were adjusted to avoid double counting.

Gross State Domestic Product

4.58 The National Statistical Office (NSO) provided the comparable estimates of gross state domestic product (GSDP) of States for the period 2011-12 to 2018-19. These have the advantage of being based on the same principles and uniform methodology of estimation across States. The base year for the projection of GSDP is 2018-19. We noted that GSDP numbers for 2019-20 are available for many States from their own calculations, but these are not certified by the NSO. Most of the States made these estimates the basis for their budgets for 2020-21. However, the economic scenario changed significantly in the last two months of 2019-20. Hence, we did not consider calculations made by the States for the years beyond 2018-19. To ensure uniformity in methods and approach, we made our own projections of GSDP from 2019-20.

4.59 We assessed the GSDP growth of States in two stages.

i. In stage 1, for the year 2019-20, we extrapolated the trend in GSDP growth rate during 2011-12 to 2018-19 for each State. While arriving at our projections of GDP for 2020-21, at the all-India level, we made assumptions about the behaviour of broad sectors like agriculture, industry, public administration, defence and social services, and other services and assessed them separately before arriving at the aggregate GDP growth rate. We, however, noted that sectoral growth rates of individual States could vary around the national average, as in the past. To account for these differences, we assessed the elasticities of sectoral growth rates of States with respect to the corresponding sectoral growth for the aggregate of States during 2011-2019. We combined this information with our assessment of national growth in the sector for 2020-21 to arrive at the State-wise growth in the sector. This procedure was followed for each sector, before consolidating these and arriving at the initial estimates of aggregate GSDP growth rate for each State in 2020-21. For the period 2021-22 to 2025-26, sharp differences in GSDP growth were ironed out by grouping States in six categories (four for General States and two for NEH States) and assigning the average growth of each group to all States within the group.

ii. In stage 2, we made a five-fold distinction between the States in terms of their per capita revenue expenditure, averaged for 2017-18 and 2018-19: (a) those with per capita revenue expenditure at 140 per cent or more of the average for all States; (b) those with such expenditure between 130 per cent and 140 per cent of the all-State average; (c) those with such expenditure between 100 per cent and 130 per cent of the all-State average; (d) those with such expenditure between 80 per cent and 100 per cent of the all-State average; and, (e) those with such expenditure at 80 per cent or less of the all-State average. Higher public spending per capita, with proper allocations and efficient use, should also yield higher growth. Accordingly, we normatively assessed that the higher the per capita revenue expenditure, the higher should be the GSDP growth to support such higher expenditure, and vice versa. We also distinguished between the NEH States and general States at this stage and benchmarked them around the group average. While GSDP growth rates were distinguished for four categories of States (categories 'a', 'b', 'd',

and 'e' above) based on their per capita revenue expenditure, the category 'c' above was generally assigned GSDP growth rates derived from the sectoral calculations in stage 1.

iii. This principle was extended broadly to the following years also with adjustment of extreme values. This method ensured that the all-State growth rate in each year is identical to the projected national growth during our award period. The method also ensured a degree of progressivity and equity in our calculations, while also giving due consideration to fiscal discipline.

4.60 The resultant growth estimates are placed at Annex 4.5. The calculations also yielded GSDP growth of NEH States, which is on an average, less than that of the general States.

Own Taxes Revenue

4.61 The own tax revenue of the States can be divided broadly into two – SGST, which was 41.5 per cent of own tax revenue in 2018-19, and non-GST taxes which was 58.5 per cent.

Non-GST Taxes of States

4.62 The non-GST taxes of State Governments are: sales tax on petroleum and alcohol (24.3 per cent of own tax revenue), State excise (12.3 per cent), stamp duties (10.4 per cent), vehicle tax (5.7 per cent), electricity duty (3.5 per cent) and others (2.3 per cent). Our assessment of own tax revenue of States, as in the case of the Union, combined indications from past trends and the necessity to raise resources needed for health and income support and to fight the economic slowdown precipitated by the pandemic. Besides, from the normative perspective, the tax to GSDP ratio has to improve considerably compared to its recent performance. For this, it is important for States, just as in the case of the Union, to tighten and improve tax administration to ensure greater compliance and deepening of the tax base. This is also critical to avoid excessive borrowings and the likelihood of an unsustainable debt path.

4.63 For the year 2020-21, we assessed that the non-GST taxes will contract for all States, the rate of contraction being 1.7 times the contraction in each State's GSDP. The projection of non-GST taxes was done in two stages. In the first stage, States were distinguished normatively on the basis of two considerations. First, we distinguished between the NEH states and the general States. Second, we calculated the deviation of States from the average ratio of non-GST tax collections to GSDP in the aforesaid two categories. For 2021-22, a buoyancy of 1.15 was taken as the general norm for both NEH and general States in the first stage. For NEH States, the non-GST taxes to GSDP ratio averaged 2.49 per cent and for general States, this ratio averaged 3.87 per cent. We noted that the NEH States, in general, may have constraints relating to land ownership laws and infrequent transactions in land, etc. in their efforts to improve collections from non-GST taxes. We then divided the NEH States in two sets of buoyancies of 1.15 and 1.20 during 2022-23 to 2025-26, making higher buoyancy applicable for States with lower ratio of

non-GST taxes to GSDP and vice versa.

4.64 Non-GST taxes of the general States should show significant improvement in rate structure, compliance and collections because these taxes have shown lower buoyancy than the taxes subsumed under GST. Hence, in the first stage, we divided these States in two sets of buoyancies of 1.25 and 1.30 during 2022-23 to 2025-26 in a similar way.

4.65 At the second stage, we made a distinction between the States which are higher by 40 per cent or more than the average per capita revenue expenditure (averaged separately for general States and NEH States for 2017-18 and 2018-19) and other States with effect from 2021-22. We assessed normatively that the first category should have a higher tax buoyancy to support their higher expenditure. For the other States, we maintained the buoyancies determined at the first stage.

State GST

4.66 The all-State growth and buoyancy in SGST (post the IGST settlement) should mirror those in CGST. However, the buoyancy of individual States has been different. In the first stage, the States have been differentiated normatively on the basis of two considerations – first, the category of States (general States or NEH States), and second, deviation of a State from the average ratio of SGST to GSDP in the two categories. For the year 2020-21, as in the case of non-GST taxes, we assessed that the SGST will contract for all States, the rate of contraction being 1.7 times the contraction in each State's GSDP. For 2021-22, a buoyancy of 1.10 was taken as the general norm for both NEH and general States. We then divided the NEH States in three sets of buoyancies of 1.30, 1.25 and 1.10 during 2022-23 to 2025-26, with the highest buoyancy for States with lowest SGST to GSDP ratio. We divided general States also in three sets of buoyancies of 1.30, 1.20 and 1.10 during 2022-2026 period in similar way. The average SGST to GSDP ratio was 2.35 per cent and 2.79 per cent respectively for the NEH States and general States in 2018-19. We distinguished the SGST buoyancy modestly for the intermediate range of general and NEH States considering that the tax potential of the latter lies in the destination-based GST, not in the other taxes.

4.67 At the second stage, we assessed normatively that the States which are higher by 40 per cent or more than the average per capita revenue expenditure should have a higher tax buoyancy. For the other States, we maintained the buoyancies determined at the first stage.

4.68 The aforementioned procedure ensured the following.

(i) The all-State SGST buoyancy during 2021-26 matches substantially the buoyancy of CGST.

(ii) The tax buoyancy of NEH States, on an average, is less than that of the general States.

(iii) The all-State tax to GSDP ratio improved by 0.7 percentage points from 2020-21 to 2025-26 (Annex 4.6).

Treatment of GST compensation

4.69 Until June 2022, States' GST revenues are protected by a Constitutional scheme that guarantees an assured annualised, compounded 14 per cent growth of revenue from erstwhile State taxes subsumed under GST. This 14 per cent growth is calculated on the certified actual collection of subsumed taxes in 2015-16 (called protected revenue). The shortfall – that is, the difference between protected revenue and actual SGST collection in any year – will be compensated by the Union Government from the resources available in the GST Compensation Fund, which will be replenished with the proceeds from the GST compensation cess and "such other proceeds decided by the GST Council".

4.70 The SGST revenue fell short of the assured path for many States in each year after the GST roll-out, resulting in a need for compensation every year. The expected significant shortfall of SGST revenue vis-à-vis the assured path in 2020-21, 2021-22 and Q1 of 2022-23, coupled with sluggishness in collections from the GST compensation cess, has already led to a considerable gap. Going by our projections, the estimated shortfall of SGST vis-à-vis the assured path – including the backlog from previous years – will amount to about Rs. 7.10 lakh crore until June 2022 (only to the States). From our projections of collections from GST compensation cess, it turns out that the compensation cess fund will have an amount of only Rs. 2.25 lakh crore by that time, from the collections of 2020-21 to Q1 2022-23.

4.71 The GST Council is yet to decide on its approach towards the requirements of GST compensation to the States, over and above the collections from the compensation cess till Q1 2022-23. However, our assumptions and calculations are as follows, on the basis of the recent deliberations and decisions of the GST Council including the legal opinion of the Attorney General.

(i) States' shortfall from the assured path of SGST will be fully compensated.

(ii) The aforementioned shortfall in the requirements of compensation till Q1 2022-23 will be met by extending the levy of GST compensation cess till the year 2025-26.

(iii) In the interim, the transitional requirements of liquidity of the States could be met from borrowings, either by the Union or by the States.

(iv) We are not including or quantifying the debt implications of the borrowings under the proposals. The fiscal deficit and debt path worked out by us excludes the borrowing that the States may do under any arrangement worked out between them and the Union, consequent upon decisions in the GST Council.

(v) We have estimated the collection from GST compensation cess through 2025-26. Our calculations showed that the estimated collection from the compensation cess, if extended till 2025-26, will be just enough to clear the liabilities towards the States. We have built in this income stream to the revenues of the States, in proportion to the estimated shortfall of each State, year-wise (Annex 4.8).

Non-tax Revenue

4.72 Own non-tax revenues of the States include interest receipts, dividends and profits, royalties, irrigation receipts, receipts from forestry and wildlife, receipts from elections, etc. These revenues grew at a trend rate of 10.4 per cent during 2011-12 to 2018-19 with a buoyancy of 0.9.

4.73 As in the case of tax revenues, we followed a two-stage procedure for assessing the non-tax revenues of the States till 2025-26. We took a macro view first and assessed that, with focus on rationalising and increasing fees and user charges, with a buoyancy of 1.1, the growth of these revenues should modestly outpace the GSDP growth of each State. In the second stage, we have normatively assumed that the buoyancy of those States that exceeded the average (of the group, as spelt out earlier) per capita revenue expenditure by 40 per cent or more should have a higher buoyancy of 1.30 in order to support their expenditure without reliance on excessive borrowings. The projected ratios of non-tax revenue to GSDP are given in Annex 4.7.

Revenue Expenditure

4.74 The adjusted revenue expenditure for 2018-19 of States (adjustments being those mentioned in para 4.57) formed the basis for projection. Expenditure on interest payment, pensions, elections, disaster management and compensation and assignment to local governments have been projected separately. This is because the factors that determine the growth in these items are different from those that determine the rest of the revenue expenditure. The aforesaid items have been added back to the revenue expenditure once the remaining projections are complete. The norms adopted for assessment of different items of expenditure are presented below.

Interest Payments

4.75 We adopted a two-stage procedure for the projection of interest payments for 2021-2026. The budget estimates of 2020-21 have been adopted as the base for projection. The projected addition to the stock of outstanding liabilities each year has been taken to be the fiscal deficit for each State. The assumptions on the year-wise fiscal deficit to GSDP ratio of States are presented in Chapter 12 on fiscal consolidation. We have further assumed that the interest rate on fresh borrowings of the State Governments will be a uniform 6.6 per cent during 2020-2026. Standard calculations based on these assumptions yielded a growth rate of interest payments for each State for each year – some above 9 per cent and some below 9 per cent. However, we are of the view that all States should make efforts towards debt consolidation and a simple barometer of that is the rate of growth of interest payment. Therefore, in the second stage of the projection, the projected growth rates in excess of 9 per cent have been brought down to 9 per cent, while the growth rates below 9 per cent have been kept unchanged.

Pensions

4.76 The budget estimates of pension payments for 2020-21, along with the revised estimates for 2019-20, have been adopted as the base for projection. The pension payments have been projected with uniform norms for all States. The year-wise norms have been aligned to those for the Union Government discussed in para 4.39 to 4.40.

Election

4.77 We devised a methodology to account for the different State election cycles. We considered the pattern of election-related expenditure of the previous five years and projected each year with a five-year inflation indexation at the rate of 4 per cent per annum from the base year (that is, five years before). Thus, for instance, the election-related expenditure in 2021-22 has been projected with a five-year inflation indexation at the rate of 4 per cent per annum upon the corresponding expenditure in 2016-17.

Compensation and Assignments to Local Governments

4.78 The States should assign proceeds of taxes to local governments based on the recommendations of the State Finance Commissions. A uniform annual growth of 4 per cent has been applied to this component from the base of the budget estimates for 2020-21 for all States.

Remaining Revenue Expenditure

4.79 While projecting the revenue expenditure of the States, we had employed the 'scheme, non-scheme' distinction in our report for the year 2020-21. We had, then, noted that the booking of expenditure done by the States did not follow a uniform pattern, but we kept the 'scheme, non-scheme' distinction with our assumptions and judgements. Examination of the accounts for 2018-19 for many States showed continuing issues in separating States' own schematic expenditure and their full salary and related components from the rest. Considering that this report of the Commission is for five years, we did not employ these assumptions and ratios for this Report. The separation of schematic and other expenditures (split into capital and revenue components and Union and State shares) is an important analytical distinction, which is weakened by data-related issues. It is important that these accounting differences are ironed out forthwith to facilitate comparison of important components of State Government expenditure and the aggregation of the States' accounts with the Union's accounts.

4.80 We employed the ratios derived from the Finance Accounts of each State to separate the developmental component from the rest. The developmental revenue expenditure consists of the States' contribution to the CSS as well as expenditure on schemes formulated and implemented by State Governments from their resources. We have treated all such expenditure on par with the

developmental component of the revenue expenditure of the Union Government, with a trend growth rate of 8.4 per cent per annum during 2022-23 to 2025-26. The only difference is for 2021-22, in which this expenditure has been kept the same at the reassessed levels of 2020-21 for the Union, while a growth of 4 per cent has been accorded to the State Governments.

4.81 The other component largely includes salaries, other establishment expenditure and the expenditure on maintenance of assets. We have assigned marginally higher growth rates to this part of revenue expenditure for 2021-2026 compared to assumptions made for the Union Government's salary component, because this includes expenditure on maintenance of assets also. We projected this component with a trend growth rate of 5.1 per cent per annum during 2021-22 to 2025-26, as opposed to annual growth of 4.4 per cent assigned to the salary bill of the Union Government during the period.

Aggregate Revenue Expenditure and Pre-Devolution Revenue Deficit

4.82 With the aforesaid methodology for projection, the aggregate revenue expenditure of all the States taken together shows a trend growth rate of 6.3 per cent per annum from the base of 2020-21 to 2025-26. The resulting estimation of the pre-devolution revenue deficit is presented in Annex 4.9. It may be noted that in the calculation of pre-devolution revenue deficit, the State accounts were netted of Central transfers of all kinds – both grants and tax devolution.

Summary and Recommendations

4.83 We based our projections for the period 2021-2026 on the provisional accounts of 2019-20 and the reconstructed estimates for 2020-21for the Union and the Finance Accounts of 2018-19 for the States, with the exception of some components where the Budget 2020-21 formed the basis of calculation. Considering the change in the economic and fiscal scenario on account of the pandemic, assumptions about GDP, GSDP, revenue and expenditure components have been reconstructed for 2020-21.

4.84 Our revenue norms from 2021-22 have been arrived at on the basis of the requirements of mobilising resources for funding development expenditure by implementing administrative and procedural reforms. We noted that distinct improvements are possible in the collections from GST, direct taxes of the Union and non-GST taxes of the States with institutional and administrative reforms and use of IT-based solutions. This assessment gets reflected in the improvement of tax to GDP ratio by 0.7 percentage points each for the Union and the States by 2025-26.

(para 4.27 and 4.68)

4.85 We have treated the expenditures arising out of current transactions separately from the accumulated liabilities of extra-budgetary transactions. We quote from our report for 2020-21, "Outstanding extra-budgetary liabilities need to be clearly identified and eliminated in a time-

bound manner with transparent reporting of deficit and debt as provided in the amended FRBM Act of 2018". We reiterate this statement. The liability of the accumulated burden needs to be fully met and will need additional resources beyond our projections to be mobilised by the Union Government, through administrative and governance reforms that will release scarce resources for clearing outstanding liabilities. We expect that the Union Government will draw up an appropriate plan for introducing such measures that will ensure repayments in a time-bound manner. As we have factored in the entire current expenditure requirements of the Union and State Governments for the award period, they should not take further recourse to any extra budgetary resources.

(para 4.43 to 4.48)

4.86 Progressivity and equity were brought into our calculations by differentiating States with higher spending in per capita terms from other States and assigning them higher targets of GSDP growth and tax buoyancy. We also employed similar principles for assessing the non-tax revenues of the States. The initial levels of tax-GSDP ratio of the States was also considered while making our projections.

(para 4.58 to 4.68)

4.87 States were brought to a comparable base of revenue and expenditure in 2018-19 by removing subsidies, UDAY-type grants and farm loan waiver from the base and giving the same treatment to Central transfers. We have also endeavoured, wherever possible, to bring in symmetrical treatment between comparable items of revenue and expenditure of the Union and the States. We did not remove the pan-Indian subsidies of the Union from its base, but subjected them to tight norms.

(para 4.57)

4.88 In keeping with the approach of the previous Finance Commissions, we have adopted normative principles with the objective of ensuring fiscal sustainability in austere times. We have been guided by the imperatives of reprioritising expenditure by economising establishment-related expenses, removing inefficiencies in the administration of subsidies, minimising leakages in public spending and channelising the resultant savings into developmental expenditure in social and economic sectors. We assessed the committed revenue expenditure of the Union and the States with the objective of prudential management of scarce resources, particularly in the initial years. At the same time, we have endeavoured to keep reasonable space for developmental revenue expenditure and for capital expenditure for the Union and all the States.

(para 4.35, 4.39 to 4.48 and 4.75 to 4.81)

4.89 Our analysis and projections at different stages were affected by inconsistent accounting of receipts and expenditure that made it very difficult to ensure comparability of the base level of expenditure and revenue across States. It is important that these accounting differences are ironed out forthwith to facilitate comparison of important components of State Government expenditure and consistent State level fiscal analysis and the aggregation with the Union's accounts.

(para 4.79)

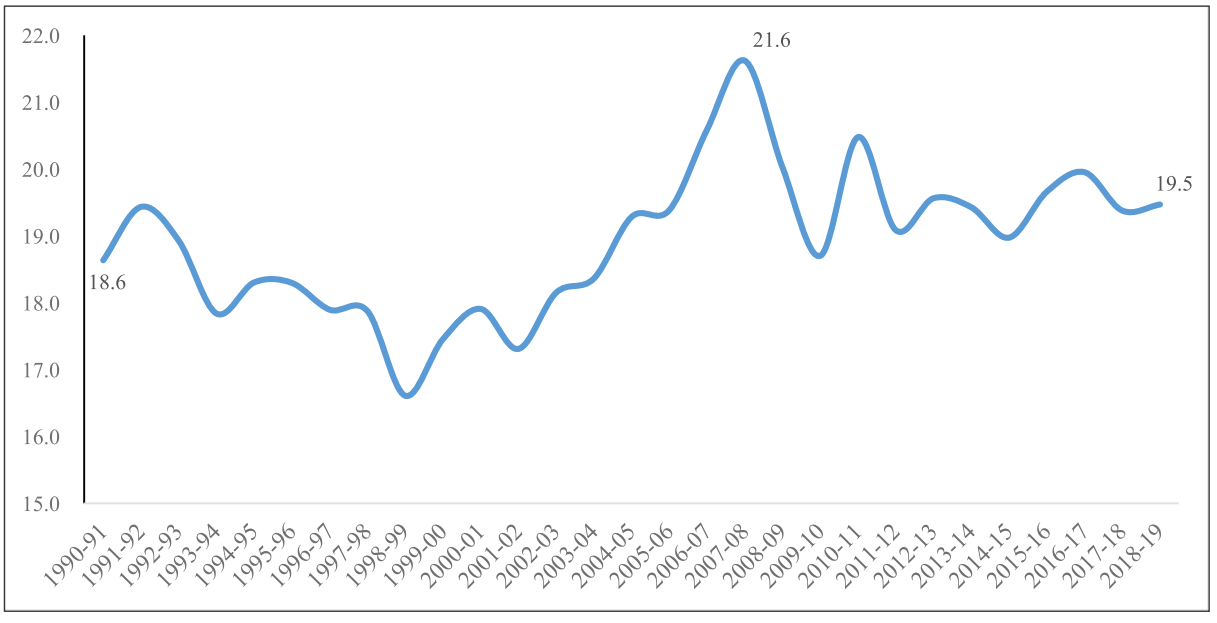
Chapter 5

Resource Mobilisation

This Chapter discusses the imperative of stepping up efforts for raising the resources of governments at all levels, in the context of increasing requirements of public expenditure and stagnant revenues relative to gross domestic product (GDP). The Covid-19 pandemic has widened the gap between revenue and expenditure of governments. We analyse the major direct and indirect taxes with untapped revenue potential. We conclude that, with appropriate corrective measures in tax administration and policy, the tax to GDP ratio could, in time, be raised by 5 percentage points. Corrective measures recommended by us bear the potential of yielding revenue gains from GST, personal and corporate income taxes as well as property taxes at the local government level.

5.1 Public spending in India needs to better meet the expectations of social and physical infrastructure, employment, livelihood support and security. However, resource availability to meet these growing needs has remained an enduring challenge. The strain of these expenditure pressures has been showing up in the budgets of different tiers of government. What compounds these difficulties is the deteriorating revenues of the government relative to gross domestic product (GDP) in recent years (Figure 5.1). The growth in taxes from the late 1990s till 2007 was

Figure 5.1: General Government Revenue (tax plus non-tax) as % of GDP



Source: Union Budgets, CAG and NSO

largely due to improvement in the collection of direct taxes, particularly corporate tax. More recently, in 2015 and 2016 there was a brief spike in tax collections due to the increase in excise duty rates and the levy of cess to off-set the rapid fall in crude prices. At the onset of the Covid-19 pandemic in March 2020, tax and non-tax revenues for both the Union and States had already been declining. The pandemic has affected the economy in multiple ways. No sector of the economy - financial, monetary, fiscal and real – has escaped the adverse fallout. Both informal and formal sectors are impacted significantly. Hence, building avenues for sustained additional financial resources for governments at different tiers, including the third tier, is inescapable. This is what this chapter attempts to address.

Table 5.1: General Government Revenue (tax plus non-tax) and Expenditure (as % of GDP)

Country/country group	Revenue		Expenditure	
	2011-2012 average	2017-2018 average	2011-2012 average	2017-2018 average
Advanced Economies				
United Kingdom	36.0	36.6	43.6	38.9
United States	29.2	30.1	38.1	35.2
Average	35.5	36.2	41.4	38.6
Emerging Market and Middle-Income Economies				
Brazil	34.9	30.7	37.4	38.2
China	27.4	28.0	27.6	32.3
India	19.6	20.0	27.5	26.4
Russia	34.6	34.4	33.7	33.7
South Africa	26.9	28.6	31.1	32.9
Average	29.2	27.2	30.2	31.2
Asia	24.9	25.5	26.5	29.8
Low-Income Developing Countries				
Average	17.5	14.6	19.2	18.4
Asia	16.0	16.1	19.1	19.4

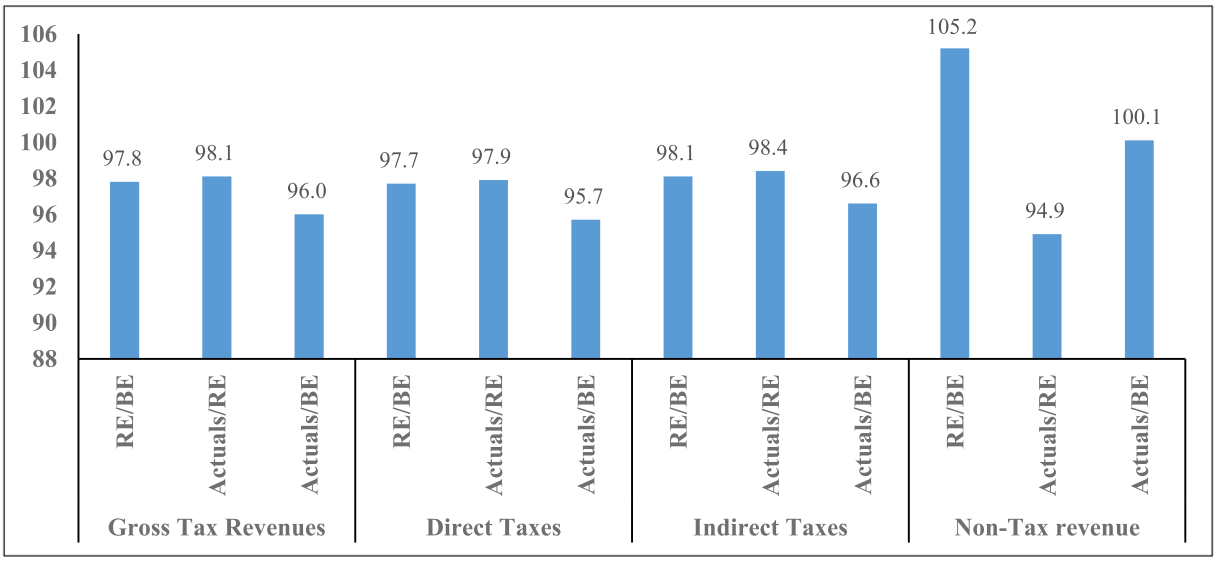
Source: Fiscal Monitor, April 2020, IMF

5.2 Table 5.1 brings out two salient points. First, India's revenue to GDP ratio has been virtually stagnant in the last decade and much lower than that of its peers. Second, it is evident that its financing requirements are substantially larger than its comparator countries and, despite high debt financing, public spending in India remains lower than its peers. Many research studies,

including one that was done for this Commission by the International Monetary Fund (IMF), have indicated the large gap in tax collections of more than 5 per cent of GDP, compared to its potential. Thus, even while recognising that there is great scope for improving efficiency in public spending, the immediate reason for fiscal pressures faced by governments at all tiers in India stems from the inability to mobilise adequate non-debt resources.

5.3 Another problem relates to budget marksmanship. Figure 5.2 shows that for the Union Government, the actual tax collections during the last ten years, on an average, was 4 per cent less than what was budgeted. The gap between revised estimates and actuals is by no means negligible. This prediction error leads to ad hoc expenditure management, typically in the second half of the financial year, that includes cuts in developmental expenditure creating uncertainties for implementing agencies, reneging on contractual obligations and payments, and significant carry-overs of liabilities. The problem is equally present in States, though it is sharper for some.

Figure 5.2: Budget Marksmanship of the Union Government in Revenues during 2010-2020 (average, in per cent)



Source: Union Budgets

5.4 In this chapter, we follow a bottom-up approach by estimating the additional potential from different revenue sources. It is possible that the Covid-19 pandemic will have a long-standing effect on the country's GDP, with implications for tax bases of both direct and indirect taxes. Hence, most of the conclusions on additional resources in this chapter are expressed in relation to GDP, not in absolute numbers.

Revenues of the Union

5.5 During 2015-16 to 2019-20, the Fourteenth Finance Commission (FC-XIV) period, gross tax revenues constituted about 84 per cent of the gross non-debt receipts of the Union Government. Out of the rest, 12 per cent was non-tax revenues and the remaining 4 per cent was non-debt capital receipts, primarily proceeds from disinvestment. More than half of the Union Government's non-tax revenues since 2015-16 was on account of the transfer of profits and dividends from public non-financial and financial corporations, including the Reserve Bank of India (RBI). These non-tax receipts are largely dependent on economic growth, while proceeds from disinvestment are often treated as a financing item in standard fiscal literature. Hence, going forward, the strength of the revenue of the Union Government will almost fully depend on the buoyancy of its taxes and economic growth.

Goods and Services Tax

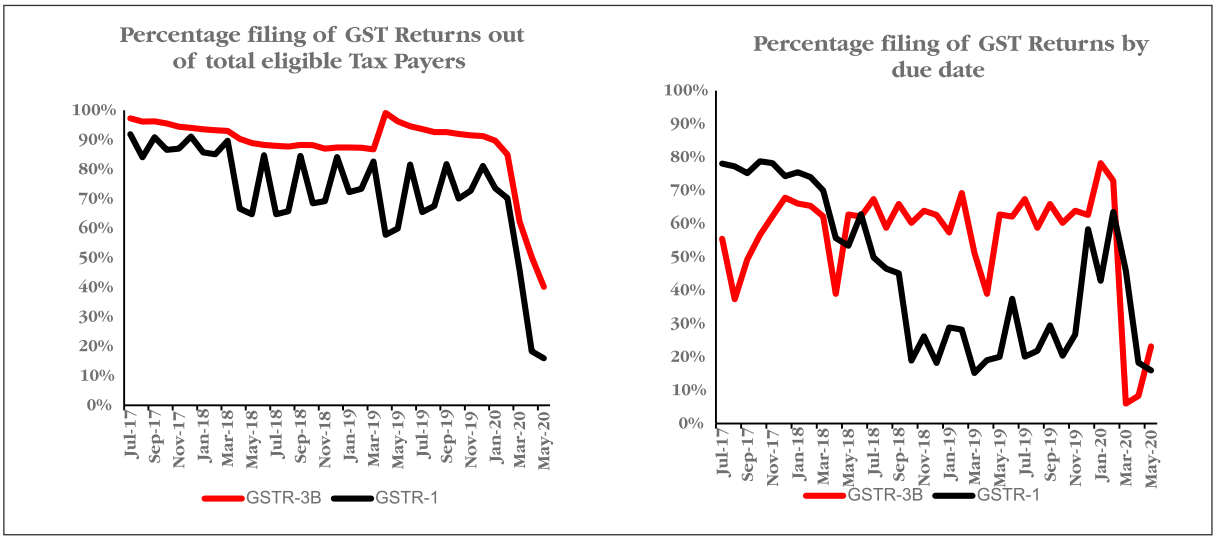
5.6 Improving the efficiency of the goods and service tax (GST) will strengthen both Union and State finances – the latter to a larger extent because under the current scheme of tax devolution, more than 70 per cent of total GST revenue accrues to the States. Revenue realisation from GST has been much below expectations so far as discussed below.

5.7 ***Inverted duty structure:*** In a GST regime, with multiple rates, the balance of the rate structure of intermediates and final goods and services has important implications. In many cases, this rate structure is inverted, leading to large refunds and less-than expected net tax collections being available to the general government. In 2018-19, about 78.5 per cent of the tax liability on the taxable outward supplies was paid through input tax credits. In contrast, as per the national accounts, the ratio of value added to gross output in the economy was 49.3 per cent in 2018-19, which means that slightly more than Re. 1 worth of inputs yields Re. 1 of value added. One of the important reasons for the higher than 50 per cent input tax credit could be the inverted duty structure for many items. This can be corrected even without the weighted effective tax rate going up, with a salutary impact on net revenue collections of the general government.

5.8 ***Compliance:*** The other reason for the above -mentioned inconsistency could be input tax credit frauds. In March 2020, it was reported to Parliament that 1,620 cases of fake invoices of GST amounting to Rs. 11,816 crore were detected in 2018-19 and 3,866 cases amounting to Rs. 11,378 crore during April-January 2020. However, these are only detected cases. In its Report No. 11 of 2019 on GST, the Comptroller and Auditor General (CAG) observes, “Even after two years of roll out of GST, system validated Input Tax Credit through “invoice matching” is not in place and non-intrusive e-tax system still remains elusive. The complexity of return mechanism and the technical glitches resulted in roll back of invoice-matching, rendering the system prone to ITC frauds. Thus, on the whole, the envisaged GST tax compliance system is non-functional.” There are serious handicaps to the systematic detection of frauds because of the following reasons.

i. Out of two monthly returns that are required to be filed by the tax-payers, GSTR-1 (detailed monthly return on outward supplies, matched by corresponding invoices, which facilitates invoice matching) and GSTR-3B, the compliance in filing of GSTR-1 has always been less than the filing of the self-assessed and summary GSTR-3B, through which taxes are paid (Figure 5.3).

Figure 5.3: GST Returns filing as Per cent of Total Eligible Tax Payers



Source: GSTN data as on 24 September 2020

ii. The problem with the over-reliance on GSTR 3B has been that input tax credit (ITC) claims cannot be verified from this. The aggregate data on GSTR 3B also leads to misleading inferences like the following:

(a) The taxable outward supplies as per the GSTR 3B return data were as high as Rs. 652 lakh crore in 2018-19. This can be compared to the total value of output of Rs. 348 lakh crore in the economy as per the national accounts, which should roughly be the upper limit for taxable turnover. Thus, the reporting of taxable turnover in GST returns on the aggregate is not consistent with the comparable aggregate figures from the national accounts. There is no validation within the system to establish consistency between taxable value and tax paid as per GSTR 3B.

(b) If taxable outward supplies as per the GSTR 3B are to hold good, then the effective GST rate, as per GSTR 3B, turns out to be 6.1 per cent, which is much lower than the effective rate derived from GSTR1.

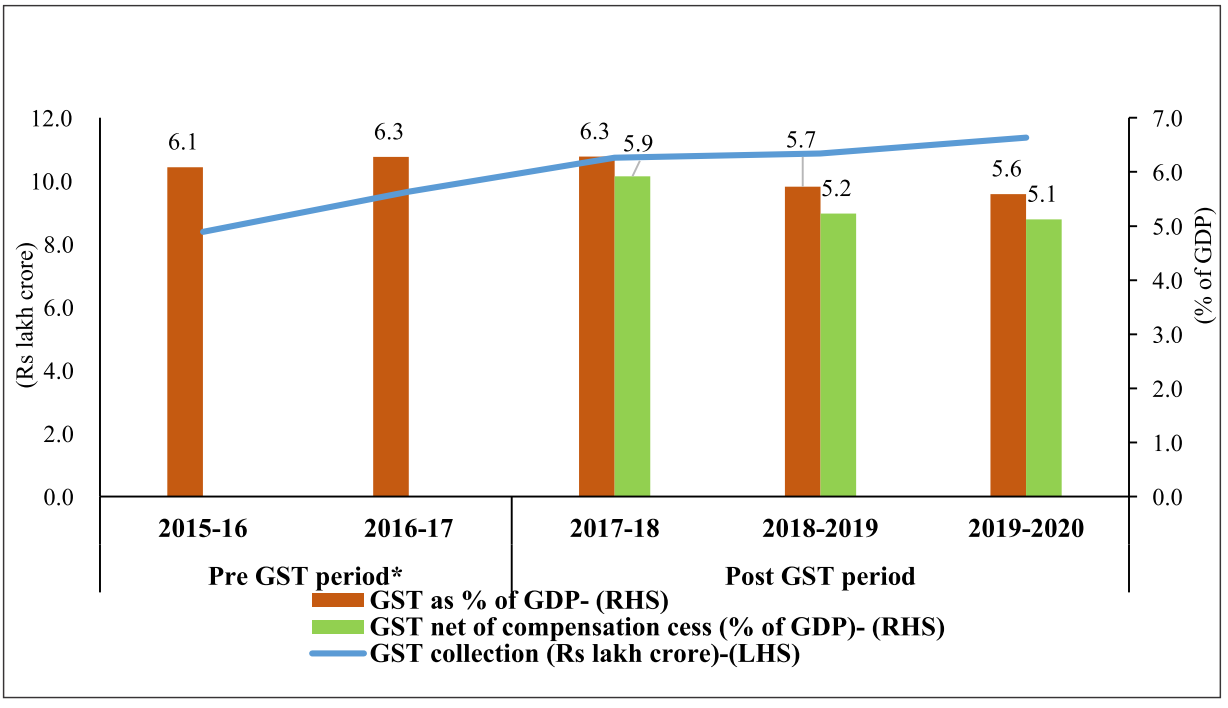
iii. Delays and non-compliance in filing returns, especially of the comprehensive GSTR1, makes it difficult to monitor tax evasion on a regular basis. Sample-checks of

outlier input tax credits cannot fully capture frauds.

iv. The lack of correspondence between aggregates on GST payments made by companies, as seen from the corporate tax data, and aggregates from GST returns makes macro crosschecks difficult. This is explained in Annex 5.1. It is paramount that tax authorities (both of direct and indirect taxes) should find a way to overcome technical impediments, including differences in accounting codes, etc. and operationalise the tax information system efficiently. This, in our view, will improve the efficiency of the entire GST structure, ensure better compliance, check evasion and enable early settlement of ITC and other adjustment claims.

5.9 ***Revenue neutrality:*** Figure 5.4 shows that general government revenues from the taxes subsumed under GST was around 6.3 per cent in 2016-17. However, collections under GST, net of compensation cess, was around 5.1 per cent of GDP in 2019-20. Collections under GST compensation cess of about 0.5 per cent of GDP are netted out as this was an addition under GST, and did not have any parallel in the pre-GST period. A change in tax structure can be said to be revenue neutral if the modified tax is able to realise revenue comparable to the original tax regime, relative to the tax base. In this sense, the much-needed revenue neutrality of GST stands compromised. Correcting the inverted duty structure and problems related to invoice matching in the next two years should progressively help India's GST to re-establish its revenue neutrality.

Figure 5.4: GST Collections vis-à-vis Collection from Taxes Subsumed Under GST



Source: Union Budget, Finance Accounts, CAG and MoSPI
Note: *GST data for pre GST period are of taxes subsumed under GST (Union & State)

5.10 ***Medium term target:*** The rate neutrality of GST, which was compromised in the multiple downward adjustments of rates subsequent to the introduction of the tax, needs to be restored. Immediately, the focus should be to streamline its technology platform and to ensure prompt filing of returns and invoice matching. The streamlining of the GST rate structure will greatly help to move towards its revenue potential. The calculations are presented in Box 5.1. Overall, the ambition should be to achieve GST revenue (net of revenues from GST compensation cess) of around 7 per cent of GDP over the medium term.

Box 5.1: Revenue Gap in GST – an approximation

Revenue neutral rate (RNR): There were at least four different estimates of the RNR of GST before its implementation.

(a) The Task Force appointed by the FC-XIII: RNR at 12 per cent (5 per cent for the Central GST and 7 per cent for the State GST). The Task Force noted that this was a steep decrease from the combined CENVAT and VAT of 20.5 per cent.

(b) IMF: RNR of 11.6 per cent. It used the national accounts data on final consumption and supply and use tables for 2011-12. Very few exemptions were considered.

(c) NIPFP: RNR in excess of 17 per cent with different scenarios.

(d) Report on RNR and Structure of Rates chaired by the then Chief Economic Adviser: RNR of 15 per cent (preferred estimate) and 15.5 per cent (alternative estimate).

The arithmetic average of these RNR estimates is around 14 per cent.

Current effective GST rate: On behalf of the FC-XV, the NIPFP did a study and concluded that the effective tax rate estimated from GSTR-3B was too low, perhaps because of reporting issues and that the effective tax rate from GSTR-1 was about 14 per cent. However, this was based on return data only till October 2018. In September 2019, the Reserve Bank of India estimated that after multiple rate adjustments, the effective weighted average GST rate declined from 14.4 per cent at the time of inception to 11.6 per cent. The IMF did an analysis of GST, on our behalf, and indicated that current effective tax rate is around 11.8 per cent.

Restoring the RNR will mean: (a) merging the rates of 12 per cent and 18 per cent; (b) operating with a three-rate structure of a merit rate, standard rate and demerit rate of around 28 per cent to 30 per cent; and, (c) minimising exemptions.

GST potential: The potential for GST collections can be assessed with the help of the latest supply and use tables (2015-16). We have adopted the standard macro approach, quoted in the Report on the Revenue Neutral Rate on GST in 2015. The formula is:

B=Y-E + M - X - [(1- e) (N+I)], where B is the potential GST base; the other variables are explained in the table below. The assumptions included full compliance, full pass-through of the GST into prices, GST as a single positive rate and a zero rate on exports. The absolute numbers below are not important as they relate to 2015-16, the ratios are verified to be robust in later years too.

Estimation of GST collection gap relative to GDP using supply and use tables for 2015-16 (values are in Rs. lakh crore)			
Y= Output at basic prices	252.4	Applying above formula, tax base, B	69.7
M=Import of goods and non-factor services, adjusted for exemptions	25.6	GDP at current prices	137.7
X= Export of goods and non-factor services, adjusted for exemptions	23.7	GST rate	14%
Exempted Value (E) = (unprocessed farm produce, public administration & defence, education and health)	52.6	Estimated GST collection in 2015-16	9.8
Exempted value/ Total output (e) =exempt ratio	0.21	GST to GDP ratio: estimate of potential	7.1%
Fixed capital formation (N)	39.8	GST to GDP ratio: current (without proceeds of compensation cess)	5.1%
Value of intermediate output (I)	126.8	Gap as % of GDP	2.0%

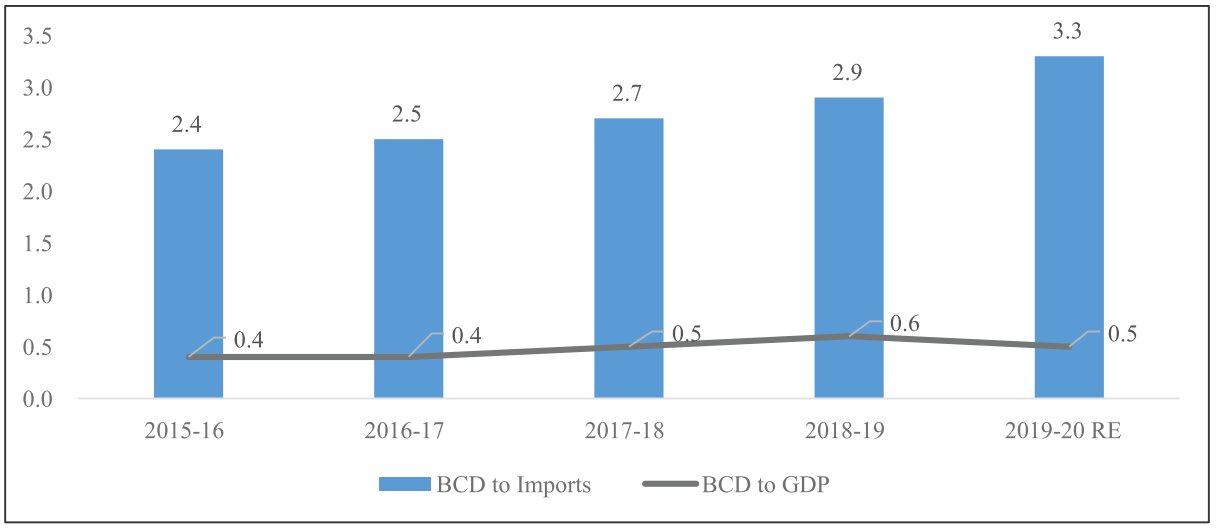
Collection efficiency which is the ratio of GST collections to the product of final consumption expenditure and standard rate and is a summary measure of efficiency of GST, stands below 50 per cent now. At the potential estimated above, it will be around 60 per cent, which is around advanced country benchmarks.

Streamlining Customs Duty Structure

5.11 There is high dispersion across India's complex and multiple rate tariff structure. According to World Trade Organization data, the ad-valorem tariff structure of India in 2019 comprised 94 per cent of the total tariff lines and included fifty-three Most Favoured Nation (MFN) applied rates, ranging from 0 to 150 per cent, with an average rate of 18 per cent. Bound duties account for 74 per cent of total tariff lines and range from 0 to 300 per cent. While the nominal MFN applied rates are higher than in trading partners, the average effective custom duty rate is lower. Research shows that revenue may increase with trade liberalisation accompanied by a simpler rate structure with an improvement in customs procedures and reduction in non-tariff barriers.

5.12 India's basic customs duty collections stood at 0.6 per cent of GDP and 2.9 per cent of its merchandise imports in 2018-19 (Figure 5.5).

Figure 5.5: Basic Custom duty as % of Merchandise Import and GDP



Source: Union Budgets, Department of Commerce and MoSPI

Note: BCD for 2019-20 is revised estimates

5.13 The efficiency gains from the following mix of policies will likely have a positive revenue impact in the medium term.

(i) Broad banding industrial finished products on MFN basis.

(ii) Broad banding intermediate industrial products and industrial raw materials on MFN basis.

(iii) Continuing with zero rating of imports to facilitate global value chain-related exports.

(iv) Streamlining and reducing non-tariff barriers.

Income Taxation by the Union Government

5.14 Direct taxes have undergone substantial reforms in the last decade, with favourable impact on tax compliance. However, while the statutory rates were reduced and the slabs got revised upwards, the plethora of exemptions and concessions did not get reduced proportionately. As a result, there is ample evidence of under-reporting of incomes and evasion, especially in the unorganised sector.

Personal Income Tax

5.15 For non-corporate entities, the slabs and rates of personal income tax are applicable. The following statistics throw light on the developments in the recent years.

(i) The number of tax returns of the assessees under personal income tax grew at a trend rate of about 19 per cent during 2011-12 to 2017-18. The reported gross total income in this segment grew at an annual rate of about 18 per cent. The collections from personal income tax grew at an annual rate of 16.6 per cent.

(ii) Most of the increase in non-corporate entities who declared business incomes from assessment year 2012-13 to assessment year 2019-20 took place in the income class of Rs. 2.4 lakh to Rs. 5 lakh. Table 5.2 suggests bunching of returns around the tax avoidance zone. There are a large number of individual proprietorships and partnerships outside the organised sector whose operations and income flows are not effectively tracked. With increasing formalisation of the economy and with the help of instruments like information from GST returns and bank transactions, the tax administration should be able to track them more effectively. Table 5.2 also shows that while the share of returns in the tax-paying bracket (income of Rs. 5 lakh and above) increased by more than 7 percentage point, their income share went up only marginally.

Table 5.2 Business Income of the Non-Corporate Sector

Classes (in Rs.)	% of Returns		Income share (%)	
	AY: 2012-13	AY: 2019-20	AY: 2012-13	AY: 2019-20
Above zero to 2.4 lakh	68.48	23.90	29.25	6.91
2.4 lakh to 5 lakh	22.21	59.38	20.92	42.48
5 lakh and above	9.32	16.72	49.83	50.60

Source: Department of Revenue

(iii) Salary income accounted for about 59 per cent of the declared incomes in this segment, while 27 per cent was business income.

(iv) Out of the 5.53 crore individuals that filed returns in this segment, 40.5 per cent did not pay any tax. Another, 53.2 per cent, whose annual income averaged Rs. 5.6 lakh, paid a tax of Rs. 22,538 each on an average, which means an effective tax rate of only 4 per cent. Their contribution to tax collections accounted for about 21 per cent. The remaining 6.3 per cent accounted for about 79 per cent of tax collections under personal income tax. This skewed picture emerges because of the plethora of exemptions and deductions, lack of effective surveillance and also the structure of tax slabs and rates.

5.16 Table 5.3, which presents tax threshold levels at purchasing power parity terms in different countries along with their tax rates and per capita gross national income, shows that in some ways, India's threshold level and the lowest rate of tax are generally comparable to those of major developing countries and lower than those of many developed countries. The threshold

limits may be kept at the current level for some time to build stability in tax regime and to ensure greater predictability and better tax planning for the taxpayer.

Table 5. 3: Comparison of Tax Regimes Across Countries

Country	Minimum tax rate (%)	Maximum tax rate (%)	Minimum threshold level ($_ppp)	2019 per capita GNI (PPP $)	World Bank classification (*)	2019 GNI per capita, (current US$)
United States	10.0	40.0	9275	65880	HI	65760
Sweden	20.0	25.0	56107	57300	HI	55840
Australia	19.0	45.0	12641	51560	HI	54910
Netherlands	8.0	52.0	25042	59890	HI	53200
Canada	15.0	33.0	9084	50810	HI	46370
United Kingdom	20.0	45.0	18373	48040	HI	42370
Japan	5.0	45.0	3815	44780	HI	41690
South Korea	6.0	42.0	1710	43430	HI	33720
China	3.0	45.0	12000	16740	UMI	10410
Brazil	7.5	27.5	10139	14850	UMI	9130
South Africa	18.0	45.0	12418	12630	UMI	6040
Indonesia	5.0	30.0	12886	11930	UMI	4050
Sri Lanka	4.0	24.0	9931	13230	LMI	4020
India	5.0	30.0	11788	6960	LMI	2130
Zambia	25.0	37.5	8621	3580	LMI	1450

Source: Our calculations based on different country sources, IMF, OECD, World Bank

Note: Countries like US and Canada have provincial taxes, which are not reflected in this table.

(*) World Bank country classification is based on 2019 GNI per capita in current US$, Atlas method. Low income (LI): < US$1,036; Lower-middle income (LMI): US$1,036 - US$4,045; Upper-middle income (UMI): US$4,046 - US$12,535; High income (HI): > US$12,535

5.17 When India has opted for moderate tax rates and thresholds at the entry levels of income, it is important that the tax base is properly captured. Annex 5.2 makes it clear that there is significant room for improvement in the tax base. This is where the recommendations of the Tax Administration Reform Commission (TARC), 2013, become all the more relevant. The major recommendations relate to:

(i) Reviewing various exemptions under different tax laws.

(ii) Expanding coverage of provisions relating to tax deduction at source (TDS) and tax collection at source (TCS) to more transactions, which leave behind an audit trail. This will act as a deterrent to tax evasion and aid in the collection of tax at the transaction stage itself.

(iii) Closer co-ordination between agencies involved in TDS and TCS, filers of

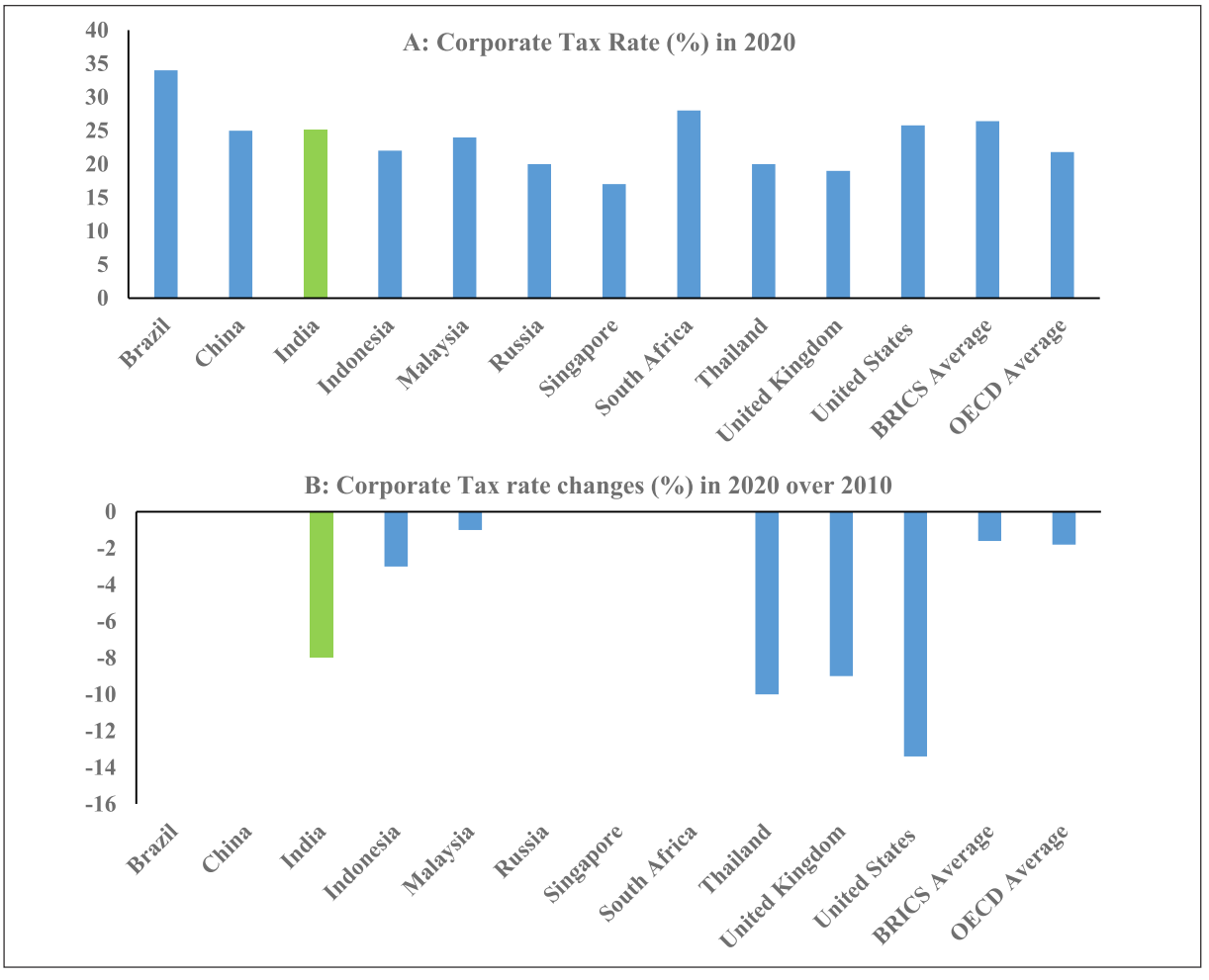
withholding tax and information filers for various financial transactions to trace assessees not filing returns.

(iv) Timely clarifications by authorities and improvement in the quality of orders from the angle of fairness, legality and propriety, irrespective of revenue consequences, will reduce disputes. Conduct of multi-year audits against the current single-year audit may also be considered.

Corporate Tax

5.18 With the correction in the corporate tax rate in September 2019 to a base rate of 22 per cent for those companies which do not avail of exemptions (without cesses and surcharges), India stands aligned to global benchmarks – India's rate is close to the BRICS and Organisation for Economic Cooperation and Development (OECD) averages. India undertook one of the sharpest corrections in rates over the last decade (Figure 5.6).

Figure 5.6 A&B: Rates of Corporate Tax Across Countries in 2020 and Change From 2010



Source: OECD

5.19 Public sector companies had about 18 per cent share of total corporate profits and 15 per cent of the tax liability in 2018-19. Multinational corporations account for more than 50 per cent of the total corporate tax collections in India. The effective tax rate on companies, inclusive of surcharge and cess, in 2018-19 was 27.84 per cent. The reduction in the statutory rate by 8 percentage points (for companies opting to do without concessions) can improve tax collections over a five-year frame. Two important channels include (a) increase in the post-tax return on investment that can, in turn, boost investment, aggregate profits and other incomes, spurring economic activity and also augmenting revenues from personal income tax and indirect taxes and (b) disincentive effect on multinationals for their profit shifting behaviour. These effects will take time to realise and may require complementary reforms for improving ease of doing business. Apart from this, the grandfathering of tax holidays done in 2017 should bring in buoyancy effects during the award period.

5.20 The revenue that was lost on account of the reduction in corporate tax rate in 2019 was around 0.7 per cent of GDP. Were new investments to respond, the positive impact of the reduction in tax rates on profits and incomes could compensate, over the next five years, much of the revenue lost from rate reduction.

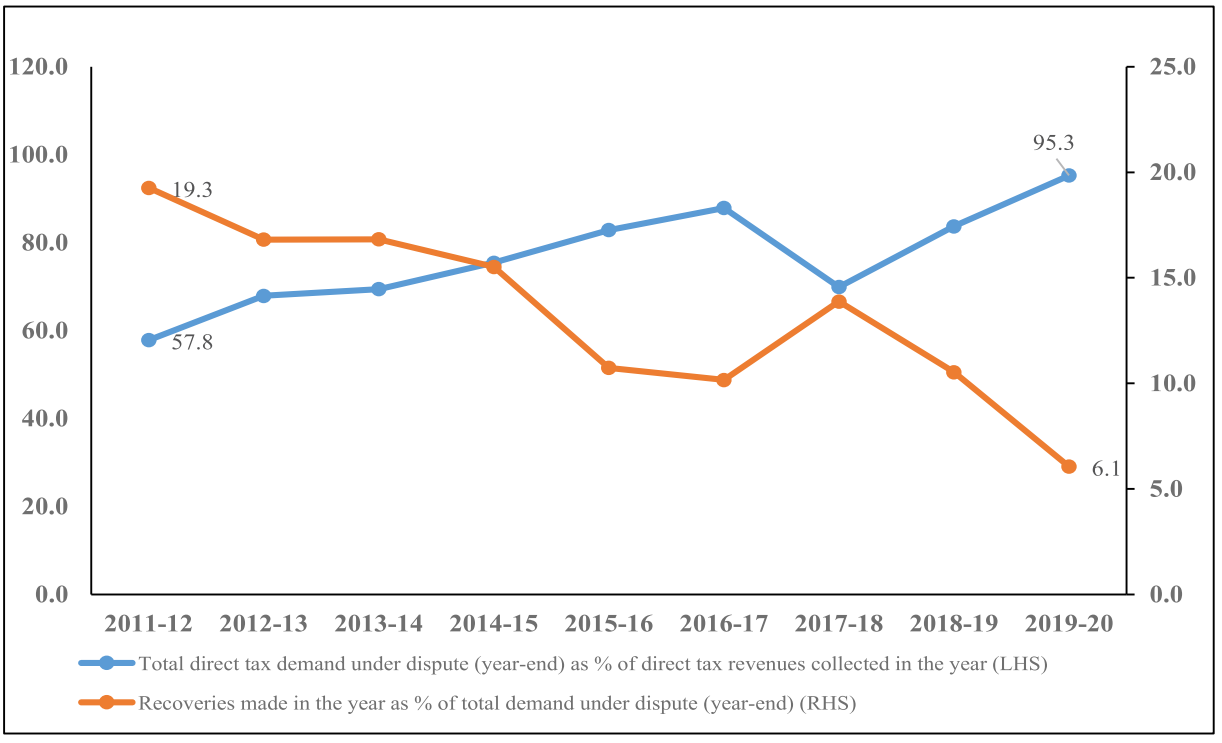
5.21 Between 2014-15 and 2018-19, direct taxes to GDP ratio of the Union Government increased by 0.4 percentage points. This should continue in the next five years, suitably adjusting for the tax policy change in 2019-20. Annex 5.2 which sees the national accounts and tax return data in a consistency framework indicates that tax collections can improve significantly with improvement in tax administration, streamlining of exemptions and capturing untapped incomes in the tax bracket. The concessions given to perquisites also need to be reviewed. Under an environment of improved tax administration and policy changes, overall, the revenue from the direct taxes of the Union has scope to improve 1.5 to 2 percentage points of GDP over the medium term and go beyond this in the next decade. Continuing improvements in direct tax collections is essential to impart greater progressivity to the tax structure.

Increasing Incidence of Disputes in Direct Taxes

5.22 The stock of direct tax demand at dispute was Rs. 9.99 lakh crore at end-March 2020 (Table 5.4). It had increased at a trend growth rate of 16.3 per cent from its level of Rs. 2.86 lakh crore at end-March 2012. Figure 5.7 shows that this stock amounted to more than 95 per cent of direct tax collections in 2019-20. In contrast the total recoveries made out of the demand under dispute grew at a modest trend rate of 3.7 per cent per annum. The High-Level Committee (HLC) to Interact with Trade and Industry on Tax Laws (November 2016) noted several cases where different views were taken in different jurisdictions on the same issue. It recommended that there should be a body at the highest level in the Central Board of Direct Taxes (CBDT) and Central Board of Indirect Taxes and Customs (CBIC) to clarify all matters of interpretation so that there is consistency and uniformity across jurisdictions. The HLC also recommended that data should be

maintained on a case-wise basis. It stated that every case where an assessment order becomes a matter of dispute should be recorded at every level of adjudication with the details of the relevant revenue official in order to analyse the case, draw lessons for the future and feed into the relevant official's performance reporting.

Figure 5.7: Stock of Disputed Tax Demand Versus Direct Tax Collections



Source: Central Board of Direct Taxes

5.23 Table 5.4 also shows that the pendency at the level of the departmental appellate mechanism increasingly accounted for a larger chunk of the disputed tax demands. Seeing the trends in the stock of tax amounts under dispute and the annual recoveries from such disputed amounts against the background of the direct tax collections, it seems that tax disputes are progressively becoming a losing battle for the Government.

5.24 This requires an urgent departmental resolution irrespective of revenue consequences. Timely clarifications and removal of doubts by authorities, review and improvement in the quality of orders passed from the angles of fairness, legality and propriety and conduct of multi-year audits as against the current single-year audit will help stem the origin of disputes.

Table: 5.4: Increase in Direct Tax Demand Under Dispute

Year	Total direct taxes under dispute - year end (Rs. crore)	Percentage pendency at different levels				Total direct tax collection (Rs. lakh crore)
		CIT(A)	ITAT	HC/SC	Others	
2011-12	2.86	44.5	37.0	7.9	10.6	4.94
2012-13	3.80	51.6	31.0	5.0	12.3	5.59
2013-14	4.43	54.2	31.8	5.0	9.0	6.39
2014-15	5.25	53.4	30.7	7.9	8.0	6.96
2015-16	6.15	60.2	24.9	10.8	4.0	7.42
2016-17	7.47	60.5	24.1	11.6	3.7	8.50
2017-18	7.00	58.3	25.4	12.7	3.5	10.02
2018-19	9.53	65.6	21.0	9.6	3.8	11.38
2019-20	9.99	69.3	17.6	9.0	4.0	10.49

Source: Central Board of Direct Taxes

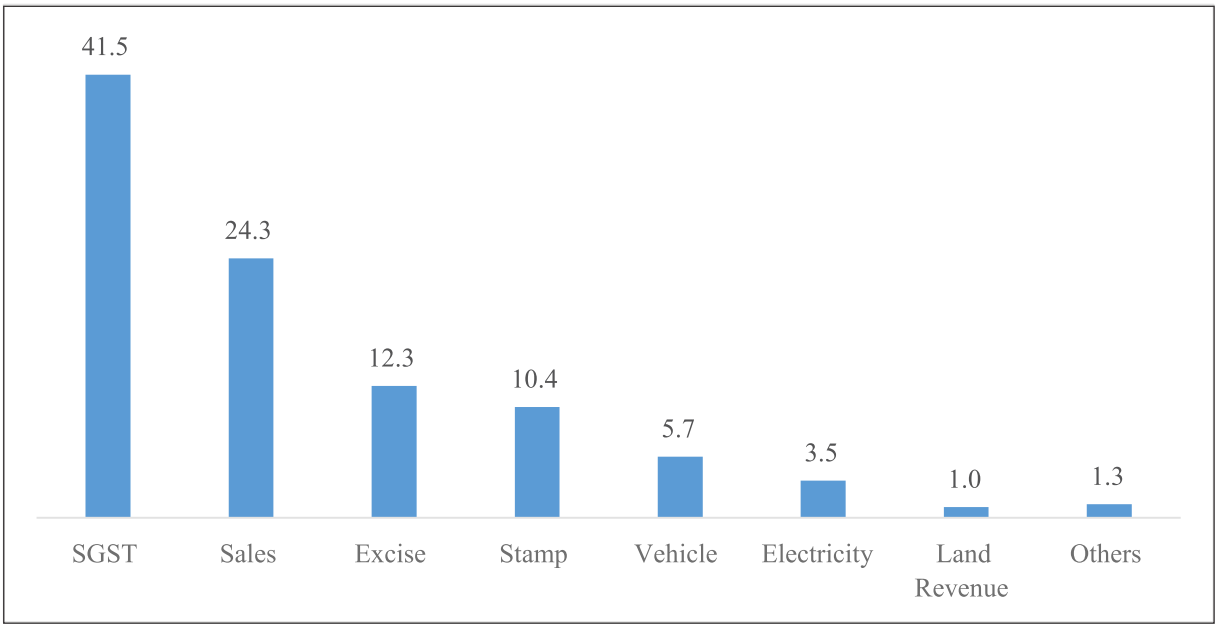
Note: CIT(A) – Commissioner of Income Tax (Appeals); ITAT – Income Tax Appellate Tribunal; HC – High Court; SC – Supreme Court

Non-GST Taxes at the State Level

5.25 About 41.5 per cent of States' tax revenue, subsumed under State GST (SGST), is under the pooled taxation powers of the general government (Figure 5.8). Another 17 per cent, the petroleum component of VAT, can be brought under that pool by a decision of the GST Council. The inclusion of petroleum under GST can reduce the cascading effect on goods with significant petroleum inputs, but can have transitional revenue implications. Petroleum VAT has generally declined from its very high rates of 2016-17; still the range is fairly large. The rates of electricity duty, another tax that can potentially be subsumed under GST, are generally lower than 15 per cent, but are widely varying across States. For seven States, the realisation from electricity duty was nil in 2018-19, while for another eight States, its share was less than 1 per cent, and for the remaining thirteen States, the average share of collection from electricity duty in own tax revenue was 4.6 per cent.

5.26 A significant part of the revenue buoyancy of States is actually or potentially linked to GST. **States will need to step up field efforts for expanding the GST base and for ensuring compliance, commensurate with their field strength and infrastructure for VAT and GST collection.** States should also widen their tax base by enhancing initiatives to mobilise more resources from taxes like stamp duties. The latter is the focus of the ensuing discussion.

Figure 5.8: Percentage Share of Taxes in States' Own Tax Revenue: 2018-19



Source: Finance Accounts of States, CAG

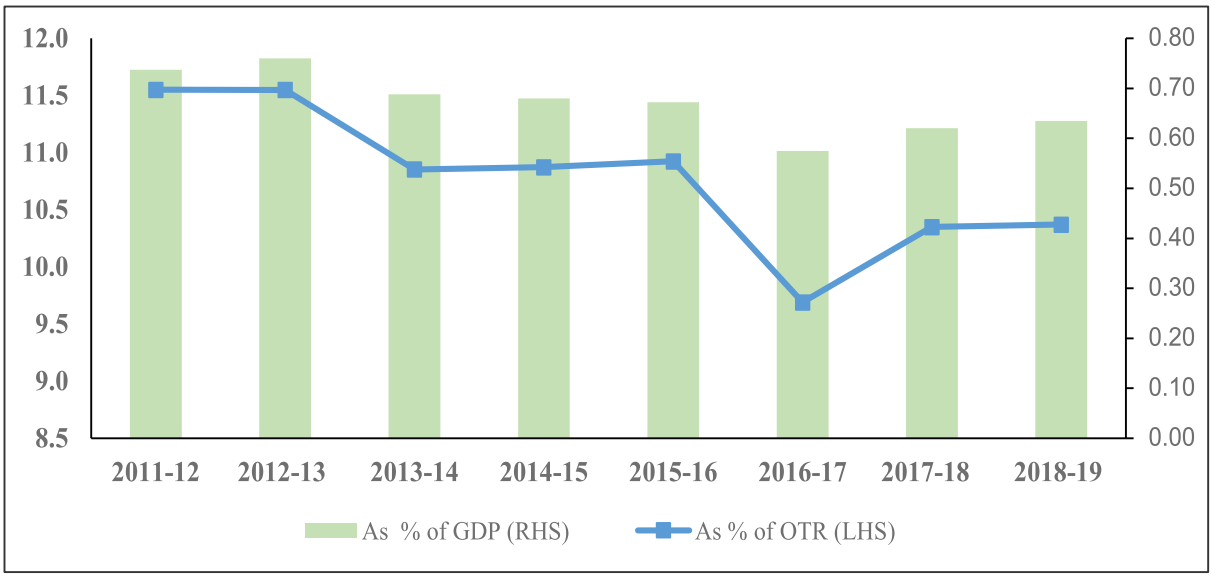
Stamp Duties and Registration Fees

5.27 The Constitution divides the responsibility of fixing stamp duty rates between the Union and States. However, it is collected and retained by the State where the instrument is executed. The Indian Stamp (Collection of Stamp Duty through Stock Exchanges, Clearing Corporations and Depositories) Rules, 2019 of the Union Government came into effect from July 2020. The new rules tried to address the stamp duty regime, recognising the technological changes in the field of financial securities and to provide for a centralised mechanism under which stamp duty is to be collected at one place by one agency (that is, through the stock exchanges or clearing corporations authorised by the stock exchange or by the depositories) on one instrument.

5.28 In the past, Indian stamp duty rates were exceptionally high, often above 10 per cent, while most countries in the world have rates that are less than 5 per cent[1]. This led to under-declaration of property values and lower collection of property taxes and capital gains taxes. Many States have revised stamp duty rates downwards to 5 per cent or below. Most States have also digitised land and property records. Research has indicated that although the stamp duty rationalisation policy in India may improve the efficiency of the housing market, it may not increase the stamp duty revenue collection as other policies having a bearing on per capita income also play a role in improving revenue collection[2]. Figure 5.9 shows that stamp duty and registration fee collections as per cent of GDP and the own tax revenue of States declined during 2011-2019.

[1] Alm, J.. Annez, P., & Modi, A. 2004. Stamp Duties in Indian States: A Case for Reform. World Bank Policy and Research Working Paper 3413
[2] Mukherjee, Vivekananda, 2013. "Determinants of Stamp Duty Revenue in Indian States South Asian Journal of Macroeconomics and Public Finance, 2(1): 33-58 SAGE Publications

Figure 5.9: Stamp Duties and Registration Fee Collections of All States as Percentage of GDP and Total Own Tax Revenue



Source: Finance Accounts of States, CAG and MoSPI

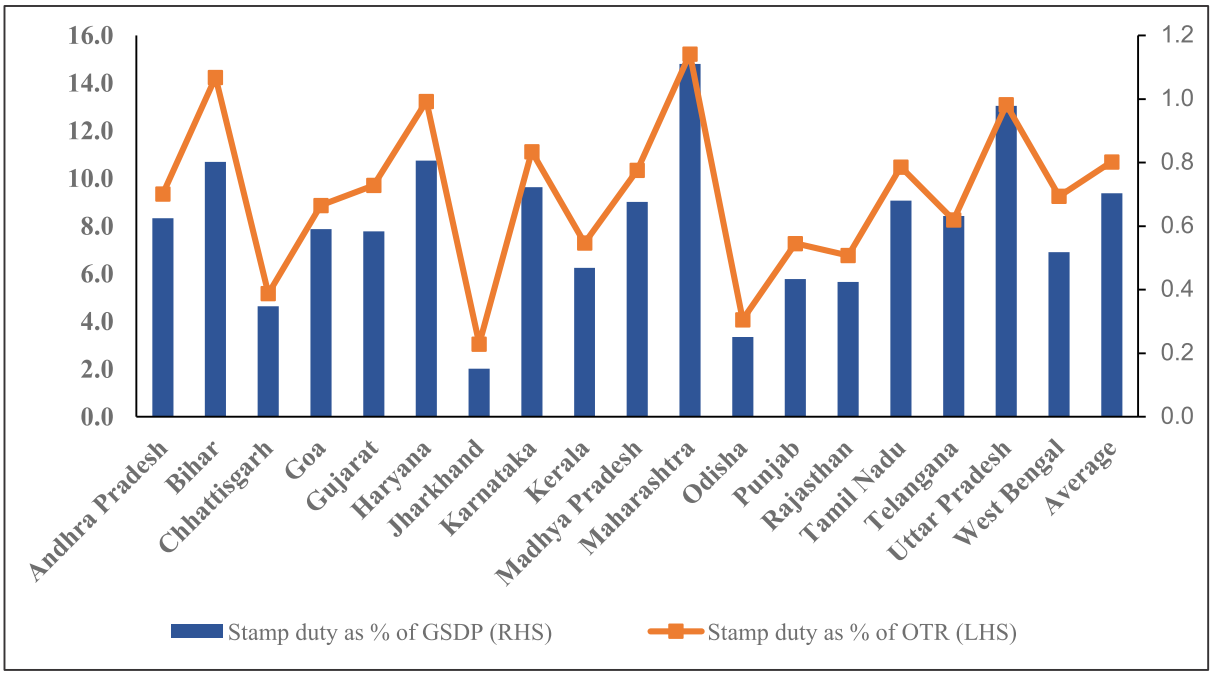
5.29 Figure 5.10 shows that many richer States, which are known to have buoyant property transactions, lag behind the average in terms of realisation from stamps and registration. One of the most important issues attested by researchers, Economic Survey, 2017-18 and the audits of stamp and registration departments by the CAG is the persistent undervaluation of property in registration. The Economic Survey pointed out that the guidance value or fair value of land fixed by State Governments, at which properties tend to get registered, are considerably lower than the market value of land. The CAG, upon sample cross-checks, reported that the loss of revenue to governments occurs because of misclassification of documents, undervaluation of property, short levy of stamp duty and registration fees and other irregularities.

5.30 There are many ways that State Governments can cross-check the wedge between market prices of properties and their fair values. One useful source can be the Residex of the National Housing Bank, an urban housing price index computed for housing properties in fifty cities across India that makes use of valuation data collected from primary lending institutions and data collected through market survey for under-construction properties, apart from registration data collected from official agencies. Another useful cross-check can be the data from private real estate portals abundantly present in States with buoyant property transactions. These portals give differentiated price quotations for different kinds of properties at different locations.

5.31 It is recommended that States should integrate computerised property records with registration of transactions. Research has indicated that computerised registration systems have

reduced the transaction costs for owners[3]. It is important that State Governments streamline their methodology of property valuation to yield regular and realistic updates of values, close to market values and greater revenues from property registrations. This will also help property taxation at the third tier of government, which is dealt in subsequent sections and in Chapter 7, although this will likely need greater effort in improving local administrative capacity.

Figure 5.10: Stamp Duties and Registration Fee Collections of General States as Percentage of GSDP and Own Tax Revenue



Source: Finance Accounts of States, CAG

The Third Tier - Property Tax and Professions Tax

5.32 Chapter 7 of this report on Empowering Local Governments delineates the property tax structure in the country. The design of property taxation, argued normally on the basis of benefit principle and ability-to-pay principle, has to guard against the possibility of creating disincentives to financial savings, which is important in the current Indian context. It is important to design a comprehensive taxation of house and commercial property, in such a way that it is both revenue-productive and progressive. This section discusses the taxation of houses, on which the available survey data gives scope to estimation.

[3] Deininger, Klaus and Goyal, Aparajita, 2012; Going Digital: Credit Effects of Land Registry Computerization in India. Policy research working paper; no. WPS 5244 Washington DC, World Bank Group

Estimating House Tax Potential at the Local Government Level

5.33 The Economic Survey 2017-18 estimated that the collection of house taxes in rural areas relative to their potential for select five states (Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and Uttar Pradesh) averaged about 20 per cent. It made use of the housing data from Census 2011, the National Sample Survey Organisation (NSSO) Sixty-Ninth Round (July-December 2012) report on 'Drinking Water, Sanitation, Hygiene and Housing Condition in India', online data on size of houses and their prices from widely quoted real estate websites, and the Central Public Works Department (CPWD) plinth area rate of construction. The Survey assumed tax rates of 0.1 per cent of the property value for households with two living rooms, 0.2 per cent for households with three to five rooms and 0.3 per cent for households with more than five rooms.

5.34 Partly based on the approach given in the Economic Survey, we attempted to estimate the house tax potential for rural and urban areas separately for all States using the unit level data from NSSO Seventy-Sixth Round on Drinking water, Sanitation, Hygiene and Housing Conditions' conducted in July-December 2018 (DWSHH 2018). The detailed step by step procedure was as follows:

Step 1: From the unit level data of DWSHH 2018, the size of houses was estimated. The house floor area was estimated separately for different size categories of houses – those with one room, two rooms, three rooms, four rooms, five rooms and six and more rooms.

Step 2: A value of Rs. 1,900 per square foot of floor area for 2011-12 was inflated by 20 per cent based on the plinth area rate of CPWD 2019 - Cost Index. As a result, for 2019, the value of floor area was assumed at Rs. 2,280 per square foot uniformly for all States.

Step 3: The total value of houses was estimated by multiplying the area in square feet estimated in Step 1 by Rs. 2,280 on average uniformly for all States to get the tax base.

Step 4: House tax rates were assumed at the same rate adopted by the Economic Survey 2017-18, that is 0 per cent for houses with one room, 0.1 per cent for two rooms, 0.2 per cent for three, four and five rooms and 0.3 per cent for 6 and above rooms. The tax potential was estimated by multiplying the tax rates with the respective tax bases as calculated in Step 3.

5.35 The overall assessment of potential for house tax collections derived from this methodology at the 2019 prices is Rs. 42,160 crore for rural areas and Rs. 23,184 crore for urban areas. The imputation of the same valuation per square foot of house area in rural and urban areas may have led to underestimation of potential in the urban areas. The State-wise estimated house tax potential in 2019 for both rural and urban areas is at Annex 5.3. Recommendations on property taxes have been made in Chapter 7. It is expected that with changes in law and providing flexibility to local governments to levy tax not below a floor (as against the current ceiling) we can expect a growth in revenues on this account.

Rationalising Professions Tax

5.36 The power of the State Legislature to impose a professions tax is derived from Article 276 of the Constitution read with Entry 60 of the List II- State List of the Seventh Schedule. Article 276 states that no one shall be required to pay more than Rs. 2,500 by way of professions tax to any State or any local authority within that State. The initial tax limit of Rs. 50 per annum per person was raised to Rs. 250 in 1950 and subsequently to Rs. 2,500 in 1988 by the Constitution (Sixtieth Amendment) Act, 1988. At present, twenty-one States are imposing professions tax. In some States, the levy is generally applicable to all persons engaged in any employment or in any profession whereas in the others, it is only for enumerated professions. In some States, the tax is levied and collected by the State, but in others, municipal bodies also levy and collect the tax under a State legislation.

5.37 The FC-XI maintained that States should either levy professions tax to supplement the resources of local governments or empower them to levy it, and that the rates should be suitably revised to bring them nearer to the ceiling prescribed under the Constitution. Further, it recommended that the ceiling fixed in 1988 needs to be suitably enhanced and that Parliament should be empowered to revise the ceiling without having to amend the Constitution every time. The FC-XII endorsed the suggestion made by the State Finance Commissions to raise the ceiling on professions tax. The FC-XIV recommended raising the ceiling from Rs. 2,500 to Rs. 12,000 per annum. It also recommended that Article 276(2) of the Constitution be amended to increase the limit and to vest the power to impose limits on Parliament, with the caveat that the limit should adhere to Finance Commission recommendations.

5.38 The reason for giving Parliament the power to determine the limits of professions tax was that the States should not have unlimited power to raise a second income tax in the name of professions tax. The following amendment to the Constitution of India will be sufficient to ensure revenue buoyancy to the States from professions tax and to check against excessive empowerment of the Union Government in fixing limits:

1. In clause (2) of Article 276, for the words "two thousand and five hundred rupees per annum" the words "such amount as Parliament may by law specify" shall be substituted.

2. In Article 276 of the Constitution, after clause (2), the following provisions shall be inserted:

> "Provided that no Bill or amendment which imposes or varies the amount shall be introduced or moved in either House of Parliament except on the recommendation of the President made in pursuance of a recommendation of the Finance Commission to this effect."
>
> "Provided further that nothing contained in clause (2) shall be construed to give Parliament the power to prescribe different limits on the amount payable as tax on professions, trades, callings and employment for different States."

5.39 Since the Finance Commission makes its recommendations to the President, it would be constitutionally appropriate that the recommendation to change the limit of professions tax is made by the Finance Commission to the President.

5.40 The simplest way to revise this ceiling is to index it to the accumulated inflation over the intervening years, in order to protect the real value of the 1988 ceiling. This will not adjust for the real increase in professional incomes that occurred during this period, but will only correct for cumulative inflation. Mere correction of inflation, not considering the increase in the underlying incomes, also divests the professions tax of the potential criticism of duplicating income tax. This indexation has been attempted by annually increasing the ceiling of Rs. 2,500 by inflation calculated from the implicit GDP deflator for each year. By this method, the upper ceiling of annual professions tax of Rs. 2,500 fixed in 1988 at 1988 prices works out to around Rs. 18,000 at 2019-20 prices.

5.41 This means that professions tax collections by urban local bodies in India have the potential to grow by more than seven times with the same number of assessees just by rationalising rates.

Summary of Recommendations

5.42 The pandemic has given rise to two competing considerations in the short to medium term. First, there is the need for sizeable resources for the general government to deal successively with the increased demands for health interventions and medical infrastructure, income generation programmes and fiscal support for economic revival. Second, the sharp contraction in economic activity has adversely affected revenue collection, especially tax revenues. This fiscal predicament has been described as a 'scissors effect' in Chapter 2. Fully meeting the estimated tax gap could result in a 5 percentage point improvement in the tax-GDP ratio from its level of 16 per cent in 2019-20 over the medium term. But this would happen only with significant improvement in governance of tax administration across the three tiers of government. The changes required to close the tax gap are both administrative/operational and tax policy-related. In the ensuing section, our recommendations are arranged in three segments; (a) administrative/operational changes, (b) tax policy changes and (c) other changes that will help achieve the full potential.

Administrative/Operational Changes

(i) The IT platform of GST needs to be rectified forthwith and strict compliance ensured with the timelines of filing GST returns, which should lead to seamless invoice-matching and identification of frauds. This should also facilitate regular flow of consistent data on turnovers, output GST, input tax credits and net collections, with possible degree of disaggregation to facilitate scrutiny, analysis and feedback to policy.

(para 5.8 to 5.10)

(ii) The unit level information from GSTN should help in expanding the breadth of direct taxes. Tax authorities need to overcome technical impediments and operationalise the tax information system efficiently. (Action by Union and the States).

(para 5.8 to 5.10 and annex 5.1)

(iii) States will need to step up field efforts for expanding the GST base and for ensuring compliance, commensurate with their field strength and infrastructure for VAT and GST collection. (Action by States).

(para 5.26)

(iv) With the help of information from GST returns, the increasing number of formal transactions and the trail of bank transactions, the direct tax administration should track individual proprietorships and partnerships more effectively (Income Tax – Action by Department of Revenue, Government of India).

(para 5.15)

(v) Closer co-ordination should be ensured between agencies involved in TDS and TCS, filers of withholding tax and information filers for various financial transactions to trace assessees not filing returns. (Income Tax – Action by Department of Revenue, Government of India).

(para 5.17)

(vi) To reduce excessive dependence on income tax on salaried incomes, it is important to expeditiously expand coverage of provisions relating to TDS and TCS to more transactions and incomes, which will leave behind an audit trail that acts as a deterrent to tax evasion. (Income Tax – Action by Department of Revenue, Government of India).

(para 5.15 to 5.17)

(vii) Another issue that calls for urgent departmental resolution, irrespective of revenue consequences, is disputed direct taxes. Timely clarifications and removal of doubts by authorities, review and improvement in the quality of orders passed and conduct of multi-year audits as against the current single-year audit will help stem the origin of disputes. The constitution of an apex body at the highest level in the CBDT and CBIC to clarify all matters of interpretation will help ensure consistency and uniformity across jurisdictions. The data on disputes should be maintained on a case-wise basis, facilitating analysis of cases and drawing of lessons for the future. (Income Tax—Action by Department of Revenue, Government of India).

(para 5.22 to 5.24)

(viii) At the State Government level, stamp duty and registration fees have large untapped potential. States should integrate computerised property records with

registration of transactions and capture the market value of properties. State Governments should also streamline their methodology of property valuation to yield regular and realistic updating of property values. This will also help property taxation at the third tier of government. (Stamp duty and registration fees: Action—State Governments).

(para 5.27 to 5.31)

Tax policy changes

(ix) The inverted duty structure between intermediate inputs and final outputs present in the GST for many items should be resolved by streamlining its multiple rate structure. This can be corrected even without the weighted effective tax rate going up, with a salutary impact on net revenue collections of the general government. (GST—Appropriate recommendations by Union and the States for action by the GST Council).

(para 5.7)

(x) Efficiency gains can be similarly reaped in customs duty collections by reducing its multiple rate structure: (a) broad banding industrial finished products on MFN basis; (b) broad banding for intermediate industrial products and industrial raw materials on MFN basis; (c) streamlining and reducing non-tariff barriers; and (d) continuing with zero rating of imports to facilitate global value chain-related exports. The changes at (a) to (c) above may be made in calibrated fashion. (Customs Duty—Action by Department of Revenue, Government of India).

(para 5.13)

(xi) The myriad exemptions under different direct tax laws that breeds tax evasion, especially by the richer groups will need to be reduced. Incentives leading to ambiguous interpretations and evasion will need to be eliminated. The concessions given to perquisites also need to be reviewed comprehensively. The threshold limits may be kept at the current level for some time to build stability in the tax regime and to ensure greater predictability and better tax planning for the taxpayer. (Income Tax—Action by Department of Revenue, Government of India).

(para 5.15, 5.16 and 5.21).

(xii) The Union Government may initiate action for a Constitutional amendment to effect a change that enables periodic revision of the limits of professions tax upon the recommendations of the President of India, after taking cognisance a recommendation to this effect by the Finance Commission. (Action by Department of Revenue, Government of India).

(para 5.36 to 5.41)

Institutional and tax policy changes that will help achieve the full potential

(xiii) It is important to restore the revenue neutrality of the GST rate, which was compromised by the multiple rate structure and several downward adjustments of rates. The rate structure can be rationalised by merging the rates of 12 per cent and 18 per cent. The system can be operated with a three-rate structure of a merit rate, standard rate and demerit rate. Efficiency and revenue gains require that exemptions be minimised. (GST—Appropriate recommendations by the Union and the States for action by the GST Council).

(para 5.10 and Box 5.1)

(xiv) Over-reliance on consumption-based taxes by the general government, which reduces the progressivity of the tax system, should be reduced by widening the net of income and asset-based taxation. Different tiers of the Government should review their Constitutional entitlements to income and asset-based taxation and assess the feasibility of each untapped tax power, so that the erosion of the tax base and evasion of tax payments can be halted. Wherever inadequate devolution of taxation powers hinders resource mobilisation at the third tier of Government, especially in asset-based taxes, such devolution should be immediately undertaken and local administrative capacity strengthened.

(Annex 5.2)

Chapter 6

Towards Cooperative Federalism: Balancing Equity and Efficiency

In the spirit of cooperative federalism, this chapter contains our recommendations of resource allocation between the Union and the States as well as among the States. It starts with a discussion on the vertical fiscal imbalance created by the Constitutional assignment of revenues and expenditures. It then goes on to explain our approach on vertical devolution while presenting the views of the Union and the States. On horizontal devolution, the chapter discusses our approach to meet the needs of the States while giving due regard to the considerations of equity and efficiency.

6.1 Para 4 (i) of this Commission's terms of reference (ToR) which flows from Article 280(3) of the Constitution of India mandates it to make recommendations regarding "(a) the distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under Chapter I, Part XII of the Constitution and the allocation between the States of the respective shares of such proceeds".

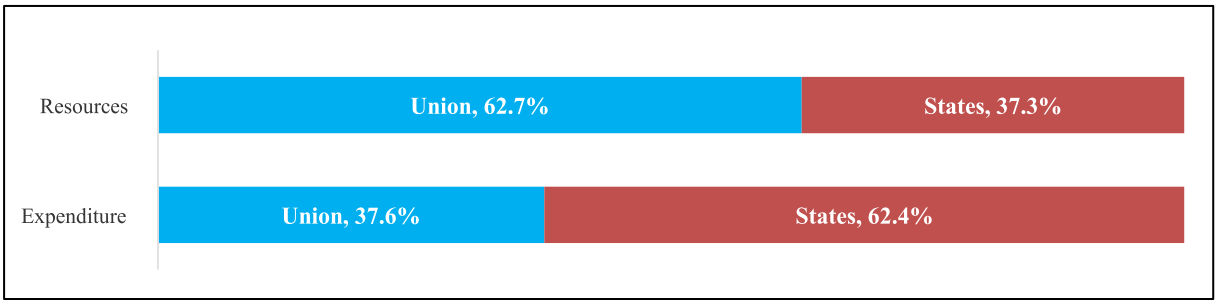
6.2 A very important task of the Commission is to recommend the division of the net proceeds of taxes collected by the Union Government. These net proceeds constitute the divisible pool (after excluding cesses, surcharges and cost of collection) between the Union and the States. This is called the vertical devolution or the vertical sharing of taxes. The first part of this chapter covers this Commission's views on the vertical fiscal imbalance, trends in vertical devolution and aggregate inter-governmental transfers, in the context of the views of the Union and State Governments.

6.3 The second part of the above ToR mandates this Commission to recommend the shares of each State from the divisible pool of taxes which are devolved. This is called horizontal devolution or horizontal sharing of taxes. The second part of this chapter covers this Commission's views on the horizontal imbalance existing among States and the historical perspective on the horizontal sharing approach. It recognises the views expressed by various State Governments on horizontal sharing, the approach adopted and recommends the inter se shares of States in horizontal devolution.

Vertical Fiscal Imbalance

6.4 The Constitution empowered both the Union and the States to raise revenues from different sources of taxation and also assigned responsibilities to incur expenditure through

Figure 6.1: India's Vertical Fiscal Gap (2018-19)



subjects in three lists – Union List, State List and Concurrent List – in the Seventh Schedule. By Constitutional design, this distribution has assigned higher and more buoyant taxation and resource raising powers to the Union Government whereas higher responsibilities for incurring expenditure have been assigned to the States.

6.5 For example, in 2018-19, the Union Government raised 62.7 per cent of the aggregate resources raised by both the Union and States, whereas the States spent 62.4 per cent of the aggregate expenditure of the Union and the States (Figure 6.1). There is thus a structural vertical imbalance which necessitates orderly transfer of resources from the Union to the States. At an aggregate level in 2018-19, the States could generate their own resources to meet only 44.8 per cent of their total expenditure. This means that the remaining 55.2 per cent needed financing through vertical resource transfers and/or by contracting debt.

6.6 Due to this basic design, the Constitution has stipulated that the Finance Commission assess the vertical fiscal imbalance which is likely to arise during its award period and recommend the sharing of resources based on such assessment.

Vertical Sharing

6.7 Finance Commissions, historically, have been recommending a proportion of the taxes collected by the Union Government for devolution to the States. Until the Tenth Finance Commission (FC-X), separate percentages were recommended for devolution of income tax and Union excise duties. However, after the Eightieth Amendment to the Constitution, net proceeds of all taxes[1] (after deducting cess, surcharge, and cost of collection) collected by the Union are shareable with the States. These constitute the divisible pool of taxes. The States' shares in the divisible pool recommended by the last four Finance Commissions is given in Table 6.1.

[1]Articles 270 and 279 read together defines 'Net proceeds of taxes' as all the taxes, except cess and surcharges, reduced by cost of collection.

Table 6.1: States' Share in Divisible Pool

	FC-XI (2000-05)	FC-XII (2005-10)	FC-XIII (2010-15)	FC-XIV (2015-20)	FC-XV (2020-21)
States' share in divisible pool (%)	29.5	30.5	32.0	42.0	41.0*

* Vertical share for twenty-eight states after adjustment for the reorganisation of the erstwhile State of Jammu and Kashmir into the two Union Territories of Jammu and Kashmir and Ladakh. The FC-XIV award was for twenty-nine States.

6.8 The FC-XIV expressed the view that tax devolution should be the primary route of transfer of resources to States, since it is formula based and thus conducive to sound fiscal federalism. Driven by this view, it recommended 42 per cent of the divisible pool for sharing with the States, up from the 32 per cent share recommended by the FC-XIII. While recommending this change, the FC-XIV did not expect it to lead to significantly higher aggregate transfers to States, but instead to more of a compositional shift in overall transfers in favour of greater tax devolution as compared to grants.

6.9 In this Commission's Report for the Year 2020-21, stability and predictability of resources was considered an essential component of long-term good budgeting and the vertical sharing of resources was retained at the same level as that recommended by the FC-XIV. We only adjusted for the newly carved out Union Territories of Jammu and Kashmir and Ladakh, keeping the balance share broadly equivalent at 41 per cent for the remaining twenty-eight States.

Submissions and Views of States

6.10 Almost all the States were of the considered view that the devolution of taxes from the divisible pool should, at a minimum, be a 50:50 distribution between the Union and the State Governments, especially given the declining share of the divisible pool in gross revenues. Their basic argument was that the States have much larger expenditure responsibilities as compared to the Union, especially in sectors such as education, health, police, law and order, agriculture and allied activities, irrigation, forests and environment preservation, power, roads, social welfare, drinking water and sanitation.

6.11 For State Governments to meet these expenditure responsibilities, a large devolution of gross revenues is inescapable because the committed expenditures on the sectors falling within the States' responsibilities are disproportionately much higher than their own tax and non-tax resources.

6.12 States also emphasised that with the introduction of the goods and services tax (GST), they have significantly lost their financial autonomy of imposing differential tax rates. Pre-GST, States could take individual measures for additional resource mobilisation by calibrating their tax

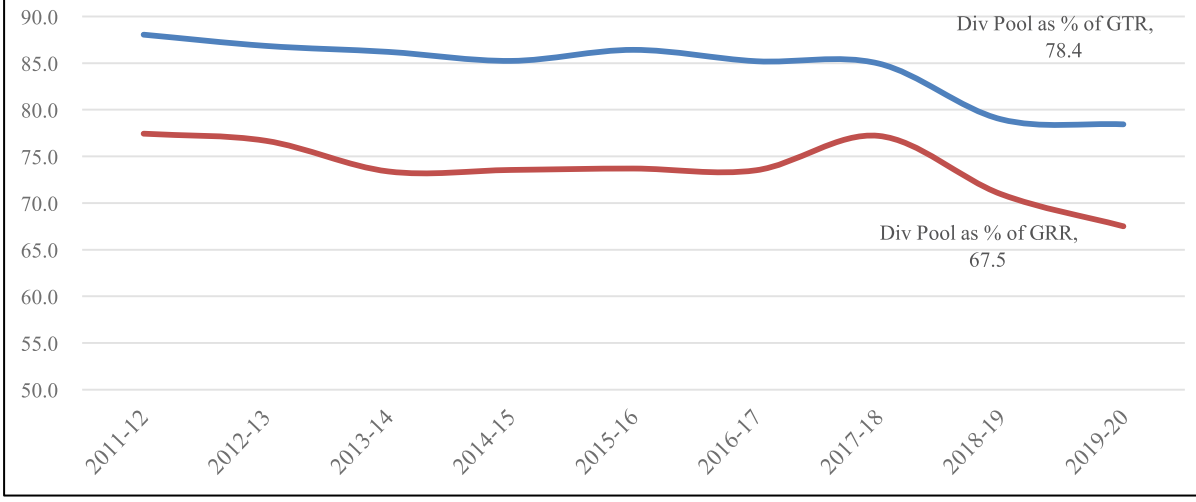
rates autonomously. However, now the GST Council has to approve any tax rate changes. Since practically all taxable commodities are covered under GST, the States have lost much of their individual resource raising ability.

6.13 It was hoped that, under the new GST regime, States would have gained through the sharing of service tax revenues. However, in the aggregate, the States have had to contribute a larger proportion of their revenues to the common GST pool as compared to the Union. Some estimates were placed before us that the contribution to the combined GST pool has been roughly in the proportion of 48:52 by the Union and the States.

6.14 State Governments also argued that tax devolution from the divisible pool is the most frictionless means for States to receive their share of resources. Only such unconditional transfers could protect the autonomy of the State Governments, as this federal autonomy is a basic ingredient of the Constitution.

6.15 At the same time, State Governments also represented that the Union has significantly shrunk the divisible pool over time through excessive and rising cesses and surcharges. These are, under the Constitution, non-shareable with the States. Figure 6.2 indicates that the divisible pool as a percentage of the gross revenues of the Union has been consistently falling as more and more resources are raised through non-shareable cesses and surcharges; currently the divisible pool accounts for just two-thirds of gross revenues. States further agreed that the Finance Commission should, therefore, work out a mechanism so that the 50:50 division should objectively account for the cess and surcharges currently retained by the Union from gross revenues.

Figure 6.2: Divisible Pool as Percentage of GTR and GRR



GTR: gross tax revenue; GRR: gross revenue receipts

Submissions and Views of the Union Government

6.16 The Union Government has not explicitly stated its preferred division ratio between the Union and the States. However, the general line of reasoning has been that it has very large responsibilities on account of defence, internal security and interest payment obligations for its own debt. It also needs sufficient financial resources to provide for national developmental priorities in diverse areas such as railways, road transport, health, education, agriculture, poverty alleviation schemes, recapitalisation of public sector banks and subsidies, including for food and fertilizer.

6.17 The tenor of the Union's argument has also been that the FC-XIV had significantly raised the devolution share from 32 per cent to 42 per cent and this considerable increase had unduly strained its fiscal position. Therefore, it was implied that there could be merit in appropriately recalibrating the devolution percentage below the present 42 per cent, especially since the Union needs a much greater proportion of the gross tax revenues for meeting its own committed liabilities, as also for the new national developmental priorities and flagship programmes such as the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Ayushman Bharat programme, Pradhan Mantri Awas Yojana, Pradhan Mantri Gram Sadak Yojana, Pradhan Mantri Fasal Bima Yojana, Swachh Bharat and Pradhan Mantri Kisan Samman Yojana.

Approach, Perspective and Recommendation

6.18 We have carefully considered all aspects of the above differences in the approaches and submissions of the Union and the States.

6.19 As far as the States' issue of the need for a 50:50 division is concerned, we have recognised that, besides the devolution from the divisible pool of gross tax revenues, there are substantial financial flows through grants which are borne by the Consolidated Fund of the Union for disaster relief, local bodies, revenue deficit grants and any other sector/State specific grants that are awarded by the Finance Commission. In addition to the Finance Commission grants, the Union also finances many other grants/transfers to the States through various Centrally Sponsored Schemes (CSS) and Central sector schemes.

[2] Non-FC grants from 2017-18 onwards also includes GST Compensation to States which amounts to 2.6, 2.1 and 4.8 per cent of GRR in 2017-18, 2018-19 and 2019-20 respectively.

Table 6.2: Central Transfers to States as Percentage of Gross Revenue Receipts

FC	Year	Share in Central taxes (A)	FC grants (B)	Total FC transfers C=A+B	Non-FC grants (D)	Total transfers E=C+D
FC-XIII	2010-11	21.7	3.1	24.8	23.9	48.7
	2011-12	25.3	4.4	29.7	23.7	53.4
	2012-13	24.8	3.9	28.7	20.0	48.7
	2013-14	23.8	4.0	27.8	17.9	45.8
	2014-15	23.4	4.3	27.7	18.6	46.3
	2010-15	**23.8**	**4.0**	**27.8**	**20.5**	**48.2**
FC-XIV	2015-16	29.7	5.0	34.7	13.2	47.9
	2016-17	30.6	4.8	35.4	13.0	48.4
	2017-18	31.9	4.4	36.3	16.8	53.0
	2018-19	32.9	4.0	36.9	15.5	52.4
	2019-20*	27.9	5.3	33.2	15.4	48.6
	2015-20	**30.6**	**4.7**	**35.3**	**14.9**	**50.2**

*Source: Union budget of respective years; * Provisional actuals from CGA*

6.20 As seen in Table 6.2, when we take the sum of the devolution of taxes and the various grant components, we observe that the Union Government has, in practice, been transferring about 50 per cent of its gross revenue receipts – the sum of its gross tax revenues and gross non-tax revenues – with about 2 per cent variation on each side. The higher transfers from 2017-18 onwards can be attributed to GST compensation to States being transferred as grants. Therefore, while constitutionally the Union is not obligated to share its non-tax revenues with the States, in practice this 50:50 distribution is in fact subsuming all the components of gross revenue receipts (including the cess and surcharge components, as also the non-tax revenues components).

6.21 Thus, through the combination of the Finance Commission transfers and the Union's voluntary transfers through various schemes – the States are already receiving about half of the gross revenue receipts. In this broader sense, the States' broad expectations of financial transfers from the Union are being significantly met.

6.22 As for the Union Government's view that the FC-XIV recommended a disproportionately high jump from 32 per cent to 42 per cent, we specifically note that the two percentage figures are not strictly comparable. The FC-XIII while working on 32 per cent devolution for States, was cognizant of the fact that substantially greater transfers to the States from the Union would also take place through its own recommended grants, as well as the other mechanisms for the flow of Plan funds through the Planning Commission.

6.23 In the post-Planning Commission period, the FC-XIV made adjustments recognising that many transfers from the Union to the States through the Plan transfer channels of normal Central assistance, special Plan assistance, State-specific grants and tied assistance would no longer be

available to the States. The FC-XIV also expected a compositional change in the aggregate transfers in favour of tax devolution.

6.24 It is noted that the FC-XIV estimated, as per its recommendations, that the aggregate transfers to the States would be about 49 per cent of the gross revenue receipts of the Union. The Union accepted this sharing arrangement between States and the Union when the award was implemented over the financial years 2015-2020. In fact, the provisional actuals of the Union Government for 2019-20 show it as transferring a slightly higher share of gross revenue receipts to the States.

6.25 On the basis of these facts, our view on the future contours of the vertical devolution of resources between the Union and the States is to share gross revenue receipts similarly in about equal ratio between the Union and States, while assuming no further decline in the divisible pool as a proportion of gross revenue receipts. This balance has been achieved through 41 per cent of the divisible pool being devolved to the twenty-eight States and the balance devolution taking place through various forms of Finance Commission and non-Finance Commission transfer mechanisms.

6.26 It is well recognised that the stability and predictability of resources is the most essential component of good long-term budgeting and fiscal marksmanship for both the Union and States. It is, therefore, our considered view that there should be broad continuity in the availability of resources through the divisible pool.

6.27 It could be argued that while the overall share of States may be about half of the gross revenue receipts, this can be compositionally altered in the form of a smaller share of tax devolution and a relatively larger flow of conditional grants from the Union to the States. This matter too has been carefully examined by us. We do note that the experience has been that the tax devolutions are a more progressive and frictionless form of transfers.

6.28 However, more importantly, as we have noted in our report for 2020-21, higher tax devolution vis-a-vis grants enable higher revenues to States especially when Central taxes are buoyant. In case of a decline in revenues, as is currently being experienced, the burden sharing pressure by both the Union and States has some advantages. On the one hand, it helps the Union perform its macro-economic stabilisation role. On the other hand, the grants are fixed absolute numbers, rather than percentages and, thereby, give predictability to the States by way of automatic stabilisation.

6.29 **Accordingly, we recommend the vertical share of States at the same level as recommended by us for 2020-21 – 41 per cent of the divisible pool for 2021-22 to 2025-26**. As we noted in our report for 2020-21, this vertical devolution has been adjusted to factor in the reorganisation of Jammu and Kashmir. This level of vertical transfers will allow appropriate fiscal space for the Union to meet its demands as well as maintain an adequate level of unconditional resources for the States.

Horizontal Sharing

6.30 After determining the States' aggregate share in the divisible pool, our task was to recommend inter se distribution of this among the States. This is called horizontal devolution. Finance Commissions in the past have recommended this horizontal devolution based on appropriate objective parameters or formulae. These, as expected, have not been uniform over time. The formulae used for horizontal devolution can be broadly divided into two patterns, as summarised in Box 6.1.

Box 6.1 Phases in Horizontal Devolution

Phase 1: From First to Seventh Finance Commission

- Till FC-VII, income tax and Union excise duties were shared using different parameters.
- Income tax was broadly shared using population and tax contribution parameters.
- The FC-III considered equity parameters like relative backwardness, scheduled caste/scheduled tribe (SC/ST) population, financial weakness etc. for distribution of Union excise duty for the first time.
- In the case of distribution of Union excise duty, the FC-VII considerably reduced direct weightage of population and increased weightage of equity parameters, like inverse of per capita income, percentage of poor etc.

Phase 2: From Eighth to Fourteenth Finance Commission

- FC-VIII to FC-X recommended similar parameters, including equity considerations, for distribution of both income tax and Union excise duties.
- After the Eightieth Amendment to the Constitution, a single sharing formula from the divisible pool of taxes was recommended from FC-XI onwards. Parameters used by earlier Finance Commissions continued in the formulae.
- Weightage for equity parameters increased significantly, with a proportionate decrease in direct weightage for population.
- The FC-X introduced fiscal performance criteria for the first time with 10 per cent weight to tax efforts of States. Later, criteria like fiscal discipline and fiscal capacity were used by Finance Commissions.

6.31 Horizontal devolution of taxes has been mainly driven in the past by considerations of need, equity and performance. Balancing equity and efficiency is never an easy exercise. Some Finance Commissions have also given due consideration to fiscal disabilities and fiscal discipline in the devolution formula. Table 6.3 summarises the criteria used and the weights assigned by the last four Commissions.

Table 6.3: Criteria and Weights (%) in Previous Finance Commissions

Criteria		FC-XI (2000-05)	FC-XII (2005-10)	FC-XIII (2010-15)	FC-XIV (2015-20)
Need and cost disability	Population (1971)	10.0	25.0	25.0	17.5
	Population (2011)				10.0
	Area adjusted	7.5	10.0	10.0	15.0
	Forest cover				7.5
Equity	Index of infrastructure	7.5			
	Income distance	62.5	50.0		50.0
	Fiscal capacity distance			47.5	
Performance	Tax efforts	5.0	7.5		
	Fiscal discipline	7.5	7.5	17.5	
		100	**100**	**100**	**100**

Submissions and Views of States

6.32 Almost all the States, in their memoranda submitted prior to our report for 2020-21 as well as subsequently, have emphasised retaining income distance as a criterion with varying weights ranging from 15 per cent to 55 per cent in their memoranda. A few States have suggested a modified income distance criterion by adjusting for agriculture, or excluding the per capita income of high-income districts etc. A State has also suggested use of the inverse of income in place of distance of income. Many States have raised concern that the use of population data of 2011 in the formula would be disadvantageous to those which improved their demographic management. Half the States have suggested retaining forest cover/area as a criterion with suggested weights ranging from 4 per cent to 15 per cent. Few States have suggested modifying the forest cover criteria by including open forest, tree cover, alpine meadows, glaciers etc. Almost all the States have suggested area as a criterion in their memoranda with weights ranging from 5 per cent to 20 per cent. Some of them have suggested keeping the minimum floor of 2 per cent of the area share as was done by the FC-XIV and FC-XIII. A few States have suggested adjustment of area by giving weight to the international border in a State, hilly terrain, wetlands, among other things.

Approach and Recommendations

6.33 The horizontal devolution formula is designed to focus on specific objectives to be achieved through such devolution, such as: (i) to help bridge the vertical fiscal gap of the States; (ii) to provide horizontal equity (by providing higher share to poorer regions); (iii) to equalise fiscal capacities of States (revenue equalisation); (iv) to provide for cost differentials among States for providing basic public service (expenditure equalisation).

6.34 As discussed earlier, a fiscal gap exists for all the States due to the large structural mismatch between the States' own resources and their committed/development expenditure liabilities. To achieve the first objective of bridging the vertical gap of the States, the transfer of resources should be based on needs-based criteria. Per capita transfers based on population and cost disabilities address this objective.

6.35 Given the large differences in the resource base available and the status of development in India, fiscal equalisation is an essential objective while distributing resources amongst States. Though fiscal equalisation has been recommended by almost all recent Finance Commissions, India does not have any fully accepted definition of equalisation. It may, thus, be worthwhile to examine the equalisation definition adopted by other federal countries like Canada and Australia (also discussed in Chapter 2) .

6.36 Canada's constitution mandates the federal government to follow the 'principle of making equalisation payments to ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation.' Australia's Commonwealth Grants Commission defines equalisation as 'if each State made the same effort to raise revenue from its own sources and operated at the same level of efficiency, each would have the capacity to provide services at the same standard.' Both Canada and Australia use the detailed representative tax system (RTS)[3] approach for deciding on equalisation payments. Due to their definitional differences, Canada adopts only revenue equalisation (one-sided equalisation) whereas Australia also takes expenditure differentials into consideration while deciding on equalisation payments.

6.37 The RTS approach requires a detailed and highly sophisticated system for arriving at a tax-base for each revenue source available to the States. It has also been criticised for being highly complex and non-transparent unless the system is sufficiently developed.

6.38 The alternative to the RTS approach is the use of macro indicators like gross state domestic product (GSDP) and per capita income which are relevant for assessing the potential resource base of each jurisdiction. In many ways, macro indicators are more transparent and simpler to understand for the public. Furthermore, there is strong correlation between such macro indicators and the theoretically well-defined fiscal capacity or tax base.[4] Hence, Finance Commissions have used an equalisation formula based on macro indicators to determine the shares of States.

6.39 This Commission seeks to harmonise the principles of expenditure needs, equity and performance in determining the criteria for horizontal sharing. As discussed, need is a basic tenet of inter-governmental resource transfer. Each State has its own unique enablers as well as disabilities, irrespective of the policy choices made. We address such cost and economic

[3]RTS is a method to measure the revenue raising capacity of a jurisdiction by applying the national average tax rate to a tax base within a jurisdiction.
[4]Wilson Leonard, 2006, `Macro Formulas for Equalisation', Chapter 12, A Practitioner's Guide to Intergovernmental Fiscal Transfers (edited by Anwar Shah, World Bank)

differentials by applying the equity principle and equalising fiscal capacities. The efficiency principle has also been applied to reward and incentivise States to perform better, in terms of the utilisation of resources available to them.

6.40 Another important lesson is the need for stability and predictability in transfers. Hence, the three principles of need, equity and efficiency ought to be carefully balanced in assigning weightages within the formula.

6.41 Based on the above principles and considerations, this Commission had recommended a horizontal devolution formula in its report for 2020-21. We are of the opinion that this formula continues to meet all the aforesaid considerations and the approach outlined above. Hence, we are recommending continuation of the same criteria and weights for determining inter se shares of States for the 2021-22- 2025-26 award period. However, we have updated the underlying data for calculating the shares wherever possible. The following part of the chapter explains each criterion in more detail.

Need Based Criteria

Population

6.42 The population of a State represents the needs of the State to undertake expenditure for providing services to its residents. It is also a simple and transparent indicator that has a significant equalising impact.

6.43 Many States, in their memoranda, have raised concerns over the use of population data of 2011 for devolution purpose. Their concern is that the States which have controlled their population would be at a disadvantage if the latest population data is used instead of the 1971 data. Nevertheless, all the States suggested population criteria to be retained in the formula. Para 8 of this Commission's ToR specifies that "the Commission shall use the population data of 2011 while making recommendations." All previous Commissions since FC-VI (award period 1974-79) have been using population data of 1971 while making their recommendations. The FC-XIV had expressed a view in its report that, though the use of dated population data is unfair, they were bound by the ToR. This Commission is of the view that fiscal equalisation being recommended by it is designed to meet the present needs of the States, and that is best represented by the latest population data. Further, the specific ToR has mandated the use of 2011 population data and so this is what this Commission has done.

6.44 Since significant parts of the devolution formula will be scaled by the population, a significant weight to the population criterion will get reflected through the overall devolution formula. Hence, we have assigned standalone population a weight of 15 per cent for shares under this criterion. Annex 6.1 gives the method and calculation table for the inter se shares under this criterion.

Area

6.45 All Finance Commissions since the FC-X have used area as another criterion in the devolution formula on the ground of need – the larger the area, greater is the expenditure requirement for providing comparable services. A majority of the States have also suggested retaining area as a criterion in the horizontal devolution formula. We agree with the argument that a larger area incurs some additional administrative costs. However, it may not lead to proportional increase in cost of providing services. Hence, we have maintained a moderate weight of 15 per cent for the area criterion in consonance with the approach of FC-XIV. It is also true that States incur certain minimum costs even if the area is very small. Hence, we have continued with the same adjustments as done by the FC-XIV as well as FC-XIII and FC-XII while calculating the shares of geographical area of the States, by assigning a floor of 2 per cent share to those States with less than 2 per cent share in the actual area. Area share has thus been calculated using the same method as the FC-XIV. Annex 6.2 gives the actual geographical area, area share and adjusted area shares of States as calculated by this Commission.

Forest and Ecology

6.46 Forest cover was used as a criterion in the devolution formula for the first time by the FC-XIV on the grounds that while the forest cover maintained by States provide wider ecological benefits, it also imposes opportunity costs that need to be compensated. The FC-XIV assigned 7.5 per cent weight to forest cover in the devolution formula.

6.47 Many States have suggested forest cover or some variation of it as a criterion in the devolution formula. Some have also suggested including tree cover outside the forest, mangrove forest, incremental change in forest etc. as criteria. However, some other States have suggested dropping forest cover as a criterion. We had also commissioned studies by domain experts on the impact of including forest cover in the devolution formula. These studies have helped strengthen our view that given the importance of forest and environmental issues in the present times, it is important to retain the forest criterion in the devolution formula. There are also cogent arguments that this criterion is needed as a reward for providing ecological services and to overcome disabilities arising from areas dedicated to dense forests (areas covered by very dense and moderately dense forests).

6.48 The forest and ecology criterion has factored in both the ecological services being provided by the State's forest cover to the country as well as the cost disabilities. This is arrived at by calculating the share of the dense forest of each State in the aggregate dense forests of all the States. We have assigned a weight of 10 per cent for the forest and ecology criterion. The increase in weight is also a recognition of forests, a global public good, as a resource that ought to be preserved and expanded through afforestation of degraded and open forests for national benefit as well as to meet our international commitments. Annex 6.3 gives the forest cover and shares of States in the criterion.

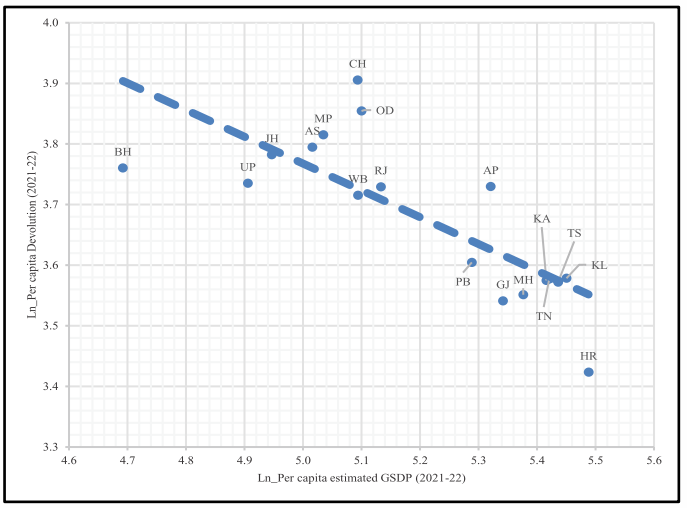
Equity-based Criterion

Income Distance

6.49 Distance of per capita income has been used as an equity criterion in the devolution formula by previous Commissions, with weights assigned in a range of 33.5 per cent (FC-IX) to 62.5 per cent (FC-XI). This criterion is intended to make the devolution formula more equalising and progressive, so as to provide higher devolution to States with lower per capita income (and lower own tax capacity). Here, per capita GSDP is used as a proxy for the distance between States in tax capacity. Poorer States with low per capita income also have higher expenditure needs to provide for comparable services. Hence, the income distance criterion helps provide for two-sided equalisation.

Box 6.2: Progressivity of horizontal distribution

The Covid-19 crisis has placed a heavy burden on the health infrastructure of States, especially those with low per capita income which also have poorer health facilities. As the chart for twenty major States shows, our recommended devolution is progressive on a per capita basis, signalling that we have recommended higher per capita tax devolution to States with lower per capita income.



6.50 Almost all the States have suggested retaining of the income distance criteria in the horizontal devolution formula. Horizontal equity is thus an important redistributive aspect which can be achieved through this criterion. Hence, this Commission has retained the income distance criterion with a weight of 45 per cent.

6.51 Income distance has been calculated using a methodology similar to the one that was adopted by the FC-XIV. A three-year average (2016-17 to 2018-19) per capita comparable GSDP has been taken for all the States. Income distance has been computed by taking the distance of each State from the State having highest per capita GSDP. In this case, Goa has the highest per capita GSDP followed by Sikkim. Since they are small and outlier States, the State with the third highest per capita GSDP – Haryana – has been taken as the benchmark to avoid distortions. The distance of the per capita GSDP of each State from Haryana's per capita GSDP has been calculated. Goa, Sikkim and Haryana have been assigned the income distance as calculated for the State with the fourth highest per capita GSDP - Kerala. Such distance has been scaled by the population (Census 2011) of each State and then the share of each State has been computed. It is also noted that the most of the lower per capita income States are also the more populous States. Therefore, use of population scaling of income distance makes it more progressive. Annex 6.4 gives details of the methodology and the calculation table for the income distance criterion.

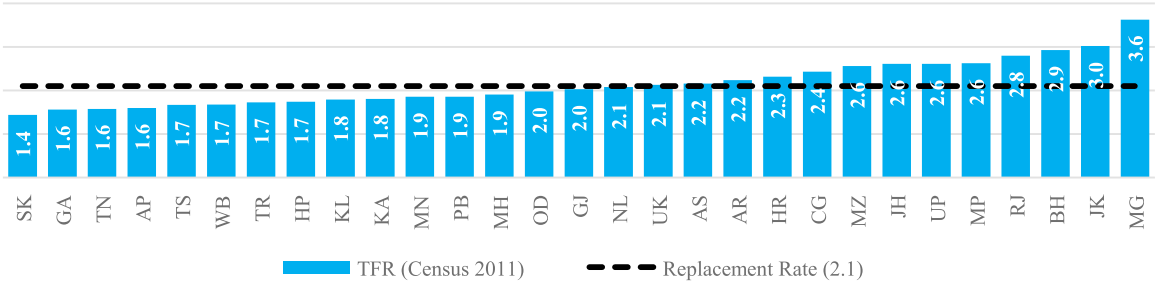
6.52 Use of income distance criterion meets equity considerations and makes tax devolution highly progressive in favour of low per capita income States. As shown in Box 6.2, lower per capita income States receive higher per capita tax devolution through the horizontal formula.

Performance-based Criteria

Demographic Performance

6.53 All the Finance Commissions since FC-VI (1974-79) were mandated to use the population data of the 1971 Census while recommending their awards. After almost four decades, this Commission has been mandated to use the population data of the most recent Census. As mentioned earlier, some States had raised serious concerns regarding this. We feel that the use of the latest Census data, and sudden change of underlying data, should not unfairly put some States which have performed well on the national objective of demographic management at a disadvantage. Our ToR also makes reference to consider performance incentives to States for the efforts and progress made in moving towards the replacement rate of population growth. Hence, we have decided to recommend a new performance-based criterion to reward States which have performed well in this regard and adopted policies for improved demographic management.

Figure 6.3: Total Fertility Rates of States



6.54 This Commission recommends a criterion of demographic performance by using a measure of total fertility rate (TFR) data of all States. This criterion has been computed by using the inverse of TFR of each State, scaled by the population data of Census 1971. Figure 6.3 shows State-wise total fertility rates as per the Census 2011. States which have achieved lower TFR will be scored higher on demographic performance whereas States with higher TFR will receive a lower score. Better performance in the reduction of TFR also serves as an indirect indicator for better outcomes in health (especially maternal and child health), nutrition as well as education. Hence, this criterion also rewards States with better outcomes in those important sectors of human capital. Since this is an important performance criterion to reward efforts made by States in controlling their population and achieving better human capital outcomes in education and health, we have decided to assign a total weight of 12.5 per cent. Annex 6.1 gives details of the

methodology and the calculations for this criterion.

Tax effort

6.55 The FC-X, FC-XI and FC-XII used tax effort of States as a criterion in the devolution formula to reward State's own tax performance. Many States have suggested inclusion of tax performance criteria to incentivise States with higher efficiency of tax collection. This Commission is of the view that the inclusion of tax effort as a criterion will reward the States with higher tax collection efficiency and, at the same time, will also encourage all States to be more tax efficient.

6.56 The tax effort of States is computed by first calculating the ratio of per capita own tax revenue of a State and its per capita GSDP over three years (2016-17 to 2018-19) and then taking the ratio thereof. This ratio has been scaled by the population of the State. Annex 6.5 gives the calculation table for this criterion. A weight of 2.5 per cent has been assigned to this.

6.57 Overall, the horizontal formula and the weights attached to the criteria are summarised in Table 6.4. The End Note of this chapter explains the methodology and mathematical model for computing inter se horizontal shares of all States.

Table 6.4: Criteria and Weights assigned for Horizontal Devolution

Criteria	Weight (%)
Population	15.0
Area	15.0
Forest and ecology	10.0
Income distance	45.0
Tax and fiscal efforts	2.5
Demographic performance	12.5
	100.0

6.58 For the period 2021-22 to 2025-26, the inter se shares of States in the net proceeds of the taxes (divisible pool) as recommended by this Commission, based on the methodology described above, are given in Table 6.5.

Table 6.5: Inter se Shares of States

State	Share (%)
Andhra Pradesh	4.047
Arunachal Pradesh	1.757
Assam	3.128
Bihar	10.058
Chhattisgarh	3.407
Goa	0.386
Gujarat	3.478
Haryana	1.093
Himachal Pradesh	0.830
Jharkhand	3.307
Karnataka	3.647
Kerala	1.925
Madhya Pradesh	7.850
Maharashtra	6.317
Manipur	0.716
Meghalaya	0.767
Mizoram	0.500
Nagaland	0.569
Odisha	4.528
Punjab	1.807
Rajasthan	6.026
Sikkim	0.388
Tamil Nadu	4.079
Telangana	2.102
Tripura	0.708
Uttar Pradesh	17.939
Uttarakhand	1.118
West Bengal	7.523
	100

Summary of Recommendations

i. We recommend retaining the vertical share of 41 per cent of the divisible pool of taxes for the States during the award period of this Commission. (para 6.29)

ii. To arrive at the inter se shares of States in the devolution, we have retained the horizontal devolution formula recommended in our report for the year 2020-21. (para 6.41)

iii. On horizontal devolution, while we agree that the Census 2011 population data better represents the present need of States, to be fair to, as well as reward, the States which have done better on the demographic front, we have assigned a 12.5 per cent weight to the demographic performance criterion. (para 6.54)

iv. The horizontal formula and the weights attached to the criteria are summarised in Table 6.4. (para 6.57)

v. For the period 2021-22 to 2025-26, the inter se shares of States in the net proceeds of the taxes (divisible pool) as recommended by this Commission, based on the methodology described above, are given in Table 6.5. (para 6.58)

End Note

The inter se share of ith state in the tax sharing formula, S_i, is determined as the weighted sum of State shares by six parameters or criteria – population, area, forest and ecology, income distance, fiscal and tax performance and demographic performance:

$$S_i = \sum_{m=1}^{6} S_i^m \, \omega_m$$

where ω_m = weight of mth parameter and S_i^m is the inter se share of the i-th State as per the mth parameter.

Methods of calculating each criterion/parameter are as follows:

1. **Population**

$$Inter\ se\ share\ of\ i^{th}\ state = \frac{POP_{i2011}}{\sum_{j=1}^{28} POP_{j2011}}$$

where POP_{jy} is population of the jth State as per Census of year y.

2. **Area**

Area shares have been calculated in two-steps.

Step 1. $Inter\ se\ share\ of\ i^{th}\ state = \frac{Area_i}{\sum_{j=1}^{28} Area_j}$

where $Area_i$ = the actual geographic area of ith state.

Step 2. For States with actual area share less than 2 per cent, floor share of 2 per cent is fixed. To arrive at the final shares, remaining State shares are adjusted for the total to add up to 100.

3. **Forest and Ecology**

- Forest Cover (F_i) = Very Dense Forest + Moderately Dense Forest

$$FC_i = Inter\ se\ share\ of\ i^{th}\ state = \frac{F_i}{\sum_{j=1}^{28} F_j}$$

4. **Income Distance**

- Three-year (2016-17 to 2018-19) average of per capita GSDP of ith State ($GSDPPC_i$)
- d_i is distance (difference) of ith state's $GSDPPC_i$ from third highest state's, namely Haryana's, GSDPPC
- Top three GSDPPC States -- Goa, Sikkim and Haryana -- are assigned notional distance of the fourth highest state, namely Kerala
- $D_i = d_i * POP_{i2011}$

$$Inter\ se\ share\ of\ i^{th}\ state = \frac{D_i}{\sum_{j=1}^{28} D_j}$$

5. Demographic Performance

- From Census 2011, total fertility rate of ith State (TFR_i) calculated from Age-Specific Fertility Rates ($ASFR_{i,k}$) where $ASFR_{i,k}$ is the kth age-specific fertility rate in the ith State.

$$ASFR_{i,k} = \frac{Number\ of\ live\ births\ last\ year\ in\ the\ k^{th}\ age\ group\ of\ females\ in\ the\ i^{th}\ state}{Mid-year\ female\ population^{\#}\ in\ the\ k^{th}\ age\ group\ in\ the\ i^{th}\ state}$$

The female population as registered in the age group by Census 2011 is taken as the mid-year female population.

Total Fertility Rate of ith State is,

$$TFR_i = 5 \times \sum_{k=15-19}^{45-49} ASFR_{i,k}$$

Where k = 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49.

- DP_i = demographic performance of the ith State is given by

$$DP_i = \frac{1}{TFR_i} \times POP_{i,1971}$$

- Inter se share of States by demographic performance is given by

$$Inter\ se\ share\ of\ i^{th}\ state = \frac{DP_i}{\sum_{j=1}^{28} DP_j}$$

6. Tax Effort

- T_i= three-year (2016-17 to 2018-19) average of per capita own tax revenue of the ith State.
- $\overline{GSDPPC_i}$ = three-year average (2016-17 to 2018-19) of $GSDPPC_i$.
- Tax ratio $t_i = \frac{T_i}{\overline{GSDPPC_i}}$
- Tax effort of ith State $TE_i = t_i \times POP_i$

$$Inter\ se\ share\ of\ i^{th}\ state = \frac{TE_i}{\sum_{j=1}^{28} TE_j}$$

Chapter 7

Empowering Local Governments

In our Report for the Year 2020-21, we had recommended total grants of Rs. 90,000 crore to local governments in the ratio of 67.5:32.5 between rural and urban local bodies. Now, for the five-year period 2021-26, we recommend grants of Rs. 4,36,361 crore for local governments.

In view of the fast pace of urbanisation and future needs of the cities to act as engines of growth, and in continuation with the principles followed in the report for the year 2020-21, the ratio of inter se distribution of the grants recommended for rural and urban local bodies gradually moves from 67.5:32.5 in 2020-21 to 65:35 in 2025-26, which is the final year of our award period. For the inter se distribution of grants amongst the States, the weightage is 90 per cent on population and 10 per cent on area.

Out of the total grants earmarked for panchayati raj institutions, 60 per cent is earmarked for national priorities like drinking water supply and rainwater harvesting and sanitation, while 40 per cent is untied and is to be utilised at the discretion of the panchayati raj institutions for improving basic services.

The Commission adopted a differentiated approach in the allocation of grants to urban local bodies. Given the importance of metropolitan areas, fifty Million-Plus cities are provided with a Challenge Fund of Rs. 38,196 crore over the five-year award period. Almost one-third of this fund is for achieving ambient air quality based on identified parameters, while the remaining two-thirds is for meeting service level benchmarks on drinking water supply, rainwater harvesting and water recycling, solid waste management and sanitation.

Out of the total grant of Rs. 82,859 crore recommended for cities with less than a million population, 40 per cent of the grants is untied while 60 per cent is tied to the national priorities of drinking water, rainwater harvesting, solid waste management and sanitation.

For all local governments, both urban and rural, web-based availability of annual accounts for the previous year and audited accounts for the year before previous is an entry level qualification for grants. For urban local bodies, an additional entry level condition for receiving grants is the notification of minimum floor rates of property taxes by the relevant State followed by consistent improvement in the collection of property taxes in tandem with the growth rate of State's own gross state domestic product.

In view of the challenges of the current pandemic, out of the total grants for local governments, Rs. 70,051 crore is earmarked for the improvement of health services.

We have recommended Rs. 8,000 crore to States as grants for incubation of new cities and Rs. 450 crore for facilitating shared municipal services. The Ministry of Housing and Urban Affairs, in consultation with the States, will draw up appropriate modalities for the administration of both these grants.

7.1 Para 4 of the terms of reference (ToR) mandates the Commission to recommend "the measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State based on the recommendations made by the Finance Commission of the State." In addition, para 7 mandates the Commission to consider proposing measurable performance-based incentives for States, at the appropriate level of government for "(vii) provision of grants in aid to local bodies for basic services, including quality human resources, and implementation of performance grant system in improving delivery of services" and "(ix) progress made in sanitation, solid waste management and bringing in behavioural change to end open defecation."

The Evolution of Local Self-Government

7.2 Panchayats have been the fulcrum of local self-government since ancient times, exercising both executive and judicial powers over village-level issues ranging from land distribution and tax collection to disputes. However, they were not part of the formal government structure. The framers of the Constitution recognised the need to empower panchayats for the development of rural areas and Article 40 of the Directive Principles of State Policy specified that "The State shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government." Since what are described in popular parlance as the urban local bodies and rural local bodies constitute local self-government in the Constitutional sense, the chapter's title is "Empowering Local Government."

7.3 The conceptualisation of the local self-government system post-Independence was done through the reports of four important committees: Balwant Rai Mehta Committee (Committee on Panchayati Raj Institutions,1957), Asoka Mehta Committee (1977-1978), G.V.K. Rao Committee (Committee On Administrative Arrangements for Rural Development and Poverty Alleviation Programmes,1985) and L.M. Singhvi Committee (1986). However, it was not until 1992, with the enactment of the Seventy-Third and Seventy-Fourth Amendments to the Constitution, that these institutions were formalised in the governance system. The year 1993 was epoch-making in decentralised governance in India with the emergence of a clear third tier in both rural and urban areas. This also broadened the role of the Finance Commission through the insertion of the sub-clauses (bb) and (c) to Clause (3) of Article 280 of the Constitution, wherein Article 280(3)(bb) refers to the measures needed to augment the Consolidated Fund of a State to supplement the resources of the panchayats in the State on the basis of the recommendations made by the Finance Commission of the State. Similarly, Article 280(3)(c) refers to the measures needed to augment the Consolidated Fund of a State to supplement the resources of the municipalities in the State on the basis of the recommendations made by the Finance Commission of the State. According to the Ministry of Panchayati Raj (MoPR), since then, approximately 3.1 million representatives are regularly elected to about 0.26 million rural local bodies all over the

country. Providing basic services at the grassroots level makes them the primary interface between citizens and the government.

7.4 Like rural local bodies, urban local bodies also have a long history. The Municipal Corporation in Chennai (then known as Madras) was set up in 1687, and the Municipal Corporations of Kolkata (then Calcutta) and Mumbai (erstwhile Bombay) followed in 1726. There are around 206 Municipal Corporations and 1,683 municipalities and 2,411 Nagar Panchayats.[1,2]

Approach of Previous Finance Commissions

Terms of Reference

7.5 Subsequent to the Seventy-Third and Seventy-Fourth Amendments, so far four Finance Commissions – FC-XI to FC-XIV – have given their recommendations for local bodies. The ToR was the same for all the Commissions. Each, accordingly, deliberated on the critical issues related to the effective functioning of the local governments and made suitable recommendations.

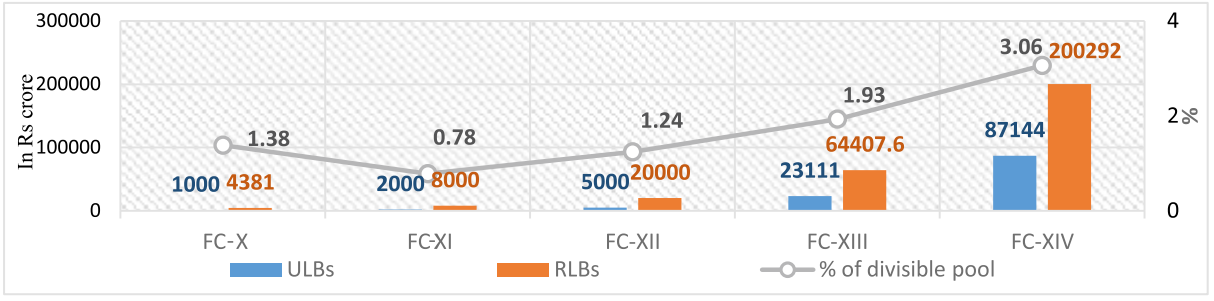
7.6 Since the FC-X was constituted in 1992, a year before the Amendments came into force, its ToR did not specify considering grants for the local bodies. However, it still recommended grants, which were equivalent to 1.38 per cent of the divisible pool, to the rural local bodies and urban local bodies in order to enable them to discharge the new role assigned to them during its award period.

Quantum of Flows

7.7 Grants recommended by successive Finance Commissions in absolute terms have been growing (Figure 7.1). For example, at Rs 2,87,436 crore, the combined grants for rural and urban local bodies recommended by the FC-XIV were three times the Rs. 87,519 crore recommended by the FC-XIII. Except for the FC-XIII, all the previous Commissions recommended such grants in absolute terms and not as a proportion of the divisible pool. If we express these grants as a proportion of the divisible pool, except for the FC-XI, the share of local governments has increased from one Commission to the next to reach 3.06 per cent under the FC-XIV. *We, in our Report for the Year 2020-21*, recommended a total grant of Rs. 90,000 crore for the year 2020-21, which was equivalent to 4.31 per cent of the divisible pool estimated by the Commission for that year.

[1] Nagar Panchayats also include town municipal councils, small town committees, town councils, notified area committees
[2] This information is compiled from the topic notes provided by the State Governments to us

Figure 7.1: Grants to Local Governments by Various Commissions



Note: RLBs – rural local bodies; ULBs – urban local bodies

7.8 The actual amounts disbursed, however, have fallen short of the amounts recommended by the Commissions (Table 7.1). The shortfall has fluctuated between 5 per cent and 18 per cent for the rural local bodies and between 10 per cent and 18 per cent for urban local bodies. The shortfalls – which were the highest for rural local bodies under the FC-X and for urban local bodies under the FC-XIII – were because of failure of the local governments to meet the conditionalities attached to the performance grants by the Commissions. Sometimes the concerned Union ministries had also added to these conditionalities.

Table 7.1: Grants Recommended Versus Actual Releases

(Rs. crore)

	Rural Local Bodies			Urban Local Bodies		
Grants	**Recommended**	**Released**	**% Released**	**Recommended**	**Released**	**% Released**
FC-X	4381	3576	81.6	1000	834	83.4
FC-XI	8000	6602	82.5	2000	1752	87.6
FC-XII	20000	18927	94.6	5000	4470	89.4
FC-XIII	64408	58257	90.7	23111	18980	82.1
FC-XIV	200292	179491	89.6	87144	74259	85.2

Note: FC-XIV: amount released till 2019-20 RE. For FC-XIII: allocation recommended was based on actual divisible pool realised. Grants proposed by FC-XIII were dynamic in nature: a) The basic grant was equivalent to 1.50 per cent of the previous year's divisible pool; b) the performance grant – effective from 2011-12 – was 0.50 per cent for 2011-12 and 1 per cent thereafter, up to 2014-15; c) grants-in-aid for local bodies in a year was based on a proportion of the divisible pool of the previous year's revised estimates; and d) Rs. 1,357 crore was allocated as special areas grant. The allocation recommended to rural local bodies also included Rs. 1,357 crore allocated to the special areas

Basis of Horizontal Distribution

7.9 Different Commissions followed distinct criteria while recommending resources to the States for local governments. While population and geographical area were common to all the

previous five Commissions, both equity and efficiency criteria like distance from highest per capita income, index of deprivation, index of decentralisation and revenue effort varied across Commissions (Table 7.2).

Table 7.2: Criteria for Distribution of Grants to States for Local Governments by Finance Commissions

(in per cent)

	FC-X	FC-XI	FC-XII	FC-XIII		FC-XIV	FC-XV
				RLB	ULB		
Population	100	40	40	50		90	90
(Census)	*1971*	*1971*	*2001*	*2001*		*2011*	*2011*
Geographical area	-	10	10	10		10	10
Distance from highest per capita income	-	20	20	10	20	-	-
Index of decentralisation	-	20	-	15		-	-
Index of deprivation			10	-		-	
Revenue effort	-	10	20	-		-	-
Proportion of scheduled castes/ scheduled tribes in population	-	-	-	10	0	-	-
FC local body grants utilisation index	-	-	-	5		-	-

Basic and Performance Grants

7.10 The FC-X stipulated that State Governments should prepare suitable schemes and issue detailed guidelines for the utilisation of grants. The local governments were required to raise matching contributions for this purpose. No grant amount was to be used for expenditure on salaries and wages.

7.11 The FC-XI made it clear that the first charge on the grants should be maintenance of accounts and audit, followed by the development of a financial database. The remaining amounts were to be utilised for maintenance of core services like provision of primary education, primary health care, safe drinking water, street lighting and sanitation, maintenance of cremation and burial grounds, public conveniences and other common property. These grants were untied, barring the stipulation prohibiting the payment of salaries and wages.

7.12 The FC-XII recommended that panchayats should use the grants to improve service delivery relating to water supply and sanitation. The rural and urban local bodies were also expected to give high priority to expenditure for the creation of databases on their finances and maintenance of accounts through the use of modern technology and management systems.

7.13 The FC-XIII stipulated six conditions for rural local bodies and nine conditions for urban

local bodies to access the performance grant. All these conditions had to be met in each of the award years. A special area grant was provided for the areas excluded from Part IX and IX-A of the Constitution. This grant had two components – a special area basic grant and a special area performance grant. Four conditions had to be met to avail of the latter. In case States were unable to draw their performance grant, the amount not drawn was to be redistributed in a specified manner.

7.14 The FC-XIV recommended grants in two parts – an unconditional basic grant and a conditional performance grant. For duly constituted gram panchayats, the ratio between the unconditional basic grant and conditional performance grant was 90:10 and for municipalities the ratio was 80:20. The basic grant was intended to be used to improve the status of specified basic civic services. The performance grant was based on revenue improvement, with the criteria (including the quantum of incentive to be given) left to be determined by State Governments. In order to be eligible for performance grants, the local governments would have to show an increase in own source of revenue and also submit audited annual accounts. Municipalities, in addition, had to publish the service level benchmarks relating to basic urban services each year. In addition, the MoPR stipulated some more conditions for availing of performance grants like completion of the Gram Panchayat Development Plan, display of sector-wise expenditure in a dashboard and assignment of scores to Gram Panchayats based on (a) percentage increase in the quantum of own source revenue, (b) open defecation free (ODF) status of Gram Panchayats and (c) level of immunisation in Gram Panchayats.

7.15 Unlike the FC-XIV, our report for 2020-21 provided grants to all the three tiers of panchayats as well as to areas under the Fifth and Sixth Schedules of the Constitution and Cantonment Boards in urban areas. Fifty per cent of the grants to rural local bodies were tied to (a) sanitation and maintenance of ODF status and (b) supply of drinking water and rainwater harvesting. As the grants were stipulated only for one year, no performance conditions were imposed for their release. For the Million-Plus cities, that is cities or urban agglomerations with population more than a million, in 2020-21, the total grant of Rs. 9,229 crore was fully tied (Rs. 4,400 crore for the improvement of ambient air quality and Rs. 4,829 crore for the improvement of conservation, supply and management of water and efficient solid waste management). This grant was to be released in two equal instalments, and the release of the second instalment with respect to ambient air quality in the second half of 2020-21 was conditional on improvement in air quality. The first instalment was to be used for steps relevant for measurement as well as improvement of services. Going forward, a roadmap clearly indicated that such performance criteria would determine the release of the relevant grants in the 2021-22 to 2025-26 period. For urban local bodies in towns other than Million-Plus cities, 50 per cent of the grants were tied to (a) drinking water (including rainwater harvesting and recycling) and (b) solid waste management. In our report for 2020-21, we paid particular attention to the long-standing issue of non-availability of accounts, including audited accounts, in the public domain on a timely basis.

Accounts and Audit

7.16 For any part of the government using tax-payers' money, availability of accounts (including audited accounts) in the public domain on a timely basis is a primary requirement for good governance. In the absence of such information, previous Finance Commissions have also highlighted the difficulties in realistically assessing the requirement of resources by rural and urban local bodies for carrying out their core functions and for development expenditure. Various Commissions, starting from the Eleventh, have highlighted this issue, but there has been inadequate progress on this front. To bring an end to this long-standing vexed issue, we had clearly stated, in our report for 2020-21, that availability of accounts (unaudited) for the previous year and audited accounts for the period preceding the previous year in the public domain online would be an entry-level condition for qualifying for any grant.

7.17 There are two major problems with the accounts of local governments in India: (a) the lack of timely accounts, including audited accounts, on a timely basis and (b) the classification of their accounts to make them amenable to consolidation with Union and State Governments' accounts. The FC-XI recommended that the Comptroller and Auditor General (CAG) should be entrusted with the responsibility of exercising control and supervision over the maintenance of accounts and audit of all tiers of rural and urban local bodies, and that its audit report should be placed before a committee of the State legislature.

7.18 The FC-XII recommended that the compilation of disaggregated data in the formats suggested by the CAG is necessary for State Finance Commissions to be able to assess the income and expenditure requirements of the local governments. Priority should be given to the creation of a database and maintenance of accounts through the use of modern technology and management systems.

7.19 The FC-XIII recommended that while the CAG should provide technical guidance and supervision, a major portion of the actual auditing would have to be undertaken by the local fund audit departments. Hence, all State Governments should strengthen their local fund audit departments appropriately through both capacity building of existing manpower as well as augmentation of personnel.

7.20 The FC-XIV recommended that accounts prepared by the local governments should distinctly capture income from own taxes, assigned taxes, grants from the State, Finance Commission grants and grants for any agency functions assigned by the Union and State Governments. In addition, it also recommended that technical guidance and support arrangements by the CAG should be continued and States should facilitate local bodies to compile accounts and have them audited in time.

7.21 In our report for 2020-21, we recommended timely availability of accounts, both before and after audit, of individual local governments online in the public domain from 2021-22 as the entry level conditions for both rural and urban local bodies to qualify for its recommended grants.

Treatment of Excluded Areas

7.22 Under Article 243M of the Constitution, the Seventy-Third and Seventy-Fourth Amendments do not apply to the Fifth and Sixth Schedule areas (areas where the States have not enacted laws for establishing duly-elected panchayats and municipalities). After the enactment of the Panchayats (Extension to Schedule Areas) Act (PESA), 1996, the areas that remain excluded are given in Table 7.3.

Table 7.3: Areas where Provisions of Parts IX and IX-A of the Constitution Do Not Apply

State/Area within a State	Provisions under which exempt
Meghalaya	Exempt under Article 243M and covered by Sixth Schedule, except selected areas of Shillong Municipal Areas
Mizoram	Exempt under Article 243M, with two administrative districts Lawngtai and Saiha covered by Sixth Schedule
Assam:Bodoland, North Cachar and Karbi Anglong districts	Covered by Sixth Schedule
Tripura	Only Tripura tribal district is covered by Sixth Schedule
Nagaland	Exempt under Article 243M and not covered by Sixth Schedule
Manipur: Hill areas for which District Councils exist	Exempt under Article 243M and not covered by Sixth Schedule
West Bengal: The hill areas of the district of Darjeeling, covered by the Darjeeling Gorkha Hill Council	Exempt under Articles 243M (3) /243ZC (2) of the Constitution and not covered by Sixth Schedule

7.23 The FC-X mandated that grants would be distributed to even those States which are not required to have panchayats in order to supplement the resources of similar local level representative bodies. However, the FC-XI stipulated that its award for Excluded Areas should be made available to the respective States only after the enactment of relevant legislative measures for the extension of the provisions of the Seventy-Third and Seventy-Fourth Amendments to such areas.

7.24 The FC-XII did not indicate separate grants for normal and excluded areas and left it to the States to distribute the grants between them, after noting that a bill for amending the Sixth Schedule in order to extend certain provisions of the Seventy-Third and Seventy-Fourth Amendments to these excluded areas was then under consideration in the Ministry of Home Affairs.

7.25 While the FC-XIII recommended grants of Rs. 1,357 crore for the Excluded Areas after considering Parts IX and IX-A, Articles 244, 280 and 275 of the Constitution, the FC-XIV did not recommend grants to these areas.

7.26 While the FC-XIV recommended no grants to the Excluded Areas, we, in our report for 2020-21, recommended grants for such areas falling within a State, based on population and area in the ratio of 90:10.

Status and Effectiveness of State Finance Commissions

7.27 According to the Constitution (Articles 243-I(1) to 243-I (4)), SFCs are, at the State level, what the Finance Commission is at the level of the Union. As originally envisaged, Finance Commissions are to make recommendations on measures to augment the Consolidated Fund of a State to supplement the resources of local governments on the basis of recommendations made by SFCs.

7.28 Article 243-I of the Constitution requires SFCs to be appointed at the 'expiration of every fifth year'. The intention of this clause appears to be that all State Government transfers to local governments should be governed by the mandate of a current SFC. The mandate given to an SFC should thus be applicable only for a period of five years and should not be extended. In practice, this has not happened. Finance Commissions have not got the benefit of recommendations of SFCs, as most State Governments did not constitute them in time and did not give due importance to strengthening this critical constitutional mechanism. Even now, only fifteen States have set up the fifth or the sixth SFCs. Several States have still not moved beyond the second or third SFC. The current Commission too faces a similar challenge in suggesting measures based on the recommendations of SFCs. Table 7.4 shows the current status of SFCs in the States.

Table 7.4: Status of Constitution of SFCs

State	Last SFC Constituted
Assam, Bihar, Punjab, Rajasthan	VI
Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Odisha, Sikkim, Tamil Nadu, Tripura, Uttarakhand and Uttar Pradesh	V
Andhra Pradesh, Karnataka and West Bengal	IV
Chhattisgarh, Goa, Gujarat, Jharkhand and Manipur	III
Arunachal Pradesh, Mizoram	II
Erstwhile Jammu and Kashmir, Telangana	I

Source: MoPR inputs submitted to FC-XV

7.29 SFCs face significant challenges in the form of poor administrative support, inadequate resources for their smooth functioning and the delayed placement of action taken reports (ATR)

before State legislatures. According to a study by the National Institute of Public Finance and Policy (NIPFP), commissioned by us, the average delay in SFCs submitting their report has been about sixteen months.

Views of Stakeholders

Union Government

7.30 The Commission held meetings with various Union Ministries to understand the requirement of funds during its award period. The MoPR and Ministry of Housing and Urban Affairs (MoHUA) are the nodal ministries dealing with rural local bodies and urban local bodies respectively and have advocated comprehensive schemes and quantum of grants that should flow to both. These are summarised below.

Ministry of Panchayati Raj

7.31 The MoPR submitted its revised memorandum to us after we submitted the report for 2020-21. The Ministry suggested that grants to the panchayati raj institutions for the award period of 2021-26 should be raised to Rs. 10 lakh crore. It also suggested that for the initial four years, that is 2021-22 to 2024-25, this grant may be kept as 50 per cent untied for ensuring basic services and 50 per cent tied to drinking water supply and sanitation. In the fifth year, 2025-26, the tied component of the grant may be reduced to 25 per cent and the untied may be increased to 75 per cent, taking into account the progressive saturation that is expected to be achieved in drinking water supply and sanitation. Out of the untied grants, the panchayati raj institutions may be allowed to carry out the basic services through either outsourcing or contract engagements. They may also utilise the grants for various revenue/recurring expenditures such as operation, maintenance, wage payments, internet and telephone expenses, fuel expenses, rentals and contingency expenditure during calamities.

7.32 The Ministry sought an additional grant of Rs. 12,000 crore for the five-year period to enable Gram Panchayats without an office building to construct one in a time-bound manner. It also requested grants for the construction of multi-purpose community halls/centres in all Gram Panchayats, in order to provide a critical rural infrastructure for the holistic development of rural areas and for community-based organisations such as women self-help groups. The MoPR also highlighted the critical role played by the panchayati raj institutions by leveraging community capacities (Box.7.1).

Box 7.1: Partnerships, Convergence and Community Cadre

Representatives of panchayati raj institutions across the country have been very active in controlling the spread of the Covid-19 pandemic. They have collaborated closely with various stakeholders, self-help groups (SHGs), frontline health workers – auxiliary nurse midwife (ANM), accredited social health activists (ASHA) and anganwadi personnel – to roll out several initiatives such as didi/community kitchens set up under the Mid-Day Meal programme/POSHAN Abhiyan. They also took the responsibility of equipping the SHGs to run community kitchens and supplied food grains through the public distribution system. The panchayati raj institutions, operating as the third tier at the grass root level, highlighted the necessity and benefits of developing and tapping community capacities in times of crisis and creating a strong social cadre.

Ministry of Housing and Urban Affairs

7.33 The MoHUA also submitted a revised memorandum, after the release of our report for 2020-21, highlighting the following issues:

i. The mandatory condition of growth of property tax in tandem with the growth of gross state domestic product (GSDP) in order to qualify for grants, made by us in the report for 2020-21, may be removed as there is no correlation between the two. Instead, it should be mandatory for urban local bodies to notify a road map for increasing collection of property taxes and user charges to cover operations and maintenance cost.

ii. The MoHUA must be made the nodal ministry with respect to grants for Million-Plus cities to take steps to check air pollution, like use of mechanical sweeping machines, promotion of non-motorised transport (pedestrian and cycle), paving the side flanks of the road with facility for water percolation, etc. The Ministry of Environment, Forests and Climate Change (MoEF&CC) may be given a separate grant for installation of systems to monitor air quality.

iii. Separate grants may be allocated to urban local bodies for public health infrastructure and primary health care clinics in informal settlements and low-income neighbourhoods.

iv. An active municipal borrowing market must be created through the cityfinance portal, which serves as a national framework of standardised, timely and credible financial information on cities. It facilitates benchmarking, comparison and peer learning between cities on a range of financial indicators.[3]

v. A substantial increase in grants is needed for bridging the resource gap of municipalities, which is anticipated at Rs. 12.27 lakh crore over the period 2021-22 to 2025-26.

vi. Devolution to municipalities may be increased by at least four times (Rs. 3,48,575 crore), as compared to the FC-XIV award.

[3] https://cityfinance.in/home

vii. The MoHUA and the Controller General of Accounts (CGA) should develop an account maintenance system, National Municipal Accounting Manual (NMAM), which will be integrated with the Public Financial Management System (PFMS). For this, the Ministry suggested a total fund requirement of Rs. 213 crore (Rs. 193 crore to State Governments and Rs. 20 crore to the MoHUA).

viii. The Ministry sought Rs. 450 crore for building service centres shared by municipal clusters.

ix. The Ministry was of the view that instead of a model property tax legislation, what is required is a toolkit consisting of (a) best practices across States/cities in each stage of the property tax lifecycle; and (b) model statutory provisions that can be incorporated within existing property tax rules to strengthen administration. It informed us that a consultative group of urban development ministers from six States (Gujarat, Odisha, Tamil Nadu, Punjab, Tripura and Uttar Pradesh), constituted to pursue our recommendations on property tax, has reviewed the municipal legislations of all twenty-eight states and identified the best practices in laws, procedures and on-ground activities.

Ministry of Jal Shakti

7.34 The Department of Drinking Water and Sanitation (DDW&S) in the Ministry of Jal Shakti proposed that 25 per cent of the basic grant for local governments should be earmarked for creating and maintaining drinking water and sanitation infrastructure. Parameters such as achievement and sustenance of ODF status, increase in solid and liquid waste management infrastructure and improvements in access to safe drinking water infrastructure should be set to make the local governments eligible for performance grants.

7.35 The DDW&S is closely working with the MoPR and the Department of Expenditure, Ministry of Finance, on implementing our recommendations, in the report for 2020-21, on tied grants related to water supply and sanitation. Both the MoPR and the DDW&S issued a joint advisory to all States on the broad framework to be followed in respect of these grants. It was proposed that 50 per cent of Finance Commission grants to panchayati raj institutions for water supply and sanitation shall be placed at the disposal of the DDW&S and funds would be channelised through it for better implementation of programmes and proper utilisation of grants. This would help in achieving the goal of the Jal Jeevan Mission to provide assured potable water to every household in adequate quantity and of prescribed quality on a long-term basis. Gram Panchayats should have five-year perspective plans in the form of village action plans indicating quantifiable targets for this purpose.

Ministry of Environment, Forests and Climate Change

7.36 Confident about the systems already created under the National Clean Air Programme

(NCAP), the MoEF&CC had sought funds for air quality improvement in Million-Plus cities from 2020-21 onwards, based on the reductions in the average annual concentrations of both PM_{10} and $PM_{2.5}$. Accordingly, we had recommended grants for 2020-21 and also laid out a roadmap as advised by the Ministry. However, in its revised memorandum, the MoEF&CC favoured a different approach and recommended evaluation of performance grants based on improvement by States on four parameters: (a) strengthening of the institutional framework for monitoring air quality; (b) source-wise cause analysis for air pollution; (c) progress on action plans and compliance of statutory guidelines; and (d) quantification of air quality improvement. The relative weights assigned to these factors shift over the award period, with more emphasis on institution and capacity building in the initial years and on outcomes in the later years.

Other Ministries

7.37 The Ministry of Finance emphasised the importance of setting up of SFCs and suggested that the timely submission of SFC reports may be made a mandatory condition for the transfer of local body grants to States. It also proposed that States be encouraged to transfer more sources of revenue, like registration fees, to local governments.

7.38 The Ministry of Women and Child Development stressed the need to link the performance grants for rural local bodies to indicators relating to women and children. This may include earmarking at least 30 per cent of the total Gram Panchayat budget towards women-centric programmes, encouraging the mandatory establishment of Mahila Sabhas in every State, collection of gender-disaggregated data and regularisation of ASHA workers.

7.39 The Ministry of Tribal Affairs proposed that Excluded Areas should be considered for grants while making recommendations for panchayati raj institutions.

7.40 The Directorate General of Defence Estates, Ministry of Defence, proposed the inclusion of cantonments under the grants for urban local bodies, citing their similarity with municipalities. It sought a grant of Rs. 1,035 crore for sixty two cantonments across seventeen States and two Union Territories (Delhi and Jammu & Kashmir) for our award period. The Department also stressed the dire need of resources for Cantonment Boards owing to their limited taxation capacity and revenue loss on account of taxes being subsumed into GST.

State Governments

7.41 In their memoranda to the Commission, most of the States demanded that we significantly increase support to local governments. Some States also suggested that local governments may be given a share of the divisible tax pool over and above the State's share (as FC-XIII had partially done), so that they get the benefit of buoyancy in the Union's tax revenues.

7.42 Almost all the State Governments urged that grants be provided for all the three tiers of

rural local bodies instead of only Gram Panchayats. Some States, wherever relevant, urged that grants should be provided to the Excluded Areas, as the Constitutional amendment Bill regarding the recognition of village councils is still pending with the Union Government.

7.43 The States had differentiated views on the weightage allotted to parameters for inter se distribution between the States. While some States suggested continuation of the existing parameters of population and area, others suggested the use of indicators of urbanisation rate, transfers of funds, functions and functionaries (3Fs) to local governments, devolution index and so on.

7.44 States like Tamil Nadu and West Bengal suggested that performance-based grants should be linked to (a) green and non-conventional energy initiatives by local governments and (b) digitisation of the provision of various services, assessment (including of property tax) and audit at the grass root level.

7.45 Assam and Kerala advocated the use of the urbanisation rate of States as a parameter for the inter se distribution of grants between rural local bodies and urban local bodies in lieu of the national average rate of urbanisation as applied for the grants for 2020-21. Manipur proposed that we should consider extending local governments grants to Autonomous District Council (ADCs) areas that do not fall under Sixth Schedule Areas in the State but are excluded under Part IX and Part IX-A of the Constitution.

Representatives of Local Governments

7.46 We held detailed consultations with elected representatives of local governments of each tier as well as the ADCs during our visits to the States. Important suggestions received were in the three categories: decentralisation issues, operational issues and issues on utilisation of Finance Commission grants.

Decentralisation Issues

i. In almost every State, representatives of rural local bodies unanimously sought distribution of grants among all the three tiers, because all of them are part of the panchayat system within the Constitution. This would increase the effectiveness of rural local bodies in public service delivery (such as rural connectivity, education, health, drinking water, sanitation) by pooling of human and other resources and skills.

ii. Effective delegation of funds, functions and functionaries is still pending in some States, despite transfer of all twenty-nine subjects to the rural local bodies.

iii. Appropriate measures should be taken to ensure that for the release of grants, no additional conditions, other than those indicated by us, are imposed on local governments by the Union or the State Governments.

Operational Issues

i. The ceiling of annual professions tax should be raised from the current Rs. 2,500.

ii. Local governments should be permitted to levy tax on the properties of the Union and State Governments.

iii. Grants should be provided to the Sixth Schedule areas and other Excluded Areas.

Issues on Utilisation Of Finance Commission Grants

i. Grants should not be rigidly confined to a few specific sectors and local governments should have the flexibility to use these in sectors they consider as priority ones.

ii. Finance Commissions should support the establishment of a GIS-based property tax system for all local governments with the objective of strengthening their revenues.

iii. Funds should be earmarked for the creation of databases at the level of local governments, while providing them the flexibility to hire or outsource specialised manpower for this.

iv. Limited manpower, lack of technical support, high cost of construction in hilly areas and inadequate resources were the main problems of local governments.

v. Municipalities should be provided more resources to create and expand civic amenities. The need for resources has increased manifold because of the severe strain on the existing infrastructure as a result of the increase in floating population and tourists. There is also a need to provide basic urban infrastructure to meet the needs of the growing urban population due to intra- and inter-State migration.

vi. Performance grants are highly commendable as they incentivise and reward better performance, but backward areas face considerable challenges in meeting the performance conditions.

Studies Commissioned by FC-XV

7.47 We commissioned thirteen studies to analyse various issues related to local governments. These can be grouped under four heads:

i. **Analysis of overall trends of FC-XIV flows:** "Devolution of Union Finance Commission Grants to Panchayats" and "Analysis of Fund Flows to Rural Local Bodies" by the Centre for Policy Research (CPR) and "Design of Inter-Governmental Fiscal Transfers in India to Rural Local Governments" by the Indian Institute of Public Administration (IIPA).

ii. **Review and analysis of functioning of SFCs across States:** "Overview of State Finance Commission Reports" by NIPFP.

iii. **The dynamics of the growing urban sector and measures to address the associated challenges:** "Status of Municipal Finance in India" and "Finances of Municipal Corporations in Metropolitan Cities of India" by the Indian Council for Research on International Economic Relations (ICRIER); "A Municipal Finance Blueprint in India" by Janagraha; "Urban Infrastructure and Resilience" and "The Potential of Urbanisation to accelerate post-COVID Economic recovery" by the Indian Institute for Human Settlements (IIHS); and "Property Taxation in India" by the World Bank.

iv. **Analysis of the impact of rising air pollution on urban areas of India: study on "Air Pollution:** Enabling Outcome Linked Clean Air Financing" undertaken by World Resource Institute (WRI), "Targeting Improved Urban Air Quality Outcomes Through Performance Grants" by the World Bank and "Current State and Sources of Air Pollution and Solutions" by The Nature Conservancy.

All the studies are available on the website of the Finance Commission.[4]

7.48 One of the important findings was that the tendency to impose conditionalities has given rise to the temptation by both the Union and State Governments to interfere, in the name of convergence, in the powers of the panchayats to select schemes. It was highlighted that the challenge for the Commission would be to avoid the pitfalls of earlier Commissions and to see how to continue providing largely untied grants to local governments, while ensuring a modicum of expenditure responsibility and accountability. The Commission needs to examine the context in which conditionalities are imposed and whether they set out perverse incentives and are open to subversion.

Immediate Challenges

7.49 The studies also highlighted the key challenges that are being faced by urban areas and how addressing them is the key to enabling them to emerge as growth engines.

Property Taxes

7.50 The report by the World Bank highlighted the fact that India compares unfavourably with Organisation for Economic Co-operation and Development (OECD) as well as BRICS countries such as Brazil and South Africa in terms of revenues from the urban immovable property tax.[5] In 2016, while the average collection from property taxes as a proportion of gross domestic product (GDP) was about 1.1 per cent in the OECD group, it was only about 0.2 per cent in India. In countries such as Canada, the United Kingdom and the United States, property tax collections form the bedrock of local governments' revenues and are about 3 per cent of their

[4] https://fincomindia.nic.in/ShowContentOne.aspx?id=27&Section=1
[5] BRICS is an abbreviation for Brazil, Russia, India, China, and South Africa.

respective GDPs. Several factors lead to low property tax revenue in India: undervaluation, incomplete registers, policy inadequacy and ineffective administration. Another big challenge for property tax administration is the lack of accurate property tax records with the urban local bodies. Some of the best practices from States that can serve as a role model for other States to boost property taxation revenue are listed in Box 7.2.

Box 7.2: Best Practices in Property Taxation in States

Karnataka: AASTHI project for GIS-based property tax system

a. Property tax valuation was changed from annual rental value assessment to a capital value method.

b. The Revenue Departments of all the urban local bodies were computerised and a GIS-based property tax information system put in place.

c. Field surveys using digitised ward maps with individual properties and unique property ID were conducted in over 1.5 million properties.

d. Cadastral-level GIS maps were generated for over 200,000 square km, covering over 3.8 million properties in the State.

Reform Result

a. 1.2 million previously unassessed properties (42 per cent of the total) were brought into the tax net.

b. Revenue increase by 30–40 per cent.

c. Dramatic decline in citizens' complaints of calculation errors owing to the online calculations.

d. Automation resulting in real-time data on collection of property tax by the urban local body.

Ranchi: Optimisation of Tax Collection

In 2014, the Ranchi Nagar Nigam entered into an agreement with a private agency for providing managed services for collection of tax and other charges from properties within the jurisdiction of the urban local body through a competitive bid process.

a. Property tax demand notice was generated in real time using hand-held devices linked with the back office and banking records along with door-to-door collection through cash/cheque/demand draft from the assessees.

b. An online helpline, chat, SMS, and telephonic services were set up for grievance redressal.

Reform Result

Property tax collection in Ranchi Nagar Nigam since outsourcing

Within three years, there was a four-fold increase in property tax collection in Ranchi from Rs. 9 crore in 2014 to Rs. 43 crore in 2017.

Financial Year	2014	2015	2016	2017
No. of tax collectors deployed by the agency	110	110	110	110
No. of properties	96,000	100,000	103,000	160,000
Growth in assessment base	2%	4%	3%	55%
No. of properties per collector	873	909	936	1,455

Source: Ranchi Nagar Nigam.

Pune Municipal Corporation (PMC): Reforms in assessment, billing, and collection project

a) In 2013, the introduction of a GIS-based system for city mapping and creation of unique IDs for all properties led to the creation of a digital property database. This increased the assessed properties by 18 per cent.

b) Self-assessment has been made mandatory every year. Penalties are in place for non-submission, withholding of information and submission of false information.

c) Pune Municipal Corporation moved to a capital value-based system which considers the increasing value of properties for property tax assessment, making it a more progressive and buoyant tax system.

The resultant increase in property tax collection in PMC was 29 per cent in 2011–12. Property tax revenue has doubled from 2013–14, reaching Rs. 1,158 crore in 2016–17.

Source: World Bank Report on Property Taxation to the Commission

7.51 The study by Janagraha analysed the property tax life cycle consisting of five stages: enumeration (counting of properties), valuation (assigning values to properties for the purpose of taxation), assessment (assessing the property tax payable by each property), billing and collection. It was highlighted that though all the States have Municipal Acts, property tax forms a small section in all of them. There is significant variation in Municipal Acts across States (summary of the Acts of all twenty-eight States is at Annex 7.1) with regard to enumeration, valuation, assessment, billing and collection.

Outcome Based Incentives for Metropolitan Cities

7.52 Air pollution has become a critical challenge in metropolitan cities in recent times. Measuring and assessing clean air achievements is not always a straightforward exercise, particularly in the Indian context of limited monitoring of air quality within and outside cities. In its study, the WRI highlighted issues pertaining to the measurement and monitoring of air pollution. First, most of the cities in question must have sufficient monitors in place to meet basic standards for PM_{10}, $PM_{2.5}$, ozone, NOx or other criteria pollutants regulated under India's Prevention and Control of Air Pollution Act, 1981. Second, the degree of control that a city or State has over air pollution varies. City air quality depends not only on the city's actions, but also on climate, weather as well as emissions that originate outside the cities. The ability of cities to control their "own emissions" (emissions within the territorial boundaries) also varies. Air pollution is caused by transportation, construction and road dust, household energy use (biomass burning, emissions from diesel generators), industrial emissions, industrial energy use and improperly managed solid waste, among others. The relative contribution of each of these sources varies across cities. Some of these can be influenced by actions within a city, others are more dependent on State or national policies beyond the control of the cities. In short, effort and achievement are not always tightly correlated.

7.53 Monitoring networks for quantifying improvements in air quality should be based on at least meeting Central Pollution Control Board (CPCB) guidelines for maintenance of monitors and reporting of data, cities should be encouraged to use high quality scientific data beyond that produced by the pollution control board networks and air quality achievements should be assessed across long-running averages of air quality to avoid being influenced by seasonal variations or particular episodes beyond a city's control.

7.54 The World Bank, in its discussion with us, highlighted that air pollution is not a localised phenomenon. The effect of pollution may be felt in cities and towns far away from the source. Thus, there is a need to create an effective and sustained institutional mechanism for inter-State and inter-city coordination, in addition to multi-sectoral synchronisation. A large number of Million-Plus cities do not meet the standards for pollutants (particulate matter). This not only affects people's health but also hinders trade, investment and various economic activities in these cities.

7.55 Strengthening, on an ongoing basis, the knowledge of sources of pollution and emissions and expanding the ambient air quality monitoring network in cities and across States to get consistent year-on-year data of particulate matter is imperative.

Nine Guiding Principles

7.56 We have arrived at our recommendations after duly considering all inputs received from the extensive consultations with the State Governments, representatives of local governments, Union Ministries and reports commissioned for this purpose. The nine guiding principles that run as a common theme across all our recommendations for the local governments are:

i. Relevant ToR and the Constitutional provisions.

ii. Pre-requisite of timely online availability in the public domain of both the accounts of the previous year and audited accounts of the year before the previous year for availing of grants for both rural and urban local bodies.

iii. Pre-requisite of notifying minimum floor on property tax rates by States in order to increase the buoyancy of revenue of urban local bodies.

iv. Inclusive and uniform approach for all three tiers within rural local bodies, Excluded Areas and cantonment areas.

v. Inter se rural and urban share of devolution in the context of the evolving urban complexities and challenges.

vi. Differential needs of urban habitations, including the special needs of emerging large urban areas as “agglomeration economies”.

vii. Air pollution in Million-Plus urban agglomerations.

viii. Focus on national priorities related to (a) strengthening of primary health care and

creation of diagnostics infrastructure for management of disease and epidemics at the local level; (b) solid waste management; (c) provisioning for drinking water and sanitation; and (d) promoting and incentivising water recycling, rejuvenation and rainwater harvesting.

ix. Importance of generation of internal resources like revenues from property taxation and tax on professions.

Absence of SFC recommendations

7.57 The lack of effectiveness of SFCs has already been discussed in detail. Previous Finance Commissions had to make recommendations without the benefit of recommendations of SFCs and they, therefore, developed their own criteria and conditionalities for transferring grants. Thus, despite a Constitutional mandate that recommendations of the SFCs shall be the basis for Finance Commissions to consider the measures to augment the Consolidated Fund of States, this could not be followed. As we have pointed out in para 7.28 and as Table 7.4 clearly revealed, there is no improvement in the situation. It would have been open to us to take into account the failure of State Governments to constitute SFCs in a timely manner or that of the SFCs to give their recommendations and deny grants for local governments in such States. However, we have eschewed this option, keeping in view the genuine requirements of the third tier institutions and the service they provide to the people. At the same time, we note this with dismay and expect all those States which need to discharge the given Constitutional responsibilities to ensure that the SFCs are constituted and their recommendations are implemented in a timely manner both in letter and spirit.

7.58 **Accordingly, we recommend that all States which have not done so, must constitute SFCs, act upon their recommendations and lay the explanatory memorandum as to the action taken thereon before the State legislature on or before March 2024. After March 2024, no grants should be released to a State that has not complied with the Constitutional provisions in respect of the SFC and these conditions. The MoPR will certify the compliance of all Constitutional provisions by a State in this respect before the release of their share of grants for 2024-25 and 2025-26.**

Grants to Local Governments

7.59 Grants to local governments are discussed in six parts: (a) total envelope of grants for local governments, (b) grants for rural local bodies, (c) grants for urban local bodies, (d) grants for health to be channelised through local governments, (e) performance-based grants to the urban sector for the incubation of new cities and (f) grants for shared municipal services.

Total Grants for Local Governments

7.60 **We recommend total grants for duly constituted local governments that add up to Rs. 4,36,361 crore for the period 2021-26. We favour a fixed amount rather than a proportion of the divisible pool of taxes to ensure greater predictability of the quantum and timing of fund flow.**

7.61 **Of these total grants, Rs. 8,000 crore is performance-based grants for incubation of new cities and Rs. 450 crore is for shared municipal services.** These grants are detailed in paras 7.148 to 7.154. **In view of the current pandemic, the Commission has decided to provide grants of Rs. 70,051 crore to strengthen and plug the critical gaps in the health care system at the primary health care level.** The details are at paras 7.136 to 7.147. Table 7.5 details the distribution of the remaining Rs. 3,57,860 crore out of the total grants of Rs. 4,36,361 crore recommended for local governments. The ratio of inter se distribution between rural local bodies and urban local bodies is different for each year; it gradually moves from 67:33 in 2021-22 to 65:35 by the end of the award period.

Table 7.5: Grants to Local Governments

(Rs. crore)

Grants	2021-22	2022-23	2023-24	2024-25	2025-26	Total
1. Total grants for rural and urban local bodies	80207	82613	85091	89997	90003	**427911**
(a) Grants for primary health sector	13192	13192	13851	14544	15272	**70051**
(b) Other grants to be disbursed among the local bodies excluding (a) above	67015	69421	71240	75453	74731	**357860**
Inter-se distribution of grants at (b) above between RLB and ULB	67: 33	67: 33	66: 34	66: 34	65: 35	**-**
(I) Grants for RLBs	44901	46513	47018	49800	48573	**236805**
(ii) Grants for ULBs	22114	22908	24222	25653	26158	**121055**
2. Grants for incubation of new cities		2000	2000	2000	2000	**8000**
3. Grants for shared municipal services	90	90	90	90	90	**450**
Grand Total (1+2+3)	**80297**	**84703**	**87181**	**92087**	**92093**	**436361**

Grants for Rural Local Bodies

7.62 **A total of Rs. 2,36,805 crore is recommended for duly constituted rural local bodies for the period 2021-26. Inter se distribution amongst the States is with a weight of 90 per cent on population and 10 per cent on the area of the States. The detailed methodology is in Annex 7.2. The share of each State is detailed in Annex 7.3. The quantum of grants for rural local bodies and urban local bodies from the total allocation of grants in each State is based on the ratio 67:33 for the first two years of 2021-22 and 2022-23, 66:34 in the next two years of 2023-24 and 2024-25 and 65:35 in the last year of the award, namely 2025-26.** The details are in Annex 7.4.

All Tiers Covered

7.63 **Similar to what we had done in our report for 2020-21, we recommend that for the five-year award period (2021-22 to 2025-26) grants should go to all the three tiers of panchayati raj institutions.** This is also in line with the suggestion made by almost all elected representatives of panchayats and State Governments. The three tiers are parts of one system and are interlinked through backward and forward linkages. Availability of funds to all three tiers would improve functional coordination among them and facilitate the creation of assets across smaller jurisdictions, thereby increasing project viability in such areas.

Excluded Areas Covered

7.64 The approach of the previous Finance Commissions to the allocation of grants to the Fifth Schedule and Sixth Schedule areas and Excluded Areas has already been discussed earlier. With the passage of the Panchayats (Extension to the Scheduled Areas) Act (PESA), 1996, the provisions of Part IX of the Constitution relating to the panchayats have been extended to the Fifth Schedule areas. The tribal areas included in the Sixth Schedule still remain outside its purview. According to the Ministry of Home Affairs, in February 2019, a draft Constitutional Amendment Bill for Article 280 to extend financial resources and administrative powers to the Sixth Schedule Autonomous Councils was introduced in the Rajya Sabha. In the light of the Constitutional provisions and the ToR, we intensively deliberated upon the issue and decided to follow the path advocated by the FC-XIII.

7.65 The Finance Commission is required to recommend measures to augment the Consolidated Fund of a State to supplement the resources of panchayats and municipalities on the basis of the recommendations made by the relevant SFC. The ToR of this Commission do not include the provisos to Article 275(1) relating to grants to the Sixth Schedule areas. Thus, grants-in-aid meant for panchayats given to the Consolidated Funds of States cannot be expected to be apportioned to the Excluded Areas and the Sixth Schedule areas, as these areas are excluded from the ambit of the recommendations of the SFCs.

7.66 However, this Commission finds no reason to depart from the course of action followed by the previous Commissions who also had similar ToRs. The argument then used was to earmark grants for such Excluded Areas under Article 275, notwithstanding the specific exclusion in the ToR. Accordingly, taking into account the per capita grants that are considered due to every resident in India and in order to promote uniformity of approach across all States in the matter of devolution to local governments, **we recommend that grants shall be distributed to even those areas which are not required to have panchayats (Fifth and Sixth Schedule areas and Excluded Areas) in order to augment the resources available for providing basic services by their respective local level bodies.**

Basis of Intra-Tier Distribution

7.67 **All the tiers in the panchayats – village, block and district – shall receive the grants.** The inter se distribution among all the tiers should be done by the State Governments on the basis of the accepted recommendations of the latest SFC and in conformity with the following bands of (a) not less than 70 per cent and not more than 85 per cent for Gram Panchayats, (b) not less than 10 per cent and not more than 25 per cent for Block Panchayats and (c) not less than 5 per cent and not more than 15 per cent for Zilla Panchayats, subject to the shares adding up to 100 per cent. In States, which have a two-tier system with only village and district panchayats, the allocation will be in the bands of not less than 70 per cent and not more than 85 per cent for village panchayats and not less than 15 per cent and not more than 30 per cent for district panchayats. In the event of SFC recommendations not being available, the inter se distribution within the tiers should be decided by the State Government within the bands indicated above. Once the State-level grants are earmarked for each tier, the intra-tier distribution among the relevant entities across the State should be on the basis of population and area in the ratio of 90:10 or as per the accepted recommendations of the latest SFC.

Table 7.6: Range for Distribution of Funds to the Three Tiers

Range for distribution	Gram Panchayat	Block Panchayat	District Panchayat
Minimum	70%	10%	5%
Maximum	85%	25%	15%

Note: Subject to the percentages adding up to 100

7.68 In respect of allotment of grants for Excluded Areas in a State exempted from the purview of Part IX and Part IX-A of the Constitution, the concerned State shall make allocations on the basis of population and area in the ratio of 90:10. The concerned State Government should allot these grants for each year at the beginning of the financial year and intimate the same to the ministries of Home Affairs and Finance.

Accounts and Audit

Integration of the Financial Management Systems

7.69 In our report for 2020-21, we reiterated that timely availability of audited accounts – separately at the local body level and jointly at the State and all-India level – continues to be a problem despite the emphasis laid by previous Commissions. We consider the availability of accounts online, both before and after audit, of all three levels of government a critical reform agenda. In our report for 2020-21, we recommended that the upgraded PRIAsoft software needs

to be integrated with the Integrated Financial Management Information System (IFMIS) of the State Governments (wherever it exists) and the Public Financial Management System (PFMS) of the CGA in the Union Government in order to generate online accounts by each rural local body, enable online auditing of such accounts and their consolidation at the State and all-India levels.

7.70 To achieve this objective, the report for 2020-21 suggested a two-stage process. First, the integration of the PRIASoft and NMAM systems with the State-level IFMIS and, subsequently, with PFMS to achieve complete integration. It recommended that in 2020-21, under the guidance of the CAG, the concerned ministries and CGA shall develop, on a trial basis, an integrated account maintenance system as stated above for the States before 31 March 2021, ready for full roll-out from 1 April 2021.

7.71 As a follow up on this recommendation, we interacted with all the stakeholders, namely, CAG, CGA, MoPR and MoHUA. It is worth mentioning that MoPR has taken prompt and significant steps in this regard as summarised in Box: 7.3.

Box 7.3: Initiatives by MoPR for Auditing and Integration of Accounts

- ·For creating an Integrated Accounts Maintenance System, the MoPR constituted, on 12 February 2020, a technical committee for harmonisation of heads of accounts comprising representatives of the CAG, CGA, National Informatics Centre and the National Institute of Rural Development and Panchayati Raj.
- On 15 April 2020, the MoPR initiated a programme called Audit-Online for facilitating financial audit of accounts of the panchayats by auditors (either state Accountant General or local fund auditors). The application not only facilitates the auditing of accounts but also for maintaining audit records that have been carried out. A draft Audit Manual has also been prepared by MoPR and shared with the States.
- A roadmap has been laid for the States to complete the exercise in a time-bound manner, especially (a) closure of account books for the year 2019-20 in PRIASoft; (b) registration of auditors on Audit-Online; (c) preparation of an audit plan; (d) completion of training of officials involved in audit; and (d) completion of the entire exercise of online audit of panchayat accounts.

Entry-level Condition for Availing the Grants

7.72 As earlier mentioned, auditing of accounts and their availability online continues to be a pending problem. A new trend, however, is evolving with a few States experimenting by involving external agents like chartered accountants for audit and certification of accounts (Table 7.7). This is an encouraging practice and more efforts in this direction are required across all State Governments.

Table 7.7: States Using Chartered Accountants for Auditing of Accounts

States	Status
Chhattisgarh	Preparation of annual account and audit of the urban local bodies are entrusted to chartered accountant firms and are placed before the general body of each urban local body for perusal.
Madhya Pradesh	Accounts are prepared and certified by the chartered accountants of local governments.
Rajasthan	Department of Local Fund Audit (DLFA) and chartered accountants certify the accounts of urban local bodies.
Sikkim	The DLFA audits the accounts of the local governments and submits a consolidated report to the Sikkim Legislative Assembly. Chartered accountants appointed by the State Government certify the accounts on a year to year basis.

Source: Compiled from inputs received from CAG

7.73 Over the last decade, there has been progress in digitising financial transactions, for example, through PFMS for the Union Government, and IFMIS for the States. However, the usability of all the data is restricted by its generation and collection by different government agencies and departments across all tiers of government in separate and disparate databases primarily for their own purposes. Data is difficult to link, compare and analyse across government entities due to lack of common data standards. A metadata catalogue or common data dictionary is not operational. Ambiguities in definition and discretionary classifications impede meaningful comparison and/or consolidation across levels and entities. For example, the current six-tier accounting classification is not standardised at levels below minor heads across the Union and the State Governments. As there is no standardisation of what is a programme and what is a scheme, minor head and scheme heads are used interchangeably. There are instances where substantive amounts, as much as 25 per cent of total expenditure, are booked under an omnibus minor head called '800-Other Expenditure', obscuring financial reporting. It is well-nigh impossible to get an integrated view of how much the general government (that is Union, States and local governments) or the government at the State level (State Government and the local governments in a State) or even all the local governments in a State are spending on health or education or salaries and wages, or generating in terms of tax revenues.

7.74 While the country has made considerable progress in moving from a manual system of accounts to a digital system, the full benefits of such a move have not been reaped because of a lack of business process re-engineering. Digitisation is much more than putting in numbers in a computer that would have been manually recorded on a piece of paper otherwise. If transactions, like payments, are done in electronic mode, all the necessary details – the purpose, to whom, from where, when and how much – can be captured right at the time of data entry. Once the details of

how a transaction is to be electronically entered has been specified by a rigorous data standard for all levels of government and these standards are followed, generating accounts data on a consistent and uniform basis for all rural or urban local bodies, or integrating the accounts of the local governments with that of the relevant State Governments would be a fairly simple exercise under an IT-led financial reporting framework. We strongly recommend the specification and adoption of a uniform data standard for digital recording of all government transactions at the earliest. We recognise that States are at different stages of evolution with respect to digitisation of accounts with respect to local governments, and some States have more sophisticated systems than others. During the transition period, for these relevant States, we do not suggest regression to lower levels of sophistication with the capture of fewer characteristics of the underlying accounts data but only on the timely online availability, in the public domain, of both the accounts of the previous year and audited accounts of the year before previous according to formats worked out appropriately by the Union, State and local governments.

7.75 With the help of modern digital infrastructure, a receipt or expenditure can have the necessary characterisation at the input stage itself. This will enable appropriate processing of data to produce the various required reports. Online entry of receipts of expenditure in real term basis generate unaudited accounts monthly and yearly and thus the unaudited accounts are automatically available at the end of the financial year.

7.76 Since auditing is necessary to ascertain the transparency and accountability of public funds and this has remained an unfinished task so far, **we recommend the online availability of both provisional accounts of the previous year and audited accounts of the year before previous as entry level condition to avail of the grants.**

7.77 Given the pandemic and the complexities involved in the task for auditing of accounts, in the first and second year of the award period (2021-22 and 2022-23), States need to ensure that at least 25 per cent of the rural local bodies have both their provisional accounts for the previous year and audited accounts for the year before the previous available online in the public domain in order for them to avail of the full grants in 2021-22 and 2022-23. From the third year (2023-24) onwards, States will receive total grants due to the rural local bodies having both provisional accounts of the previous year and audited accounts for the year before previous and making these available online. For example, if for a particular State only 35 per cent of rural local bodies have both provisional accounts for the year 2022-23 and audited accounts for the year 2021-22 and these are available online in 2023-24, then in 2023-24, the State will receive total amount due to these 35 per cent of the rural local bodies for the year 2023-24.

Grants for the Year (t) for a particular State (X)[6] = Grants due to the rural local bodies in State (X) that prepared provisional accounts for the previous year (t-1) and audited accounts for the year before the previous (t-2), and these accounts are available online in the public domain in year (t).

[6] This condition is applicable from 2023-24 onwards

7.78 Provisional annual accounts of a particular year shall be available online in real time basis by 15 May of every subsequent year. To illustrate; the online provisional annual accounts for the year 2020-21 shall be available by 15 May 2021.

Table 7.8: Eligibility Criteria for Rural Local Bodies to Avail Grants

2021-22 and 2022-23
In the first and second year of the award period (2021-22 and 2022-23), States need to ensure that at least 25 per cent of the rural local bodies have both their provisional accounts for the previous year and audited accounts for the year before the previous available online in the public domain in order for them to avail of the full grants in that year.
2023-24, 2024-25 and 2025-26
From the third year (2023-24) onwards, States will receive total grants due to the rural local bodies having both provisional accounts of the previous year and audited accounts for the year before previous and making these available online. For example, if for a particular State only 35 per cent of rural local bodies have both provisional accounts for the year 2022-23 and audited accounts for the year 2021-22 and these are available online in 2023-24, then in 2023-24, the State will receive total amount due to these 35 per cent of rural local bodies for the year 2023-24.

Basic Grants and Tied Grants for National Priorities

7.79 The flagship scheme of Swachh Bharat Mission (SBM) of the Union Government has played a central role in bringing about behavioural change in both the urban and rural areas and has resulted in people maintaining healthy sanitation practices. This mission has a direct link with SDG 6 of clean water and sanitation. Under the SBM (Grameen), over 5.6 lakh villages and 616 districts have been declared as ODF as on 31 March 2019.

7.80 While there has been significant progress in achieving ODF, large parts of rural India continue to face shortage of drinking water facilities. Of the total ODF certified villages, only 41.53 per cent habitations have been provided with piped water supply schemes, as of 31 March 2019. The 112 aspirational districts have piped water supply in only 24.4 per cent habitations against the national average of 44.4 per cent habitations. Only 18 per cent of the rural population could access potable drinking water through piped water supply and only 17 per cent of rural households were provided household piped water connections. The Union Government has proposed a combined approach to water and sanitation through convergence between the National Rural Drinking Water Programme (NRDWP) and the SBM-G. Villages which have been verified as ODF are given priority for piped water schemes under the NRDWP.

7.81 The DDW&S has drawn our attention to the fact that a revalidation exercise conducted on the current status of the piped water coverage found that only around 3.04 crore households or 16 per cent of the total 19.01 crore rural households have tap water connections, and 15.96 crore (84 per cent) households still remain without a functional household tap connection. For all existing tap connections to be made functional, there needs to be a plan for long-term and reliable availability and supply of water. To ensure this, the Union Government has launched a Jal Jeevan Mission with a total outlay of Rs. 3.60 lakh crore, out of which the Union's share is Rs. 2.08 lakh crore.

7.82 As waste generation increases, even in rural areas, it is important for States to provide guidelines and to set up basic infrastructure for its management. Regional collection facilities can be developed where rural household waste, particularly human excreta and faecal sludge, is temporarily stored until sufficiently large volumes accumulate for further processing.

7.83 The solid waste management sector in India is in urgent need of support. While substantial progress has been achieved in the provision of sanitation services in the past decade, much remains to be done to improve solid waste management. The inadequate management of human excreta and faecal sludge in India has significant environmental and human health impact. There is urgent need to intervene to support local governments to provide this essential and basic service to their citizens. This should take the form of incremental solutions, building on the existing systems and on the knowledge and experiences of countries that have managed to transform their sectors.

7.84 We recognise that the country's achievements on the sanitation front need to be sustained and strengthened at all levels. For this, all the three levels of government will have to join hands in the spirit of cooperative federalism. Local governments form a crucial link for implementation and execution of such schemes. In view of the above and to supplement resources of local governments to meet the broader objective of fulfilling national priorities, we recommend the following:

i. 40 per cent of the total grants to be disbursed to rural local bodies shall be untied and can be used by them for felt needs under the twenty-nine subjects enshrined in the Eleventh Schedule, except for salaries and other establishment costs. The expenditure required for auditing of accounts by external agencies approved by the State Government, however, may be borne from this grant.

ii. 30 per cent of the total grants to be disbursed to rural local bodies shall be earmarked for drinking water, rainwater harvesting and water recycling.

iii. 30 per cent of the total grants to be disbursed to rural local bodies shall be earmarked for sanitation and maintenance of ODF status, and this should include management and treatment of household waste, and human excreta and faecal sludge management in particular.

7.85 The year-wise allocations recommended for this purpose are given in Table 7.9. However, if any local body has fully saturated the needs of one category and does not require funds for that purpose, it can utilise the funds for the other category. For example, if a local body saturates its requirement for drinking water, it can utilise the funds for ODF and vice-versa. The respective village assembly/Gram Sabha shall certify this and it will be duly confirmed by the supervising authority of the panchayats or the State Government. The State-wise and year-wise allocations for tied and untied (drinking water and sanitation) grants recommended for the five-year award period are at Annex. 7.4.

Table 7.9: Detailed Year-Wise Grants for Rural Local Bodies

(Rs. Crore)

Grants	2021-22	2022-23	2023-24	2024-25	2025-26	Total Grants
Total Grants	**44901**	**46513**	**47018**	**49800**	**48573**	**236805**
Untied (40%)	17961	18605	18806	19920	19429	**94721**
Tied (60%)	26940	27908	28212	29880	29144	**142084**
(a) drinking water, rain water harvesting and water recycling	13470	13954	14106	14940	14572	**71042**
(b) sanitation and maintenance of ODF status	13470	13954	14106	14940	14572	**71042**

Urbanisation: Engine of Growth

7.86 India is urbanising rapidly. According to Census 2011, at 377.1 million, India's urban population was 31 per cent of the total, up from 286 million (28 per cent) in 2001 (Table 7.10). However, an agglomeration index developed by the World Bank put the share of India's population living in areas with "urban-like" features at 55.3 per cent in 2010. The extent of urbanisation is said to be understated in official data because of hidden urbanisation on the peripheries of major cities.

Table 7.10: Urbanisation Trends

Year	Population in Millions	Level of Urbanisation (%)
1961	78.9	17.96
1971	109.1	19.90
1981	159.5	23.40
1991	217.6	25.71
2001	286.1	27.81
2011	377.1	31.16

7.87 It is argued that India's economic growth momentum cannot be sustained if urbanisation is not actively facilitated. Cities will have to become the engines of the country's growth and development. In general, there is a pattern suggesting that States with a higher share of urban state domestic product have witnessed higher growth in per capita income and lower incidence of poverty. All this tends to support the position that urbanisation, economic growth and poverty reduction are related.

7.88 Many States like Gujarat, Kerala, Maharashtra and Tamil Nadu have, in their memoranda to us, also emphasised the need for greater financing of the urban sector. Many Indian cities are growing through a process of peripheral expansion, with smaller municipalities and large villages surrounding the core city becoming part of the large metropolitan area. *World Urbanization Prospects 2018* has indicated that India's urbanisation will be around 37-38 per cent in 2025 and the urban sector will start overtaking the rural sector from 2045-46 onwards.

7.89 There is a need to act immediately to prepare the urban areas to meet these future challenges and to promote them as engines of economic growth and investment hubs. Accordingly, we recommend that total grants to local governments should be gradually restructured and apportioned between rural and urban local bodies in the ratio of 65:35 by the end of our award period.

Urban Agglomerations-centric Approach

7.90 Out of the total urban population of 377 million (Census 2011), 61 per cent (229 million) live in 475 urban agglomerations that include urban local bodies, census towns and outgrowths. However, till now, urban agglomerations find no place in the urban governance paradigm and is only a census term. Instead, urban agglomerations should be the demographic basis of metropolitan governance in India. According to Census 2011, urban agglomerations with more than a million people contained almost 40 per cent of the total urban population (Table 7.11).

Table 7.11: Urban Agglomerates Distribution (Census 2011)

Classification	Total Population in millions	Per cent sharœof urban population
Urban agglomerations greater than 1 million	149.5	39.7
Urban agglomerations less than 1 million	80.6	21.4
Not an urban agglomeration	146.9	39.0
Total urban population	**377.1**	**100.0**

Source: Census 2011

7.91 In view of the country's differentiated urbanisation pattern, we consider it important to accord differential treatment to the urban agglomerations with more than one million population

relative to other urban areas in the distribution of urban local body grants. Accordingly, urban areas are grouped into two broad categories for recommending grants to urban local bodies: (a) **Category-I cities:** urban agglomerations/cities with more than one million population and (b) **Category-II cities:** other than million-plus cities.

7.92 For the Million-Plus cities, ambient air quality and national priorities for urban drinking water, water harvesting and recycling and sanitation are found to be more critical. For smaller cities and towns with comparatively lesser own sources of revenue, a certain proportion of untied grants from the Finance Commission continues to be an important source of finance apart from a certain amount of tied grants to give a boost to the national priorities like urban drinking water, water harvesting and recycling and sanitation.

Grants to Urban Local Bodies

7.93 **To cater to the growing urbanisation needs, a total of Rs. 1,21,055 crore is recommended for urban local bodies for the period 2021-26. Inter se distribution among States is with a weightage of 90 per cent on population and 10 per cent on area. The detailed methodology for apportionment of funds for urban local bodies is in Annex 7.2. The share of each State is detailed in Annex 7.3.** The quantum of grants based on the rural and urban share described at Table 7.5 is detailed in Annex 7.4.

7.94 As regards the grants earmarked for primary health care, the urban local bodies shall be actively involved in the components of urban health infrastructure to be built by the Ministry of Health and Family Welfare in close coordination with State Governments.

Two Entry Level Conditions for Availing Grants

7.95 **As in the case of the rural local bodies, in order to be eligible for grants, the urban local bodies too have to mandatorily prepare and make available online in the public domain annual accounts of the previous year and the duly audited accounts of the year before previous.** Such audited accounts should include the minimum of a) balance sheet; b) income and expenditure statement; c) cash flow statement; and d) schedules to balance sheet, income and expenditure statement and cash flow statement.

7.96 Given the pandemic and the complexities involved in the task for auditing of accounts, in the first and second year of the award period (2021-22 and 2022-23), States need to ensure that at least 25 per cent of the urban local bodies have both their provisional accounts for the previous year and audited accounts for the year before the previous available online in the public domain in order for them to avail of the full grants in that year. From the third year (2023-24) onwards, States will receive total grants due to the urban local bodies having both provisional accounts of the previous year and audited accounts for the year before previous and making these available online. For example, if for a particular State only 35 per cent of urban local bodies have both

provisional accounts for the year 2022-23 and audited accounts for the year 2021-22 and these are available online in 2023-24, then in 2023-24, the State will receive total amount due to these 35 per cent of urban local bodies for the year 2023-24. Provisional annual accounts of a particular year shall be available online in real time basis by 15 May of every subsequent year. To illustrate, the online provisional annual accounts for the year 2020-21 shall be available by 15 May 2021.

Grants for the Year (t) for a particular State (X)[7] = Grants due to the urban local bodies in State (X) that prepared provisional accounts for the previous year (t-1) and audited accounts for the year before the previous (t-2), and these accounts are available online in the public domain in year (t).

7.97 As indicated in paras 7.50 and 7.51, property taxes are among the most important revenue sources for local governments across the world. It is progressive and, to a large extent, satisfies the 'user pays' principle. The MoHUA has correctly pointed out that property taxes have, regrettably, grown much slower than GDP. This is in spite of the fact that, over the medium term, the value of the properties in most urban centres has grown faster than GDP. This only strengthens the argument for focussing sharply on mobilising more property taxes. Furthermore, as most of the taxes at the local body level have been subsumed under the GST, property taxes can help increase revenue buoyancies at the third tier. Our specific observations and recommendations on property tax are contained in our report for 2020-21 at para 5.2 (xxi):

"The importance of mobilisation of own revenues by self-governing local bodies cannot be overemphasised. It leads to better ownership and accountability. Internationally, property tax is one of the most effective instruments for revenue mobilisation by local bodies. For historic reasons as well as because of vested interests, property tax yields remain negligible in India. We recommend that to qualify for any grants for urban local bodies in 2021-22, States will have to appropriately notify floor rates[8] and thereafter show consistent improvement in collection in tandem with the growth rate of State's own GSDP."

7.98 This condition in the report for 2020-21 shall continue to be applicable as an entry level condition for all the urban local bodies for availing the grants. Further, this condition is over and above the requirement of timely online availability in the public domain of both unaudited accounts for the previous year and audited annual accounts for the year before previous. In a democratic system, proximity of the elected representative to the tax payer often reduces the willingness to mobilise revenues. Moreover, somewhat curiously, some States have ceilings on property tax rates in urban areas, which militates against the entire principle of decentralisation and devolution of finances and functions to local governments. Instead, the provision of a statutory floor to the property tax rate will help promote the buoyancy of such tax revenues and facilitate the mobilisation of revenues by local governments.

7.99 The conditions mentioned above, have a two-fold implication. First, a State can avail of

[7] This condition is applicable from 2023-24 onwards

[8] The minimum floor rate shall have different slab-wise property tax rates for different types of properties; and differential rates for commercial, residential and industrial properties.

the grant only if it notifies the floor rates of property tax by suitably amending the relevant State Municipal and Municipal Corporation Acts. However, this condition is a one-time phenomenon. Once the State has done that, the other condition related to the year-wise consistent improvement in collection in tandem with the simple average growth rate of the State's own GSDP in the most recent five years will also apply. The five-year average has been taken *to avoid any anomaly arising from cyclical or one-off fluctuation in GSDP.* Hence, setting the minimum floor rate is the pre-condition for a State availing of the urban local body grants, but *once this pre-condition is satisfied, the State will receive such total grants based on the urban local bodies meeting the condition of their property tax revenues in the previous year growing in tandem with the average growth rate of the State's own GSDP in the most recent five years.*

7.100 The Housing Price Index, for example RESIDEX by the National Housing Bank, available for many cities in India shows that residential property prices tend to move up as a State develops. There are cities that are exceptions, but given the wide gap between what is actually collected as property taxes and the potential that can be mobilised, the rate of growth of GSDP in the preceding five years provides a good and convenient proxy to measure how far the cities are catching up with their potential property tax revenue during the five years of our award.

7.101 In view of the current pandemic, **we recommend the provision of a one-year window for notifying the floor rates of property tax; this will trigger in two stages from 2022-23. In the first stage, States are expected to notify the floor rates and operationalise the arrangements in 2021-22. The condition of notifying the floor rates of property tax will apply for eligibility of grants from 2022-23. Once the floor is notified, the condition of growth in property tax collection being at least as much as the simple average growth rate of the State's own GSDP in the most recent five years will be measured and taken into account from 2023-24 onwards.**

7.102 For example, if State X has duly notified a floor to the property tax rates in 2021-22, it becomes eligible for getting the entire urban local body grants in 2022-23. But for 2023-24 and onwards it has to meet the second condition of improvement in property tax collection in tandem with the growth rate of the State's own GSDP as well. The growth rate to be achieved in property tax revenue in a particular year will be taken as the simple average of GSDP growth available for the most recent five years. To illustrate, to qualify under this conditionality in 2023-24, the average GSDP growth rate for the period 2017-18 to 2021-22 (provisional or final, whichever is available at the beginning of the year) will be used for calculating the growth in property taxes that has to be achieved in 2022-23. The State will become eligible for grants in 2023-24 only if the urban local bodies have met the condition of actual collections of property tax in tandem with the State's own GSDP growth. If, in 2023-24, only 25 per cent of the urban local bodies have met the second condition of consistent improvement in collection in tandem with the growth rate of State's own GSDP, then the State will receive the total amount due to these 25 per cent urban local bodies in 2023-24. If, in 2024-25, 35 per cent of the urban local bodies have met the condition of consistent improvement in collection in tandem with the growth rate of State's own GSDP, the

State will then receive the cumulative amount due to these 35 per cent of the entitled urban local body grants in 2024-25. However, it may be noted that the State will receive no grant in any of the years, if it has not notified the minimum floor rate. Thus, a State notifying minimum floor is only a necessary condition (and not a sufficient condition) for availing the grants. Once this pre-condition is satisfied the State will receive only the total grants due to those urban local bodies that meet the condition on growth rate of property tax revenue.

Table 7.12: Eligibility Criteria for Urban Local Bodies To Avail Grants

2021-22 and 2022-23
In the first year of the award period, that is 2021-22, a State needs to ensure online availability of at least 25 per cent of both unaudited urban local body accounts for the previous year and audited accounts for the year before the previous to avail the full grants in that year. States are also expected to notify the floor rates of property tax and operationalise the relevant arrangements in 2021-22. The condition of notifying the floor rates of property tax will apply for eligibility of grants from 2022-23 along with which a State needs to ensure online availability of at least 25 per cent of both unaudited urban local body accounts for the previous year and audited accounts for the year before the previous to avail the full grants in that year.

2023-24, 2024-25 and 2025-26		
State has notified minimum floor rate of property tax rate by 2022-23	*Urban local body has met the condition of consistent improvement in collection in tandem with the growth rate of State's own GSDP*	*Urban local body has not met the condition of consistent improvement in collection in tandem with the growth rate of State's own GSDP*
Unaudited annual accounts of the previous year and audited online accounts for year before previous available.	**Can avail the grants**	Cannot avail the grants
Unaudited annual accounts of the previous year and/or audited online accounts for year before previous not available	Cannot avail the grants	Cannot avail the grants

7.103 Moreover, for increasing the buoyancy of property taxes, laws relating to enumeration, assessment, valuation and billing play an important role in the revenues mobilised. There is a need to follow best practices in this regard and codify them in a Model Property Tax Act. This should continue to be a reform agenda in the medium term and State Governments need to pursue this in cooperation with the Union government.

Category-wise Quantum of Grants

Million-Plus Cities Challenge Fund

7.104 In our classification of urban centres, Category I cities consist of fifty urban centres with million plus population – the Million-Plus cities. These fifty, in turn, consist of forty-four urban agglomerations (excluding Delhi, Chandigarh and Srinagar) and six cities which the Census 2011 does not classify as urban agglomerations (Jaipur, Visakhapatnam, Ludhiana, Faridabad, Vasai-Virar City and Kota). The forty-four urban agglomerations encompass sixty-seven cities with a population between 100,000 to less than one million and 1,048 towns with a population of less than 100,000.

7.105 **For these Category-I cities, during its five-year award period, we recommend grants to the tune of Rs. 38,196 crore in the form of a Million-Plus cities Challenge Fund (MCF). This amount is linked to the performance of these cities in improving their air quality and meeting the service level benchmarks for urban drinking water supply, sanitation and solid waste management.**

7.106 Almost a third of the total MCF of each city is earmarked for achieving ambient air quality. The balance two thirds of the city-wise MCF is earmarked for achieving service level benchmarks for drinking water (including rainwater harvesting and recycling) and solid waste management. Detailed State-wise and city-wise grants are in Annex 7.6.

Table 7.13: MCF for Million-Plus Agglomerations /Cities

(Rs. crore)

	2021-22	2022-23	2023-24	2024-25	2025-26	Total Grants
Total Grants	**6978**	**7227**	**7643**	**8093**	**8255**	**38196**
Ambient air quality	2217	2299	2431	2571	2621	**12139**
Service level benchmarks	4761	4928	5212	5522	5634	**26057**

7.107 For the Million-Plus cities/urban agglomerations, the recommended city-wise distribution of grants for the period 2021-26 is on population basis. In the case of urban agglomerations which contain more than one Million-Plus city, the concerned State Government, in consultation with all such entities within the urban agglomeration, shall entrust one urban local body as the nodal entity to receive the grants. This nodal entity will also have the responsibility of achieving the performance indicators for the entire urban agglomeration.

Ease of Breathing

7.108 As indicated in paras 7.52 to 7.55, absence of a metropolitan paradigm has resulted not only in fragmented governance, service delivery and lack of accountability, but also in an inability of such cities to realise agglomeration economies. Since the contemporary challenges

of economic growth with environmental sustainability and equitable access to opportunities and services can be satisfactorily met only at the agglomeration level, we treat the urban agglomerations with more than a million population as a single unit for monitoring of performance indicators.

7.109 Ambient air quality is critical not only for the health and well-being of those living in the Million-Plus cities but also for attracting investment. A city with great 'ease of doing business' is unlikely to attract investments if the ambient air quality makes breathing both hazardous to health and difficult. Particulate matter has been identified as one of the most critical environmental risks globally and poor air quality has been associated with morbidity and mortality due to respiratory, cardiovascular and cerebrovascular diseases.

7.110 Data generated by the National Air Monitoring Programme (NAMP) reveal that particulate matters (PM_{10} and $PM_{2.5}$) are exceeding the permissible levels at many locations, particularly in urban areas. Air pollution is a complex issue because of the variety of sources - industries, automobiles, generator sets, domestic fuel burning, road side dusts and construction activities, to name a few. Aware of the complexities involved and given the paucity of funds, we have considered air quality monitoring as well as its use as a performance metric only for Million-Plus cities.

MCF Administrative Mechanism

Ambient air quality

7.111 For monitoring ambient air quality and disbursing grants to Million-Plus cities, the MoEF&CC shall act as a nodal ministry. In consultation with the respective State Governments, the Ministry shall develop city-wise and year-wise targets on ambient air quality, based on measurable indicators and outcomes. These will be made available in the public domain. The MoEF&CC shall evaluate the improvement in average annual concentrations of PM_{10} and $PM_{2.5}$. The report for 2020-21 made very specific recommendations for evaluation of air quality at para 5.3 (xiii) and Annex.5.3, based on the Ministry's written proposal that for 2021-22, the average annual value of 2021 (as calculated in January 2022) over average annual value of 2019 (as calculated in January 2020) will be taken. The same procedure should be adopted for calculations in subsequent years. However, as stated in para 7.36, *regrettably the MoEF&CC changed its position regarding its capacity to implement the parameters that it had proposed for the report for 2020-21. The Ministry, in its revised memorandum, submitted a different approach by recommending evaluation of performance grants based on improvement of the State on four parameters: They are: (a) strengthening of institutional framework; (b) source-wise cause analysis for air pollution; (c) progress on action plans and compliance of statutory guidelines; and (d) quantification of improvement in air quality. The relative weights assigned to these factors shift across the years with more emphasis on institution and capacity building in the first year to outcomes in the later years.*

7.112 Open waste burning on the streets, activities of small informal industries (for example, rice popping using burning tires), spontaneous combustion in landfills are significant, but overlooked, sources of pollution. Waste decomposition and poorly managed composting also affect air quality by releasing toxic gases as well as methane into the atmosphere. We are also of the view that ending open waste burning, proper solid waste management and composting at landfill sites can play significant role in air quality management. **Hence, we recommend that both informal burning as well as spontaneous combustion at landfills should be monitored carefully.** This could include:

a) Monitoring of open waste burning and chemical traces from waste burning at landfill sites as well as the development of an app to allow reporting by citizens by sending pictures.

b) Process-tracing of waste management in each city to identify where the breakdown in waste management occurs.

7.113 We also took feedback from other experts from the World Bank and WRI about our recommendations in the report for 2020-21. It appears that only persistent efforts lead to a reduction in the complex problem of poor air quality. Furthermore, the improvement in ambient air quality observed in 2020-21 may simply be the outcome of the lockdowns triggered by the Covid pandemic. In view of this, we recommend that a preparatory period of one year be provided to put in place the necessary equipment and procedures to move towards the desired objective of clean air in the medium term. Hence, in the year 2021-22, as suggested by MoEF&CC, **the relative weightages for assessment of city performance on air quality may be based on four parameters: (a) strengthening of the pollution monitoring mechanism; (b) source-wise cause analysis for air pollution; (c) progress on action plans and compliance of statutory guidelines; and (d) quantification of air quality improvement with the weights as prescribed in the Table 7.14.**

7.114 As explained in Annex 7.8, quantification of improvement in air quality has two parts, namely, reduction in particulate matter (PM_{98}) and increase in the number of good days according to improvement in the air quality index (AQI). Management of open waste burning and combustion at landfill sites should constitute an integral part of the air quality improvement index, with suitable weights arrived at on the basis of source-wise cause analysis for air pollution in specific urban agglomerations. We are also of the view that economic use of the landfills should be encouraged by allowing private sector involvement in these efforts to ensure the availability of sufficient and reliable financing. After 2021-22, for all the remaining four years of the award period, the entire weightage will be on the fourth parameter of quantification of improvement in air quality.

7.115 While the MoEF&CC shall handhold and monitor the urban local bodies in these efforts, the MoHUA shall take initiative in implementing parameters (b) , (c) and also management of open waste burning and combustion at landfill sites by the concerned urban local bodies, once the

MoEF&CC, as technical adviser, agrees to the source–wise analysis for air pollution and year-wise action plans from 2021-22 to 2025-26. Details are in Annex 7.8.

Table 7.14: Relative Weightage for City Performance Assessment*

Parameter	2021-22	2022-23	2023-24	2024-25	2025-26
Strengthening of pollution monitoring mechanism	10	-	-	-	-
Source-wise cause analysis for air pollution	10	-	-	-	-
Progress on action plans and compliance of statutory guidelines.	10	-	-	-	-
Quantification of air quality improvement	70	100	100	100	100
Total	**100**	**100**	**100**	**100**	**100**

* Details at Annex 7.8 A and 7.8 B

Air quality monitoring mechanism

7.116 The MoHUA may actively assist cities in reducing the sources of air pollution and improving air quality, as some of its programmes like the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), which has a component relating to development of electric transport, already deal with this. For the final monitoring of the outcome of air pollution reduction, the MoEF&CC shall recommend the release of MCF to the Million-Plus cities and the Ministry of Finance will release the funds directly to the State Government, with an intimation to the State Government, MoHUA and the MoEF&CC. These grants, based on performance, will be released as a single instalment during a year, which is to be decided by the MoEF&CC after consultation with the MoHUA and State Governments.

7.117 Each State Government and urban agglomeration shall sign a memorandum of understanding (MoU) with the MoEF&CC for a year-wise action plan, agreed outcomes to be achieved and quantum of funds to be released. Such action plan shall contain the city-wise details of sources of air pollution and the proposed measures to be taken by them such as deployment of sweeping machines, promotion of non-motorised transport (pedestrian and cycle), and paving the side flanks of the road with facility for water percolation. While the MOEF&CC shall closely involve the State Pollution Control Boards through NCAP grants for strengthening the air quality monitoring infrastructure, it shall build the infrastructure capacities of the Million-Plus cities in controlling air pollution.

7.118 In case of non-achievement of the highest improvement slab by cities, the balance fund would be utilised as follows: 50 per cent of the undisbursed amount will be distributed to the performing cities in a manner that top performers (>10 per cent improvement) get 20 per cent of the amount, second best performers (8-10 per cent improvement) get 17.5 per cent and third best performers (6-8 per cent improvement) get 12.5 per cent.

7.119 The MoEF&CC has also evidentially shown that ambient air quality is not a major problem in eight urban agglomerations with population of over a million on the south-western sea coast , namely, Kannur, Kochi, Kollam, Kozhikode, Malappuram, Thiruvananthapuram and Thrissur in Kerala and Coimbatore in Tamil Nadu. These cities are way below the NAMP threshold for breaching of pollution thresholds by particulate matter. The total grants allocated to these eight cities will, therefore, be linked to their performance in service level benchmarks on solid waste management-star rating, drinking water, water recycling and rainwater harvesting.

Service level benchmarks for drinking water supply, sanitation and solid waste management

7.120 Urbanisation directly contributes to waste generation, and unscientific waste handling causes health hazards and degradation of the urban environment. The definition of municipal solid waste includes refuse from households, non-hazardous solid waste discarded by industrial, commercial and institutional establishments, market waste, yard waste and street sweepings which are collected by the municipal authorities for disposal.

7.121 Waste generation rates are increasing, but with low recycling rates and treatment capacity as well as insufficient number of sanitary landfills, waste is mostly disposed of in dumpsites or burnt openly. To overcome this problem, *the first priority is* to address the most basic and pressing issues of *stopping dumping and providing collection and environmentally-sound disposal services to all citizens.* Landfilling has been practised for many years, has passed stringent environmental tests and is an established disposal method in environmentally cautious economies. It is currently the most financially accessible and environmentally acceptable solution for waste disposal in India. *A second priority* is to introduce *alternative methods of waste management in order to reduce waste disposal requirements.* Material recovery/recycling and other advanced treatments such as waste-to-energy should be pursued in parallel, depending on local conditions. In metro regions with large volumes of waste generation, for example, land availability and transport make landfill options expensive. In such cases, a mix of technologies including landfilling and more advanced solutions should be considered. *A third priority* is closure and rehabilitation of old dumpsites, to reduce exposure and risk to human health and the environment. *Closure and capping of existing dumpsites,* in compliance with environmental regulations, is an urgent and critical need. Local governments should also plan for long-term monitoring and management of these environmentally compromised sites and, depending on site characteristics and costs, land remediation/reclamation potential must be explored for future uses, including potential solid waste management disposal and treatment facilities.

7.122 The MoHUA, in its submission to the Commission, proposed that at least 50 per cent of buildings – newly-constructed residential buildings with plot size of 100 sq. meter or above, and all other buildings such as institutional, commercial, office premises, public buildings – in urban local bodies should have rain water harvesting structures. The Ministry also proposed minimising non-revenue water comprising (a) consumption which is authorised but not billed,

such as public stand posts; (b) apparent losses such as illegal water connections, water theft and metering inaccuracies; and (c) real losses which are leakages in the transmission and distribution networks. For ensuring good quality of water, at least 60 per cent of public water bodies in the urban local body should have water quality of 'D' and above in line with the water quality criteria prescribed by the CPCB in June 2019 in its report on *Indicative Guidelines for Restoration of Water Bodies.*

7.123 **We are of the view that solid waste management, quality water supply, water conservation, water recycling and rejuvenation are all significant national priorities and critical for the long-term sustainable development of cities. Thus, we recommend that the MoHUA shall act as a nodal ministry for determining the urban agglomeration eligible to get MCF funds for drinking water (including rainwater harvesting and recycling), sanitation and solid waste management criteria under service level benchmarks. The Ministry shall evaluate the performance in service level benchmark indicators of solid waste management (attainment of star ratings), water quality and water conservation methods.** Detailed performance criteria are at Annex 7.9.

7.124 As we already stated in the report for 2020-21, these performance grants related to service level benchmarks will be disbursed from the first year of the award period, that is 2021-22 onwards, as the States and these cities have been given adequate time and notice for putting in place a scheme and mechanism for implementation. In case of non-attainment of these benchmarks by a urban agglomeration, the MoHUA, in consultation with the State Government, shall distribute the unallocated grants amongst other non-Million-Plus cities in proportion to their population.

7.125 Each State Government and urban agglomeration shall sign a MoU with the MoHUA for year-wise action plans, agreed outcomes to be achieved and quantum of funds to be released, and make them available in the public domain. The performance of each urban agglomeration for each service level benchmark for the year will be placed in the public domain, including online, in a manner that is easily accessible to the citizens living within it. These grants based on performance will be released as a single instalment during a year, which is to be decided by the MoHUA after consultation with the State Government. On the recommendation of the MoHUA, the Ministry of Finance will release the funds directly to the State Government, with an intimation to it and the MoHUA.

Conditionalities for release of performance grants

7.126 As detailed in para 7.113 and 7.114, we recommend that, as advised by MoEF&CC, the relative weightages for assessment of city performance on air quality may be based on four parameters, namely, (a) strengthening of pollution monitoring mechanism, (b) source-wise cause analysis for air pollution, (c) progress on action plans and compliance of statutory guidelines, and

(d) quantification of air quality improvement. While MoEF&CC shall handhold and monitor the urban local bodies in these, the MoHUA shall take initiative in implementing (b) and (c) by the concerned urban local bodies, once the MoEF&CC, as technical adviser, agrees to the source-wise analysis for air pollution and year-wise action plans from 2021-22 to 2025-26.The details are in Annex 7.8. Hence, it is expected that all the stakeholders are ready for compliance of these conditions from 2021-22.

7.127 Similarly, steps outlined by us in the report for 2020-21 on measuring and publishing solid waste management-related service level benchmarks for basic services shall be followed. Since the stakeholders involved have been advised a year ahead and are expected to be ready for evaluation from 2021-22 onwards, the performance grants will be disbursed from the first year of our five-year award period, that is, 2021-22 onwards. Detailed criteria for performance grants enclosed for Category I cities is given at Annex 7.9. However, though the performance criteria are revolving around only a few service level benchmarks, it would be extremely important to ensure that publication and monitoring of all the service level benchmarks continues. This will facilitate transparency and accountability in service delivery and sustainability of the entire service level benchmarks initiative, which is now of almost fifteen years' vintage. Hence, we recommend that all the service-level benchmarks should be published on www.cityfinance.in along with the audited annual accounts.

Grants for Other Than Million-Plus Cities/ Towns

7.128 **The other than Million-Plus cities/towns shall also get the grants as per population. We recommend a basic grant of Rs. 82,859 crore for a period of five years for these cities.** State-wise details are at Annex 7.5.

Table 7.15: Grants for Non-Million-Plus Cities/Category-II Cities/Towns

(Rs. Crore)

In Rs. Crores	2021-22	2022-23	2023-24	2024-25	2025-26	Total Grants
Total Grants	**15136**	**15681**	**16579**	**17560**	**17903**	**82859**
Untied (40%)	*6054*	*6273*	*6631*	*7024*	*7161*	**33143**
Tied (60%)	*9082*	*9408*	*9948*	*10536*	*10742*	**49716**
(a) sanitation (including solid waste and waste water management) and solid waste management and attainment of star ratings as developed by the MoHUA	*4541*	*4704*	*4974*	*5268*	*5371*	**24858**
(b) drinking water, rainwater harvesting and water recycling	*4541*	*4704*	*4974*	*5268*	*5371*	**24858**

7.129 Some cities and towns may be part of some urban agglomeration, but they will still receive the grants under this component, as the MCF is an additionality in these cases. These cities have to fulfil the two entry level conditions indicated earlier for availing the grants – making both provisional and audited annual accounts available online in the public domain and the State notifying minimum floor rates for property tax and the property taxes growing in tandem with the GSDP growth rates. (details at paras 7.95 to 7.99, 7.101 and 7.102).

7.130 **Of the basic grants recommended to other than Million-Plus cities, 40 per cent is untied and can be used by the urban local bodies for felt needs under the eighteen subjects enshrined in the Twelfth Schedule, except for salaries and other establishment costs.**

7.131 An overview of the national priorities has already been given earlier. Further, in order to supplement the resources needed to fulfil these priorities, **we are of the view that the remaining 60 per cent of the grants should be tied to supporting and strengthening the delivery of basic services.** Thirty per cent of the total grants to be disbursed to urban local bodies shall be earmarked for sanitation and solid waste management and attainment of star ratings as developed by the MoHUA. This should include management and treatment of household waste, in particular human excreta and faecal sludge, in line with the principles highlighted in para 7.121 and movement towards more innovative and environment-friendly ways to tackle this problem. To improve the current situation, urban local bodies require technical assistance to: (a) move towards professionalising their delivery of solid waste management services and economic use of land filling, either public, private or jointly managed; (b) develop and implement strategic multi-year investment plans that address their local infrastructure and maintenance needs according to their waste generation trends; (c) mobilise resources to fund capital investments and cost-recovery mechanisms that will ensure the sustainability of operations and maintenance plans; and (d) set up monitoring systems to oversee compliance and maintain adequate standards of service provision. Adequate financing is essential to run any type of waste management system and hence private sector involvement in these efforts is recommended to ensure the availability of sufficient and reliable financing. In addition, 30 per cent of the total grants to be disbursed to urban local bodies shall be earmarked for drinking water, rainwater harvesting and water recycling. However, if any urban local body has fully saturated the needs of one category and there is no requirement of funds for that purpose, it can utilise the funds for the other category. Such saturation will also be certified by the respective urban local body and duly confirmed by the supervising authority of municipalities in the State Government. We also recommend that no further conditions or directions other than those already indicated by us should be imposed either by the Union or the State Governments, or any authority, for releasing the funds.

7.132 Intra-city distribution of these grants shall be on the basis of recommendations of the latest SFC. In case the SFC recommendation is not available for distribution within a particular category, allocations should be based on population and area in the ratio of 90:10. The States should also make allotment of grants on population basis for the Cantonment Boards within their territories.

Cantonment Boards

7.133 Cantonments are pioneering urban formations in India. According to Census 2011, there are sixty-two cantonments boards in the country, spread across seventeen States and two Union Territories (the National Capital Territory of Delhi and Jammu and Kashmir). The population living in cantonments accounts for around 0.56 per cent of the total urban population of the country.

Table 7.16: Features of Cantonment Boards and Municipalities

MUNICIPALITY		CANTONMENT BOARD	
Constitutional Provision	**Salient Feature**	**Cantonments Act, 2006**	**Salient Feature**
Article 243 U	Duration of municipality is five years.	Section 14	Duration of elected members of a Board is five years
Article 243 W	Powers, authority and responsibilities of municipality (as per Twelfth Schedule)	Various sections of Cantonments Act, 2006	All functions given in the Twelfth Schedule are assigned to the Cantonment Board.
Article 243 Z	Audit of accounts as per law framed by the State	Cantonment Account Code, 1924	Audit of Cantonment Board is done by Controller General Defence Accounts. CAG also carries out audit of deficit Boards
Article 243ZA	Elections to municipalities are conducted by the State Election Commission	Cantonment Electoral Rules, 2007	Electoral rolls are revised every year by the Cantonment Board and elections are conducted by the Union Government

7.134 The composition and nature of a Cantonment Board is similar to that of a municipality, and this makes it qualify as the local government of cantonment areas. Many State Governments (Karnataka, Madhya Pradesh, Jharkhand, Telangana etc.) have already started sharing their revenue proceeds or allocation of SFC grants with these Boards. However, other States keep these areas outside of their allocations. The FC-XIII was the first Commission to include recommendations for the Cantonment Boards stating that "t*he development plans for civilian areas within the cantonment areas (excluding areas under the active control of the forces) should be brought before the district planning committees.*" From the proposal of the Directorate General of Defence Estates, Ministry of Defence, it was learnt that Cantonment Boards are increasingly facing challenges of low revenue base, particularly in view of the taxes being subsumed under GST, low potential for property tax revenue as large areas in the cantonment are under the armed forces and commercial usage of property is quite limited. Cantonment Boards fall under the purview of Entry 3 in the Union List. **However, because of their similarity with municipalities, we are of the view that the State Governments, while deciding the share of**

basic grants among urban local bodies in non-Million-Plus cities, should allot grants on population basis for the Cantonment Boards falling within their territory. However, conditions applicable to other urban local bodies will also apply to the Cantonment Boards. A State-wise list of Boards along with the population is at Annex 7.7. The responsibility for making suitable arrangements on these lines for the Cantonment Boards falling within Union Territories lies with the Union Government.

Timely Release of Grants

7.135 **The grants recommended by us for rural local bodies and non-Million-Plus cities shall be released in two equal instalments each year in June and October, after ascertaining the entry level benchmarks and other requirements recommended by us. The States shall transfer grants-in-aid to the local governments within ten working days of having received them from the Union Government. Any delay beyond ten working days will require the State Governments to release the same with interest as per the effective rate of interest on market borrowings/State Development Loans (SDLs) for the previous year.**

Grants for Health to be Channelised through Local Governments

7.136 The Covid-19 pandemic has brought the limitations of India's health infrastructure to the fore. Apart from the tragic loss of life, the heavy and sudden burden of the pandemic has tended to overwhelm the health care system in almost all countries and result in a shortage of doctor and paramedics, hospital beds, intensive care units (ICUs) and quarantine facilities. We had initiated discussions on health-related issues by constituting a High-Level Group on Health Sector and based on intensive consultations with different stakeholders made observations on its proposed course of action in our Report for 2020-21. The vulnerabilities exposed by the pandemic, reinforced the need to review the earlier strategy and approach. Accordingly, consultations were held with the Ministry of Health and Family Welfare (MoHFW), State Governments, eminent health experts, and expert bodies including the World Bank. The States have an overwhelming share of 70 per cent of the total health related public expenditure, with the balance 30 per cent with the Union. Expenditure on primary health care accounts for a very large share of this expenditure and this, as our consultations brought out, is an area that requires to be strengthened within a short period. We recognise that in the efforts to achieve the ideal of universal health, rural and urban local bodies can play a key role in the delivery of primary health care services especially at the "cutting-edge" level. Strengthening the local governments in terms of resources, health infrastructure and capacity building can enable them to play a catalytic role in health care delivery, including in crisis times.

7.137 We have carefully analysed Articles 243 G and 243 W of the Constitution that deal with the powers, authority and responsibilities of panchayats and municipalities and also entrust them

with the implementation of schemes for economic development and social justice, including those in relation to the matters listed in the Eleventh and Twelfth Schedules. Health and sanitation, including hospitals, primary health centres and dispensaries and family welfare are listed at serial numbers 23 and 24 of the Eleventh Schedule for panchayats, and public health, sanitation conservancy and solid waste management at serial number 6 of the Twelfth Schedule for municipalities.

7.138 Many State Governments have not been proactive in transferring the functions, functionaries and funds to the local governments, as stipulated in the Constitution. The current pandemic has highlighted the critical role of panchayats and their potential to mobilise the community in managing local quarantines for the returning migrant workers, arranging cooked food and water for them and supporting the frontline health workers at the primary health care level. Kerala has established itself as an example where local governments and the staff of public health institutions effectively deliver healthcare at the local level in a collaborative framework (Box 7.4).

Box 7.4: Kerala Reforms for Effective Delivery of Healthcare Services

One major reform implemented in Kerala in 1996 was the transfer of 35-40 per cent of the State Government's development budget to local governments. This transfer was unconditional and was accompanied by training and granting of autonomy to local governments to develop and implement expenditure plans based on local needs and priorities. As part of the move towards decentralisation, sub centres and primary health centres (PHCs) in rural areas were brought under the overall supervision and control of gram panchayats, putting in place mechanisms for greater community involvement. Community health centres (CHCs) and taluk hospitals were under the purview of block panchayats. District hospitals and the management of State-sponsored and Centrally sponsored schemes (CSS) at the district level came under district panchayats. Similarly, CHCs and taluk hospitals in urban areas were transferred to municipalities and Municipal Corporations. While the total number of posts at sub-centres and PHCs remained under State Government control, appointment of temporary staff to offset vacancies came under the purview of Gram Panchayats. Staff working in local governments are State Government staff and the number of positions and transfers are determined at the State level. Local body members such as ward members who head the Village Health, Sanitation, and Nutrition Committees (VHNCs) are actively engaged in convergent action under the National Health Mission (NHM), which has the multipurpose health workers as convenors and ASHA and anganwadi workers as members. This structure has helped the government to engage more closely with the community, respond to local needs, catering to critical gaps like purchase of medicines and hiring of additional workforce as well as to invest in disease prevention activities. This has resulted in increased utilisation of PHCs and sub centres, particularly in villages with strong governance.

7.139 Taking a cue from the Kerala model, we considered this to be an opportune time to involve the third tier in the health sector and extend additional resources to it to strengthen the primary health system at the grass root level. We believe that the involvement of local

governments would also make the health system accountable to the people. We also sought an assessment of existing gaps in the health care delivery system in both rural and urban areas from the Union Government. We also analysed the existing interventions through different programmes, including the CSS of National Health Mission and Aysuhman Bharat. Based on our assessment, we have decided to provide a part of the grants earmarked for the third tier for support to primary healthcare. We have identified interventions that will directly lead to strengthening the primary health infrastructure and facilities in both rural and urban areas. The components identified along with the amount earmarked year-wise are given in Table 7.17. **Thus, a sum of Rs. 70,051 crore out of the grants for local governments have been earmarked for the health sector at the rural and urban local body levels over the award period of five years.**

Table 7.17: Sector-wise Break Up of Health Grants

(Rs. crore)

Total Health Grants	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Support for diagnostic infrastructure to the primary healthcare facilities	3478	3478	3653	3835	4028	**18472**
Sub centres	*1457*	*1457*	*1530*	*1607*	*1687*	*7738*
PHCs	*1627*	*1627*	*1708*	*1793*	*1884*	*8639*
Urban PHCs	*394*	*394*	*415*	*435*	*457*	*2095*
Block level public health units	994	994	1044	1096	1151	**5279**
Urban health and wellness centres (HWCs)	4525	4525	4751	4989	5238	**24028**
Building-less Sub centres, PHCs, CHCs	1350	1350	1417	1488	1562	**7167**
Conversion of rural PHCs and sub centres into health and wellness centre	2845	2845	2986	3136	3293	**15105**
Total Health Grants	**13192**	**13192**	**13851**	**14544**	**15272**	**70051**

Support for diagnostic infrastructure to the primary healthcare facilities

7.140 We intend to give support for diagnostic infrastructure in sub centres, PHCs and urban PHCs under the vision of comprehensive primary health care. Diagnostic services are critical for the delivery of health services, and these grants are intended to fully equip the primary health care facilities so that they can provide some necessary diagnostic services (Annex 7.10 A-I, A-II and A-III).

Block level public health units

7.141 Block public health units (BPHU) would integrate the functions of service delivery,

public health action, strengthened laboratory services for disease surveillance, diagnosis and public health and serve as the hub for health-related reporting.

7.142 The BPHUs will also improve decentralised planning and the preparation of block plans that feed into district plans. In addition, they will improve accountability for health outcomes. Given that the block health facility is co-terminus with the Block Panchayat /Panchayat Samiti/Taluka Panchayat, this has the potential to facilitate convergence with the panchayati raj institutions and the child development project officer of the Integrated Child Development Scheme (ICDS) programme. We propose to provide support to BPHUs in all the States (Annex 7.10 B).

Urban Health and Wellness Centres

7.143 A paradigm shift in urban primary health care is envisaged, based on the learning from the management of the Covid-19 pandemic, which has affected urban areas disproportionately. As part of this shift, universal comprehensive primary health care is planned to be provided through urban Ayushman Bharat-Health and Wellness Centres (AB-HWCs) and polyclinics. Such urban HWCs would enable decentralised delivery of primary health care to smaller populations, thereby increasing the reach to cover the vulnerable and marginalised. It is envisaged that the urban HWCs would create a mechanism for representatives of the Medical Administrative Staff and Resident Welfare Associations to disseminate information on public health issues at least once a month.

7.144 We propose to provide support for setting up urban HWCs in close collaboration with urban local bodies (Annex 7.10 C).

Building-less Sub centres, PHCs, CHCs

7.145 An assessment of infrastructure gaps in rural PHCs/Sub centres based on *Rural Health Statistics, 2019*, shows that 885 PHCs and 33,886 Sub centres do not have the necessary infrastructure to meet the targets of the National Health Policy, 2017. The Commission proposes to provide support for necessary infrastructure for 27,581 HWCs at the sub centre level and 681 HWCs at the primary health centre level in rural areas in close collaboration with rural local bodies (Annex 7.10 D).

Conversion of Rural PHCs and Sub Centres into Health and Wellness Centre

7.146 The Union Government has envisaged the creation of 1,50,000 HWCs by transforming existing sub centres and PHCs as the basic pillar of Ayushman Bharat to deliver comprehensive primary health care. We propose to provide support for necessary infrastructure for the conversion of rural PHCs and sub centres into HWCs so that they are equipped and staffed by an appropriately trained primary health care team, comprising of multi-purpose workers (male and

female) and ASHAs and led by a mid-level health provider. PHCs linked to a cluster of HWCs would serve as the first point of referral for many disease conditions (Annex 7.10 E).

7.147 **Involving panchayati raj institutions as supervising agencies in these primary health care institutions would strengthen the overall primary health care system. Hence, we recommend year-wise State-wise fund allocation spread over five years for this purpose** (Annex 7.10). A Committee headed by the Secretary, MoHFW, and comprising Principal Secretaries of Health of all States should be set up to draw a time line of deliverables and outcomes for each of the five years along with a definite mechanism for flow and utilisation of these grants. This mechanism needs to be in place by April 2021 for the first instalment of funds to start flowing by July 2021. Similarly at the State level, a committee under the Chief Secretary and comprising officials of the State departments of Health, Panchayat Raj and Urban Affairs and select representatives from all three tiers of rural and urban local bodies should be in place by April 2021 and with plans ready for implementation by July 2021. A similar committee also needs to be constituted at the district level under the District Collector/Deputy Commissioner. Thereafter, subsequent steps should be taken at both the Union and State levels in line with plans agreed upon in the respective Committees. We expect that the persons charged with this responsibility at each level of the Union and State Governments will ensure strict adherence to timelines and outcomes as set out in the agreed policy. We also recommend that representatives of the urban local bodies and all three levels of panchayati raj institutions should be involved by entrusting them, in a phased manner, with the responsibility of supervising and managing the delivery of health services. **We also recommend that no conditions or directions other than those indicated in this paragraph should be imposed either by the Union or the State Governments, or any authority, for releasing the grants for health.**

Competition-based Grants for Incubation of New Cities

7.148 The Covid-19 pandemic has brought into sharp focus the well-known problem of inadequacy of appropriate housing and infrastructure facilities in urban areas. Given the trend in urbanisation, the country needs both rejuvenation of old cities as well as the setting up of new cities. The challenge of setting up infrastructure, such as laying of roads, water and sewer lines and provision of sites for schools and colleges and parks in greenfield cities can be less daunting than the problem of setting up such facilities in old established cities. On the other hand, establishment of greenfield cities runs into the problem of land acquisition and rehabilitation. Paradoxically, these problems are more pronounced in States that, because of their higher density of population, need such new cities more than sparsely populated States. Given these complexities, it is better to start on a pilot basis and, hence, **we recommend a performance-based challenge fund of Rs. 8,000 crore to States for incubation of new cities.** The amount available for each proposed new city is Rs. 1,000 crore and a State can have only one new city under the proposed scheme. Thus, a maximum of eight States can avail this grant for eight new cities over the award period of the Commission.

7.149 Determining the viability of building a proposed new city is a challenging proposition. The success of a new city depends on progress in areas such as land acquisition, having a masterplan, obtaining the necessary regulatory approvals, establishing secure source of water, gas and power supply, telecommunication, road, rail and air connectivity, solid and liquid waste management systems, securing the necessary finances for building the new city and establishing a revenue model for the urban local body to ensure its financial viability. Thus, the MoHUA will need to set up an expert committee, which will include independent domain experts and representatives from State Governments, to specify the minimum eligibility conditions to compete for the award. This committee will also have to work out the bidding parameters by which the top eight among the qualifying applicants will be selected. Since the proposed model is in the nature of viability gap funding, the bid parameter will need to be related to the cost in terms of our award per 100,000 residents in the proposed city (or some similar criterion), and calibrated in a manner that the funds are utilised - with commensurate performance and desired outcomes - within the award period, that is, before March 2026.

7.150 One area of concern in this context is the downside risk of delays in implementation of the project, including its abandonment mid-stream. To protect against this risk, the expert committee will have to schedule the release of tranches of the Finance Commission award to a new city in step with the completion of various stages of the project, according to a pre-agreed schedule. Providing a level playing field to all States in competing for the award for incubation of new cities, laying down rules of the competition process and complete transparency in the selection of the winners will be critical for the success of the pilot project.

7.151 We recommend that:

(i) the MoHUA set up an expert committee, which will include some independent domain experts and representatives of State Governments, to specify, by 31 January 2022, the minimum eligibility conditions for competing for the award and how the funds will be released to the winners;

(ii) the expert committee should (a) by 31 March 2022, specify the bid parameter for evaluating competing proposals by States, make it publicly available and call for bids from States by 30 September 2022; (b) announce the winners by 31 December 2022; and (c) recommend the release of the first tranche of the grant by 31 March 2023, and indicate how progress of the project should be evaluated vis-à-vis specified benchmarks for release of subsequent tranche(s).

Shared Municipal Services - Grants for National Data Centre

7.152 There is an urgent need to create an enabling ecosystem for States and urban local bodies to enhance own revenues, access municipal borrowings and implement shared municipal services. An institutionalised mechanism needs to be established to make municipalities "market worthy", with active participation of the financial services sector. The institutional arrangement

needs to be undertaken for implementation of various reforms at the urban local body level like publishing of documents, creating model PPP contracts, modernising municipal budgeting, evolving a national municipal borrowing framework including provisions equivalent to the Fiscal Responsibility and Budget Management Act for urban local bodies.

7.153 Municipal Shared Services Centres are intended to handle the following kinds of services: (a) issue of birth/death certificate, trade license, grievance redressal and other certificates/approvals/collections to citizens by using a model similar to the passport seva kendras; (b) function as a centralised processing centres for accounting, vendor payments, payroll processing etc., like the centre for income tax refunds; (c) doorstep/field services such as collections, maintenance and other last-mile field-level municipal services for which field staff can be optimised across municipalities and shared among a cluster of smaller urban local bodies.

7.154 The MoHUA will need to undertake both ecosystem-building as well as hand-holding for implementation of the Municipal Shared Services Centres. **We recommend a grant of Rs. 450 crore for this.**

Tax on Professions

Rationalising Professions Tax

7.155 The power of the State Legislature to impose a professions tax is derived from the Seventh Schedule, which states that no one shall be required to pay more than Rs. 2,500 by way of professions tax to any State or any local authority within that State. The initial tax limit of Rs. 50 per annum per person, which was raised to Rs. 250 per annum in 1950 and subsequently to Rs. 2,500 per annum in 1988 by the Constitution (Sixtieth Amendment) Act, 1988. At present, a majority of the States are levying professions tax. In some States, the levy is generally applicable to all persons engaged in any employment or in any profession whereas in the others it is only for enumerated professions. In some States, the tax is levied and collected by the State, but in others, municipal bodies also levy and collect the tax under a State legislation.

7.156 The FC-XI and subsequent Commissions recommended enhancement of the ceiling of Rs. 2,500, with FC-XIV recommending that the limit may be increased to Rs. 12,000. Further, while the FC-XI and FC-XIII recommended that this ceiling be changed through a parliamentary legislation, the FC-XIV suggested it be done through a Constitutional amendment. It further recommended that the amendment may also vest the power to impose limits on Parliament, with the caveat that the limits should adhere to the Finance Commission's recommendations and the Union Government should prescribe a uniform limit for all States. **Since the ceiling for professions tax has not been revised for the last three decades, it is time that the relevant amendment to the Constitution is carried out on a priority basis.** This area is explored in detail in the Chapter 5 on Resource Mobilisation.

Summary of Recommendations

i. The total size of the grant to local governments should be Rs. 4,36,361 crore for the period 2021-26. We favour a fixed amount rather than a proportion of the divisible pool of taxes to ensure greater predictability of the quantum and timing of fund flow.

(para 7.60)

ii. Of these total grants, Rs. 8,000 crore is performance-based grants for incubation of new cities and Rs. 450 crore is for shared municipal services. A sum of Rs. 2,36,805 crore is earmarked for rural local bodies, Rs. 1,21,055 crore for urban local bodies and Rs. 70,051 crore for health grants through local governments.

(para 7.61, 7.62 and 7.93)

iii. For inter se distribution among States for rural and urban local bodies, weightage of 90 per cent should be given to population and 10 per cent to the area of the State. The grant to each State is detailed at Annex 7.4.

(para 7.62 and 7.93)

iv. We recommend that all States which have not done so, must constitute SFCs, act upon their recommendations and lay the explanatory memorandum as to the action taken thereon before the State legislature on or before March 2024. After March 2024, no grants should be released to a State that has not complied with the Constitutional provisions in respect of the SFC and these conditions. The MoPR will certify the compliance of all Constitutional provisions by a State in this respect before the release of their share of grants for 2024-25 and 2025-26.

(para 7.58)

v. The entry level condition for rural and urban local bodies availing any grants due to them is having both provisional and audited accounts online in the public domain. States will receive grants for those rural and urban local bodies that have their provisional accounts for the previous year and audited accounts for the year before the previous, available online.

(para 7.76 to 7.78, 7.95 and 7.96)

vi. For urban local bodies, apart from the entry level condition of having both provisional and audited accounts online in the public domain, after 2021-22, fixation of minimum floor for property tax rates by the relevant State followed by consistent improvement in the collection of property taxes in tandem with the growth rate of State's own GSDP will be an additional mandatory pre-condition.

(para 7.95 to 7.99, 7.101 and 7.102)

vii. To supplement the resources needed to fulfil national priorities, 60 per cent of the grants to rural local bodies should be tied to supporting and strengthening the delivery of two categories of basic services: (a) sanitation and maintenance of ODF status; and (b) drinking water, rain water harvesting and water recycling.

(para 7.84 and 7.85)

viii. Urban local bodies have been categorised into two groups, based on population, and different norms have been used for flow of grants to each, based on their specific needs and aspirations. For cities with million plus population (Million-Plus cities), 100 per cent of the grants are performance-linked through the Million-Plus Cities Challenge Fund (MCF). Basic grants are proposed only for cities/towns having a population of less than a million.

(para 7.104, 7.105 and 7.128)

ix. Category I cities (urban agglomerations with a population of more than one million) will be treated as a single unit for monitoring of performance indicators of ambient air quality and service level benchmarks. One-third of the total MCF of each city is earmarked for achieving ambient air quality. The balance two-third of the city-wise MCF is earmarked for achieving service level benchmarks for drinking water (including rainwater harvesting and recycling) and solid waste management. For drinking water (including rainwater harvesting and recycling) and sanitation and solid waste management criteria under service level benchmarks, the MoHUA shall act as the nodal ministry for determining the eligible urban local bodies.

(para 7.111 to 7.127)

x. Sixty per cent of the basic grants for urban local bodies in non-Million-Plus cities should be tied to supporting and strengthening the delivery of: (a) sanitation and solid waste management and attainment of star ratings as developed by the MoHUA; and (b) drinking water, rain water harvesting and water recycling.

(para 7.130 and 7.131)

xi. We recommend that for the five-year award period (2021-22 to 2025-26) grants should go to all the three tiers of panchayati raj institutions.Since no resident of India should be denied a share of the local body grants, these should be distributed to even those areas which are not required to have panchayats (Fifth and Sixth Schedule areas and Excluded Areas) for augmenting their resources to provide basic services by similar local level bodies.

(para 7.63 to 7.68)

xii. State Governments, while deciding the share of basic grant among various urban local bodies in cities other than Million-Plus cities, shall make allotment of grants (only under basic grants) on a per capita basis for the Cantonment Boards falling within the State.

(para 7.133 and 7.134)

xiii. The grants recommended by us for rural local bodies and non-Million-Plus cities shall be released in two equal instalments each year in June and October after ascertaining the entry level benchmarks and other requirements recommended by us. The States shall transfer grants-in-aid to the local bodies within ten working days of having received them from the Union Government. Any delay beyond ten working days will require the State Governments to release the same with interest as per the effective rate of interest on market borrowings/State Development Loans for the previous year.

(para 7.135)

xiv. Since health grants are meant for addressing the gaps in primary health infrastructure, the allocations would not be on a per capita basis for States or for local governments. Based on the MoHFW proposal, the recommended year-wise State-wise fund allocation for this purpose is provided at Annex 7.10. The MoHFW shall closely coordinate with respective State Governments and work out a mechanism for flow and utilisation of these health grants and also involve panchayati raj institutions at all three levels by entrusting them with the responsibility to supervise and manage the delivery of health services in a phased manner. No conditions or directions other than those indicated in para 7.147 should be imposed either by the Union or the State Governments, or any authority, for releasing the grants for health.

(para 7.136 to 7.147)

xv. A sum of Rs. 8,000 crore is recommended to States as grants for incubation of new cities and Rs. 450 crore for facilitating shared municipal services.

(para 7.148 to 7.154)

xvi. Since the ceiling for professions tax has not been revised for the last three decades, it is time that the relevant amendment to the Constitution is carried out on a priority basis.

(para 7.155 and 7.156)

Chapter 8

Disaster Risk Management

Successive Finance Commissions have followed an expenditure-based approach to determine the allocation of funds for disaster management to State Governments. In a significant departure from the past, in our Report for the Year 2020-21, we had recommended a new methodology, which is a combination of capacity (as reflected through past expenditure), risk exposure (area and population) and hazard and vulnerability (disaster risk index) for determining State-wise allocation for disaster management. This shall be continued for the five-year award period from 2021-22 to 2025-26 also.

Similarly, we have recommended continuation of mitigation funds at both the Union and State levels – National Disaster Mitigation Fund (NDMF) and State Disaster Mitigation Funds – to aid the implementation of mitigation measures in States for the award period, as provided in the Disaster Management Act, 2005. The six types of earmarked allocations within the overall allocation of National Disaster Response Fund and NDMF shall also continue in order to address certain priorities related to preparedness, mitigation and recovery through special initiatives.

A set of ideas and innovations which promote market-based instruments of risk management and identify alternative sources of funding has also been presented.

8.1 Paragraph 9 of the Terms of Reference (ToR) mandates the Commission to "review the present arrangements on financing Disaster Management initiatives, with reference to the funds constituted under the Disaster Management Act, 2005 (53 of 2005), and make appropriate recommendations thereon". Further, Para 7 requires the Commission to "consider proposing measurable performance-based incentives for States, at the appropriate level of government, in following areas: … (iii) Achievements in implementation of flagship schemes of Government of India, disaster resilient infrastructure, sustainable development goals, and quality of expenditure". Subsequently, we were asked to submit two reports, one for the year 2020-21 and a final report for an extended period of 2021-22 to 2025-26. To this end, we had already made our recommendations in Chapter 6 of the Report for the Year 2020-21.

8.2 In this first report, we briefly outlined the current mechanism of disaster risk management. We also gave fifteen recommendations (i to xv) at para 6.4 of the chapter on Disaster Risk Management. These include setting up of mitigation funds, allocation of funds at national and state level, a new methodology to estimate the disaster risk management fund and the allocation of funds to various States to cover both mitigation and response. From the total earmarked grants for disaster management, both for the national and State corpus, 20 per cent was

earmarked for mitigation and the remaining 80 per cent for the response fund. The response fund was further apportioned into three windows, namely Response and Relief, Recovery and Reconstruction and Capacity Building in the ratio of 50.0:37.5:12.5. Further, four priorities were identified under the National Disaster Mitigation Fund (NDMF) and two priorities under the National Disaster Response Fund (NDRF).

8.3 We reviewed these recommendations along with feedback from the Union and the State Governments. We also examined the context of the unprecedented Covid-19 pandemic within the current framework of disaster management in India. Recommendations for disaster risk management covering the period from 2021-22 to 2025-26 are made after considering all relevant issues.

Background

8.4 Disaster management, as a subject and as a facet of Union-State relations, has evolved over the years. Initially, the focus was largely on disaster relief. Earlier Finance Commissions too used the term 'disaster relief' while drafting their recommendations. However, the Disaster Management Act expanded the area of concern and action of both the Union and State Governments to a wide range of disaster management functions, which included relief and response, preparedness and mitigation, as well as recovery and reconstruction.

8.5 The Act also led to the creation of a new institutional structure for disaster management, with the setting up of the National Disaster Management Authority (NDMA) and State Disaster Management Authorities (SDMAs). The role of these institutions and the functions mandated by the Act have influenced the recommendations of Thirteenth and Fourteenth Finance Commissions (FC-XIII and FC-XIV). Successive Finance Commissions have taken a gradual and incremental approach to strengthening financial arrangements for disaster management. Based on their recommendations, a well-structured scheme of funds at the Union and State levels has been institutionalised, supported through guidelines and norms for assistance.

8.6 This scheme of funding for disasters has provided State Governments with a dependable source of assistance to meet their disaster response and relief needs. Further, these funds could be augmented and replenished through a national disaster fund when disasters of rare severity necessitate it. The guidelines and norms for assistance have been periodically revised, resulting in enhanced provisions for those affected by disasters.

8.7 A review of these arrangements every five years provides Finance Commissions an opportunity to introduce innovations in the funding arrangements as well as to improve the efficiency and equity of disaster management funds. The Finance Commissions are called upon to address a much broader task than allocating financial resources to States based on a set of considerations. This broader task is equally about reviewing the context of risk and vulnerability in the country, improving the institutional and policy aspects of disaster management, expanding

its scope, and encouraging more stakeholders to participate in an area which has a direct bearing on the physical safety, security and well-being of the people.

8.8 Over the years, Finance Commissions, through their recommendations, have steadily promoted innovation and reforms in the way governments at different levels support disaster management. We intend to follow the same path and precedent, though with a greater sense of urgency in view of the frequency of disasters and their mounting impacts in human and economic terms.

The Evolving Context of Finance Commission's Recommendations

8.9 Several considerations have guided the process of review and framing of our recommendations. The most important of these has been the ToR. A second important consideration has been the impact of climate change. The country has witnessed large-scale floods in different States (Uttarakhand, Tamil Nadu, Assam, Bihar and Kerala), cyclones; Phailin and Hudud (Odisha), Okchi (Tamil Nadu), Titali (Andhra Pradesh and Odisha), Gaja (Kerala and Tamil Nadu), Bulbul, Fani and Amphan (West Bengal) and successive droughts (Rajasthan, Maharashtra, Karnataka, Andhra Pradesh, and Telangana) over the last five years.

8.10 Third, the NDMA and SDMAs, which have become well-established institutions, have expanded the scope of disaster management beyond the traditional response-and-relief functions to include preparedness, mitigation and recovery and reconstruction. Disaster management has become a more specialised area internationally, with a rich body of literature devoted to risk assessment, risk transfer and risk reduction. Its professional needs have also increased at the national and state levels, as States have undertaken diverse initiatives in different areas of disaster management. The involvement of non-government organisations (NGOs) and the private sector has also helped in expanding participation in disaster management activities, as evidenced recently in some disasters of rare severity.

8.11 Fourth, the Union government has used the provisions of the Disaster Management Act for the management of the Covid-19 pandemic. For such events in the past, State Governments used the provisions of the Epidemic Diseases Act, 1897. As epidemics/pandemics are not explicitly provided in the Seventh Schedule of the Constitution – except the related broader subjects like 'public health' and related entries in the State List and 'preventing the spread of diseases from one state to another' in the Concurrent list – some observers had felt that the Constitutional framework leaves scope for improvements in the clarity of the roles of the Union and States. The Second Administrative Reforms Commission (2006) had recommended the addition of an entry in the Concurrent List for "Management of emergencies, natural or man-made". The National Commission to Review the Working of the Constitution (2002) had also recommended for similar action. It is interesting to note that even for passing the Disaster Management Act in 2005, the Parliament had to trace its legislative competence to the Concurrent List entry at No. 23 - 'Social security and social insurance: employment and unemployment'. We

are given to understand that the Ministry of Home Affairs has constituted a task force for filling the legislative vacuum on the ambit of disasters. In view of this, we are hopeful that the legislative framework to deal with Covid-19 kind of pandemics and related issues would get streamlined soon and we chose to deal with this issue in the chapter on the health sector rather than in the disaster risk management chapter.

8.12 Fifth, the insurance industry has witnessed significant growth in the last decade, especially after the increase in the limit on foreign direct investment in the sector to 49 per cent under the automatic route in 2015-16. Leading global insurance companies have set up operations in India in collaboration with domestic players and a range of life and non-life insurance services and products have been introduced in the market. As household income has increased, the insurance sector in India is likely to experience strong growth through product innovation, lower premiums, better claims management and regulatory supervision. The insurance sector can be leveraged to substantially reduce the financial burden of disaster management by households, particularly well-to-do ones.

8.13 Finally, India is a signatory to three large global frameworks, which were created in 2015: Sustainable Development Goals (SDGs), Paris Agreement on Climate Change and Sendai Framework on Disaster Risk Reduction (SFDRR).[1] These frameworks call for a set of inter-related actions on the part of governments and other stakeholders, which improve mitigation and adaptation, strengthen regulations, reduce risks and vulnerabilities and build greater resilience at the level of the state and civil society. India's commitment to these frameworks call for enabling actions so that we achieve the key indicators of these development frameworks.

8.14 In combating climate change, India has launched eight missions under the National Action Plan on Climate Change (NAPCC) in the specific areas of solar energy, energy efficiency, water, agriculture, Himalayan eco-system, sustainable habitat, green India and strategic knowledge on climate change. Climate actions at the State level are based on the State Action Plans on Climate Change (SAPCC). Thirty-three States/Union Territories have prepared their SAPCCs in line with the NAPCC, taking into account their specific issues relating to climate change. These initiatives, among other things, outline sector-specific and cross-sectoral priority climate actions. The Union Government is also implementing the National Adaptation Fund for Climate Change (NAFCC) to support adaptation measures of States/Union Territories in areas that are particularly vulnerable to the adverse impacts of climate change. Under the NAFCC, thirty projects have been sanctioned in twenty-seven States to tackle the issues related to adaptation in agriculture, water, forestry, etc. The Government of India has also embarked upon ambitious actions in the areas of renewable energy, afforestation, energy efficiency and urban development. As a result of these efforts, India has achieved 21 per cent reduction in the emission intensity of its gross domestic product (GDP) between 2005 and 2014, thereby achieving its pre-2020 voluntary goal of reducing the emission intensity of GDP by 20-25 per cent from 2005

[1] It is called the Sendai framework as it was adopted by the United Nations member states between 14 and 18 March 2015 at the World Conference on Disaster Risk Reduction held in Sendai, Japan.

levels by 2020.[2] The success of the missions launched under the NAPCC is key to India's commitment to the Paris Agreement to combat climate change and achieve its SDGs.

Studies and International Workshop

8.15 Given the changing context and priorities, we commissioned two studies, in collaboration with the NDMA, to prepare our recommendations. Our recommendations have benefitted from these studies and other workshops that we organised in collaboration with the United Nations Development Programme (UNDP) and the World Bank. In one of these, the UNDP, conducted a review of disaster risk financing practices and presented several recommendations, which cover allocations for the SDRFs and the NDRF, diversification of funding windows and sources of resource mobilisation. The second study, undertaken by the Indian Institute for Human Settlements, Bengaluru has focused on urban risks and vulnerabilities and the capacities and resources, which are required to be addressed by the urban local bodies. An international workshop on disaster risk financing held in Delhi on 12 and 13 November 2018 brought together several international experts, senior government officials, and representatives from the private sector and the insurance industry to discuss various aspects of disaster risk financing. The workshop presented several ideas about the size and allocation of disaster funds and the need for diversifying financial instruments and services for improved risk management.

States' Priorities

8.16 State Governments have also submitted memorandums to the Commission. These include several demands which are broadly similar to what they had raised before previous Finance Commissions. The key demands are:

i. SDRF allocation for States needs to be augmented. A majority of States recommended that the existing criteria for allocation, which is based on past expenditures, needs to be reviewed and the considerations of risk and vulnerability need to be taken into account. However, a few States were of the opinion that allocations should continue to be based on past expenditures.

ii. Some States were of the view that the SDRF should be financed entirely by the Union Government, as they find it difficult to provide their matching contribution.

iii. States and SDMAs should have greater flexibility in disbursing relief. The norms of assistance for the SDRF and NDRF are nationally determined, and do not always have flexibility for the unique needs of certain areas, especially remote and hilly terrains.

iv. The list of items considered for, and norms of, assistance included in the guidelines for the NDRF and SDRF should be revised and improved.

[2] India's Second Biennial Report 2018.

v. The process of assessment for the determination of Union assistance through the NDRF as well as its release should be made faster and more efficient and transparent.

vi. The existing norms of assistance should include more resources for recovery and reconstruction. At present, the allocations are not sufficient for the reconstruction of housing and infrastructure.

vii. Separate allocations need to be made for the resettlement of people in floodplains, coastal areas and hills who have been displaced as a result of the impact of climate change.

viii. Mitigation, which has emerged as an important component of disaster management, should be funded through Union allocation. States are currently funding risk reduction measures on their own, but these funds are insufficient for the task.

ix. States should receive allocation for preparedness measures, which improves their ability to act upon early warnings. These measures would include setting up State Disaster Response Forces, which reduces dependence upon the armed forces, and the National Disaster Response Force.

x. Capacity-building grants introduced by the FC-XIII, which had been very useful in building state capacities in disaster management but were discontinued by FC-XIV, should be restored.

xi. The process of adjustment from the SDRF while releasing the NDRF allocation to the States needs to be reviewed.

xii. States should be provided greater technical assistance through national agencies for supporting their disaster management functions.

xiii. Concerted effort needs to be made to reduce the growing number of incidents of death by lightning. Families of people who die due to lightning should get ex gratia assistance.

xiv. Incidents of elephant attacks, lightning, mining-related fire hazards, snakebites, heatwaves, river and coastal erosion and public health disasters such as Japanese encephalitis, Nipah and the Covid-19 pandemic must be included in the eligible list of disasters for funding support from SDRF and NDRF.

xv. The amount earmarked for State-specific disasters should be increased up to 25 per cent from the current 10 per cent of SDRF allocation, in view of the large number of local calamities not covered under the national list.

Views from Union Agencies and Ministries

8.17 The NDMA has long advocated the setting up of a NDMF and State Disaster Mitigation Funds (SDMFs) so that resources for investment in risk reduction are available. Further, a separate funding window will help implement softer mitigation measures. Such funding is

available at present under scattered heads like Climate Change Fund and Sustainability Mission, among others.

8.18 The UNDP study refers to the Advisory Committee of the NDMA emphasising that the release and utilisation of financial resources from the NDRF and SDRFs should lead to measurable outcomes in terms of preparedness and response at the national and state levels, respectively. The Advisory Committee also noted that capacity building for disaster management should be funded through these mechanisms and suggested that there should be greater accountability in the utilisation of these resources. The National Institute for Disaster Management (NIDM) has also suggested the need for a separate funding for preparedness, capacity building, creating awareness, innovation and research. It has suggested allocations for State Institutes for Disaster Management (SIDMs), which are the State resource centres, for strengthening the disaster management system at the State level.

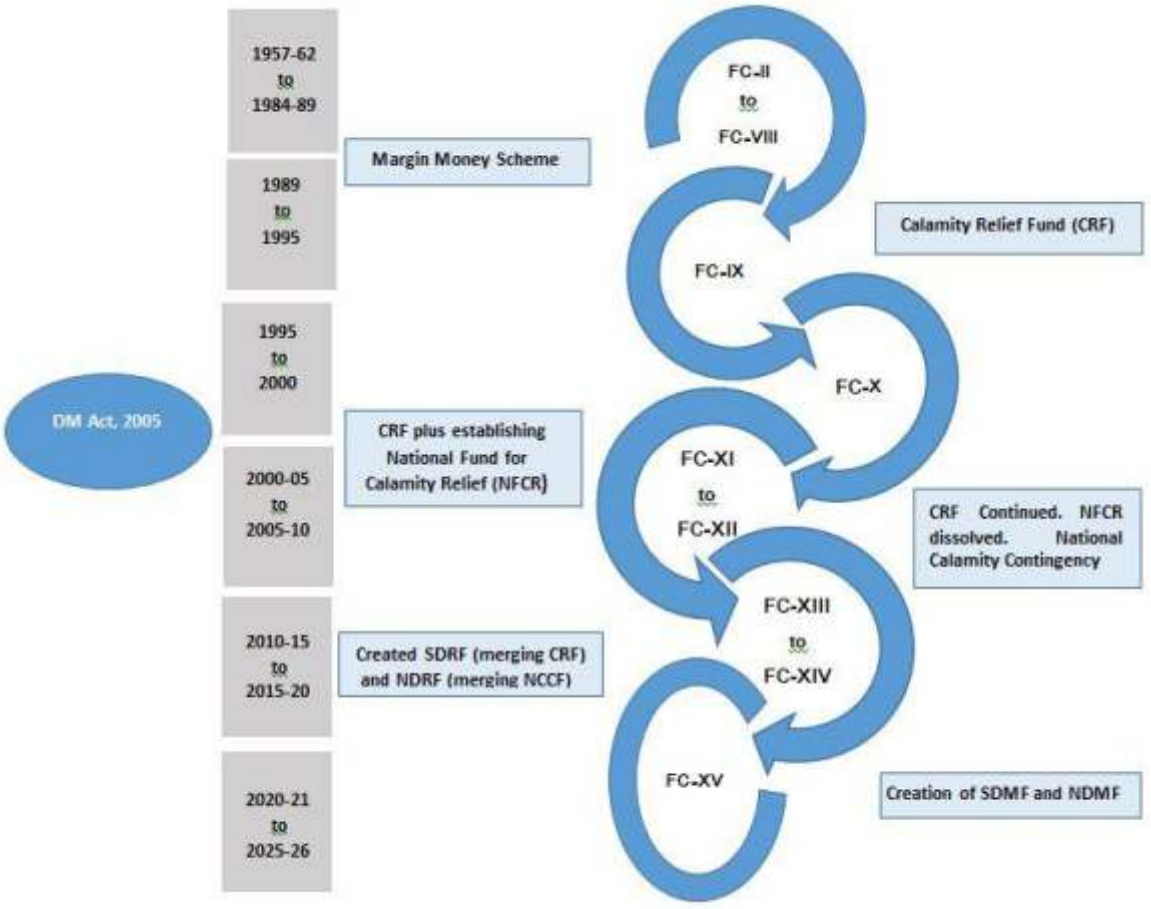
8.19 The ministries expressed their sectoral concerns. The Ministry of Agriculture and Farmers' Welfare has introduced new norms for the declaration of drought, based on a range of indicators, which the States need to follow. It has also suggested that the States should promote the Pradhan Mantri Fasal Bima Yojana (PMFBY) for reducing losses suffered by farmers. The Ministry of Home Affairs has suggested that the SDRF allocations be increased significantly and requested for financial assistance to strengthen and support disaster governance at State and district levels as well as the National Disaster Response Force. The Ministry of Finance suggested that the Commission may consider size of population, area, fiscal discipline and the vulnerability to disasters of each State while determining the size of the SDRF corpus and also earmark allocation for undertaking measures related to disaster preparedness. Further, it has also recommended the setting up and earmarking of allocation for the NDMF. The Ministry of Defence has requested for a review of procedures of funding disaster relief so that reimbursements to defence forces for disaster relief work are received in a near real time frame.

8.20 These priorities and views are based on the actual experiences of dealing with disasters. It casts an important responsibility on us to respond to these clearly and improve the existing system. In doing so, we need to place our recommendations in the context of the disaster risk financing system that has evolved over the years through the wisdom of previous Finance Commissions. We need to improve the existing system in a way that is fiscally sustainable, empowers State and local governments and retains the strength of our system while introducing innovations based on international practices. In brief, these improvements and innovations represent continuity with change. The Commission interacted extensively with the NDMA and other specialists in the field and is happy to note that expertise in disaster management have emerged with the necessary capacity and resources to take reforms and innovations to their logical conclusions.

Evolution of Disaster Risk Financing

8.21 The evolution of disaster risk financing in India over more than six decades in line with recommendations of successive Finance Commissions has been mapped in Figure 8.1. The important aspects of recommendations relating to disaster management from the FC-II (1957-62) to this Commission (FC-XV) are summarised and provided in Annex 8.1.

Figure 8.1: Evolution of Disaster Risk Financing in India



Key Features of Disaster Risk Financing

8.22 The mechanism of disaster risk financing in India reflects the distribution of responsibility in respect of disaster management. It is the State Governments which respond immediately to disasters – organising rescue, evacuation and relief and providing people with assistance. After the disaster event, the responsibility for recovery and reconstruction also lies primarily with the State Governments. The Union Government extends secondary support

through deploying the National Disaster Response Force and the armed forces at the request of State Governments. The Union Government and its agencies also provide financial and technical assistance whenever necessary.

8.23 As a result, it is the State Governments which incur most of the expenditures on disaster management. These expenditures are, at present, met through the SDRF. When States exhaust their SDRF resources, they can request financial assistance through the NDRF by submitting memorandums to the Union Government. The NDRF, which is set up at the Union level, replenishes and reinforces the State funds following a set of guidelines. This has been the central feature of disaster risk financing in India, and it has met the requirements of States for disaster assistance on a predictable basis. The broader impact of these allocations is reflected in improved early warning and preparedness nationally and, consequently, reduced human mortality over the years. However, as disaster risk has increased – both in terms of incidence as well as economic impact – the existing disaster risk financing arrangements appear less than adequate in terms of both source and application.

Aggregate Expenditures on Disasters

8.24 *The total expenditure on disaster response and relief across twenty-eight States between 2011 and 2019 has been Rs. 1,66,702 crore (Table 8.1). A steep jump in annual expenditure from 2015-16 could be explained by the upward revision of the norms of assistance in 2015.*

Table 8.1: Aggregate Expenditure of 28 States on Disasters

(Rs. crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Aggregate States' expenditure on disasters*	14008	11425	16923	18416	32952	27727	15803	29448

* Major Head 2245 + expenditure incurred directly from Public Account

Source: Finance Accounts, CAG

8.25 It is observed that, in addition to the assistance from the SDRF and NDRF, State Governments have also been allocating funds from their budgetary resources for response and relief. State Governments also availed of World Bank loans for supporting larger recovery and reconstruction projects.

Conceptual Framework for Disaster Risk Financing

8.26 These expenditures on response and relief need to be viewed in two ways: one, how they impact public finances, and two, whether they help the people reduce their risk and vulnerability. However, it is also time to recognise that such a huge expenditure should also take poverty and disaster risk into consideration, as these are closely linked.

8.27 In public finance, disasters are looked upon as a contingent liability of the state. Contingent liabilities refer to (government) obligations that are triggered when a potential, but uncertain, future event occurs. The allocations made through the SDRF and NDRF help governments meet their contingent liabilities. However, the existing approach to meeting the contingent liabilities has two weaknesses. First, it is aimed at *meeting* the contingent liabilities, not *reducing* them. Governments should invest in estimating risk exposure and taking appropriate measures to reduce contingent liabilities. Second, the SDRF and NDRF, which function as dedicated reserve funds, are presently the only financial mechanisms for meeting the contingent liabilities. When risk exposure is high and contingent liabilities could increase significantly, multiple instruments and funding windows need to be introduced to meet these liabilities.

8.28 At the community and household level, disaster funds also need to be considered as means of transfer of resources to the people. When people have access to cash, they take several measures to address their welfare losses. They adopt coping strategies in response to disasters, and if they still have resources, they try to recover from the impact and resume their livelihoods. As the size of assistance is generally low, coping with disasters emerges as the primary objective.

8.29 If people need better protection against disasters, they need to build and acquire assets. These assets could include household assets, such as houses or sources of livelihoods, or community assets such as roads, drainage and health centres. Assets provide a sense of well-being and act as a defence against uncertainties and losses associated with disasters. Households with more assets are less likely to experience welfare losses following the occurrence of a disaster event. A disaster assistance strategy, therefore, should not just help people cope with the impact, but should also help them recover from the impact and reduce their risk and vulnerability.

8.30 These two broad conceptual approaches have simultaneously guided our deliberations and helped us frame our recommendations in more forward-looking terms. We envisage that not only should the Union and State Governments have adequate funds to deal with disasters, but these funds should also be sufficiently diversified to support a framework which includes all aspects of disaster management. Risks posed by natural hazards have increased and they need a more comprehensive and balanced response, as compared to the present approach which focuses just on response and relief. Further, the transfer of resources on such a scale should have a clear, discernible impact on poverty and risk which affects households and communities, particularly the poorer sections, all over the country.

Guiding Principles for the FC-XV

8.31 Based on a review of the established practices, both national and international, we are guided by the following four principles.

8.32 First, in all countries with a federal system, while it is the union or federal government which provides disaster assistance, the primary responsibility for disaster management rests with states. Whether it is the United States, Canada or Australia, the federal governments provide the assistance based on a declaration of disaster. In India too, the Union Government has the responsibility for disbursing assistance to the States, either through the NDRF, SDRF or other transfers. SDRF is a well-established mechanism, mandated by the legal provisions of the Disaster Management Act. In view of its long evolution, legal status and operational utility, SDRF should continue as the main vehicle of state resources for disaster management.

8.33 Second, a disaster management cycle consists of several functions – prevention, preparedness, response, mitigation, recovery and reconstruction. A disaster management system, in its infancy, does lay stress on response. However, as it develops further, it advocates other disaster management functions too. The Commission, therefore, having acknowledged the expanding field of disaster management and earmarked financial allocations for different functions, covering both relief and mitigation and provisions made under the Disaster Management Act, had recommended, in its report for 2020-21, the creation of a National Disaster Risk Management Fund (NDRMF) and State Disaster Risk Management Funds (SDRMF) at State level in its first report.

8.34 Third, after subsuming a substantial amount of the National Calamity Contingency Duty (NCCD) into the goods and service tax (GST) and the creation of SDMF and NDMF, the Union Government's fiscal space for disaster management at the national level has reduced significantly. The FC-XIV had recommended a change in the financing pattern of SDRF by the Union and States in the ratio of 90:10 for all States. The Union Government had accepted the recommendation made by the FC-XIV with the modification that contribution of the States to SDRF will continue as before; and that once GST is in place, the recommendation of the FC-XIV on disaster relief would be fully implemented. As the GST introduced in July 2017 has not stabilised, the Union Government decided that its share in SDRF during the award period of FC-XIV shall remain in the same ratio as it was in FC-XIII award period. **Hence, the sharing arrangement recommended by the FC-XIII (25 per cent contribution by all States, except for the North-Eastern and Himalayan (NEH) States which shall contribute 10 per cent) continued and we consider it appropriate to maintain the same arrangement.**

8.35 Fourth, as the system of disaster financing matures, the financial services and instruments for disaster management need to be diversified. Public funds serve a very important purpose in providing predictable support to states. However, these funds are seldom sufficient. We need to recognise the importance of alternative sources of funding and the role that market instruments can play in risk management.

8.36 Guided by these principles, we have made recommendations on all aspects of disaster risk financing. Our first set of recommendations relate to the size and allocation of SDRMF and NDRMF and funding windows for disaster management functions. Recognising some of the challenges posed by emerging risks and vulnerabilities, we have recommended earmarked allocations within the overall allocation.

8.37 We follow it up with recommendations for strengthening systems, guidelines and capacities which need to support the planning and utilisation of resources allocated at the Union and State levels. We believe that a certain level of investment in the governance framework will go a long way in improving the results and outcome in this sector.

8.38 We also follow it up with presenting a set of ideas and innovations which promote market-based instruments of risk management and identify alternative sources of funding. These innovations require further elaboration and due diligence before they are introduced and implemented. However, we believe that it is time to implement these interventions to diversify sources of disaster risk financing and improve the disaster risk management framework in the country.

8.39 Before we present our recommendations, we would like to mention two issues which we have decided not to engage with. Several States have asked for a revision in the norms for assistance provided from SDRF/NDRF now covered under SDRMF/NDRMF. While their request may be justified, such a task is beyond the scope of the Finance Commission. It is the Ministry of Home Affairs which should periodically revise the norms of assistance in consultation with the States. We take note of the fact that the norms are revised periodically, and the practice should continue.

8.40 The existing norms of assistance allow 10 per cent of SDRF to be used for relief assistance for people affected by lightning and other local disasters. In case States are more seriously affected by local disasters, they should bring it to the attention of the Ministry of Home Affairs and NDMA and seek relaxation of the norms. We are satisfied with the existing norms.

National and State Disaster Mitigation Funds

8.41 There is a concept of flexi-fund in development programmes, which allows State Governments to spend 25 per cent of programme resources on implementing mitigation measures. However, in actual practice, these flexi-funds have not been utilised for this. In 2016, the Supreme Court directed the Union Government to set up the NDMF in accordance with Section 47 of the Disaster Management Act. But the NDMF has not been constituted till now. The ministries of Finance and Home Affairs, in their memorandum, as well as the NDMA, have argued for such a fund to be set up without any further delay.

8.42 There is lack of clarity about mitigation in policy and planning discussions. Mitigation refers to "lessening or minimising of the adverse impacts of a hazardous event". It includes both

structural measures (constructing flood embankments and sea walls) as well as non-structural measures (developing building codes and a land use plan) aimed at reducing risks.

8.43 Section 2 (i) of the Disaster Management Act defines 'mitigation' as measures aimed at reducing the risk, impact or effects of a disaster or a potential disaster situation. Hence mitigation could be considered as all related measures, including large scale interventions such as construction of coastal walls, flood embankments, etc. But these are very resource intensive measures which should be pursued through regular development schemes and not from the mitigation fund. **We are of the view that the mitigation fund created should be used for those local level and community-based interventions which reduce risks and promote environment-friendly settlements and livelihood practices.**

8.44 Mitigation, as it is commonly understood and practised in disaster management, is closely related to climate change adaptation. Many interventions such as water resource management, afforestation and livelihood diversification could be considered as helping both disaster mitigation and climate change adaptation. It would, therefore, be desirable to link mitigation to climate change adaptation and use the mitigation fund for supporting adaptation measures as well. At the same time, it should be noted that 'mitigation' is defined differently in climate change policy, where the term is used for the reduction of greenhouse gas emissions that are the source of climate change.

8.45 Given the increasing levels of risks posed by climate change, unregulated urbanisation and over-exploitation of natural resources such as land, water and forests, the idea of a mitigation fund addressing risks and vulnerabilities at the local level has become imperative. Setting up such a mitigation fund, as recommended in our report for 2020-21, will provide a full expression to the objectives of the Disaster Management Act. It would also be in keeping with international practices related to supporting mitigation, along with response.

8.46 **The Commission, taking cognizance of need for mitigation funds at both the national and State levels in accordance with the provisions of the Disaster Management Act, has suggested allocations at these levels**. Mitigation funds should typically provide small grants for community-based local initiatives, pursuing an approach which promotes adjustment with hazards through soft measures, rather than controlling them through hard measures. An indicative list of mitigation activities is provided in Annex 8.2 and the Ministry of Home Affairs, in consultation with NDMA, may issue a detailed list of mitigation activities as part of the guidelines of the Mitigation Fund. The NDMA and SDMA should supervise the National and State Disaster Mitigation Funds as per the provisions of the Act.

Size and Allocation of Disaster Risk Management Funds for States

8.47 One of the key issues before the Finance Commission is the determination of the size of the SDRF and its inter-state distribution. This is an important concern for State Governments as they see the SDRF as the primary source of funds for disaster response. Though the Disaster

Management Act stipulates the constitution of the SDRF, it does not mention the size or source of the fund. The responsibility for determining this, therefore, has been given to the Finance Commission in its ToR. We have now decided to call the basic fund for States as State Disaster Risk Management Fund (SDRMF) which includes both SDRF and SDMF.

8.48 Successive Finance Commissions have pursued an expenditure-based approach to determine the allocation of funds for disaster management to each State. The expenditure-based allocation, however, tends to favour the better-off States, which can allocate resources and show higher expenditures. This gives them a larger base, which allows for even greater percentage increase in future allocations. In contrast, States with a lower initial allocation and expenditure see a lower increase in their allocations. The divergence in the allocations between these groups of States will progressively increase, creating a highly asymmetric situation.

8.49 Several States, which have received lower SDRF allocations, have highlighted this asymmetry arising from the expenditure-driven method. If such an approach persists, it will only aggravate such asymmetry in the inter-state allocation. Successive Finance Commissions have acknowledged the limitations of this approach and have indicated they would prefer a methodology which reflects the risk and vulnerability profile of each State. In fact, the FC-XIV had recommended in its report that such a risk and vulnerability assessment be conducted for the entire country to support the process of allocation. However, an integrated risk and vulnerability assessment at the national level has not yet been approved.

8.50 In view of these concerns, a detailed methodology was worked out which promotes equity and fairness and need-based allocation of funds to States for disaster management. The Commission has used the methodology for determining State-wise allocation for SDRMF in the manner as it had used in its report for 2020-21. It is important to note that this methodology has been the outcome of the deliberations of the Commission with main stakeholders like the Ministry of Home Affairs, NDMA, NITI Aayog, State Governments and UNDP as well as the latter's report on disaster risk financing.

8.51 **This new methodology, which replaces the expenditure-driven methodology, is most inclusive, as it represents a combination of capacity (as reflected through expenditure), risk exposure (area and population) and hazard and vulnerability (risk index).** The new methodology as indicated in the first report is detailed in Annex 8.3 for ready reference.

8.52 Given the high degree of uncertainties amidst the Covid-19 pandemic followed by the long period of lockdown, the Commission anticipates a sharp contraction in the domestic economy. Consequentially, there will be considerable squeeze in the availability of total divisible resources, at least in the near term. Secondly, we had already recommended a substantial increase in the allocation of grants for the total corpus at the State level to Rs. 28,983 crore in 2020-21, compared to Rs. 13,465 crore in 2019-20[3], keeping in view the demands of the mitigation fund that was recommended by us. Thus, the Union share for this amount increased by 115 per cent in 2020-21 against the 2019-20 budget estimates (BE). **The Commission,**

[3] https://www.ndmindia.nic.in/images/gallery/Statewiseallocation_SDRF_2015-2020.pdf

therefore, recommends that allocation for SDRF and NDRF for 2021-22 be retained at the level of 2020-21 and thereafter be set to increase by 5 per cent annually from 2022-23 to 2025-26.

8.53 **The total allocation for disaster management (SDRMF) to the States for the duration of the award period is Rs. 1,60,153 crore (Table 8.2)**. We recommend that the total State allocation for SDRMF be divided into SDRF and SDMF, which together address the full cycle of disaster management needs – response and relief, recovery and reconstruction, preparedness and capacity-building and mitigation.

Table 8.2: Annual Allocation for States for Disaster Management

(Rs. crore)

Year	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Union share	22184	23294	24466	25688	26969	**122601**
States' share	6799	7137	7491	7864	8261	**37552**
Total (Union + States' share)	**28983**	**30431**	**31957**	**33552**	**35230**	**160153**
Percentage increase over previous year	-	5	5	5	5	

8.54 **The SDRF would receive 80 per cent of the total SDRMF, while the SDMF would get 20 per cent of the allocation. Within the SDRF allocation of 80 per cent, there would be three sub-allocations: Response and Relief (40 per cent), Recovery and Reconstruction (30 per cent) and Preparedness and Capacity-building (10 per cent). While the funding windows of SDRF and SDMF are not inter-changeable, there could be flexibility for re-allocation within the three sub-windows of SDRF**. Table 8.3 shows how the overall States allocation will be divided among the SDMF and SDRF, and further three sub-allocations within the SDRF:

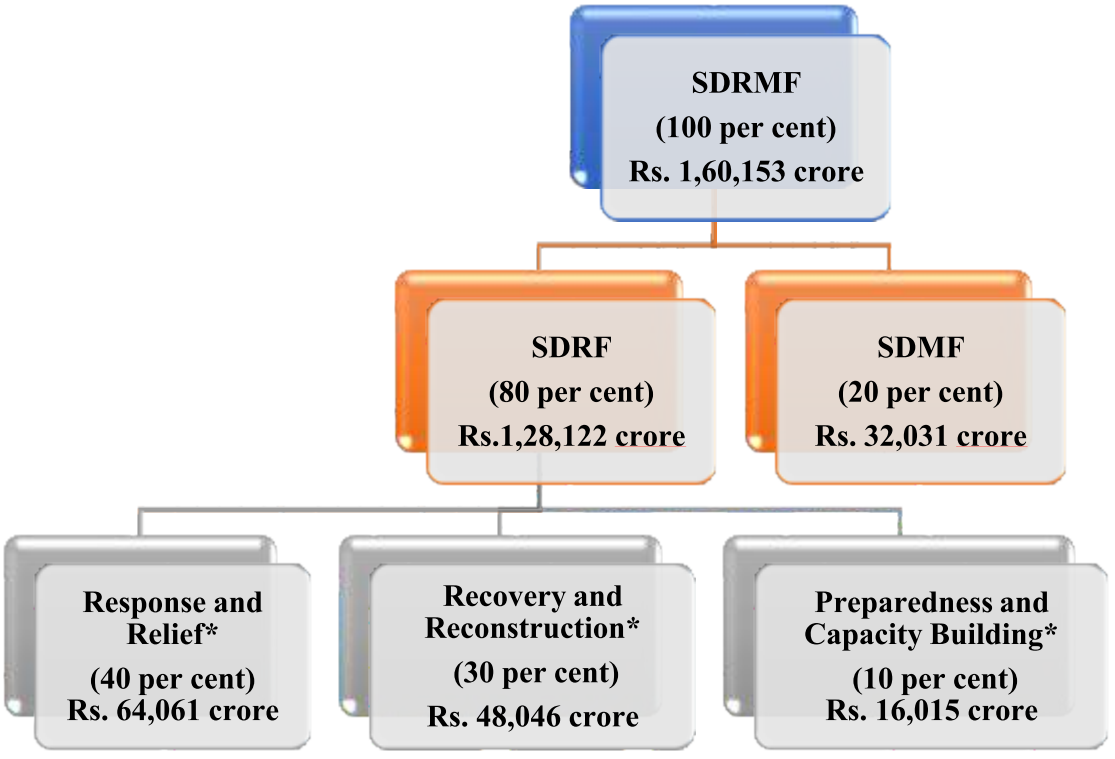
Table 8.3: Distribution of Total States Allocation

(Rs. crore)

Funds (percentage distribution)	Amount
SDMF (20)	32031
SDRF (80)	128122
i) Response and Relief (40)	64061
ii) Recovery and Reconstruction (30)	48046
iii) Preparedness and Capacity Building (10)	16015
Total (SDMF + SDRF) (100)	**160153**

8.55 The State-wise allocations based on the new methodology are provided in Annex 8.4 and Annex 8.5. A snapshot of the sub-categories and earmarked funds for SDRMF recommended by the Commission for the period 2021-26 is depicted in Figure 8.2.

Figure 8.2: Earmarked Funds for SDRMF



** Reallocation within the three sub-windows is recommended.*

Allocation of Funds for National Disaster Risk Management Fund

8.56 The NDRF represents the national disaster reserve, which supplements the SDRF. The NDRF needs to be budgeted and aligned with the SDRF in such a way that it assists States and supplements their SDRF allocations, rather than becoming the main source of disaster assistance.

8.57 The release of funds through the NDRF has been increasing exponentially. During the FC-XII period, the total release through the National Calamity Contingency Fund (NCCF), as it was known then, was Rs. 10,938 crore. During the FC-XIII period, the total release through the NDRF rose to Rs. 17,559 crore, an increase of 61 per cent over the FC-XII cycle. During FC-XIV (2015-20), the NDRF allocation went up to Rs. 57,146 crore, an increase of 225 per cent over the FC-XIII cycle. The projection during the FC-XIV is based on the expenditure incurred during the first three years of its cycle and budgeted expenditure for the last two years of its cycle.

8.58 The NDRF was funded through the proceeds of the NCCD. The NCCD on most of the

commodities has now been subsumed under the GST and is now levied on very few products such as tobacco and crude petroleum. The proceeds of the NCCD, therefore, would not be adequate to fund the NDRF. Hence, it is necessary to make an annual budgetary provision for the NDRMF, into which the NDRF has been subsumed.

8.59 As the provision for the NDRF is linked directly to expenditure, **we recommend a total national allocation of Rs. 68,463 crore for NDRMF for the period from 2021-22 to 2025-26** (Table 8.4), in view of the similar method followed while estimating the size of the SDRMF. In other words, the size of NDRMF for the first year (2021-22) has been kept at the same level of 2020-21 and thereafter, an annual increase of 5 per cent for the rest of the award period has been provided for.

Table 8.4: Proposed Annual National Allocation for Disaster Management

(Rs. crore)

2021-22	2022-23	2023-24	2024-25	2025-26	TOTAL
12390	**13010**	**13660**	**14343**	**15060**	**68463**

8.60 **The Disaster Management Act stipulates two windows of funding at the national level, namely NDRF and NDMF. We have now proposed that these two will fall under the overall amount fixed at the national level called NDRMF. The total allocation for NDRMF should thus be divided among NDRF and NDMF in an 80:20 ratios (Table 8.5).**

Table 8.5: Distribution of Total National Allocation

Funds	Amount (Rs. crore)	Percentage Share
NDMF	13693	20
NDRF	54770	80
Total (NDMF+NDRF)	**68463**	**100**

8.61 **We further suggest that three sub-allocations should be made within the NDRF corpus, similar to the SDRF: Response and Relief (40 per cent); Recovery and Reconstruction (30 per cent); and Preparedness and Capacity-building (10 per cent) (Table 8.6). If required, the Ministry of Home Affairs may examine the need for amending the Disaster Management Act to create such funding windows. While the funding windows for NDRF and NDMF are not interchangeable, there could be flexibility for re-allocation within the three sub-windows of NDRF, subject to the condition that earmarked allocations shall not exceed 10 per cent of the amount earmarked for that sub-window.**

Table 8.6: Windows of NDRF

Windows of NDRF	Amount (Rs. crore)	Percentage Share
Response and Relief	27385	40
Recovery and Reconstruction	20539	30
Preparedness and Capacity Building	6846	10
Total NDRF Corpus	54770	80

8.62 If the NDRMF releases to the States exceed the total budget provision, the Union Government could make additional provision for resources. However, a budget plan for the next five years will help the NDRMF to support States more systematically.

8.63 We recommend that all the Central assistance through the NDRF and NDMF should be on a cost-sharing basis. As the total allocations for the States have registered a significant increase, **there is a case for introducing cost-sharing arrangements on a graded basis, when States request Union assistance through different windows. States should contribute 10 per cent for assistance up to Rs. 250 crore, 20 per cent for assistance up to Rs. 500 crore and 25 per cent for all the assistance exceeding Rs. 500 crore from the NDRF and NDMF**. Such a cost-sharing arrangement would discourage exorbitant demands prepared on the considerations of competitive populism. The graded contribution would also be in keeping with international practice.

Diversifying Funding Windows

Recovery and Reconstruction Facility

8.64 At present, there is no funding window for recovery and reconstruction to support States. State Governments, therefore, have to request the Union Government for assistance. However, the guidelines for the NDRF and SDRF are oriented towards response and relief, and support for recovery and reconstruction is minimal.

8.65 When States are faced with disasters of rare severity, most of them seek loans from the World Bank, with the approval of the Union Government. However, access to such loans depend upon States' overall borrowings. Besides, States cannot approach the World Bank every time they suffer damage and loss because of such disasters.

8.66 In the past, the Planning Commission and Finance Commission have opined that resources for recovery should be allocated through development assistance. In the case of disasters of rare severity, the Union Government would provide a part of resources needed for recovery and reconstruction to States through additional Central allocation. However, with the discontinuation of the distinction between Plan and non-Plan expenditure, there is no such mechanism to support States at present.

8.67 Recovery presents an opportunity to get development activities off the ground as governments and communities spend recovery assistance on rebuilding infrastructure and houses, reviving livelihoods and improving civic services. The present near-total expenditure focus on response and relief does not leave any resources left for recovery. Without recovery, development gets seriously affected, which deepens the incidence of poverty and backwardness. Many States in the northern and eastern parts of the country experience flooding on recurrent basis and, without much recovery, these States tend to lag in development, which contributes significantly to regional imbalances.

8.68 Based on a clear appreciation of the pressing needs to rebuild assets and livelihoods, **we have recommended setting up a Recovery and Reconstruction Facility, both within the SDRF and NDRF, and suggested that 30 per cent of the resources available with these two funds be earmarked for this purpose.** When the resources are used for recovery and reconstruction, these would help people affected by disasters on a long-term basis.

8.69 Assistance for recovery and reconstruction needs to be determined on the basis of an assessment of damage and loss. **Governments do not pay for the entire cost of recovery and reconstruction, and the assistance could be a percentage of the total cost. Recovery and reconstruction is generally a multi-year programme and the assistance needs to be released annually against expenditures**. Further, assistance for recovery and reconstruction needs to be shared between the Union and States. When we apply these filters - needs assessment, recovery assistance on a partial basis, annual releases against expenditures, and cost-sharing between the Union and States - the cost of recovery and reconstruction can be easily managed on a fiscally sustainable basis.

Preparedness and Capacity-building Grants

8.70 **State Governments need to have essential disaster preparedness to respond effectively to disasters. Their institutions and facilities must be equipped and well-functioning to meet the exigencies of a situation**. The FC-XIII had introduced the capacity-building allocation by recommending a grant of Rs. 525 crore, linked to the overall size of the SDRF.

8.71 This capacity-building grant proved useful for States to develop their preparedness levels. Many States used these resources to procure emergency equipment and improve their search and rescue capacities. Though several States asked for the continuation of capacity-building grants, the FC-XIV did not include this in its recommendations and left this issue to be dealt with by the Union and State Governments.

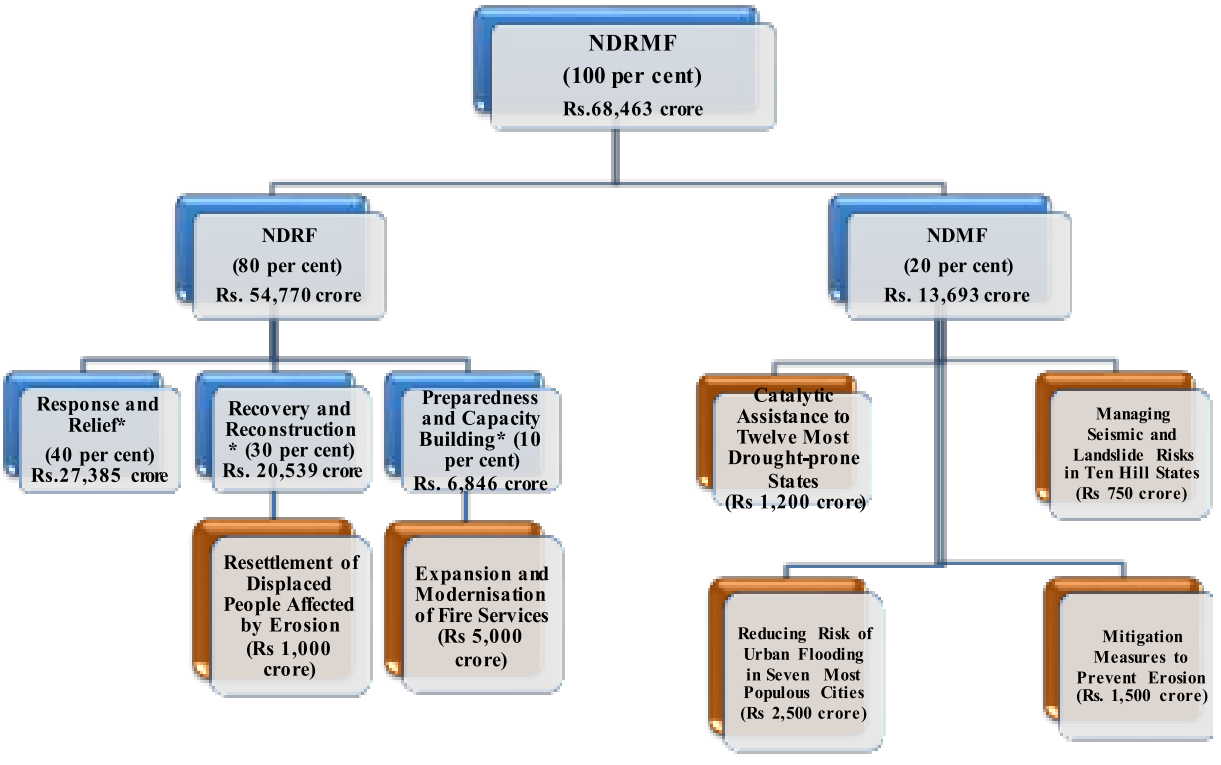
8.72 The preparedness and capacity-building components were included in the guidelines and norms of assistance for the utilisation of SDRF and NDRF, with the State Governments having the flexibility to use 10 per cent of their resources for the procurement of essential search, rescue and evacuation and communication equipment, and 5 per cent on capacity-building activities. In

spite of this flexibility, the claim upon the SDRF was too heavy to allow States to use these resources for equipping their search and rescue teams. The lesson that emerged from such an arrangement is that these resources can be utilised for capacity-building and procurement only if they are earmarked.

8.73 To support the critical institutional, functional and technological components of the disaster management system, it would be essential to earmark allocations for preparedness and capacity-building. **Such an allocation should be 10 per cent of the total State allocation and should be accessed through a sub-window within SDRF. These funds are meant to support the SDMA, SIDM, training and capacity-building activities and emergency response facilities. State Governments would not use these resources for personnel support. It is recommended that a separate set of guidelines be developed for preparedness and capacity-building grants. A similar window of preparedness and capacity-building should be made available within the NDRF, which will largely be used to support national agencies**.

8.74 A snapshot of the sub-categories and earmarked funds for NDRMF recommended by the Commission for the period 2021-26 is depicted in Figure 8.3.

Figure 8.3: Earmarked Funds for NDRMF



** Reallocation within the three sub-windows is recommended, subject to the condition that earmarked allocations under the respective sub-window is duly fulfilled.*

8.75 We recommend six types of earmarked allocations: two under NDRF (Expansion and Modernisation of Fire Services; Resettlement of Displaced People affected by Erosion) and four under NDMF (Catalytic Assistance to Twelve Most Drought-prone States; Managing Seismic and Landslide Risks in Ten Hill States; Reducing the Risk of Urban Flooding in Seven Most Populous Cities; and Mitigation Measures to prevent Erosion). These priorities are listed as follows:

Expansion and Modernisation of Fire Services

8.76 Fire services are the core first responders, particularly in urban areas. They provide a range of services, which include search and rescue, evacuation and immediate medical assistance. Incidents of fire in metropolitan and smaller cities have increased. According to National Crime Records Bureau data, 1,85,383 people lost their lives due to fire accidents between 2010 and 2019. This is an average of fifty-six deaths a day.

8.77 Fire services in the country lack resources and are ill equipped to provide adequate fire safety cover to the population. The NDMA has estimated the extent of deficiency of fire services in the country: fire stations - 97.54 per cent; firefighting and rescue vehicles - 80.04 per cent; and fire personnel - 96.28 per cent. It has recommended for allocation of grants worth Rs. 7,000 crore to States to meet these shortages. Such an investment would be completely justified and timely to save lives and economic losses which are mounting every year. As these resources need to be provided on a cost-sharing basis, we recommend a provision of Rs. 5,000 crore for strengthening fire services at the State level in the next five years. These resources could be allocated through the Preparedness and Capacity-building component of the NDRF. States need to apply for these funds, for which they should contribute 10 per cent of the amount sought. These resources could ideally provide a top-up to the existing programmes.

Catalytic Assistance to Twelve Most Drought-prone States

8.78 Drought is considered to be a silent killer and has a creeping effect. Several States such as Andhra Pradesh, Karnataka, Maharashtra and Rajasthan have suffered drought on a recurrent basis. These States are situated in low rainfall zones (less than 750 millimetres annually) and poor rainfall in successive years seems to have aggravated the intensity of drought. Even States such as Madhya Pradesh and Uttar Pradesh, where the annual rainfall ranges between 750 and 1125 millimetres, have suffered droughts. Small and marginal farmers in these States, which are largely engaged in rain-fed farming, are seriously affected by droughts.

8.79 In view of persistent droughts, widespread agrarian distress and large-scale expenditure on drought relief, it would be critical to establish a long-term drought management mechanism at the State level. While both the Union and State Governments have set up different schemes to mitigate the impact of drought, these interventions have not come together on the ground.

Implemented as they are by different agencies, these schemes have limited impact at the local level.

8.80 States need to develop long-term drought mitigation plans to address the challenges posed by successive droughts. These plans need to include area-specific farming systems, improvements in surface and ground water management, promoting efficiency of water use, agro-forestry schemes and solar energy installations. Each drought-affected district should develop a plan to bring about convergence of these interventions and monitor them on a long-term basis.

8.81 To develop district-level drought mitigation plans, we recommend allocating Rs. 100 crore each to twelve most drought-prone States over five years. These States are: Andhra Pradesh, Bihar, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Telangana, and Uttar Pradesh (Table 8.7). It would involve a total allocation of Rs. 1,200 crore over the FC-XV award period (2021-2026). The assistance could be provided through the proposed NDMF.

Table 8.7: Allocation to Drought-prone States for Drought Mitigation

(Rs. crore)

States	Total Allocation
Andhra Pradesh	100
Bihar	100
Gujarat	100
Jharkhand	100
Karnataka	100
Madhya Pradesh	100
Maharashtra	100
Odisha	100
Rajasthan	100
Tamil Nadu	100
Telangana	100
Uttar Pradesh	100
Total	**1200**

Managing Seismic and Landslide Risks in Ten Hill States

8.82 The Himalayas are not only the youngest mountains in the world, they are also among the most seismically active areas. The Indian Seismic Zonation Map classifies this region into Zones IV and V, the highest seismicity zones in India. The States of Himachal Pradesh, Uttarakhand and all the north-eastern States are in these two zones.

8.83 Seismic activities in the region trigger landslides too and both the risks are closely connected. Landslides are also triggered by heavy rains and flooding in the region. The entire Himalayan region experiences landslides on a frequent basis, causing death, destruction and economic disruptions.

8.84 It is critical that the two hill States – Himachal Pradesh and Uttarakhand – and all the eight states in the north-east undertake a mitigation programme to address the earthquake and landslide risks. The mitigation programme implemented over five years will also help these States in developing technical capacities and resources.

8.85 We recommend an allocation of Rs. 750 crore from the proposed NDMF for seismic and landslide risk reduction in the Himalayan region during the next five years. It would include an allocation of Rs. 250 crore each to Himachal Pradesh and Uttarakhand at the rate of Rs. 50 crore per year, and Rs. 250 crore for all the States in the north-east (Table 8.8). The allocation for the north-eastern States could be increased further if they are able to implement the programme and utilise these resources.

Table 8.8: Allocation for Managing Seismic and Landslide Risks in Hill States

(Rs. crore)

States	Annual Allocation	Total Allocation (2021-26)
Himachal Pradesh	50	250
Uttarakhand	50	250
All North-Eastern States		250
Total		**750**

Reducing the Risk of Urban Flooding in Seven Most Populous Cities

8.86 All the major cities in India are heavily affected by floods. The frequency of urban floods has increased, with not a year passing without large parts of some city or the other getting submerged. In December 2015, Chennai was heavily flooded, when the city received a rainfall of 340 mm in the course of just one day. In July 2018, Mumbai received 864.5 mm of rainfall within a week, which was nearly the rainfall for the entire month and in July 2019 over twenty people died due to floods in the city. In both cities, life and economic activity were disrupted as a result.

8.87 While State Governments have sought to address these issues, it requires an approach which brings together urban planning, ecological conservation and disaster management together. State Governments need to support a set of interventions which are implemented by multiple urban agencies working together. In view of the regular incidence of flooding and heavy losses, we recommend that a targeted allocation be made to address urban flooding in seven cities (excluding Delhi), which have a metropolitan area with a population exceeding five million.

These cities are: Mumbai, Chennai, Kolkata, Bengaluru, Hyderabad, Ahmedabad and Pune.

8.88 A similar approach and fund allocation is applicable to Delhi as well. However, since Delhi is a Union Territory (with Legislature), we have not made a separate allocation for it. The Ministry of Finance shall make the requisite fund allocation for Delhi for the award period of this Commission to reduce the risk of urban flooding.

8.89 We recommend that an allocation of Rs. 100 crore per year be made for each of the metros – Mumbai, Chennai and Kolkata – to prepare integrated solutions for flood management (Rs. 1,500 crore over five years). For the next tier of cities – Bengaluru, Hyderabad, Ahmedabad and Pune – an allocation of Rs. 50 crore per year should be made to prevent urban flooding (Rs. 1,000 crore over five years). The total assistance for urban flood management based on the proposed assistance is estimated to be Rs. 2,500 crore during our award period (Table 8.9). This amount may be allocated through the proposed NDMF. These allocations must be made on a cost-sharing arrangement, with the cities contributing 10 per cent of the resources.

Table 8.9: Allocation to Cities for Reducing the Risk of Urban Flooding

(Rs. crore)

Cities	Annual Allocation	Total Allocation (2021-26)
Mumbai	100	500
Chennai	100	500
Kolkata	100	500
Bengaluru	50	250
Hyderabad	50	250
Ahmedabad	50	250
Pune	50	250
Total	**500**	**2500**

Coastal and River Erosion

8.90 Coastal and river erosion can have serious adverse socio-economic consequences. A study conducted by the Space Application Centre (SAC), Ahmedabad, in association with the Central Water Commission (CWC), in May 2014 noted that around 45 per cent of India's coastline is facing erosion. The most telling example of river erosion has been Majuli island in Assam. Considered to be the world's largest riverine island, it is slowly shrinking because of erosion by the Brahmaputra river over decades. Satellite imagery shows the landmass of the island has shrunk from 1,256 square kilometres in 1971 to only 524.2 square kilometres in 2016, which means it has lost more than half of its area during the last forty-five years.

8.91 We have considered two aspects related to erosion: mitigation measures to prevent erosion (under NDMF) and resettlement of displaced people affected by erosion (under NDRF).

i) **Mitigation Measures to Prevent Erosion**

8.92 Coastal erosion, one of the recurring natural hazards, generally occurs as part of the erosion-accretion cycle. It is feared that with the predicted rise in sea levels due to climate change, there will be an increase in the rate of beach erosion as well as loss of coastal properties. In addition, the floods emanating from the Himalayan rivers wreak great annual damage, especially for the people of Assam, Bihar, Uttar Pradesh and West Bengal. Such disasters impede incentives for economic activity in these regions and make it difficult for the inhabitants to break out of their cycles of recurrent damage and poverty. **To reduce the annual flood disasters caused by regular river erosion, major capital works are required for proper upstream river basin management, with gestation spreading over ten to fifteen years. These cannot be accommodated through Finance Commission awards. Therefore, we are persuaded to recommend that such projects should be considered as national priority projects for execution. Only such holistic projects can help address flood mitigation properly. A piecemeal approach will simply witness yearly washing away of river embankments.**

8.93 In order to mitigate the risk of erosion, we recommend an allocation of Rs. 1,500 crore from the proposed NDMF for our award period. States would need to apply for these funds for undertaking erosion mitigation works and NDMA and/or Ministry of Home Affairs may develop suitable norms for this purpose. These allocations must be made on a cost-sharing arrangement, with the States contributing 10 per cent of the resources.

ii) **Resettlement of Displaced People Affected by Erosion**

8.94 The displacement caused by river erosion has taken a regional dimension covering the States of Assam, Bihar, Odisha and West Bengal. Rising sea levels have also threatened habitats. The Sundarbans in West Bengal is a climate hot spot threatened by rising sea water. The coastal fisher-population, who are amongst the most vulnerable communities, suffer loss of life and property as a result of sea erosion.

8.95 Given the magnitude of the problem, we recommend that both the Union and State Governments develop a policy to deal with the extensive displacement of people caused by coastal and river erosion. People must be provided with alternative settlements and they should receive some assistance from the government. To implement this policy, we allocate Rs. 1,000 crore to address the issue of displacement at the national level. State Governments can request the assistance for resettling affected people. Such assistance should be made available through the resources available from the recovery and reconstruction window of the NDRF. However, State Governments should avail these resources on a cost-sharing basis, contributing 10 per cent of the cost of resettlement. Such resettlements should ensure safer sites for the people being resettled.

8.96 **In view of the urgency and importance of these preparedness, risk reduction and recovery priorities at the national level, we recommend Rs. 11,950 crore from different windows of the NDRF and NDMF to address these issues (Table 8.10).** The NDMA should supervise the allocation and utilisation of these resources by framing the guidelines and setting the indicators.

Table 8.10: Summary of Earmarked Allocations

(Rs. crore)

Funding Windows	Earmarked Purpose	Total Allocations (2021-26)
NDRF (Capacity Building)	Expansion and Modernisation of Fire Services	5000
NDRF (Recovery and Reconstruction)	Resettlement of Displaced People affected by Erosion	1000
Sub-total (under NDRF)		**6000***
NDMF	Reducing the Risk of Urban Flooding in Seven Most Populous Cities	2500
NDMF	Catalytic Assistance to Twelve Most Drought-prone States	1200
NDMF	Managing Seismic and Landslide Risks in Ten Hill States	750
NDMF	Mitigation Measures to prevent Erosion	1500
Sub-Total (under NDMF)		**5950****
Grand Total		**11950**

**This amount of Rs. 6,000 crore shall be earmarked out of the total NDRF corpus of Rs. 54,770 crore.*

***This amount of Rs. 5,950 crore shall be earmarked out of the total NDMF corpus of Rs. 13,693 crore.*

8.97 We are of view that the objectives of all the earmarked allocations cannot be achieved unless the projects for which they are meant are implemented without undue delay, so that benefits accrue at the earliest to the target group. Therefore, such projects recommended by us under NDRF and NDMF should be sanctioned in such a manner that these can be completed within the award period of the Commission. **The Commission is also of the view that there shall be no spill-over for the liabilities committed for the projects sanctioned against earmarked allocation beyond the award period (2021-2026) of the Commission.**

Feasibility of District Disaster Response and Mitigation Funds

8.98 There have been consultations with State Governments in the past on the issue of separate district-level funds. State Governments have not supported the idea and suggested that the SDRF can take care of the requirements at the district level as well. Similarly, if the SDMF is constituted, it will take care of mitigation requirements at the district level.

8.99 There are many practical issues that will arise in the case of district-level funds. First, if a district does not experience any disaster, these funds will remain unspent, which will be an inefficient utilisation of resources, which are substantial. Second, the States would find it

difficult to pool resources distributed across districts to respond to a disaster in a particular district or group of districts within that State. Third, the jurisdiction of the State-level funds and district-level funds, which are meant for the same purpose, will overlap and there will always be an issue about how the district-level funds would be spent differently from State-level funds.

8.100 While setting up district-level disaster funds does not seem to be a practical idea, we recommend that State Governments must allocate resources to districts for preparedness and mitigation on an annual basis. Empowering the district administration is essential for improving disaster preparedness at the local level. Without the devolution of resources, the district administration and local governments at the district, taluka and municipal levels would find it difficult to support disaster management preparedness and implementation. State Governments managing the entire fund at the State level is a practice which needs to change.

8.101 State Governments should consider allocating these resources following a methodology that they should evolve. In subsequent allocations, the State Governments may also consider the expenditure incurred by districts under these funds.

Empowering Panchayati Raj Institutions for Disaster Preparedness and Management

8.102 In the present situation, government agencies take sole responsibility for disaster preparedness, rescue, relief and reconstruction activities without providing adequate scope for local participation. Not only has this increased people's dependence on the government machinery but it has also diminished the capacity of local communities to cope with natural disasters. The lack of disaster preparedness and mitigation planning at the local level, especially at the Gram Panchayat level, gives rise to considerable problems in the management of disasters.

8.103 In the event of disasters like floods or earthquake, it takes a while for the full impact to be felt and necessary formalities to be completed before the District Disaster Response Force/ State Disaster Response Force/National Disaster Response Force teams can swing in to action. Meanwhile enormous damage has taken place and people have suffered tremendous loss and faced hardship. Additionally, round the year events like floods, lightning or even local level droughts do not trigger an intervention at the State or Union Government level. It is, therefore, necessary to build adequate capacity at the panchayat level. Thus, the current-top-down approach for disaster management should be suitably corrected and made more effective and efficient by empowering panchayats.

8.104 The Commission, therefore, considers the role of panchayats crucial and necessary in view of their proximity to the local community (including the weaker sections of society) and their ability to enlist people's participation on an institutionalised basis. Their involvement can provide a quick response to disaster events – whether natural or man-made – and also sensitise people to deal with them and minimise their dependence on the government for rescue and relief operations.

8.105 In fact, making panchayats the nodal agency for relief and rehabilitation will result in improved planning, coordination and monitoring, and this will make the overall relief and rehabilitation interventions better. The panchayati raj institutions can play a pro-active role in all stages of disaster management, covering prevention, mitigation, preparedness, response, restoration, rehabilitation reconstruction work.

8.106 The Commission believes that the involvement of panchayats will lead to enhanced effectiveness of activities like rescue operations and arranging temporary shelters; distributing immediate relief in the form of money, food grains, medical care, clothes, tents, vessels, drinking water and other necessities; restoration, rehabilitation and reconstruction efforts of damaged villages and towns; crop protection measures and livestock management; health and sanitation measures; organising health camps and so on. In addition, panchayats can undertake several risk mitigation activities far more effectively. Therefore, some mitigation activities out of the proposed indicative list of activities in Annex 8.2 should be left to the panchayats rather than being taken up by the Union or State Governments.

8.107 The Commission is of the view that State Governments should allocate some reasonable amount out of the allocation made for SDRF and SDMF to districts. These financial mechanisms would strengthen a decentralised approach to disaster management, although, allocating resources to 2,63,028 panchayati raj institutions, comprising 2,55,549 Gram Panchayats, 6,825 Block Panchayats and 654 District Panchayats across 739 districts could be a challenge

Reimbursement to the Ministry of Defence for Expenditure on Disaster Rescue and Response

8.108 The Ministry of Defence renders assistance to the civilian administration for disaster rescue and response. Reimbursement for this expenditure is a major issue of concern. **Normally, the procedure for reimbursement should be resolved between the Ministry of Defence and the Ministry of Home Affairs through mutual consultations. However, as the issue has been referred to the Finance Commission, we recommend the following options:**

(i) Once the requested operation concludes, the unit providing the services submits the bill to the State Government. Upon receipt of this bill, the State Government releases the amount to the local military authority. The State Government can then submit the bill to the Ministry of Home Affairs for reimbursement through the NDRF. The Ministry of Home Affairs then releases the assistance to the State Government as per the norms of assistance included in the guidelines. The armed forces get their reimbursement quickly, and if there is any delay, it is a matter between the State Government and the Ministry of Home Affairs.

(ii) The Ministry of Home Affairs, in consultation with the Ministry of Finance, advances an amount from the NDRF based on average expenditures during previous years to the Ministry of Defence. The total cost incurred on rescue and relief by the

Ministry of Defence is adjusted against this advance at the end of the financial year. This would ensure that the Ministry of Defence has the requisite resources for providing these services.

(iii) Once the requested operations conclude, the local military authority submits the bill to the State Government and gets it countersigned. It then submits the countersigned bill to the Ministry of Defence, which forwards it to the Ministry of Home Affairs, which in turn, will then release the amount through the NDRF to the Ministry of Defence.

8.109 **Both the Union ministries could agree upon any one of these options**.

Strengthening Institutional Capacities and Improving Guidelines

8.110 There is a pressing need to strengthen capacities and systems for managing the NDRF and SDRF at the Union and State levels. At present, funds are released to State Governments, which incur the expenditure, and financial flows are monitored in terms of release and utilisation of funds, with little emphasis on the purpose of utilisation.

Dedicated Capacity for Managing NDRMF and SDRMF

8.111 Given the magnitude of allocations for the NDRMF and SDRMF, **we recommend setting up a dedicated capacity within the Ministry of Home Affairs, Ministry of Finance or NDMA to manage these funds actively. This could be modelled on the lines of Mexico's FONDEN (Fund for Natural Disasters).** Such a capacity with a small staff would carry out the functions of budgeting, release, utilisation, reporting and audit. It would lead to an active management of funds and a greater accountability for allocation, expenditure and reporting. **Such a dedicated capacity would also be helpful in looking beyond the SDRMF and NDRMF and augmenting disaster funding through other sources.**

8.112 We also recommend setting up an online system for the release of NDRMF and SDRMF allocations. It will show the release of SDRMF allocations, expenditures and the outstanding balance for each State online. Such a system would improve the process of adjustment while funds from the Union Government are being released.

Two-stage Assessment for NDRF Allocation

8.113 **We recommend replacing the existing system of assessment of the damages caused by any natural calamity by a two-stage assessment. The first stage should be a smaller assessment, largely to ascertain humanitarian and relief needs. The second assessment should be inter-sectoral and more elaborate, and cover damage, loss and recovery needs.** The Union Government should consider introducing Post-Disaster Needs Assessment (PDNA) as defined in the manual on PDNA produced by the NIDM

(https://nidm.gov.in/PDF/pubs/pdna_manual_vol1.pdf) as the standard methodology for carrying out the assessment following a disaster event.

Developing a Disaster Database

8.114 **We recommend setting up a disaster database as a special initiative. The database should have disaster assessments, the details of allocations and expenditure and preparedness and mitigation plans.** As insurance coverage expands in India, such a database would be extremely helpful in diversifying and improving insurance products and services.

Disbursing Assistance to Women Members of Households

8.115 Given the gender imbalances within households, **we recommend that cash assistance should be transferred to families in a way that women members of the household also get access to the money**. Housing and livelihoods assistance should also be targeted at women. This is an area which requires significant reforms in recognising the legal rights of women and their central role in ensuring the well-being of families.

Development of Guidelines

8.116 **If the new funding windows are being set up, they need to be supported through the development of guidelines.** Once the NDMF and SDMF are set up, they should follow the guidelines for mitigation. Similarly, States should also have guidelines for preparedness and capacity-building. A national recovery framework would guide the States in developing recovery plans. **The NDMA could develop the guidelines and frameworks and organise training around these enabling guidelines.**

NDMA's Leadership Role

8.117 The NDMA should take a leadership role in **developing and maintaining the financial system for disaster management and work closely with the SDMAs.** It needs to play an active role in setting up the Mitigation Fund and the Recovery and Reconstruction facility. These are new mechanisms which require support and nurturing. States need continuous guidance in setting up these windows and effectively using these resources. Without an active champion, these new windows will not be able to yield the expected results.

Outcome Framework

8.118 A greater accountability for the allocation and utilisation of SDRMF and NDRMF resources may be ensured through developing an outcome framework. Such a framework calls

for States' commitments to achieve the Sendai Framework indicators. Some of these include reducing mortality, supporting community recovery and resilience and improving the quality and substance of disaster assistance. **An annual report at the national level may record all the allocations, expenditures, key achievements and results against various indicators developed for the implementation of SFDRR**. The ministries of Finance and Home Affairs and the NDMA may lead a mid-term review of the entire allocations and assess the impact of expenditures through different windows. **The contribution of these allocations to national and state capacities and resources may be evaluated against a set of indicators determined by the NDMA.**

Alternative Sources of Funding

8.119 **The resources provided by the SDRF and NDRF would be insufficient in many situations, and both the Union and State Governments would be constrained to mobilise disaster funding through other sources like reconstruction bonds, contingent credit/stand-by facility with international financial institutions, crowdfunding platforms and corporate social responsibility.** Developing these financial mechanisms and instruments ahead of a contingent situation would help governments identify and select more cost-effective options. **We recommend that the Union and State Governments look at these mechanisms and instruments carefully and consider accessing them when they are faced with disasters.**

Reconstruction Bonds

8.120 In a post-disaster situation, State Governments can issue reconstruction bonds, with a maturity of three to five years, with the approval of the Union Government. People would like to contribute to recovery and reconstruction efforts, and they would prefer to invest in bonds, for reasons other than just financial returns. So the State Governments could issue these bonds with a lower yield. However, the resources raised by these bonds should largely be spent on the construction of productive and social assets.

Contingent Credit/Stand-by Facility with International Financial Institutions

8.121 International financial institutions, the World Bank and the Asian Development Bank (ADB) have been among the most important sources of financial assistance for post-disaster recovery and reconstruction in India. Beginning in 1990, there have been at least nine recovery and reconstruction projects supported by the World Bank with an approximate cost of US$ 2.5 billion across different States.

8.122 If the World Bank and ADB have provided loans for recovery and reconstruction on a regular basis, there could be a long-term arrangement through which the lending operation could be made shorter and easier. Such an arrangement would ensure that if the cost of disaster exceeds

a certain threshold, States could request loans from these institutions with necessary approvals. Such proposals may be considered taking into account the cost of borrowing, knowledge transfer and organisational help.

Crowdfunding Platforms for Disaster

8.123 Crowdfunding is playing an increasingly larger role in mobilising resources for disaster relief and recovery. Campaigns are launched on the internet to raise funds from the public. Communities and organisations with volunteers on the ground ascertain critical needs and create targeted donation pages. Within a matter of hours, a fundraising campaign is launched and a community of fundraisers takes shape.

8.124 Both the Union and State Governments need to recognise the role of crowdfunding and use it when disasters occur. While several crowdfunding platforms come up following a disaster event, a platform set up by the government with specified objectives and an assurance of transparency can attract public contributions on a more significant scale. Setting up a crowdfunding platform would require skills and expertise, which the governments could consider outsourcing. Identifying the right time for crowdfunding, setting up secure payment gateways and ensuring accountability and transparency are the most important considerations for the success of such an initiative. It is an area where both the Union and State Governments together should prepare operational guidelines.

Corporate Social Responsibility Window

8.125 The private sector has been supporting disaster relief and recovery for a long time. However, it can expand its contribution to disaster management by diversifying its engagement. In addition to relief and recovery assistance, it can support an event or campaign to raise awareness, mobilise donations from private sector employees and support crowdfunding. It can provide technological and innovation support for disaster management.

8.126 Incentives for a wider engagement of the private sector could include tax exemption to contributions to the NDRF and SDRF. The FC-XIV had made this recommendation, and this needs to be implemented. We reiterate these recommendations for providing tax exemption for such contributions. Schedule VII of the Companies (Corporate Social Responsibility Policy) Rules 2014 relating to corporate social responsibility states that companies may provide funds for the Prime Minister's Relief Fund or "any other fund set up by the Union Government or the State Governments for socio-economic development and relief". This rule could be used as an enabling provision for the contribution of the private sector to disaster funding windows. The corporate social responsibility rules and tax exemption incentives could be applied more innovatively to improve and diversify private sector support for disaster management.

Insurance and Risk Pooling

8.127 In the past, Finance Commissions have engaged with the provision of insurance for disaster-affected people. However, after due deliberations, they considered insurance as impractical on several grounds. They concluded that it would be cheaper for State Governments to directly provide disaster relief, as is being done presently, instead of going through an insurance intermediary.

8.128 While the Finance Commissions have correctly held these views and hence did not favour an insurance coverage for disasters to be extended to the entire population, there is a strong case for introducing insurance and risk pooling in niche areas, where essential conditions for market-based risk management instruments exist.

8.129 Insurance is feasible and practical when risk pools are large, the data on damage and loss is available and pay-outs could be estimated with reasonable accuracy. An expanded risk pool, which could exist at national or global levels, and quantified risks through a long-term database could be key to the feasibility of insurance services.

8.130 Furthermore, the use of insurance instruments is most efficient for natural perils, which occur infrequently but have high potential impact. The cost of response and recovery for frequently occurring natural hazards (occurring once every five to ten years, depending on the peril) are best absorbed by public funds such as the SDRF and NDRF. However, severe natural hazards occurring every ten to hundred years are best suited to be covered by an insurance policy or catastrophe bond.

8.131 In keeping with these principles, **we propose four insurance interventions, which need to be studied further by the NDMA and the relevant ministries for their feasibility.** These insurance interventions would provide an additional layer of protection to the people. These interventions do not seek to replace the existing public fund mechanisms; rather, they supplement these mechanisms and reinforce protection to the people. However, **these insurance mechanisms need to be introduced with due diligence in partnership with insurance companies**. The proposed insurance mechanisms are discussed below:

National Insurance Scheme for Disaster-related Deaths

8.132 An insurance programme for disaster-related deaths in India could be a feasible intervention for several reasons, and it confers clear benefits upon the families of those who have died. In India, disaster mortality as a proportion to the total population has reduced over the years. Due to improved early warning systems and preparedness as well as better communications, the annual mortality has seen a clear decline. The mortality is expected to decline further, which is a stated policy goal to meet the commitments expressed in the SFDRR.

8.133 On the strength of State-wise disaster mortality data, a national insurance scheme could be set up in partnership with an insurance company. State Governments may join the scheme by

paying insurance premium based on their annual mortality. The Union Government could also contribute to the risk pool. Such insurance premium would generally be less than what State Governments pay by way of ex gratia assistance. In case of deaths, insurance companies would release the pay-out to the affected families at different stages such as one instalment immediately after the death, second instalment after five years, and again after ten years. The insurance company could also make monthly payments to affected families. The insurance scheme could be designed in a way that it essentially works as a social protection scheme. It does not increase the administrative burden on the government, as the responsibility for the pay-out lies with the insurance company.

Synchronising Relief Assistance with Crop Insurance

8.134 Farmers receive assistance in case of crop failure due to disaster events through two sources: SDRF/NDRF release and crop insurance pay-out. Discussions with State Governments showed that the assistance through government sources to a small and marginal farmer ranges from Rs. 3,000 to Rs. 10,000 on an average. While such assistance is helpful to farmers in times of distress, it is not a significant amount. However, if the pay-out from the crop insurance scheme is available at the same time, there is a substantive increase in total assistance. The PMFBY is an effective tool for compensating farmers for crop losses due to natural perils. Its effectiveness would increase considerably if the assessment and pay-out for crop failures is coupled with the SDRF/NDRF assistance.

8.135 We recommend that the Ministry of Agriculture and Farmers' Welfare should take steps through which the synchronisation between the SDRF/NDRF release and crop insurance pay-out could be improved. It would include a common assessment of the area under crops, improved loss assessment methodology and a prompt budget provision for crop insurance.

Risk Pool for Infrastructure Protection and Recovery

8.136 Infrastructure assets are prone to risks of hazards, causing massive damage and loss as seen in recent disasters. As governments are considered the ultimate insurer, there would generally be no insurance coverage for infrastructure protection. When disasters strike, the Union and State Governments release assistance for restoration of infrastructure. However, these resources generally prove inadequate for restoration and reconstruction. As the scale of infrastructure in India increases, the need for their protection would require a major commitment of resources.

8.137 Infrastructure protection could be supported through setting up a national risk pool for infrastructure in partnership with an insurance company. Infrastructure companies within the country could be encouraged to join the risk pool, which will yield the benefit of getting insurance protection against risks as well as the incentive for investing in improved standards and

regulations. When there is damage and loss to infrastructure due to a natural hazard, the risk pool will pay for recovery and reconstruction.

8.138 Setting up a risk pool for infrastructure would be an innovative step and would require partnering with an insurance company. However, it would be more cost effective compared to other risk transfer solutions. As the Union Government has decided to set up the Coalition for Disaster Resilient Infrastructure, setting up a risk pool for infrastructure would be the first step towards seeking risk transfer solutions through market mechanisms.

Access to International Reinsurance for Outlier Hazard Events

8.139 **We recommend exploring an additional layer of protection against extreme hazard events through the international reinsurance market. Such a protection would have a parametric feature, aimed at low-frequency, high-intensity disaster events, and would provide an additional layer of protection through a global risk pool.** The index for such disasters could be defined in terms of magnitude and severity. For example, a great earthquake of magnitude 8 Mw or a super-cyclone could be the trigger for insurance pay-out.

8.140 It would be necessary to procure such an insurance protection through market quotes. Due to the low frequency of disasters and a global reinsurance pool, the premium for a parametric risk protection could be cost effective. International reinsurance companies can bid for protection, based on the magnitude of the hazard and pay-out. It is important that such an insurance protection is cost effective and should be cheaper than other forms of protection.

List of Calamities

8.141 This Commission, like its predecessors, has also examined the requests received from States for inclusion of a number of calamities in the eligible list of disasters for funding support from the SDRF and NDRF. The Commission feels that most of the calamities suggested by the States for inclusion in the list of notified calamities are State-specific or region- specific and can be difficult to quantify, as the scale of severity would vary from region to region.

8.142 The Commission considers that calamities like fire incidents and river and coastal erosion can be tackled efficiently through mitigation efforts. It has, therefore, made an allocation of Rs. 7,500 crore from the NDRMF for this. Of this allocation, Rs. 5,000 crore has been earmarked for strengthening fire services (para 8.77) and Rs. 2,500 crore has been set aside for mitigation measures to prevent erosion and resettlement of displaced people affected by erosion. (paras 8.93 and 8.95).

8.143 The Commission has observed that the list of notified disasters eligible for funding from SDRMF and NDRMF covers the needs of the States to a large extent and thus did not find much merit in the request to expand its scope.

8.144 Man-made disasters and technological disasters (chemical and industrial disasters including radioactive contamination, railway/air accidents), including public health disasters such pandemics/epidemics, which are caused by either negligence/oversight or faulty equipment or even bad weather, may have low chances of occurrence but require high level of funding. The Commission feels that financing of preventive and relief measures for such disasters should be left out of the SDRMF and NDRMF. These disasters may continue to be taken care of by the respective nodal ministry/department. The Union Government may consider financing disaster relief in respect of such disasters as a one-time temporary arrangement from the NDRMF for initial mitigation, as was done at the time of the Covid-19 outbreak provided that funds available with the respective designated ministry/department are not sufficient.

Accounting Norms and Standards

8.145 Mandates relating to operating of the disaster-related funds require the States to transfer their matching share towards the SDRF along with the Union's share received by them. However, some of the States do not make transfers into the public account maintained by them in a timely manner. This results in inadequate funds being available with the States to tackle disasters of a severe nature and they seek additional central assistance (ACA) from the NDRF. States are, therefore, advised to make timely transfers of their matching share under SDRF and SDMF. It is further suggested that since SDRF and SDMF (together now called SDRMF) are non-lapsable corpuses, any balance left under these heads from one Finance Commission award period should be carried forward to the award period of the next Commission.

8.146 The Commission also considers that since the disaster response fund and mitigation fund are different identities, there should be separate accounting heads for each under SDRMF and NDRMF in order to utilise allocation made for response and mitigation efforts. Therefore, the Commission suggests that the Ministry of Home Affairs, in consultation with Department of Expenditure in the Ministry of Finance, take appropriate action to open new accounting heads while formulating the operational guidelines and norms for the SDRMF and NDRMF. Accordingly, sub major heads corresponding to minor heads under MH '1601 - Grants-in-aid from Central Government', MH '2245 - Relief on account of Natural calamities', MH '3601-Grants-in-aid to State Governments', MH- '8121- General and other Reserve Funds' under Reserve Funds Bearing Interest, and MH '8235-General and other Reserve Funds under Reserve Funds Not Bearing Interest should be opened before first instalment of 2021-22 for SDRMF and NDRMF is released. The CGA and Department of Expenditure should ensure that these accounting norms are adhered to. The CAG may appropriately review the adherence to these prescribed accounting practices.

8.147 As per the current practice, 50 per cent of the available balance under SDRF as on April 1 of a financial year, as reported by the Accountant General of the State, is adjusted while calculating the requirement of ACA from the NDRF during severe calamities. However, this does

not capture the contribution (Union as well as States share) made to the SDRF until that period while calculating ACA under NDRF. The contribution made to the SDRF in that financial year is also meant to ensure that States have adequate funds under the SDRF for tackling severe disasters. The Commission is, therefore, of the view that the balance as on April 1 of a financial year and Union and States' contribution of their respective shares made to the SDRF until the latest date should be adjusted while calculating ACA under NDRF and the first charge should be on the SDRF during a severe disaster.

Summary of Recommendations

(I) The ratio of contribution by Union and States to the State-level allocations for disaster management recommended by FC-XIII should be maintained. Thus, States are to contribute 25 per cent of funds of SDRF and SDMF except the NEH States which shall contribute 10 per cent, and the rest is to be provided by the Union Government.

(para 8.34)

(ii) Mitigation Funds should be set up at both the national and State levels, in line with the provisions of the Disaster Management Act. The Mitigation Fund should be used for those local level and community-based interventions which reduce risks and promote environment-friendly settlements and livelihood practices.

(para 8.43 and 8.46)

(iii) Allocation of disaster management funds to SDRMFs should be based on factors of past expenditure, area, population, and disaster risk index (which reflect States' institutional capacity, risk exposure, and hazard and vulnerability respectively). Assuming an annual increase of 5 per cent, we arrive at the total corpus of Rs.1,60,153 crore for States for disaster management for the duration of 2021-26, of which the Union share is Rs. 1,22,601 crore and States share is Rs. 37,552 crore.

(para 8.51, 8.52 and 8.53)

(iv) Total States allocation for SDRMF should be subdivided into funding windows that encompass the full disaster management cycle. Thus, the SDRF should get 80 per cent of the total allocation and the SDMF 20 per cent. The SDRF allocation of 80 per cent should be further distributed as follows: Response and Relief – 40 per cent; Recovery and Reconstruction – 30 per cent; and Preparedness and Capacity-building – 10 per cent. While the funding windows of the SDRF and SDMF are not interchangeable, there could be flexibility for re-allocation within the three sub-windows of SDRF.

(para 8.54)

(v) The allocation for the NDRMF should be based on expenditure in previous years. Assuming an annual increase of 5 per cent, the total national allocation for disaster management is estimated to be Rs. 68,463 crore for the duration of 2021-26.

(para 8.59)

(vi) The allocation for the NDRMF should also be subdivided into funding windows similar to that of States' allocation for disaster management. Hence, the NDRF should get 80 per cent of the total allocation for the NDRMF, with further division into 40 per cent for Response and Relief, 30 per cent for Recovery and Reconstruction and 10 per cent for Preparedness and Capacity-building. The NDMF should be allotted 20 per cent of the total allocation for the NDRMF. If required, the Ministry of Home Affairs may examine the need for amending the Disaster Management Act to create three sub-windows within the NDRF. While the funding window of NDRF and NDMF should be maintained, there could be flexibility for re-allocation within these sub-windows.

(para 8.60 and 8.61)

(vii) To discourage excessive and unsubstantiated demands from States, all Central assistance through the NDRF and NDMF should be provided on a graded cost-sharing basis. States should contribute 10 per cent for assistance up to Rs. 250 crore, 20 per cent for assistance up to Rs. 500 crore and 25 per cent for all assistance exceeding Rs. 500 crore.

(para 8.63)

(viii) A Recovery and Reconstruction Facility should be set up within the NDRF and SDRF. Assistance for recovery and reconstruction is generally a multi-year programme, and the assistance, shared between the Union and States, needs to be released annually against expenditures and only as a percentage of total cost.

(para 8.68 and 8.69)

(ix) State Governments need to have essential disaster preparedness to respond effectively to disasters. Their institutions and facilities must be equipped and well-functioning to meet the exigencies of a situation. The preparedness and capacity-building grants could be used to support the SDMAs, SIDMs, training and capacity-building activities and emergency response facilities. A similar window of preparedness and capacity-building should be made available within the NDRF, which could be used to support national agencies.

(para 8.70 and 8.73)

(x) Major capital works required for proper upstream river basin management (to mitigate annual flood disasters caused by river erosion) with gestation periods of ten to fifteen years cannot be accommodated through Finance Commission award. Therefore, we recommend that such projects should be considered as national priority projects. Only such holistic projects can help address flood mitigation properly. A piecemeal approach will simply result in yearly washing away of river embankments.

(para 8.92)

(xi) There should be six earmarked allocations for a total amount of Rs. 11,950 crore for certain priority areas, namely, two under the NDRF (Expansion and Modernisation of Fire Services and Resettlement of Displaced People affected by Erosion) and four under the NDMF (Catalytic Assistance to Twelve Most Drought-prone States, Managing Seismic and Landslide Risks in Ten Hill States, Reducing the Risk of Urban Flooding in Seven Most Populous Cities and Mitigation Measures to Prevent Erosion).

(para 8.96)

(xii) A streamlined system of payment to the Ministry of Defence by the Ministry of Home Affairs should be institutionalised through mutual consultations. Three options for the system of payment have been outlined.

(para 8.108)

(xiii) In order to strengthen institutional capacities, a dedicated capacity should be set up to supervise the NDRMF and SDRMF and augment disaster funding through other sources. In addition, a disaster database should be developed to help assess the impact of expenditures on different aspects of disaster management. Other interventions such as disbursing assistance to women members of households will make disaster management more effective and efficient. NDMA, as a leading agency in disaster management, needs to be proactive and collaborate with States in pushing the agenda of reforms in disaster management.

(para 8.111, 8.114, 8.115 and 8.117).

(xiv) To improve and streamline the access of Central assistance to the states, the existing system of assessment of the damages caused by any natural calamitiesshould be replaced by a two-stage assessment – an initial humanitarian needs assessment for response and relief assistance and a post-disaster needs assessment (PDNA) for recovery and reconstruction needs.

(para 8.113).

(xv) All the new funding windows need to be supported through development of guidelines, the drawing up of which should be led by the NDMA. (para 8.116)

(xvi) An annual report at the national level may record all the allocations, expenditures, key achievements and results against various indicators developed for the implementation of the SFDRR. The contribution of these allocations to national and State capacities may be evaluated against a set of indicators determined by the NDMA.

(para 8.118)

(xvii) In the event of SDRMF and NDRMF assistance falling short of the required assistance, the Union and States should have recourse to other financial instruments. These instruments are identified as reconstruction bonds, contingent credit/stand-by facility with international financial institutions, crowdfunding platforms and corporate social responsibility.

(para 8.119)

(xviii) Insurance mechanisms, which act as a social safety net and supplement the existing financial mechanisms, need to be introduced in partnership with insurance companies after due diligence is done. These mechanisms are: national insurance scheme for disaster-related deaths, synchronising relief assistance with crop insurance, risk pool for infrastructure protection and recovery, and access to international reinsurance to the outlier hazard events

(para 8.131 and 8.139).

Chapter 9

Pandemic and Beyond: Building Resilience in Health Sector

There is no doubt that India has made some notable gains on the health front since independence. However, the health sector still faces critical challenges like low investment, sharp inter-State variations in the availability of health infrastructure and health outcomes and supply side problems of doctors, paramedics and inadequate number of healthcare centres. In this chapter, we have studied these challenges in detail and worked out a way forward that includes both regulatory recommendations and grants for the health sector. We have recommended grants for critical care hospitals, public health laboratories, Diplomate of National Board courses and training of allied healthcare workforce. This is in addition to the grants for health given through local governments and State-specific grants. The total grants-in-aid support to the health sector over the award period works out to Rs. 1,06,606 crore which is 10.3 per cent of the total grants-in-aid recommended by us. This forms about 0.1 per cent of gross domestic product. The grants for the health sector will be unconditional.

9.1 Para 6(iii) of the Terms of Reference (ToR) requires us to consider "the demand on the resources of the State Governments, particularly on account of financing socio-economic development and critical infrastructure, assets maintenance expenditure, balanced regional development……". Further, para 7 suggests areas where we may propose measurable performance-based incentives for States. Para 7(ii) refers to the "efforts and progress made in moving towards replacement rate of population growth" and para 7(iii) refers to the "achievements in implementation of flagship schemes of Government of India, disaster resilient infrastructure, sustainable development goals, and quality of expenditure". All these have a direct relevance to the health sector and its associated challenges.

9.2 Over the years, India's health sector has been repeatedly identified as one of the most critical areas in need of reform and public investment. However, the pace of progress has been tardy, as is reflected both in the health indices and the poor quality of public health care facilities. Unlike past Commissions, we have consciously decided to devote greater attention and resources to the health sector as it has acquired urgency in the context of the Covid-19 pandemic. The Commission invested a large part of its time and resources in extensive consultations with multiple stakeholders of this sector and this collaborative effort is reflected in the key recommendations in this chapter.

9.3 While the country has made significant progress in some areas like eradication of certain diseases, reduction in total fertility rate (TFR) and infant mortality rate (IMR), it still has quite a

distance to traverse. The Covid-19 pandemic has exposed various fault lines in the country's health sector. Low investment, sharp inter-State variations in the availability of health infrastructure and in health outcomes, supply side problems of doctors, paramedics, hospitals and inadequate number of healthcare centres like primary health care centres (PHCs), sub centres and community health centres (CHCs) are some of the structural challenges that exist. Consequently, we find about 70 per cent of expenditure on health is out of pocket, one of the highest globally. High out of pocket expenditure poses the largest risk to the population living below, and at the margins of, the poverty line. Irrespective of the ability to pay, people in India increasingly seek private health care even for minor illnesses like cold, fever and diarrhoea. Private health care in India is not only expensive but may also lack trained and skilled manpower. People living in rural areas face an additional handicap of location because health care facilities have a significant urban bias. It would not be erroneous to state that even seventy-three years after Independence quality healthcare in India has remained elusive for many.

Health Outcomes: Performance over time

9.4 There is no doubt that India has made some notable gains on the health front since independence. Life expectancy at birth has increased, infant mortality and crude death rates have been greatly reduced, diseases such as smallpox, polio and guinea worm have been eradicated, and leprosy is on the verge of getting eliminated.

9.5 The sex ratio (number of females per 1,000 males) in the country has improved from 933 in 2001 to 943 in 2011. The estimated birth rate declined from 25.8 per 1,000 population in 2000 to 20.4 per 1,000 population in 2016 while the death rate declined from 8.5 per 1,000 population to 6.4 per 1,000 population over the same period. The natural growth rate declined from 17.3 per 1,000 population in 2000 to 14 per 1,000 population in 2016, according to the National Health Profile 2018-19. In recent years, India has made progress in reducing the maternal mortality ratio (MMR) from 556 per 100,000 live births in 1990 to 130 in 2016. The long-prevailing urban-rural divide in institutional births has largely been bridged. Overall, 75 per cent of rural births are now supervised as compared to 89 per cent in urban areas.

9.6 National health programmes have played a crucial role in tackling several serious health concerns. The malarial death rate in India declined to 0.02 deaths per 100,000 population in 2018 from 0.10 deaths in 2001 and the country has achieved the Millennium Development Goal (MDG) of halting and reversing the incidence of tuberculosis (TB) by 2015. There has been significant progress in achieving immunisation coverage through the Universal Immunisation Programme (UIP) which provides protection from six vaccine-preventable diseases.

9.7 While all this reflects significant achievements, it cannot deflect attention from the fact that India lags behind many similarly placed countries. At 130 per 100,000 live births, the MMR is almost double the 2030 Sustainable Development Goal (SDG) target of 70. India ranked 94 out of 107 countries in the Global Hunger Index 2020. Childhood stunting rates of 38 per cent are

among the highest in the world. Data on nutritional outcomes also show that 35.8 per cent of children are underweight and 58.6 per cent are anaemic (Annex 9.1). Since all this has long-term implications for health as well as for learning, employability and economic performance, it is a development challenge of first-order importance.

Table 9.1: Comparison of India with Other Countries in Key Health Outcomes

Country	Population (millions)	Fertility (children per woman)	Life expectancy (years)	Under-five Mortality (per 1,000 live births)	Maternal mortality (per 100,000 births	Child stunting (%)
Bangladesh	167	2.1	72	30	173	36
Brazil	210	1.7	75	14	60	7
China	1,400	1.7	76	9	29	8
India	1,352	2.2	69	37	130	38
Indonesia	267	2.3	71	25	177	36
Malaysia	33	2.0	76	8	29	21
Russia	147	1.8	72	7	17	5
South Africa	59	2.4	64	34	119	27
Sri Lanka	22	2.2	77	7	36	17
Thailand	68	1.5	77	9	37	11
Vietnam	95	2.0	75	21	43	25

Source: World Bank indicators (2011 to 2019)

9.8 There are large inter-State variations in health outcomes. Life expectancy ranges from 65 years in Uttar Pradesh to 75.2 years in Kerala (Annex 9.2). In States like Tamil Nadu and Kerala, the TFR is 1.59 and 1.79 respectively, similar to that in advanced countries, but in States like Bihar and Uttar Pradesh have a TFR of 2.93 and 2.61 respectively. Sample Registration System (SRS) data on IMR (2018) shows the variation is from only four in Nagaland to forty-eight in Madhya Pradesh. Other States with high IMR are Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Meghalaya, Odisha, Rajasthan and Uttar Pradesh. The rate of institutional deliveries in Kerala is 99.8 per cent, while it is only 32.8 per cent in Nagaland. States like Arunachal Pradesh, Assam, Bihar, Jharkhand, Manipur, Meghalaya, Nagaland, Uttar Pradesh and Uttarakhand have a very poor rate of institutional deliveries.

9.9 This disparity is also present in nutritional outcomes. Bihar, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Rajasthan and Uttar Pradesh have very high proportion of children who are underweight and stunted. States like Haryana, Jharkhand, Madhya Pradesh and Uttar Pradesh have a very high rate of children with anaemia. Hunger Index, India's rank has fallen from 93 in 2015 to 102 in 2019 out of 117 qualifying countries. Such poor nutrition levels also hinder the building up of primary immunity in children. The Union Government launched the Poshan Abhiyan in March 2018 with the objective of building a people's movement for holistic

nutrition. The movement involves inter-sectoral convergence for better service delivery, use of technology (ICT) for real time growth monitoring and tracking of women and children and intensified health and nutrition services.

9.10 These inter-State variation were highlighted in the Health Index contained in NITI Aayog's, *Healthy States, Progressive India,* of June 2019. Among the larger States, the overall score in the index of the best-performing State was more than two and half times that of the overall score of the least-performing State. States also vary in progress towards achieving the SDGs. While Kerala, Tamil Nadu, Maharashtra and Punjab have already achieved the SDG target related to under five mortality rate (U5MR), other States still need significant improvements. There were also significant variations in the changes in the Health Index scores from 2015-16 to 2017-18 across States and Union Territories, indicating different levels of momentum in improving performance. With Covid-19, all these vulnerabilities now risk being magnified, with lasting effects on nutrition, maternal health and children, thereby increasing regional inequities. The pandemic is harming health, social and material well-being worldwide, with the poorest being hit hardest. School closures, social distancing and confinement increase the risk of poor nutrition among children.

9.11 India's health system also fares poorly in terms of providing financial risk protection against catastrophic and impoverishing medical expenses. An estimated 60 million Indians are pushed into poverty each year due to out-of-pocket payments for health. This is a major shortcoming, as ensuring financial protection is one of the key pillars of universal health coverage.

Health Infrastructure: An Assessment of Vulnerabilities

9.12 A crude proxy of the vulnerability of any health system is the availability, distribution and financing of health services, including hospital beds and human resources for health. India is estimated to have a total of 18,99,228 hospital beds (over 60 per cent of which are in the private sector), that is, roughly 1.4 beds per 1,000 population.[1] This is lower than in many comparator countries: China's bed density exceeds four per 1,000; Sri Lanka, the United Kingdom and the United States have around three per 1,000; and in Thailand and Brazil hospital beds exceed two per 1,000 persons.[2] Within India, hospital bed densities are particularly low in Bihar, Odisha, Chhattisgarh, the erstwhile State of Jammu and Kashmir, Jharkhand, Manipur, Madhya Pradesh and Assam. Gujarat, Uttar Pradesh, Maharashtra, Andhra Pradesh, Haryana and Telangana have relatively low densities of public hospital beds, but this is made up by the availability of private beds.

9.13 Beyond hospitals, primary care in the public health system, especially in rural areas, is provided via health outposts (sub centres) that are linked to PHCs and CHCs, several of which

[1] Kapoor, G et al (2020), 'State-Wise Estimates of Current Hospital Beds, Intensive Care Unit (ICU) Beds and Ventilators in India: Are We Prepared for a Surge in COVID-19 Hospitalisations?' https://t.co/zbF5o09d9m #medRxiv.
[2] OECD Health Statistics

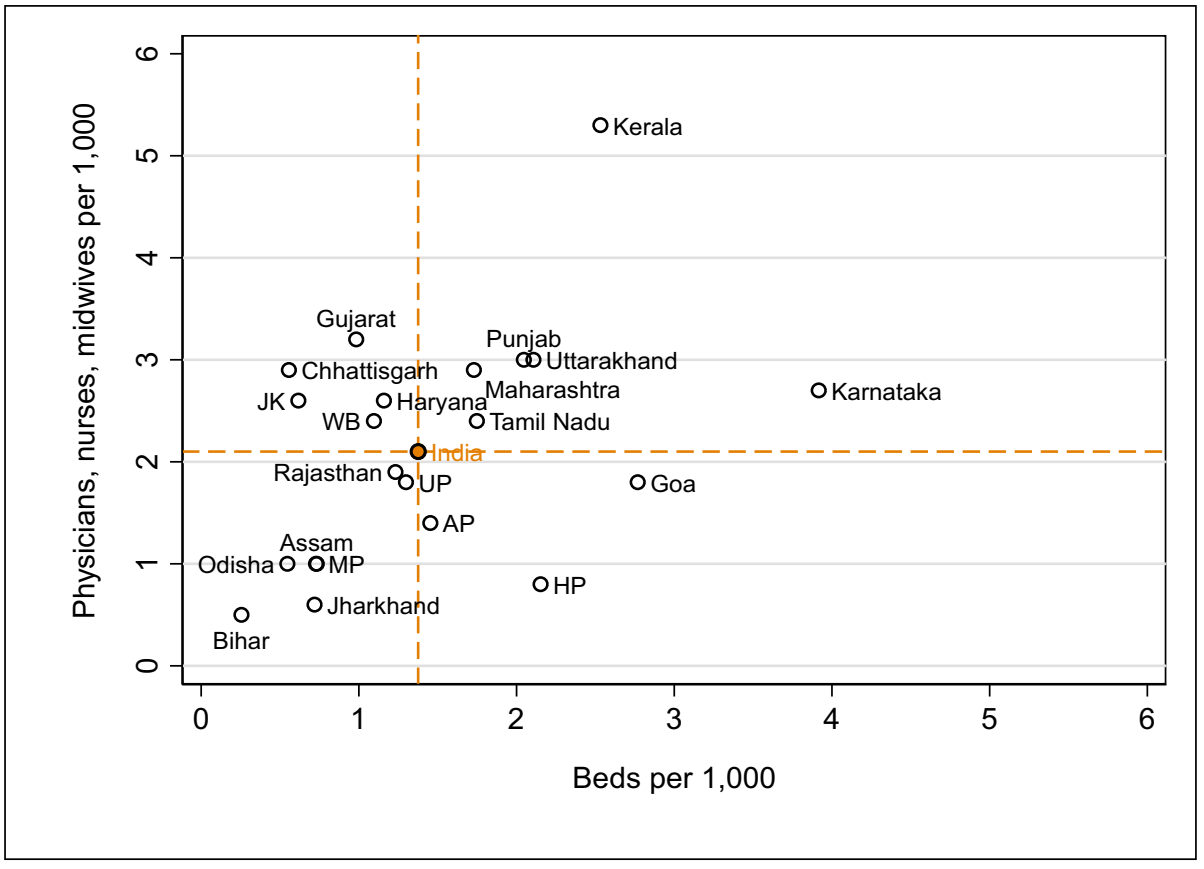
have been or are being upgraded to health and wellness centres (HWCs). The number and distribution of sub centres, PHCs and CHCs in rural areas is based on population norms and there are significant shortfalls, ranging from 23 per cent for sub centres to 28 per cent for PHCs to 37 per cent for CHCs. There is severe deficit of public health facilities in Bihar, Jharkhand, Uttar Pradesh and West Bengal (Annex 9.3).

9.14 In 2018, there were 11.54 lakh registered allopathic medical doctors, 29.66 lakh nurses and 11.25 lakh pharmacists in India. The ratio of doctors and nurses to population is also very low, as compared with the norms set by the World Health Organization (WHO). The doctor to population ratio in India is 1:1,511 against the WHO norm of 1:1,000 and the nurse to population ratio is 1:670 against the norm of 1:300, as the Ministry of Health and Family Welfare (MoHFW) mentioned in its memorandum to us.

9.15 If it is assumed that all allopathic doctors registered with state medical councils are also practising/working in the same State, then a wide variation across States in allopathic doctor to population ratio becomes evident (Annex 9.4). Among the major States, Jharkhand, Chhattisgarh, Uttar Pradesh and Bihar fare very poorly. Among the major States, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra and Uttar Pradesh are way behind others in government doctors to population ratio. The shortfall of nurses is highest in Bihar, Jharkhand, Sikkim, Telangana, Uttar Pradesh and Uttarakhand (Annex 9.5). There is also a significant shortage of all categories of health workforce in government health facilities (Annex 9.6). Seats in medical colleges are highly skewed across States, with two-third of all MBBS seats in the country concentrated in seven States (Tamil Nadu, Kerala, Andhra Pradesh, Telangana, Karnataka, Maharashtra and Gujarat).

9.16 Figure 9.1 shows the variation among States in terms of human resource for health and hospital beds. Rajasthan, Uttar Pradesh, Assam, Madhya Pradesh, Odisha, Jharkhand and Bihar are in a very vulnerable position, with very low ratio of hospital beds and health workforce to population.

Figure 9.1: Human Resource for Health and Hospital Beds per 1000 Persons



Source: World Bank

9.17 The healthcare system faces several challenges which are highlighted in the following paras.

Low Public Health Spending

9.18 The public expenditure (Union and State combined) on health as percentage of GDP in India has been around 1 per cent (Table 9.2).

Table 9.2: Public Health Expenditure

Year	Public expenditure on health as % of GDP
1992-93	1.01#
2003-04	0.99#
2015-16	0.91^
2018-19	0.96^

#Eleventh Five-Year Plan, ^Finance account

9.19 The Eleventh Five-Year Plan (2007-2012) attempted to provide a thrust to the health sector by substantially stepping up public expenditure. It stated that "effort will be made to increase the total expenditure at

the Centre and the States to at least 2 per cent of GDP by the end of the Eleventh Five Year Plan". The Twelfth Five-Year Plan (2012-17) tried to bring both rural and urban health care under the ambit of Universal Health Coverage whereby each person could get assured access to a well-defined set of health care entitlements. However, these targets were clearly not achieved.

9.20 The National Health Policy 2017 (NHP 2017) recommended the ramping up of public health expenditure to 2.5 per cent of GDP by 2025. In 2018-19, this expenditure was only 0.96 per cent of GDP (Figure 9.2).[3] Seventy per cent of public expenditure on health is by the States and only 30 per cent is by the Union Government (Figure 9.3). The aggregate public health expenditure in the country is much less than that of other countries (Figure 9.4).

Figure 9.2: Expenditure on Health as Percentage of GDP

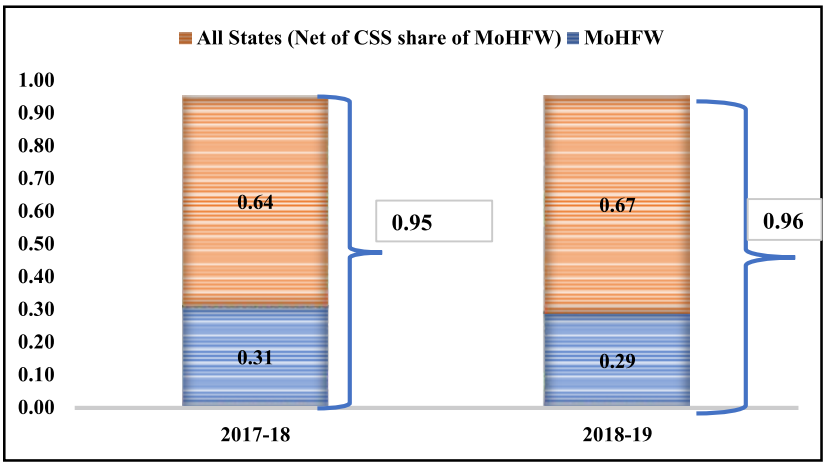
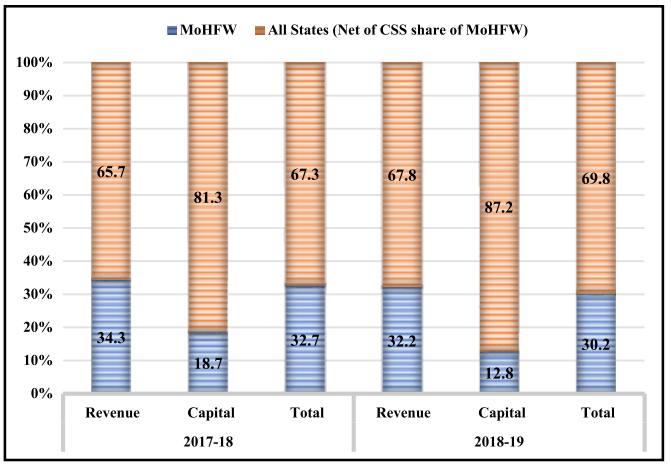


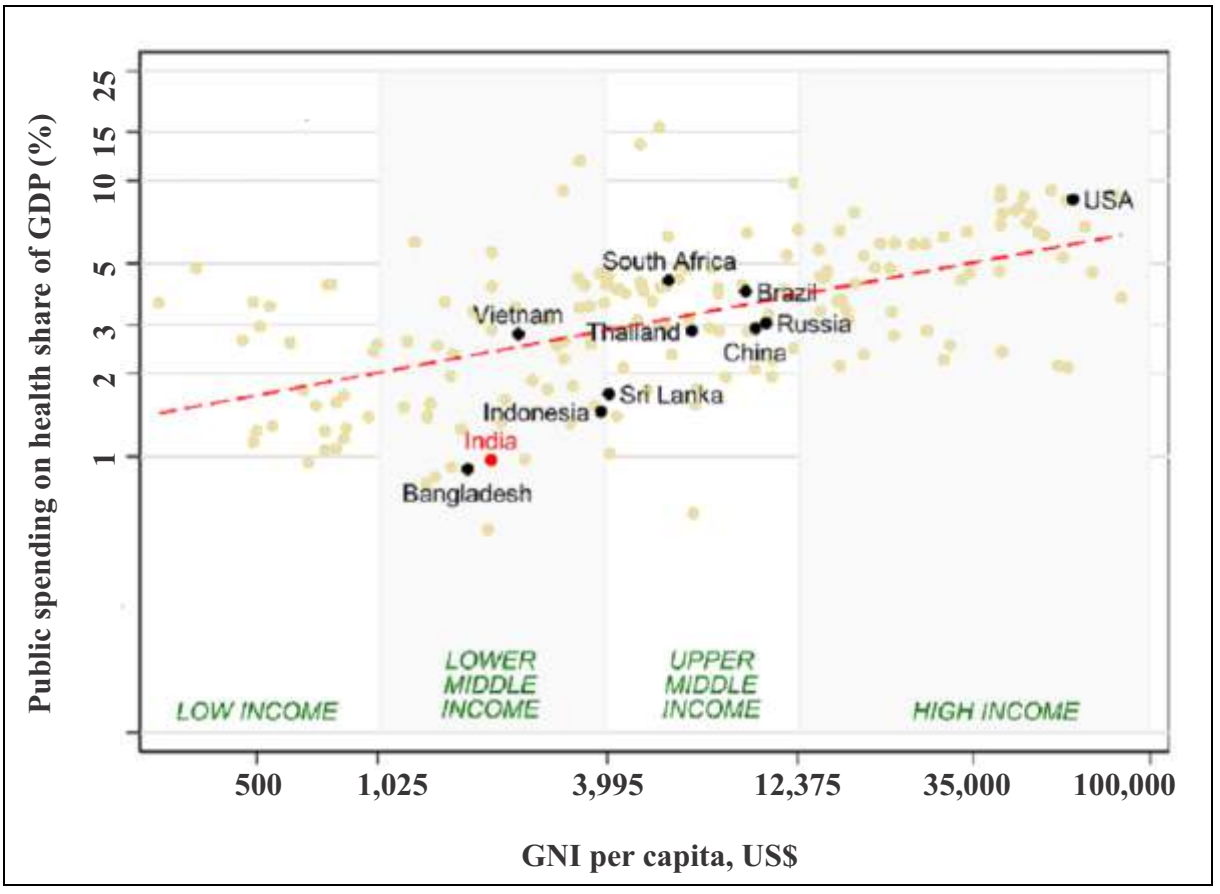
Figure 9.3: Share of Expenditure by Ministry of Health and Family Welfare and States on Health



Source: State Finance Accounts

[3] The 0.96 per cent of expenditure does not include expenditure by the Ministry of Drinking Water and Sanitation (which is now the Department of Drinking Water and Sanitation under the Ministry of Jal Shakti), nutrition component of Integrated Child Development Scheme by the Ministry of Women and Child Development and the mid-day meal scheme of the Ministry of Education, Central Government Health Scheme and health insurance schemes of State Governments employees.

Figure 9.4: Public Spending on Health as Percentage of GDP



Source: World Bank indicators (2011 to 2019)

9.21 The NHP 2017 stated that States' spending on the health sector should be increased to at least 8 per cent of their respective budgets by 2020. In 2018-19, this ratio, on an average, was only 5.18 per cent; it was 6.48 per cent for the North-eastern and Himalayan (NEH) States and only 5.03 per cent for general States. Per capita spending on health, under both revenue and capital heads, is Rs. 1,218 for all States - Rs. 2,256 for NEH States and Rs. 1,148 for general States. There are large inter-State variations in health expenditure. Details are given in Box 9.1.

9.22 While the National Health Policy recommends that expenditure on primary health be increased to two-third of the total health expenditure, it is only 53 per cent. Primary level care has the potential to take care of 90 per cent of healthcare demands. Investment in primary health care, including prevention and health promotion, provides better health and developmental outcomes at a much lower cost. It helps reduce the need for costlier, complex care by preventing illness and promoting general health.

9.23 In order to provide health insurance to vulnerable sections, the Government of India introduced the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PMJAY) in 2018. Covering 50 crore people, it is the biggest healthcare scheme in the world, providing up to Rs. 5 lakh per family per year for secondary and tertiary care hospitalisation. PMJAY will help reduce

expenditure for hospitalisations, which impoverishes people, and will help mitigate the financial risk arising out of catastrophic health episodes. As the scheme matures, there will be a need to fill the supply side gaps to make this a success.

Box 9.1: Inter-State Variations in Spending on Health

Figure 9.5 shows the inter-State variations in terms of per capita spending on health. This is seen to be lowest in Bihar, Uttar Pradesh, Jharkhand, Madhya Pradesh and West Bengal. The inter-State variation is also significant, with the per capita spending of Bihar, Uttar Pradesh and Jharkhand at about half that of Kerala and Tamil Nadu.

Figure 9.6 shows that all States except Meghalaya are spending less than 8 per cent of their budget on the health sector. Punjab, Telangana, Maharashtra, Haryana, Madhya Pradesh, Karnataka, Uttar Pradesh, Andhra Pradesh, Bihar and Nagaland are spending less than 5 per cent of their budget on health.

Figure 9.5: Per Capita Health Expenditure (2018-19)

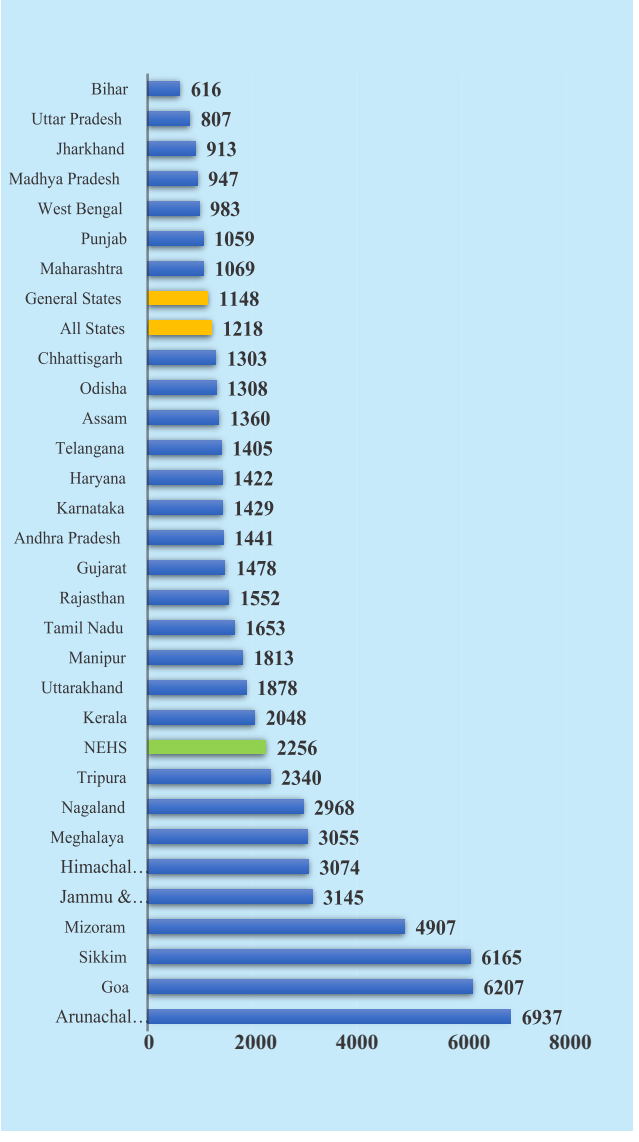
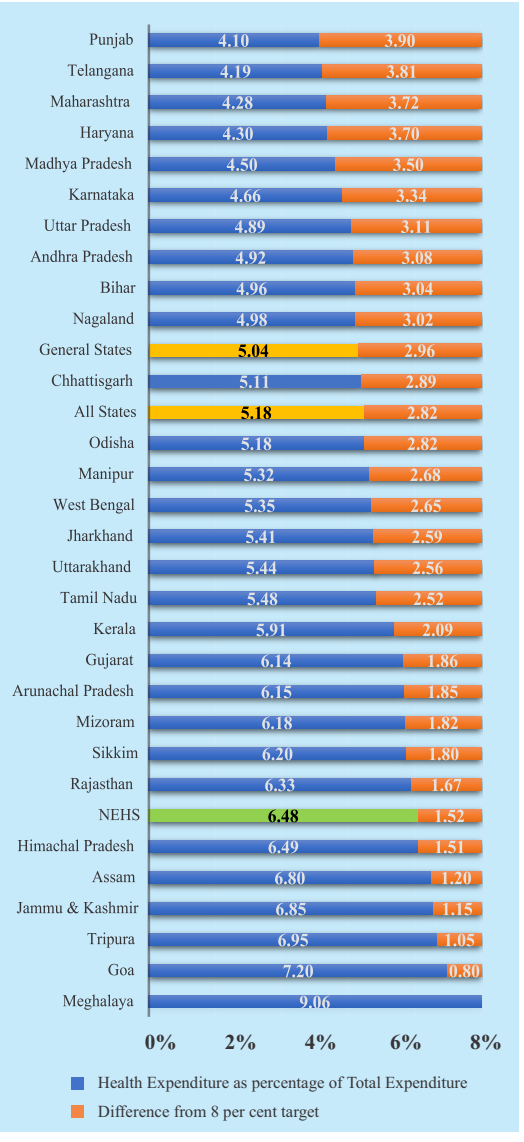


Figure 9.6: Health Expenditure of States as Percentage of Total Expenditure (2018-19)



Other Challenges in India's Healthcare System

9.24 The Covid-19 crisis highlighted the low levels of public spending on health and health infrastructure as well as some key challenges that hinder better progress in health outcomes. Some of them are:

i. an insufficient focus on core public health functions such as disease surveillance and testing;

ii. critical gaps in health infrastructure like sub centres, PHCs, CHCs and human resource for health like doctors, nurses and paramedics;

iii. shortcomings in the quality of care (apart from a select few facilities) despite improvement in access;

iv. inadequate attention to urban health systems and the role of municipalities, which have a key role to play in public health, including air and water pollution, road traffic injuries and pandemic-related vulnerabilities;

v. a government service delivery system which has traditionally focused more on reproductive health and infectious diseases and lesser on non-communicable diseases, which are now the dominant share of the disease burden; and

vi. fragmentation and lack of coordination between different levels and sectors, including a weakly regulated private sector which dominates service provision.

9.25 These overt causes of under-performance are manifestations of more deep-seated issues. Two areas stand out in this context. First, local governance is weak, especially at the sub-district level, where government capacity to deliver is poor, stacking the odds against proficient service delivery in the health sector. Second, demand-side factors, including gender and social norms, compounded by low levels of educational attainment, serve as a major barrier to improving access and quality in health care facility.

9.26 Within the health sector, one major underlying problem is a lack of accountability in the service delivery model. Service delivery has traditionally focused on inputs and infrastructure instead of outputs, outcomes and accountability. This has led to under-performance in government health facilities and the consequent emergence of a large private sector as patients seek care elsewhere. Almost 70 per cent of outpatient utilisation and 58 per cent of all inpatient utilisation now occurs in the private sector, but this is fragmented and largely unregulated. These service delivery challenges are becoming more acute with the epidemiological transition to non-communicable diseases. The health system is not fully equipped to address the growing burden from non-communicable diseases, for which it will need to move from addressing episodic health issues towards the provision of people-centred chronic care. The core of this should be detection and prevention through the primary health care system. Additionally, barriers to individuals seeking care from different levels of health care providers over her/his lifetime need to be removed.

Views of Previous Finance Commissions

9.27 The FC-XII recommended equalisation grants for the health sector amounting to Rs. 5,887 crore to States. It calculated the grants using a two-step normative approach. States which fell short of a normative level of per capita expenditure in health sector were first identified. This gap in expenditure was then filled to the extent of 30 per cent from the average. The FC-XIII recommended State-specific grants for improving health-related physical infrastructure. It also gave a separate performance-based incentive grant amounting to Rs. 5,000 crore for reduction in the IMR.

Views of Union Government

9.28 The MoHFW highlighted the deficit in various areas and sought interventions to strengthen health infrastructure, human resource and pandemic-related preparedness. The memorandum that it submitted indicated the requirement of funds in various areas. A summary of the memorandum is given in Table 9.3. The Ministry also suggested earmarking 10 per cent of the devolution amount proposed by the Finance Commission for the health sector, with at least two-third of this being reserved for primary healthcare. It also requested that a composite health index may be used as an indicator for deciding the performance-based incentives to States/Union Territories and an appropriate weight, not less than 20 per cent, be assigned to this index.

Table 9.3: Memorandum Received from Ministry of Health and Family Welfare (only State share)

Key element of support	Fund requirement (Rs. crore) Sub-components	Total
1 Setting-up of medical colleges attached to district hospitals		**41805**
2 Training of 1.5 million workforce related to allied health		**13257**
3 Starting super speciality blocks under PMSSY		**5300**
4 Primary health care		**513772**
i Bridging the infrastructure gap in public health facilities including for wellness infrastructure	100310	
ii Addressing the shortfall in health workforce	177742	
iii Supporting the national ambulance service	15503	
iv Support for IT infrastructure for primary healthcare	10733	
v Support for diagnostic infrastructure to primary healthcare facilities	18471	
vi Ensuring access to medicines to reduce out of pocket expenditure	134959	
vii Support to the states to run DNB courses in district hospitals	2723	
viii Post Covid health sector reforms-	53331	
(a) Infectious disease/critical care hospitals	*15374*	
(b) District integrated public health labs	*469*	
(c) Block level public health units	*5279*	
(d) Urban HWCs	*24620*	
(e) Building-less sub centres, PHCs, CHCs	*7589*	
Total		**574134**

Note: PMSSY – Pradhan Mantri Swasthya Suraksha Yojana
DNB – Diplomate of National Board

Views of State Governments

9.29 The health sector has been extensively covered in all the memoranda from State Governments, which have identified this as the most critical public service responsibility of the governments. Most States have emphasised that the out of pocket expenditure on medical care is very high and is symptomatic of the poor quality of public health services. A recurring theme in almost all the submissions by the States is the understanding that the development of health care institutions and provision of proper health services is indispensable for improving preventive, promotive and curative health of the people of the State and the favourable impact this will have on economic productivity. There is a clear acknowledgement by most States that much greater efforts will be necessary to expand universal health care and that one of the key actions will revolve around an adequate increase in the number of medical personnel. Their availability is not uniform across rural and urban areas within a State and this, in no small measure, is the result of the reluctance of medical personnel to serve in rural and remote areas. This has been identified as one of the biggest constraints in providing affordable basic services.

9.30 A large number of supplementary memoranda of the States were received after the onset of the Covid-19 pandemic. The State Governments have argued that they, on account of being closer to the people, have greater responsibility in combating the virus and its after effects. This would require substantial investments to be made in health infrastructure and providing the enabling environment for businesses to revive. They have, therefore, requested relaxations in targets relating to fiscal deficit and public debt so that critical health-related spending could be quickly done. Most States have acknowledged that they lack the facilities needed to contain and manage rising Covid-19 outbreaks, including the number of doctors, hospital beds, ICUs and quarantine facilities. Many States have also highlighted the link between disasters and the breakdown of health services. They have emphasised the need for an effective response and functional health service following a disaster. The Commission has been requested to consider these factors and also take cognisance of the need to provide for mitigation and containment of such outbreaks while recommending grants for disaster risk management.

Views of FC-XV in the Report for the Year 2020-21

9.31 In our Report for the Year 2020-21, we identified five important initiatives for the health sector that need to be taken, based upon the recommendations of various stakeholders. These included establishment of medical colleges in district hospitals, training of allied healthcare professionals, starting Diplomate of National Board (DNB)[4] courses in private and corporate hospitals, full utilisation of spare infrastructure and facilities in public health facilities and auditing of all medical equipment and diagnostic facilities in public hospitals in order to ensure optimum use.

[4] Diplomate of National Board (DNB) is a medical qualification awarded by the National Board of Examinations (NBE) and is considered equivalent to the postgraduate and post-doctoral programmes offered by the medical colleges in India.

9.32 The impact of malnutrition on the development of the brain, and hence on early education, also prompted us to recommend additional grants of Rs. 7,735 crore to the States for nutrition in our first report.

Stakeholder Consultations

9.33 The Commission engaged in wide consultations on the health sector with various experts and stakeholders, including the MoHFW, State Governments, NITI Aayog, World Bank and the High Level Group on the Health sector. The High Level Group on the Health Sector, under the chairmanship of Dr. R. Guleria, Director, All India Institute of Medical Sciences (AIIMS), had eminent sectoral experts, namely Dr. V.K. Paul, Member NITI Aayog and the acting Chairman, Indian Medical Council, Dr. Devi Shetty, Chairman, Narayana Health City, Dr. Govind Mhaisekar, Vice-Chancellor, Maharashtra University of Health Science, Dr. Naresh Trehan, Medanta City, Dr. Bhabatosh Biswas, professor and head of department of Cardio Thoracic Surgery, R.G. Kar Medical College and Prof. K. Srinath Reddy, President of the Public Health Foundation of India. The Group submitted its report in August 2019, which was annexed to our report of 2020-21. A gist of all the recommendations received from various stakeholders is given at Annex 9.7.

9.34 In addition to the consultations, a study was commissioned on the costs and finances of the PMJAY. This was done by the Institute of Economic Growth. The results indicate that the total costs (Union and States combined) of PMJAY for the five-year period between 2019 and 2023, on the assumption that all the targeted beneficiaries are actually covered, could range from Rs. 28,000 crore to Rs. 74,000 crore in 2019 and go up to between Rs. 66,000 crore and Rs. 1,60,089 crore in 2023, depending on different assumptions related to the notional premiums. The National Health Authority, in its presentation to us stated that the estimated expenditure on PMJAY in 2023 is likely to be Rs 32,220 crore.

India Fights the Pandemic

9.35 The first Covid-19 case in India was detected on 30 January 2020, the same day that WHO declared it a public health emergency of international concern. India had alertly implemented surveillance as early as 17 January, even before the first cases were officially detected. This was followed by a series of travel advisories and restrictions, and efforts to repatriate and quarantine Indian nationals arriving from abroad. The country went into lockdown almost two months later. On 8 June, after ten weeks of lockdown, it started a phased reopening of its economy. At the time of the finalisation of the report, India had 73 lakh confirmed cases and more than one lakh deaths.

9.36 The Government of India took various measures to balance revival of the economy and the need to deal with increasing caseloads and new hotspots. On the health front, the Covid-19 Emergency Response and Health Systems Preparedness Package of Rs. 15,000 crore was

approved by Cabinet on 22 April 2020. This included mainly emergency response components such as development and operations of dedicated Covid facilities with isolation wards and ICUs and the training of health professionals, augmenting testing capacity, procurement of personal protective equipment (PPEs), N-95 masks, ventilators, testing kits and drugs, conversion of railway coaches as Covid Care Centres, strengthening surveillance units and untied funds to the districts for emergency response.

9.37 In addition to this, to counter the economic loss as well as to provide relief to the particular groups who have been adversely affected by the pandemic, the Union Government unveiled a Rs. 20 lakh crore economic stimulus package. This package, called Atmanirbhar Bharat Abhiyaan, was spread over five tranches. In the fifth tranche, the Union Government announced that public expenditure on health will be increased by (a) investing in grass root health institutions and ramping up HWCs in rural and urban areas; (b) setting up of critical care hospital blocks in all districts; and (c) strengthening the laboratory network and surveillance by integrated public health laboratories in all districts and blocks and public health units to manage pandemics. Under the Atmanirbhar Bharat Abhiyan, the country significantly ramped up the number of ventilators and hospital beds for Covid patients as well as the production of N-95 masks, PPE and testing kits. State Governments also took various measures to fight the pandemic. The combined and focused efforts of Union and State/Union Territory Governments have resulted in progressively increased testing across the country aimed at early detection and isolation of Covid-19 positive cases.

9.38 The National Digital Health Mission (NDHM) under the National Health Authority was also launched on 15 August 2020 to implement and facilitate the National Digital Health Blueprint (NDHB). Under this Mission, every Indian will be given a digital health ID which will contain information regarding his illness, medical reports, medicine prescribed and doctor. Each health ID will be linked to a health data consent manager, which will be used to seek the patient's consent and allow for seamless flow of health information. A personal health record will enable monitoring of diseases and efficient analysis of patient data, thus enabling quicker decision-making. Telemedicine is also an integral part of digital health and this mission will help scale up telemedicine in a cost-effective way. It will improve its access and reach and enhance the doctor-patient consultation experience.

9.39 Faced with the unprecedented challenge of Covid-19, the Commission also renewed its engagement with various health sector experts like the MoHFW, World Bank and the High Level Group (HLG) on Health. Based on these discussions, various measures specific to the pandemic were highlighted. These can be divided into three categories: (a) very short-term, (b) short term and (c) medium term. These are summarised below:

a) Very short term

i. Short term management of the pandemic may include measures like rapid testing, wide surveillance with the help of chief medical officers and district magistrates for early identification and isolation of cases and containment of infections to avoid clustering.

ii. Provision of rural mobile health units and supply of equipment like ventilators, PPEs, masks, continuous oxygen supply.

iii. Ensure the supply of efficacious cost-effective medicines, which is critical till a vaccine has been developed.

iv. Final year MD students in various specialties may be awarded certificates of being 'Board Eligible' and allowed to practice in order to meet the immediate need of manpower.

v. Provision for 'flexible money' for the pandemic may be done to help both Union and State Governments.

b) Short term

vi. An 'outbreak management plan' needs to be in place along with creation of more infectious disease/critical care centres and outbreak management centres.

vii. A mechanism to shift health resources like manpower and equipment from one State to another may be created. Crash courses with the help of information technology may be started to train health workers to deal with Covid.

viii. Financing development of a vaccine and provisioning funds to make it available for the masses.

ix. Willing medical colleges may be allowed to run one additional course within their campus with an intake of 100 medical students. The nurses could also be trained and thereafter be allowed to practice as 'nurse practitioners' to prescribe forty-seven basic drugs. A one-year diploma course after MBBS for lab medicine and for ultrasound may be started. Incentives need to be designed for doctors and paramedics to work in the rural areas.

x. National policy and laws on waste disposal to be framed.

c) Medium term

xi. Investment on health to be increased to 2.5 per cent of GDP by 2025, including more investment in PHCs, district hospitals, wellness centres, national ambulance infrastructure and IT infrastructure.

xii. Shortfall in health workforce to be addressed. Primary and wellness health centres should include more MBBS/AYUSH (ayurveda, yoga and naturopathy, unani, siddha and homeopathy) doctors.

xiii. Explore possibilities of covering the remaining 60 per cent of the population under PMJAY.

xiv. Creation of an All India Medical Services on the pattern of the Indian Civil Services. This must receive priority. The All-India Services Act, 1951 has a provision for setting up an Indian Medical and Health Service.

xv. Explore the possibility of implementing a scheme like the National Health Service of the United Kingdom.

Recommendations/Way forward

9.40 We have divided our recommendations into two broad groups: (a) policy recommendations and (b) grants/financial recommendations.

A. Policy Recommendations

9.41 Based upon our discussions, we have realised that certain measures are related to overall regulatory and policy issues that need to be undertaken by the Government for building resilience in this very important sector. Accordingly, we recommend the following:

i. While the Commission has, in subsequent paras, recommended a substantial grant to strengthen the health sector, we expect concurrent efforts by States to enhance their spending on health. **We recommend that the health spending by States should be increased to more than 8 per cent of their budget by 2022**.

ii. There is a renewed focus by both the Union and State Governments on primary healthcare including wellness centres under programmes like PM-Atmanirbhar Swastha Bharat Yojana (PM-ASBY) and PMJAY, which has been magnified in the light of the pandemic. The Commission has also emphasised this by giving the majority portion of health grants for the primary health sector. **We recommend that primary health care should be the number one fundamental commitment of each and every State and that primary health expenditure should be increased to two-thirds of the total health expenditure by 2022.**

iii. In line with the first two recommendations, we expect higher spending by the Union Government towards building a stronger public health sector. As seen earlier, the larger part of the spending on health is done by States. While health remains a State subject, along with enhanced spending by State Governments, the Union Government should also increase its allocation on health. The Union Government should provide adequate support to the requests made by the MoHFW in its memorandum submitted to us (Table 9.3). Accordingly, **we recommend that public health expenditure of Union and States together should be increased in a progressive manner to reach 2.5 per cent of GDP by 2025.**

iv. **Centrally sponsored schemes (CSS) co-financed by the Government of India should be flexible enough to allow States to adapt and innovate. Top-down mandates and strictures on programme implementation are the antithesis of an open-source model. CSS should grant States significant latitude to tailor implementation modalities to local realities.** The new PMJAY programme allows States to co-brand with their own schemes, to choose whether to adopt a trust or insurance mode, to use the Government of India IT system or their own, to adapt the benefit package and eligibility/coverage groups, and so on. The National Health Mission (NHM) has also moved towards greater flexibility.

v. **There is a need to shift the focus of inter-governmental fiscal health financing from inputs to outputs/outcomes while advancing the measurement agenda as an accountability tool. Complementary to the flexibility noted above, the Union Government can shift the focus of CSS and transfers away from line-items and activities and towards outputs and outcomes, with States being empowered to choose their own pathways to achieve results.** Financing can be provided based on bilaterally agreed 'compacts' related to specific objectives (for example, service delivery outputs or specific outcomes) instead of exhaustively discussed implementation plans. To support this approach, the Union Government can support initiatives to enhance data systems, monitoring and evaluation and transparency. One recent example is the NITI Aayog Health Index, which produces an annual report documenting progress among states across twenty-three key health indicators.

vi. While States should take the lead in the design, planning and implementation of key schemes, there are many areas where they should not be starting from scratch or re-inventing the wheel. Medical research, clinical protocols, draft request for proposals/contracts, monitoring and evaluation, surveys, framework contracts for drugs/consumables to achieve lower prices, operational guidelines where appropriate and other inputs would all benefit from a prominent role of the Government of India. States can opt for these inputs where they fit their needs.

vii. **Given the inter-State disparity in the availability of medical doctors, it is essential to constitute an All India Medical and Health Service as is envisaged under Section 2A of the All-India Services Act, 1951. For this purpose, the Union Public Service Commission (UPSC) would need to do annual recruitments, based on the State-wise requisitions by each State Government. We urge the Union Government to implement this proposal in coordination with State Governments.**

viii. **The MBBS curriculum should be restructured to make it competency based. A certain degree of specialisation should be included in the curriculum and the Medical Council of India/National Medical Council (MCI/NMC) should develop small courses on wellness clinic, basic surgical procedures, anaesthesia, obstetrics**

and gynaecology, eye, ENT etc. for MBBS doctors. It should also encourage AYUSH as an elective subject for medicine undergraduates.

ix. **The asymmetric distribution of medical colleges needs to be corrected, as most of them are situated in the western and southern parts of India. All the public health facilities including district hospitals, private sector facilities and corporate hospitals should be utilised for starting specialist DNB courses which will not only enhance the service provisioning but will also ensure the availability of trained human resource.**

x. A number of students aspiring to become doctors choose to take admission in medical colleges in foreign countries. The number of such students rose from 3,438 in 2015 to 12,321 in 2019. There is a need to utilise these foreign medical degree holders in the health system of the country to supplement the existing human resource for health. This may be done by designing a skills-based training programme to improve their knowledge and skills so that they meet the professional competencies required in the screening tests that they have to clear before commencing practice in the country.

xi. **Measures should be taken to assign a larger role to nursing professionals and the concept of nurse practitioner, physician assistant and nurse anaesthetist should be introduced for better utilisation of nursing professionals.** The Allied and Healthcare Professions Bill was introduced in the Rajya Sabha in 2018 and was referred to the Standing Committee in 2019. **The early passage of this legislation should be fast-tracked given its multiplier benefits.**

xii. The NDHM is an imminent revolution with far reaching impact on health for all in the near future and beyond. As part of this Mission, States can adapt these digital health initiatives expeditiously, efficiently and mainstream it in their health endeavours in primary care/home care/facility settings, high-end hospitals as well as public health. This will require support of both public and private health providers. Harnessing new technologies, including artificial intelligence, will optimise resources and secure faster outcomes. We recommend that Union and State Governments together should commit to make available the required resources for NDHM to be an effective mission.

B. Grants/Financial recommendations

9.42 As analysed earlier, India's healthcare system is mired in several challenges and the private sector has failed to fill the critical gap. The pandemic has further highlighted the fact that health must be regarded as a merit good and hence provision of health care services cannot be left to market forces alone. Public health has significant externalities (food and drug regulation, public health action, including health promotion and prevention and surveillance for infectious disease) which require government intervention. Persistent inequities in access and coverage

are a barrier to building India's human capital, and the progress in health indicators and markets do not address the wide regional inequities in health care.

9.43 As the pandemic spread, there has been a significant decline in the delivery of non-Covid essential services, particularly in States with weak health systems, on account of marshalling of all resources for Covid related activities. Health systems across the country were hard put to manage the delivery of both sets of services. Though the private sector provides over 60 per cent of health care in the country, a disproportionately large burden was borne by the government hospitals during the pandemic.

9.44 Covid-19 has shown that significant investments are needed to strengthen the public health system. Without additional funding, the health system will not only fail to respond to outbreaks/disasters and other emergencies but will also be ineffective in delivering other essential services, delaying and disrupting the country's progress towards the achievements of the goals and targets of the NHP 2017 and the SDGs. The pandemic threatens the health standards of the poorest and the weakest and there is a risk of the inequalities being magnified, which will erode India's human capital. Early and sustained efforts are needed to change the trend.

9.45 The pandemic has highlighted the fact that essential public health responses necessary to address to such a crisis were weak. Limited laboratory capacity at all levels meant that functions of testing, case detection, surveillance and outbreak management were compromised and facilities for critical care provision lacked adequate ICUs, isolation beds, oxygen supply and ventilators. Covid-19 also illustrated that despite using the health systems approach to horizontal integration between programmes, much more needs to be done to strengthen convergence between institutions created for vertical disease control programmes and the district and sub-district service delivery systems. There is an immediate need to invest in critical care hospitals and public health laboratories that will address the substantial regional health inequities and help the country be better prepared for future epidemics/pandemics

9.46 Toward this end, it is critically important that primary health care should be at the centre of efforts to improve health and well-being. Primary health care has been proven to be a highly effective and efficient way to address the main causes and risks of poor health and well-being today, as well as handling the emerging challenges that threaten health and well-being tomorrow. There is clear international evidence that quality primary health care reduces total healthcare costs and improves efficiency by reducing hospital admissions. As analysed in earlier sections, there are critical gaps in terms of sub centres, PHCs, CHCs and wellness centres in some States. Our interactions with stakeholders have also drawn our attention to the lack of diagnostic infrastructure in health facilities.

9.47 In addition, as mentioned earlier, many States have been identified with serious shortfall in terms of human resource for health. According to the Rural Health Survey, 2018-19, there is a shortfall of 85.6 per cent of surgeons, 75 per cent of obstetricians and gynaecologists, 87.2 per cent of physicians and 79.9 per cent of paediatricians. Overall, there is a shortfall of 81.8 per cent

specialists at the CHCs, 23 per cent in terms of nursing staff at PHCs and 10 per cent in CHCs in rural areas. Similarly, a shortfall of 22 per cent was seen in PHCs and 21 per cent in CHCs in urban areas.

9.48 While investment in critical care hospitals and health laboratories will provide an immediate intervention to provide crucial services and build resilience against epidemics, pandemics and other infectious diseases, investment in primary health care infrastructure will provide resilience to withstand shocks to the health system in the medium to long term. Investment in specialist and paramedics/nurses courses will help reduce the shortfall in skilled personnel in the medium term. The investment in paramedics training will also provide the skill set for the youth to be employed in this highly productive sector. Our recommendations will also complement the vision of the PMJAY and PM-ASBY and reduce the out of pocket expenditure on health.

9.49 The grants for the health sector are divided into two parts: (i) grants aggregating to Rs. 70,051 crore through local governments and (ii) sectoral grants aggregating to Rs. 31,755 crore to States. We have also recommended State-specific grants for health amounting to Rs. 4,800 crore. **The total grants-in-aid support to the health sector over the award period works out to be Rs. 1,06,606 crore which is 10.3 per cent of the total grants-in-aid recommended by us. This forms about 0.1 per cent of GDP. The grants for the health sector will be unconditional.** We have also tried to front load this support over the award period to help in addressing the immediate requirement of funds due to the ongoing pandemic.

B.1 Health grants through local governments

9.50 Public health forms part of the Eleventh and Twelfth Schedules of the Constitution, thus entailing local governments delivering this function. The National Rural Health Mission (NRHM) provides for the implementation of healthcare programmes through a decentralised system with the involvement of local governments and communities. In fact, rural local governments play a critical role in the planning, implementation and monitoring of the NRHM. The Eleventh Five-Year Plan emphasised the need for greater involvement of local government institutions, right from the village to the district levels, in the public health delivery systems of their respective jurisdictions. The Twelfth Five Year Plan focused on strengthening the initiatives taken in the Eleventh Plan in respect of expanding the reach of healthcare and setting up a system of universal health coverage in India.

9.51 Kerala has established itself as an example where local governments and the staff of public health institutions play a vital role in the effective delivery of healthcare. The Kerala model needs to be emulated in other States as well. Considering this, we feel that adequate grants should be provided to the local governments for public health. Accordingly, **we have recommended health grants aggregating to Rs. 70,051 crore for urban HWCs, building-less sub centres, PHCs, CHCs, block level public health units, support for diagnostic infrastructure for the**

primary healthcare activities and conversion of rural sub centres and PHCs to HWCs. These grants will be released to local governments which will play an important role in providing primary healthcare. Given the importance of health grants to fight the pandemic, we have not put any conditions for release of these grants to the local governments. The details have been explained in Chapter 7 on Empowering Local Governments. The component-wise details are given in Table 9.4:

Table 9.4: Health Grants Through Local Governments

Sub-components	Amount (Rs. crore)
Urban HWCs	24028
Building-less sub centres, PHCs, CHCs	7167
Block level public health units	5279
Support for diagnostic infrastructure to the primary healthcare facilities	18472
Conversion of rural sub centres and PHCs to HWCs	15105
Total	**70051**

B.2 Health sector grants through State Governments

9.52 We have further recognised the need of investing in critical care hospitals and public health laboratories to build resilience in surveillance and fight communicable diseases, epidemics and pandemics in the future. Also, there is a need to boost the number of specialists and paramedics in the country. This can be easily done by using the health facilities available with the States and providing minimum investment for training and medical education. The details of these grants are given in the following paragraphs:

B.2.1. Critical care hospitals

9.53 In the light of the pandemic, we believe that the establishment of critical care hospitals is absolutely essential to build resilience in the country's health systems and ensure preparedness for future epidemics/pandemics. These hospitals will have ICU support, including assured oxygen supply, and requisite infection prevention and control measures. This is also in line with PM-ASBY.

9.54 The MoHFW, in its memorandum, proposed construction of hundred-bedded critical care hospitals in districts with more than 20 lakh population and fifty-bedded hospitals for districts with less than 20 lakh population. **Based upon this proposal, we recommend Rs. 15,265 crore for critical care hospitals. This includes Rs. 13,367 crore for general States and Rs 1,898 crore for NEH States. The inter se distribution of this grant is made on the basis of per capita health expenditure distance method, which is similar to the income distance method**

recommended in the horizontal formula. However, the inter se distribution is made separately for general and NEH States.

9.55 The MoHFW gave an estimated capital cost of Rs. 53 crore for a hundred-bedded hospital and Rs. 28 crore for a fifty-bedded hospital. We believe that the grants States will receive on the basis of the formula explained in the previous para will be sufficient to cover the full capital cost of building 205 hundred-bedded hospitals and 157 fifty-bedded hospitals. The number of hospitals has been capped at the maximum number of districts in a State. The State-wise number of these hospitals as well as recommended grants are given at Annex 9.8.

B.2.2. Strengthening/establishment of Integrated Public Health Laboratories

9.56 Establishment of integrated public health laboratories in all districts is required for strengthening surveillance capacities. This will also strengthen the existing Integrated Disease Surveillance Programme (IDSP) units. The MoHFW proposed a hub-and-spoke model for undertaking laboratory services that would be used in a way that patients would not need to travel to higher level centres to provide samples for laboratory tests. Thus, a district laboratory would serve as the hub for the HWCs in the block, which will be the spokes. This also forms a part of the PM-ASBY.

9.57 **We recommend providing the State's share for building these laboratories. Accordingly, Rs. 469 crore is recommended for this purpose. The remaining share may come from the Union Government as part of the PM-ASBY.** The State-wise and year-wise grants as well as detailed assumptions for calculation of grants as received from MoHFW are given at Annex 9.9.

B.2.3. Training of 1.5 million workforce related to allied healthcare professionals

9.58 After the launch of NRHM in 2005 and NHM in 2012, the Union Government took various steps to reinforce the supply and availability of drugs, diagnostics and equipment. However, the availability of human resources remains a major bottleneck. We feel that addressing this lacuna will not only strengthen healthcare but also provide additional employment opportunities for the skilled youth.

9.59 To address this problem, and given the limited resources, existing district hospitals and sub-divisional hospitals may be used for creating additional infrastructure for training. They will need to be provided funds for this purpose as well as to hire and train the faculty. There are several short-term certificate courses (of six months to one-year duration) which may be easily implemented in these hospitals with minimum investment and by strengthening the existing resources. The faculty hired for training may also work for clinical services. This intervention will, therefore, furnish the much-needed additional manpower in facilities at the district level and below while also building capacity with proven bedside/patient skills. The skilled workforce may

also find gainful employment in the private sector. This intervention is also in line with the Allied and Healthcare Professions Bill, 2018 under consideration.

9.60 The MoHFW gave an estimated fixed cost of Rs. 3 crore per facility, along with variable cost Rs 0.67 crore per course. **Based upon their proposal, we recommend Rs. 13,296 crore for training of the allied healthcare workforce. Out of this, Rs. 1,986 crore will be for NEH States and Rs. 11,310 crore for general States. Based on the number of district and sub-divisional hospitals given by the MoHFW, we have provided Rs. 3 crore per facility for each State. To determine the variable amount for each State, we have used the per capita health expenditure distance method as described in the section on critical care hospitals.** It is estimated that an additional 15 lakh workforce could be skilled in the five years of our award period, with the potential of being absorbed in various public and private healthcare facilities. Year-wise and State-wise summary of these grants along with details of cost as received from the MoHFW is given at Annex 9.10.

B.2.4. Support to States for DNB courses

9.61 India faces a severe shortage of specialists to adequately staff the CHCs and district hospitals in both rural and urban areas. As a strategy to strengthen district hospitals, the Government of India also disseminated guidelines on 'District Hospital Strengthening for Multi-Specialty Care and as a Site of Training Guidelines' in 2017. Additionally, the National Board of Education (NBE) has initiated the DNB programme in district/civil/general hospitals of States under special provisions made for the district DNB programme.

9.62 We feel that there is a need to strengthen district hospitals to serve as knowledge and training hubs for pre-service and in-service training for specialised courses recognised under the NBE, so as to address the issue of specialist shortage in public health facilities. Initiating DNB courses at district hospitals will provide adequate human resource to deliver quality specialised care. By providing the training at district hospitals, monitoring and issues of patient safety will be better ensured, thus reducing overall out of pocket expenditure in accessing specialised care. We expect the States to utilise this fund to build a cadre of additional specialists.

9.63 The MoHFW, in its memorandum, gave the details on starting DNB courses and divided it into two parts:

i. For a 100-199 bedded hospital, DNB courses in two specialities can be initiated with eight seats.

ii. For more than 200-bedded district hospital, in line with NBE guidelines, DNB courses can be initiated in four specialities with sixteen seats.

9.64 Accordingly, **we recommend Rs. 2,725 crore for starting DNB courses in district hospitals.** The State-wise and year-wise table is given at Annex 9.11.

9.65 **It may be noted that all the above grants will be administered by the MoHFW. Though various components have been earmarked, we are cognisant of the fact that some inter-component adjustments within each State's overall share may be required in future years, as per the emerging ground realities. Hence, within each State's respective share, inter-component flexibility is allowed in consultation with the MoHFW. The monitoring mechanism of these grants are detailed in Chapter 10.**

9.66 To summarise, we recommend Rs. 31,755 crore as separate sectoral grants for the health sector to State Governments. The breakup of the grants is in Table 9.5.

Table 9.5: Sectoral Grants for Health

Sub-components	Amount (Rs. crore)
Critical care hospitals	15265
District integrated public health labs	469
Support to the States to run DNB courses in district hospitals	2725
Training of 1.5 million workforce related to Allied health care	13296
Total	**31755**

9.67 In addition, we have recommended Rs. 70,051 crore for the health sector through local governments, which are detailed in Chapter 7 on Empowering Local Governments and Rs. 4,800 crore as part of State-specific grants, which are detailed in Chapter 10 on Performance-based Incentives and Grants.

9.68 We believe that the health grants recommended by us will strengthen the public health system, leveraging existing reforms undertaken over the last few years and envisaging a new generation of reforms to integrate and strengthen health service delivery and public health action.

Summary of Recommendations

9.69 A brief summary of our recommendations is given below:

I. We recommend that health spending by States should be increased to more than 8 per cent of their budget by 2022.

(para 9.41, i)

ii. We recommend that primary health care should be the number one fundamental commitment of each and every State and that primary health expenditure should be increased to two-thirds of the total health expenditure by 2022.

(para 9.41, ii)

iii. We recommend that public health expenditure of Union and States together should be increased in a progressive manner to reach 2.5 per cent of GDP by 2025.

(para 9.41, iii)

iv. Centrally sponsored schemes (CSS) co-financed by the Government of India should be flexible enough to allow States to adapt and innovate. Top-down mandates and strictures on programme implementation are the antithesis of an open-source model. CSS should grant States significant latitude to tailor implementation modalities to local realities.

(para 9.41, iv)

v. There is a need to shift the focus of inter-governmental fiscal health financing from inputs to outputs/outcomes while advancing the measurement agenda as an accountability tool. Complementary to the flexibility noted above, the Union Government can shift the focus of CSS and transfers away from line-items and activities and towards outputs and outcomes, with States being empowered to choose their own pathways to achieve results.

(para 9.41, v)

vi. Given the inter-State disparity in the availability of medical doctors, it is essential to constitute an All India Medical and Health Service as is envisaged under Section 2A of the All-India Services Act, 1951. For this purpose, the Union Public Service Commission (UPSC) would need to do annual recruitments, based on the State-wise requisitions by each State Government. We urge the Union Government to implement this proposal in coordination with State Governments.

(para 9.41, vii)

vii. The MBBS curriculum should be restructured to make it competency based. A certain degree of specialisation should be included in the curriculum and the MCI/NMC should develop small courses on wellness clinic, basic surgical procedures, anaesthesia, obstetrics and gynaecology, eye, ENT etc. for MBBS doctors and encourage AYUSH as an elective subject for medicine undergraduates.

(para 9.41, viii)

viii. The asymmetric distribution of medical colleges needs to be corrected as most of them are located in the western and southern parts of India. All public health facilities including district hospitals, private sector facilities and corporate hospitals should be utilised for starting specialist DNB courses which will not only enhance the service provisioning but will also ensure the availability of trained human resource.

(para 9.41, ix)

ix. Measures should be taken to assign a larger role for nursing professionals and the concept of nurse practitioner, physician assistant and nurse anaesthetist should be introduced for better utilisation of nursing professionals. The early passage of this legislation should be fast-tracked given its multiplier benefits.

(para 9.41, xi)

x. The total grants-in-aid support to the health sector over the award period works out to be Rs. 1,06,606 crore, which is 10.3 per cent of the total grants-in-aid recommended by us. This forms about 0.1 per cent of GDP. The grants for the health sector will be unconditional.

(para 9.49)

xi. We recommend health grants aggregating to Rs. 70,051 crore for urban HWCs, building-less sub centre, PHCs, CHCs, block level public health units, support for diagnostic infrastructure for the primary healthcare activities and conversion of rural sub centres and PHCs to HWCs. These grants will be released to the local governments. Given the importance of health grants to fight the pandemic, we have not put any conditions for release of these grants to the local governments.

(para 9.51)

xii. We recommend Rs. 15,265 crore for critical care hospitals. This includes Rs. 13,367 crore for general States and Rs 1,898 crore for NEH States. The inter se distribution of this grant is made on the basis of per capita health expenditure distance method, which is similar to the income distance method recommended in the horizontal formula. However, the inter se distribution is made separately for general and NEH States.

(para 9.54)

xiii. We recommend Rs. 469 crore for States for building public health laboratories. The remaining share may come from the Union Government as part of PM-ASBY.

(para 9.57)

xiv. We recommend Rs. 13,296 crore for training of the allied healthcare workforce. Out of this, Rs. 1,986 crore will be for NEH States and Rs. 11,310 crore for general States. Based on the number of district and sub-divisional hospitals given by the MoHFW, we have provided Rs. 3 crore per facility for each State. To determine the variable amount for each State, we have used the per capita health expenditure distance method as described in the section on critical care hospitals.

(para 9.60)

xv. We recommend Rs. 2,725 crore for starting DNB courses in district hospitals for overcoming the shortfall of specialists.

(para 9.64)

xvi. All the grants will be administered by the MoHFW. Though various components have been earmarked, we are cognisant of the fact that some inter-component adjustments within each State's overall share may be required in future years, as per the emerging ground realities. Hence, within each State's respective share, inter-component flexibility is allowed in consultation with MoHFW.

(para 9.65)

Chapter 10

Performance-based Incentives and Grants

In this chapter, we address the terms of reference relating to grants-in-aid to States. While doing this, we have linked some grants with performance-based criteria that seek to promote sectors that further national goals. The first grant recommended by us is the revenue deficit grant, which aggregates to Rs. 2,94,514 crore. We have also recommended grants and incentives for various sectors. These fall under four broad themes. The first is social sector where we have focused on health (Rs. 1,06,606 crore) and education (Rs. 10,943 crore). Our second thrust area is agriculture and rural economy where we have focused on incentives for encouraging agricultural reforms (Rs. 45,000 crore) and recommended grants for maintenance of Pradhan Mantri Gram Sadak Yojana roads (Rs. 27,539 crore). Under the third theme, we have focussed on administrative and governance reforms that need greater priority from State Governments. Here, we have provided grants for judiciary (Rs. 10,425 crore), statistics (Rs. 1,175 crore) and incentivisation of aspirational districts and blocks (Rs. 3,150 crore). Under the fourth theme, we have developed a performance-based incentive system for the power sector, which is not linked to grants but opens up an additional borrowing window for States. Besides these, we have recommended State-specific grants aggregating to Rs. 49,599 crore to help States address special needs and overcome cost disabilities.

10.1 Para 4 (ii) of the terms of reference of this Commission requires us to make recommendations on "the principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues under Article 275 of the Constitution for purposes other than those specified in the proviso to clause (1) of that article". Additionally, in a departure from the ToR of previous Commissions, para 5 asks us to examine whether revenue deficit grants be provided at all.

10.2 Another unique feature of the ToR for this Commission is para 7, which states "the Commission may consider proposing measurable performance-based incentives for States, at the appropriate level of Government in the following areas:

i. Efforts made by the States in expansion and deepening the GST tax net;

ii. Efforts and progress made in moving towards replacement rate of population growth;

iii. Achievements in implementation of flagship schemes of Government of India, disaster resilient infrastructure, sustainable development goals, and quality of expenditure;

iv. Progress made in increasing capital expenditure, eliminating losses of power sector, and improving the quality of such expenditure in generating future income streams;

v. Progress made in increasing tax/non-tax revenues, promoting savings by adoption of Direct Benefit Transfers and Public Finance Management System, promoting digital economy and removing layers between the government and the beneficiaries;

vi. Progress made in promoting ease of doing business by effecting related policy and regulatory changes and promoting labour intensive growth;

vii. Provision of grants in aid to local governments for basic services, including quality human resources, and implementation of performance grant system in improving delivery of services;

viii. Control or lack of it in incurring expenditure on populist measures; and

ix. Progress made in sanitation, solid waste management and bringing in behavioural change to end open defecation".

10.3 While firming up our recommendations on grants-in-aid, we studied their nature, categories and size as recommended by previous Commissions. There have broadly been five different categories of grants: (a) revenue deficit grants, (b) grants for local governments, (c) grants for disaster management, (d) sector-specific grants and (e) State-specific grants. Other than the revenue deficit grants, these grants were often conditional and performance-based.

10.4 The overall size of the grants, as a proportion of total transfers, varied from 26.1 per cent under the Sixth Finance Commission (FC-VI) to 7.7 per cent under the FC-VII (Table 10.1). In practice, except for the revenue deficit grants, the actual flow of funds remained below the recommended amount by the end of the award periods of earlier Commissions. This was mainly due to challenges faced in the release of conditional grants. We have recommended grants aggregating to Rs. 10,33,062 crore, which is 19.65 per cent of total recommended transfers to States.

Table 10.1: Share of Grants-in-Aid and Tax Devolution in Total Transfers Recommended by Finance Commissions

Commission	Period	Grants-in-aid		Tax devolution		Total transfers
		Amount (Rs. crore)	% share	Amount (Rs. crore)	% share	Rs. crore
Sixth	1974-79	2510	26.12	7099	73.88	9609
Seventh	1979-84	1610	7.72	19233	92.28	20843
Eighth	1984-89	3769	9.55	35683	90.45	39452
Ninth*	1989-95	11030	9.96	99668	90.04	110698
Tenth	1995-00	20300	8.96	206343	91.04	226643
Eleventh	2000-05	58587	13.47	376318	86.53	434905
Twelfth	2005-10	142640	18.87	613112	81.13	755752
Thirteenth	2010-15	258581	15.15	1448096	84.85	1706677
Fourteenth	2015-20	537353	11.97	3948188	88.03	4485541
Fifteenth (I)	2020-21	201023	19.04	855176	80.96	1056199
Fifteenth(II)	2021-26	1033062	19.65	4224760	80.35	5257822

* Ninth Finance Commission covered six years and additionally provided Plan grants of Rs. 9,000.83 crore (not included above).

10.5 During our deliberations, we concluded that the grants-in-aid can make corrections for cost disabilities and other redistributive requirements which can be addressed only to a limited extent in any devolution formula. Revenue deficit grants also allow States time to adjust to changes in the pattern of tax devolution recommended by Finance Commissions based on the evolving patterns of their assessed needs, ability and performance. Besides, grants-in-aid are more directly targeted and used to equalise the standards of basic social services. We have also tried to link many of our grants with performance-based criteria that seek to promote some sectors that further national goals. We believe that attaching performance criteria to fiscal transfers may enhance transparency, accountability, provide feedback on improving policy formulation and implementation and lead to better monitoring of expenditures. These grants have also helped us to address our wide ranging ToR.

10.6 The first such grant recommended by us is the revenue deficit grant, which allows us to correct for any post-devolution revenue deficit needs of States assessed on a comparable normative basis.

10.7 Besides this, we have also recommended grants and incentives for various sectors. These grants revolve around four main themes. The first is the social sector, where we have focused on

health and education. Both these sectors have faced unprecedented challenges from the Covid-19 pandemic and both provide public services with huge multiplier benefits and significant inter-State externalities. Our second thrust area is the agriculture sector and rural economy, where we have focused on incentives for encouraging agricultural reforms and recommended grants for the maintenance of Pradhan Mantri Gram Sadak Yojana (PMGSY) roads. This emanates from the need to enhance the welfare of rural India, which encompasses two-thirds of the country's population, employs 70 per cent of the total workforce and generates 46 per cent of national income.

10.8 Under the third theme, we have focussed on administrative and governance reforms that often do not get due priority from State Governments. We have recommended grants to strengthen the judiciary, which is the foundation of any peaceful and progressive nation. Also, considering the importance of data and statistics in today's world, we have recommended grants for improvements in statistics. The role of quality statistics and data is very important for any policy making, its implementation and subsequent monitoring. We also believe that incentivising administrative units like districts or blocks, which are below the national average in critical parameters, on the basis of performance (assessed in a transparent manner) can be an effective tool of improvement in governance. Hence, we have recommended grants for aspirational districts and blocks that will be entirely performance-based. The functioning of electricity distribution companies (DISCOMs) have remained a source of strain on State finances and the overall performance of the power sector. Therefore, we have developed a performance-based incentive system for the power sector, which is not linked to grants but opens up an additional borrowing window for States.

10.9 Lastly, we have recommended State-specific grants to help States to meet special burdens or obligations of national concern. These span six broad areas: (a) social needs, (b) administrative governance and related infrastructure, (c) conservation and sustainable use of water, drainage and sanitation, (d) preserving culture and historical monuments, (e) high-cost physical infrastructure and (f) tourism.

10.10 Grants for local governments in keeping with para 4 (iii) of the ToR and for disaster management in terms of para 9 have been dealt with at length in Chapters 7 and 8, respectively. These grants also flow to the States under Article 275 of the Constitution.

Revenue Deficit Grants

10.11 The specific ToR relating to grants-in-aid of earlier Commissions normally mentioned "sums to be paid to the States which are in need of assistance by way of grants-in-aid of their revenues". Para 4 (ii) of the ToR for this Commission, omits the words "which are in need of assistance". Some critics have argued that ToR of all previous Commissions had these words as provided in the Article 275 of the Constitution, which reads: "Such sums as Parliament may by law provide shall be charged on the Consolidated Fund of India in each year as grants-in-aid of

the revenues of such States as Parliament may determine to be in need of assistance, and different sums may be fixed for different States". Further, as mentioned earlier, para 5 of the ToR reads, "The Commission may also examine whether revenue deficit grants be provided at all."

10.12 All Finance Commissions have in the past awarded revenue deficit grants to the States. The Commissions have followed a normative approach to make their assessment and the gap in revenue accounts for the States post devolution was met by recommending revenue deficit grants under Article 275.

10.13 States have given mixed views on the issue of revenue deficit grants. Some States stressed that the gap-filling approach through revenue deficit grants has serious disincentives for tax effort and prudence in expenditure. Hence, these should be discontinued. On the other hand, most of the North-Eastern and Himalayan (NEH) States and few others have argued for continuing with revenue deficit grants. They have cited the stress on State finances on account of the implementation of state-level pay commission awards following the Seventh Central Pay Commission report, implementation of the goods and service tax (GST), interest liabilities on account of Ujjwal DISCOM Assurance Yojana (UDAY) bonds and the discontinuation of Plan grants. The NEH States have also suggested that their relative expenditure on the social sector and/or maintenance of capital assets needs to be higher than others due to topographical conditions and these need to be factored in to the revenue deficit grants. A few States expressed the need for more comprehensive equalisation grants to provide equal levels of services to all citizens.

10.14 We have considered the omission of the words, "which are in need of assistance" in ToR 4 (ii). In this context, we also deliberated the last sentence of ToR 5, which reads, "The Commission may also examine whether revenue deficit grants be provided at all". In our view, ToR 4 (ii) enjoins us to recommend the principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues under Article 275. Article 275(1) itself is very clear that determination of "need of assistance" is paramount in deciding on the principles of grant-in-aid. Article 275 (1) read together with Article 280 (3) (b), in our view, makes it abundantly clear to us that we are obligated to assess the needs of the States on sound principles and determine our recommendations accordingly.

10.15 As done by the previous Commissions, we have applied a normative framework for assessing the own revenues and expenditure requirements of the States. The normative approach, explained in detail in Chapter 4, assesses each State on comparable national standards. Unlike a gap-filling approach that does not make corrections in the fiscal behaviour of the States, this approach ensures that deficiency in fiscal capacity is corrected, but inadequate revenue effort or excessive expenditure is not encouraged. Thus, after the devolution, some States end up with a post-devolution revenue deficit as a result of a vertical imbalance that needs correction because the assessed need is yet to be met. Revenue deficit grants, therefore, ensure that, as per our assessment, at the beginning of each year of the award period, all States start with at least a

revenue balance.

10.16 Also, we believe that any abrupt departure from revenue deficit grants may not be fiscally sustainable as there are issues related to legacy as well as the issue of an adjustment path. Hence, while the recommended revenue deficit grants diminish towards the end of the award period, we considered it unwise and impractical to subject States to a sudden shock of a mismatch between expenditure and the sum of own revenues and tax devolution.

10.17 After considering all relevant issues and careful analysis, we have decided to provide revenue deficit grants to States assessed with a post-devolution deficit.

Assessment of Revenue Deficit Grants

10.18 Based upon the assessment of revenues and expenditures as explained in Chapter 4, pre-devolution revenue deficits have been calculated (Table10.2). The post-devolution revenue deficit, derived from the assessed devolution of taxes based upon the horizontal devolution formula explained in Chapter 6, is in Table 10.3. The States which still show a revenue deficit have been recommended revenue deficit grants.

10.19 **We have recommended revenue deficit grants of Rs. 2,94,514 crore over our award period for seventeen States** (Table 10.4). These States are Andhra Pradesh, Assam, Haryana, Himachal Pradesh, Karnataka, Kerala, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand and West Bengal. As can be seen from this table, the revenue deficit grants are on a declining path and the number of qualifying States declines from seventeen in 2021-22, the first year of our award, to six in 2025-26, the last year of the award. The total revenue deficit grant amount is also on a declining path, from Rs. 118,452 crore in the first year to Rs. 13,705 crore in the last year.

Table 10.2: Pre-Devolution Revenue Deficit/Surplus

(Rs. crore)

Deficit (+)/Surplus (-)

State	2021-22	2022-23	2023-24	2024-25	2025-26
Andhra Pradesh	43910	40198	36054	29445	20040
Arunachal Pradesh	8989	9361	9831	10340	10981
Assam	26977	27807	28705	29194	28950
Bihar	62323	64711	67731	71444	71984
Chhattisgarh	19206	19253	19721	19945	18327
Goa	2021	1353	582	-390	-1991
Gujarat	14281	10179	2958	-6427	-23688
Haryana	7330	1564	-5301	-14363	-27178
Himachal Pradesh	15715	15458	14900	14031	12159
Jharkhand	14688	14778	15027	15349	13798
Karnataka	25650	19348	12233	1724	-17508
Kerala	32569	27277	20618	11644	-1538
Madhya Pradesh	32797	32062	31108	28800	24259
Maharashtra	24584	17909	6976	-6022	-37198
Manipur	7240	7556	8007	8407	8837
Meghalaya	6330	6652	7038	7293	7528
Mizoram	5083	5278	5596	5762	5949
Nagaland	8304	8699	9138	9397	9750
Odisha	20614	19927	19334	17674	13891
Punjab	21982	21513	20515	18919	14122
Rajasthan	49565	49010	48472	46237	40564
Sikkim	3233	3283	3348	3370	3335
Tamil Nadu	29068	18291	5607	-10312	-34187
Telangana	-2155	-9151	-16609	-27376	-40801
Tripura	9209	9610	10011	10419	10553
Uttar Pradesh	112740	113509	112596	109944	100038
Uttarakhand	15135	15328	15440	15387	14091
West Bengal	67153	68702	70371	71026	68892
Total of States (Deficit)	**686696**	**648616**	**601917**	**555751**	**498048**
Total of States (Surplus)	**-2155**	**-9151**	**-21910**	**-64890**	**-184089**

Table 10.3: Post-Devolution Revenue Deficit/Surplus

(Rs. crore)
Deficit (+)/Surplus (-)

State	2021-22	2022-23	2023-24	2024-25	2025-26
Andhra Pradesh	17257	10549	2691	-8458	-23368
Arunachal Pradesh	-2582	-3511	-4653	-6115	-7864
Assam	6376	4890	2918	-102	-4601
Bihar	-3918	-8976	-15186	-22756	-35897
Chhattisgarh	-3232	-5708	-8366	-11964	-18216
Goa	-521	-1475	-2600	-4005	-6131
Gujarat	-8625	-15302	-25714	-39001	-60993
Haryana	132	-6444	-14312	-24600	-38901
Himachal Pradesh	10249	9377	8058	6258	3257
Jharkhand	-7092	-9450	-12235	-15623	-21672
Karnataka	1631	-7371	-17832	-32433	-56625
Kerala	19891	13174	4749	-6385	-22185
Madhya Pradesh	-18902	-25449	-33606	-44720	-59939
Maharashtra	-17019	-28371	-45100	-65185	-104953
Manipur	2524	2310	2104	1701	1157
Meghalaya	1279	1033	715	110	-699
Mizoram	1790	1615	1474	1079	586
Nagaland	4557	4530	4447	4068	3647
Odisha	-9207	-13246	-17994	-24734	-34676
Punjab	10081	8274	5618	1995	-5260
Rajasthan	9878	4862	-1205	-10200	-24070
Sikkim	678	440	149	-264	-827
Tamil Nadu	2204	-11593	-28020	-48515	-77938
Telangana	-15999	-24551	-33938	-47063	-63347
Tripura	4546	4423	4174	3788	2959
Uttar Pradesh	-5405	-17917	-35290	-58066	-92374
Uttarakhand	7772	7137	6223	4916	2099
West Bengal	17607	13587	8353	568	-11799
Total of States (Deficit)	**118452**	**86201**	**51673**	**24483**	**13705**
Total of States (Surplus)	**-92502**	**-179364**	**-296051**	**-470189**	**-772335**

Table 10.4: Grants-in-aid for Revenue Deficit

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	17257	10549	2691	Nil	Nil	30497
Assam	6376	4890	2918	Nil	Nil	14184
Haryana	132	Nil	Nil	Nil	Nil	132
Himachal Pradesh	10249	9377	8058	6258	3257	37199
Karnataka	1631	Nil	Nil	Nil	Nil	1631
Kerala	19891	13174	4749	Nil	Nil	37814
Manipur	2524	2310	2104	1701	1157	9796
Meghalaya	1279	1033	715	110	Nil	3137
Mizoram	1790	1615	1474	1079	586	6544
Nagaland	4557	4530	4447	4068	3647	21249
Punjab	10081	8274	5618	1995	Nil	25968
Rajasthan	9878	4862	Nil	Nil	Nil	14740
Sikkim	678	440	149	Nil	Nil	1267
Tamil Nadu	2204	Nil	Nil	Nil	Nil	2204
Tripura	4546	4423	4174	3788	2959	19890
Uttarakhand	7772	7137	6223	4916	2099	28147
West Bengal	17607	13587	8353	568	Nil	40115
Total of States	**118452**	**86201**	**51673**	**24483**	**13705**	**294514**

Performance-based Incentives and Grants

10.20 We held detailed deliberations with reference to the nine points given in para 7 of the ToR to firm up our recommendations on performance-based incentives and grants for the 2021-26 period. Some of our views in the light of international experience on conditional and performance based fiscal transfers have been summarised in Chapter 2. Our deliberations and recommendations are elaborated in the following paras.

10.21 The idea of performance-based incentives is a time-tested approach and previous Finance Commissions have made recommendations in three broad categories: (a) incentives/rewards within the devolution formula, (b) performance-based grants and (c) other incentives.

10.22 In the horizontal formula for devolution of taxes, the relative collection of income tax by States remained a consistent criterion for distribution of income tax from the FC-I to the FC-IX. The FC-X introduced 'tax effort' as one of the criteria for distribution of income tax. The FC-XI, FC-XII and FC-XIII used 'fiscal discipline' as one of the parameters for distribution of taxes.

These acted as a reward/incentive for States to enhance revenues and become fiscally prudent. The FC-XIII gave performance-based grants, such as incentives for reduction in infant mortality rate, improvement in the delivery of justice, issuing unique IDs, and improvement of statistical systems at the State and district level. Commissions also gave performance grants to local governments.

10.23 Besides these, there have been other incentives like the Fiscal Reform Facility recommended by the FC-XI which incentivised elimination/reduction in revenue deficits. The FC-XII recommended the Debt Consolidation and Relief Facility which incentivised better debt management and formed the basis of the fiscal responsibility and budget management (FRBM) legislations of States. The FC-XIV incentivised the States for additional debt facility on fulfilling certain conditions related to fiscal performance.

10.24 The Union Government, in its memorandum, stated equalisation and efficiency as two objectives for having performance-based incentives for States:

i. The incentives with equalisation as an objective should ensure that people living in different States have access to the same level of basic services such as roads, education, sanitation etc.

ii. The other incentives with efficiency objectives should broadly ensure that economically efficient decisions are rewarded and that the focus is on long-run sustainability of policies as opposed to the short-run imperatives of the political cycle.

10.25 The memorandum from the Union Government also suggested some possible ways of quantifying performance of States and furnished an illustrative list of indicators that can be used for this purpose. It mentioned that the detailing and refinement of incentives can be done by Ministries/Departments in consultation with the States and under the overall guidance of the NITI Aayog.

10.26 Some States supported performance-based incentives in a few of the areas listed in para 7 of the ToR. They expressed the view that States should be incentivised to perform better in fiscal as well as other socio-economic parameters and together move towards a sustainable development path. States with low total fertility ratios have supported the idea of incentivising the States on this criterion.

10.27 A few States cautioned that the measurement of performance may become very subjective. They were not sure how performance would be measured or which methodology would be scientific, objective and consistent for application across all States. Some States noted that in a large country like India, any uniform prescription – a 'one size fits all' approach – is likely to be inappropriate because of the diversity of issues needing attention across the States. With the varied socio-economic backgrounds of States, adhering to all these conditionalities may seriously hold back the implementation of development programmes.

10.28 Some of the States opposed the reference in para 7 (viii) to 'control or lack of it in incurring expenditure on populist measures' as an area to incentivise. Many States stressed that the categorisation of schemes into populist and non-populist cannot be done objectively, as development requirements differ from State to State. Further, they argued that elected sovereign governments are accountable to the people of the State and they, rather than the Finance Commission, should have the prerogative of deciding the welfare schemes.

Our Approach

10.29 We have identified the following main principles while proposing measurable performance-based incentives for States:

i. as far as feasible, incentives should be outcome-based transfers;

ii. the outcome-based indicators should be fixed against each incentive through the use of credible and verifiable data, ideally with the attributes of being objective, reliable, universal, consistent, actionable, simple, and not subject to manipulation;

iii. the incentives must be sufficient in size to induce the desired outcomes; and

iv. incentives ought to reward a combination of both achievements in absolute terms as well as percentage changes in recent years, in order to balance the long-term efforts of advanced States and short-term efforts of more laggard States.

10.30 We mentioned in our Report for the Year 2020-21 that the Commission will consider providing performance-based incentives in various areas. We have made recommendations for many of these areas for our award period of 2021-26. We have classified them in four themes, as stated earlier. Some relate to flagship schemes of the Government of India and New India 2022 and are essential for the overall economic development of the country. Some of them are long pending reforms which fall within the domain of State Governments and, hence, their cooperation and coordination is needed to bring about the change. These are discussed in detail in following paras:

A. Social Sector

A.I Health Sector

10.31 The Covid-19 pandemic highlighted long-pending challenges in the health sector and risks compounding many vulnerabilities, especially of child undernourishment and mortality. These have been discussed in detail in Chapter 9 and grants aggregating to Rs. 31,755 crore have been recommended. In addition, grants for health through local governments aggregating to Rs. 70,051 crore have also been recommended in Chapter 7. We have also recommended State-specific grants for health amounting to Rs. 4,800 crore. The total grants-in-aid support to the

health sector works out to be Rs. 1,06,606 crore which is 10.3 per cent of the total grants-in-aid recommended by us. The grants for the health sector will be unconditional. We have also tried to front-load this support over the award period to help in addressing immediate needs due to the ongoing pandemic.

A.II Education Sector

School Education

10.32 India enjoys an unprecedented demographic advantage as more than 65 per cent of its population is in the working age group and the average age of population is twenty-nine years. Education is a key area that will help in harnessing this demographic dividend, which is expected to last for the next two decades and contribute significantly to economic development.

10.33 India spends about 3 per cent of its gross domestic product (GDP) on education, which is much below the average of developed countries. About 84 per cent of total expenditure on education is done by the States. Besides low investment, the education system faces various challenges such as poor learning outcomes, inadequate teacher training, teacher vacancies and absenteeism and an ineffective regulatory regime. The accountability measures are still weak at various places. There are large inter-State variations in educational performance. For example, literacy levels of States vary from 61.8 per cent in Bihar to 94 per cent in Kerala. The pupil-teacher ratio is very poor in States like Bihar, Haryana, Jharkhand and Uttar Pradesh,

10.34 The Government of India approved the National Education Policy in July 2020 (NEP 2020). This seeks to address many of the above challenges related to the foundational pillars of access, affordability, equity, quality and accountability. It proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of twenty-first century education, while building upon India's traditions and value systems. Complementing these efforts of the government, we decided, after detailed deliberations, that States should also be incentivised to improve pre-primary and broader school education.

10.35 Various parameters for defining the key performance indicators were discussed with the Ministry of Education (MoE), NITI Aayog and other subject area experts. The MoE informed us that it publishes an annual Performance Grading Index (PGI) of States which is based on seventy parameters covering five domains: (a) learning outcomes and quality, (b) access, (c) infrastructure and facilities, (d) equity and (e) governance processes. The comprehensive index captures all the major education-related indicators. Within these, we have focused on ten key indicators to incentivise States. These mainly relate to learning and equity outcomes.

10.36 A prime area of concern that remains, even after providing access to basic education, is the poor learning outcomes of school children. Accordingly, we have selected a few learning outcomes measured by the PGI and accorded a weight of 60 per cent to them. Another area which deserves attention is the education of girls, which is a critical determinant not only of age of

marriage, age of first pregnancy, total fertility and child health and nutrition but also the raising of the next generation of Indian citizens. We have also noted the educational gaps between rural and urban areas and between general and scheduled caste, scheduled tribes and minorities students. To address these, we have chosen some of the equity outcome indicators within PGI with an overall weightage of 40 per cent. This sub-set of the PGI is given at Annex 10.1.

10.37 **We recommend grants of Rs. 4,800 crore (Rs. 1,200 crore each year) from 2022-23 to 2025-26 for incentivising States to enhance educational outcomes based upon the above mentioned indicators.**

10.38 **We recommend incentivising six States each year as under:**

i. Category I: Rs. 200 crore incentive per year per State to be given to three States which secure the top three ranks in PGI.

ii. Category II: Rs. 200 crore incentive per year per State to be given to three States which show the highest improvement in PGI score over the previous year.

10.39 Over the award period, a State can only be awarded once in Category I and once in Category II, with the condition that it cannot be awarded for both categories in the same year. When a State cannot be awarded on account of any of these conditions, then the next best State in that category will be awarded. The grant will be released based upon the recommendation of the MoE. The performance grant received by the State will be utilised by the education department for enhancing educational outcomes and not diverted for use by any other department by the State.

Higher Education

10.40 To translate the demographic advantage into a productive dividend, it is important that higher education is also geared towards higher employment and entrepreneurial opportunities. The major challenges that the country faces in higher education include disparities in access, employability, research and innovation, faculty vacancies, capacity building, multiple regulatory agencies, large number of affiliated institutions and lack of flexibility in curricula. These challenges arise not only because of limited resources and funding but also to the absence of a forward looking policy framework. Also, the Covid-19 pandemic has necessitated alternative modes of delivering quality education wherever the traditional and in-person modes of education are not possible. There is also a dearth of professional courses in regional languages, which is a hindrance for many coming from rural areas. Considering this, we have recommended grants for higher education in two sub-categories: (a) promotion of online education, and (b) development of professional courses in regional languages.

10.41 The situation arising out of the Covid-19 pandemic, when institutions are closed, has increased the demand for online education. **We recommend grants of Rs. 5,078 crore for promotion of online education through the development of massive open online courses**

(MOOCs), direct-to-home (DTH) content development, digital classrooms and provision of devices (laptop/tablet) for 25 lakhs students belonging to socially and economically weaker sections of society. The inter se distribution between States has been made on the basis of the 2011 Census population. The details of distribution of devices may be worked out by the respective States in consultation with the MoE.

10.42 We also believe that the issue of access and the rural-urban divide in higher education may be addressed through encouraging teaching and learning material and pedagogy in the vernacular languages. There is a need to start professional courses in regional languages as 70 per cent of the people in India live in rural and tribal areas without access to quality education in English language. At present, it has been found that students from these backgrounds are diffident about opting for professional courses as they are offered in English only. Also, some of those who do take it up drop out mid-stream. After consultations with various stakeholders, **including the MoE, we recommend that two colleges in every State – one medical and one engineering – convert the learning material and pedagogy of their professional courses/ programmes into the recognised regional language (matribhasha) of the concerned State.** This is also in line with the NEP 2020 that attempts to revive the focus on regional languages in the country. **We have adopted the same cost norms as suggested by the Ministry and accordingly recommend Rs. 38 crore per State for five years amounting to a total of Rs. 1,065 crore for the development of professional courses in regional languages over the period 2021-26.**

10.43 The component-wise details of grants for higher education are given in Table 10.5. **Thus, for online learning and development of professional courses in regional languages (matribhasha) for higher education in India we recommend Rs. 6,143 crore. This grant will be administered by the MoE.** The State-wise and year-wise grants are given in Annex 10.2.

Table 10.5: Component-wise Disaggregation of Grants for Higher Education

(Rs. crore)

Year	Online Education				Development of professional courses in regional languages	Total
	MOOCs development	DTH	Device	Digital classrooms		
2021-22	68	3	449	400	213	1133
2022-23	83	5	463	413	213	1177
2023-24	129	13	477	427	213	1259
2024-25	148	14	492	436	213	1303
2025-26	91	11	505	451	213	1271
Total	**519**	**46**	**2386**	**2127**	**1065**	**6143**

B. Agriculture Sector and Rural Infrastructure

B.I Incentives for Agriculture Reforms, Self-Reliance, Export and Sustainability

10.44 The agriculture sector continues to dominate the Indian economy with 17.7 per cent share in gross value added (2019-20) and 44 per cent share in total workforce in the country.[1] The sector also assumes importance for the attainment of Sustainable Development Goals (SDG) 2030, addressing the issues of hunger and nutrition, greenhouse gas emissions and environment quality and also as a significant determinant of natural resource sustainability.

10.45 During the last three decades, agricultural output has grown at a trend growth rate of 3 per cent per year and it shows acceleration during the recent decade to 3.60 per cent. On the other hand, population growth rate, has been decelerating and reached a level of just 1.1. per cent. Further, while agri-food production has projected to maintain almost the same growth rate, population growth will further decelerate. This is creating mismatch between growth in domestic output and demand, with the latter not keeping pace with the former.

10.46 India is now surplus in many commodities and needs foreign markets to sell surplus domestic production to prevent a sharp fall in farm prices. This requires improved efficiency in production and better logistics. The growth rate in agriculture so far has been largely driven by output price support and input subsidies. These cause serious distortions in the output market and have led to the unsustainable use of natural resources. The most serious stress is felt on water resources, as half of the observation wells in the country show serious decline in the groundwater table. There are reports of farmers not getting remunerative prices for some crops as markets are not very competitive. Land lease laws in the country are such that they neither allow expansion of operational holdings nor encourage exit from farming. The net result has been that agriculture suffers from poor competitiveness, low production efficiency, unsustainable use of natural resources and low returns to farmers.

10.47 The main reason for the current state of agriculture is the absence of required policy reforms and missing development initiatives. In our first report for the year 2020-21, we had recommended that States will be eligible for financial incentives if they enact and implement all features of three new Acts prepared by the Ministry of Agriculture and NITI Aayog: (a) Model Agricultural Produce and Livestock Marketing (APLM) Act, (b) Model Contract Farming Act and (c) Model Agricultural Land Leasing Act.

10.48 It is pertinent to mention that out of these three policy reforms recommended by us, the Union Government has passed two Acts – (a) The Farmers Produce Trade and Commerce (Promotion and Facilitation) Act 2020 and (b) The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act 2020. We feel that with these two laws already in place, there is no need for the Commission to incentivise States to adopt the Model APLM Act and the Model Contract Farming Act. However, the Model Agricultural Land Leasing Act still remains on our agenda.

[1] Agriculture refers to crops, livestock, fishery and forestry.

10.49 Keeping these developments in mind, we held wide-ranging consultations with experts including the Ministry of Agriculture and Farmers Welfare, to formulate our view on the agriculture-related performance-based incentives for States. In this endeavour, we had the following objectives: (a) to use the challenges created by the Covid-19 pandemic as an opportunity; (b) to create mechanisms that ensure the sustainable performance of agriculture; (c) to enable smallholders and tenant farmers raise their income; (d) to promote demand-based production; (e) to incentivise increases in exports to match rising surplus production; and (f) to boost the agri-food processing sector.

10.50 After intense deliberations, we have selected four areas and parameters for performance-based incentives covering policies, investments, development initiatives and outcomes:

i. land lease reforms,

ii. sustainable and efficient water use in agriculture,

iii. export promotion, and

iv. contribution towards Atmanirbhar Bharat.

10.51 Each parameter is assigned an equal weight of 25 per cent. A summary of these parameters along with the goal and target underlying them are presented in Table 10.6.

Table 10.6: Parameters, Targets and Weights for Performance-Based Grants for Agricultural Reforms

S.no.	Purpose	Target/goal	Weight 1-100
1	Land lease reforms	Create legal provisions for liberalisation and recognition of agricultural land lease.	25
2	Sustainable and efficient use of water in agriculture	Maintain and augment groundwater stock and check the fall in the water table.	25
3	Export promotion for surplus disposal and better returns to farmers	Increase in exports of the agriculture sector	25
4	Atmanirbhar Bharat in oilseeds, pulses and wood and wood based products	Doubling of growth in output of three commodities over the average growth rate during 2011-12 to 2017-18	25

Land Lease Reforms

10.52 As mentioned earlier, the liberalisation of land lease was among the three policy reforms highlighted in our report for 2020-21. The incidence of leasing of agricultural land is rising but the lessee, or tenant who leases agricultural land, is not recognised, as the leasing agreements are largely informal.

10.53 More than 40 per cent of cultivated land is under leased tenancy in a few States. Such cultivators work in an insecure environment as they are not recognised by law and are deprived of benefits of government schemes such as the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) and institutional credit. A committee constituted by NITI Aayog went into details of this issue and proposed a model agricultural land lease law for adoption by the States. NITI Aayog also attempted to persuade States to legislate land lease laws, using the draft as a model. At present Madhya Pradesh and Uttarakhand have partially adopted the model law. Uttar Pradesh has passed an Act to amend its Revenue Code and created a provision for leasing of land by a landlord to any person, firm, company, partnership firm, trust, society, or any other legal entity for a period of fifteen years for agriculture or for setting up solar energy plants. This innovative approach meets the objective of the model land lease law circulated by NITI Aayog.

10.54 **We recommend that States may appropriately amend their land-related laws on the lines of NITI Aayog's model law to allow short-term and long-term lease of agricultural land both for agricultural purpose as well as for agro-industry, logistics for agricultural trade and supply chains.**

Sustainable and Efficient Water Use

10.55 India faces serious and rising stress in its water resources. Groundwater levels are falling at an alarming rate in large parts of the country and 600 million people already face high to extreme water stress. Despite the rising gap between the demand and supply of water, India's policies and practices encourage profligate use of water. The agriculture sector uses about 90 per cent of total water used in the country and still half of the area under agriculture remains rainfed. We use far more water compared to most other major agricultural countries to produce the same quantity of output. The reason for this is that farmers follow flood irrigation, as water supply to agriculture and power supply to extract water for agriculture is free in many States and highly subsidised in other States.

10.56 There are at least three ways to reduce and rationalise water use in agriculture. First, replace free or subsidised power supply for agriculture with direct benefit transfers (DBT) so power supply to agriculture is adequately charged. This will lead to judicious use of water and some shift away from water guzzling crops. Second, encourage and spread new technologies, such as drip, sprinkler, sensor-based irrigation to get more crop per drop. Third, conserve and harvest rainwater to increase the availability of surface as well as of groundwater. The net effect of all these measures can be captured from changes in the groundwater table which is regularly monitored by the Central Groundwater Board under the Ministry of Jal Shakti. Accordingly, **we recommend incentive-based grants to States that maintain and augment groundwater stock and put a check on any fall in the water table.**

Export Promotion

10.57 India is a net agri-food exporting country and exports 7 per cent of its domestic production. Indian agriculture has reached a stage where growth in domestic demand is lagging behind the growth in domestic production, leading to a rise in the surplus in the domestic market. The fraction of domestic production available for export will continue to rise in the next decade. Despite being the second highest agricultural producer in the world, India's share in the global market is just 2.5 per cent. India has enormous headroom for growing agricultural exports. Recognising this, the Government of India issued the Agriculture Export Policy in December 2018 which aims to double, by 2022, the level of agricultural exports from the level achieved in 2017. We propose to use this target as an indicator for our award for export performance of a State.

10.58 Recognising the importance of exports for Indian agriculture and farmers, we constituted a High Level Expert Group (HLEG) to suggest policy changes and strategy to give a transformative push to farm exports. After reviewing global trade flows, food and agriculture trends, successful case examples in India and overseas, review of select value chains, as well as wide-ranging consultations with governments, experts, industry, farmers and commodity boards, the HLEG made significant and pragmatic recommendations for doubling agricultural exports.[2] Some of these are:

i. Focus on twenty-two crop value chains (including two for import substitution) that have a potential to nearly double India's net exports in the medium term. Of these, target seven value chains that are an early must-win (rice, shrimp, spices, buffalo meat, fruits and vegetables for exports; and vegetable oil and wood for import substitution). Given their diversity, these can serve as lighthouses for other value chains in the next phase.

ii. Support these agri-value chains holistically through a cluster approach by addressing key enablers on both the supply side and demand side. This will increase farm productivity, improve quality, ensure regulatory compliance, enhance cost efficiency and boost competitiveness, while continuing with efforts to improve market access.

iii. The value chain clusters must be anchored by private sector value chain players to ensure market orientation through value added products.

iv. States must lead this effort by building comprehensive plans for developing the value chain clusters of the focus commodities.

v. The Union Government will have a key role to play in enabling execution of these plans. Building trade relationships and negotiating treaties with importing countries will naturally be in the Union's domain. It will also have to make and/or support investments in infrastructure at the air and sea ports, national highways, and warehouses in the importing countries, and also build 'Brand India' in destination markets.

[2] Details can be seen in HLEG report at: https://fincomindia.nic.in/ShowContentOne.aspx?id=27&Section=1

vi. A central body should be set up as an Empowered Committee comprising representatives of all stakeholder groups and State Governments with a dedicated secretariat. Inter-ministerial offices like Principal Secretary of the Prime Minister's Office or Member (Agriculture) of NITI Aayog could provide monitoring oversight to this set-up.

vii. The high cost of logistics affects the competitiveness of our agriculture exports and this needs to be addressed through appropriate policy measures.

10.59 The HLEG believes that the recommended approach will boost India's agriculture exports from US$ 40 billion to US$ 70 billion in a few years after implementation, while attracting estimated investment to the tune of US$ 8-10 billion across inputs, infrastructure, processing and demand enablers. The additional exports could result in the creation of seven to ten million jobs along the value chain, besides contributing to higher farmer incomes. Keeping these suggestions in mind, **we recommend using growth in agricultural exports as a target indicator for award for export performance of a State.**

Contribution Towards Atmanirbhar Bharat

10.60 Recently, considerable emphasis has been given to making India self-reliant through Make in India. Agriculture, being the largest sector of the Indian economy, has to play a significant role in achieving the goal of Atmanirbhar Bharat. Despite the rising stock and surplus in some commodities, and large unused land, India has a sizable deficit in other agricultural commodities.

10.61 The Green Revolution, focussing on wheat and rice, created strong disadvantage for the production of pulses and oilseeds crops in the country. Moreover, the availability of pulses in global market is also very limited, leaving little scope for large scale imports. As a result, per capita domestic availability of pulses has declined from 69 grams per person per day in 1961 to less than 55 grams in recent years. Pulses are a major source of protein and nutrition for a large number of Indians and the decline in its per capita availability has led to undernutrition and malnutrition. More than 60 per cent of India's domestic demand for vegetable oil is met from imports, valued at Rs. 69,000 crore. Similarly, the country is meeting 40 per cent of its non-fuel timber requirement from imported wood and wood products, valued at Rs. 42,000 crore in 2018-19 making it the second highest agri-import commodity after vegetable oil.[3]

10.62 The country has vast tracts of barren lands devoid of vegetative cover, with serious economic and environmental implications. State laws on felling of trees and transit of produce of trees and setting up of wood-based industries are major hurdles to raising trees outside forests and producing wood on private lands. A change in the regulatory focus, in the form of relaxation in regulations relating to felling of trees and their transport and on wood-based industries, will encourage growing of valuable tree species on private lands. **We recommend increasing production of oilseeds, pulses and wood and wood-based products as an indicator to make**

[3] *Handbook of Statistics on Indian Economy,* Reserve Bank of India

India self-reliant in pulses, edible oils and wood and wood products.

10.63 One of the performance criteria presented in Table 10.6, namely the enactment of the model agricultural land lease law, is a one-time policy measure. A State is eligible to get one-fifth of the earmarked incentive for the State on the notification of the new law during our award period (2021-26). Other parameters involve step-wise annual progress. These will be quantified on an annual basis to arrive at the amount of performance-based incentive. The methodology for estimating performance-based grants to States and actual indicators to measure extent of performance are presented in Annex 10.3.

10.64 **We recommend that Rs. 45,000 crore be kept as performance-based incentives for all the States for carrying out agricultural reforms during the award period. Its distribution among States, based on gross value added (GVA) in agriculture (average of actuals for 2018-19 and our projections of 2019-20) in each State, is given in Annex 10.4. NITI Aayog will be the nodal agency for monitoring and reporting progress of the indicators in each State and recommend the release of performance-based reward on the basis of annual assessment.**

Distribution of Residual Fund

10.65 It is likely that a few States may not be able to meet all the four goals/targets for getting the full amount of the performance-based grant for agriculture. This will leave some amount of performance grants unused at the end of five years. We recommend that this unused amount be distributed among those States which earned an aggregate score of at least 25 per cent. The share of each of the eligible States will be determined on the basis of their relative share in the total agricultural GVA of all the eligible States.

10.66 **This performance grant should be used only for infrastructure and activities related to the development of agriculture and allied sectors by the States.**

B.II Maintenance of PMGSY Roads

10.67 Para 6 (iii) of the ToR says that 'While making its recommendations, the Commission shall have regard, among other considerations, to: …..the demand on the resources of the State Governments, particularly on account of financing socioeconomic development and critical infrastructure, assets maintenance expenditure……'.

10.68 Rural roads are recognised as catalysts for rural development and critical for poverty alleviation. The PMGSY was launched in December 2000 to provide all-weather connectivity to eligible habitations. To date, 6.32 lakh km road length has been constructed, which is close to a quarter of the rural road network. This huge asset demands a recurring and steady stream of funds for maintenance.

10.69 Rural roads often witness manifold increase in traffic volume and need constant

upgradation. PMGSY introduced the concept of a five-year guarantee period for the maintenance of roads. As of date, 1.63 lakh km roads (25.8 per cent) are within this guarantee period, which leaves 4.69 lakh km of road (74.2 per cent) due for renewal/upgradation. While the routine maintenance of roads is provided for by State Governments in the original cost, the increasing liability of the post guarantee period maintenance is becoming a challenge. After the change in funding pattern of Centrally sponsored schemes (CSS), post 2015, the financial burden of States has increased and most are unable to provide funds for maintenance and upgradation of roads. This financial stress has increased after the Covid-19 pandemic and, over time, it is essential that the States meet this need fully from their own sources.

10.70 The Ministry of Rural Development (MoRD) has informed us that the total asset value of PMGSY roads constructed so far is about Rs. 3.16 lakh crore. These roads will undergo rapid deterioration if periodic maintenance is not carried out. The cost of such maintenance is approximately Rs. 12-15 lakh per km in plain areas and Rs. 14-17 lakh per km in the hilly areas. At the present construction cost of Rs. 0.6 crore per km, the total replacement value of the 4.69 lakh km of roads now in the post five-year period is roughly Rs. 2.81 lakh crore. The Ministry requested us to provide a grant of Rs. 73,142 crore to the States for the roads that are likely to fall in the post-five-year category during our award period.

10.71 We feel that it is extremely important to provide for maintenance of the PMGSY roads at the end of the five-year maintenance contract period. We have taken the projected expenditure on maintenance of roads from the MoRD for a period of five years and recommend grants to cover a part of the maintenance cost. We have covered a higher proportion of the total maintenance cost for NEH States considering that they face greater challenges in maintaining their road infrastructure. Until the States are fully able to meet these costs, for the general States we have provided for 25 per cent of the projected cost of maintenance, and the total grant works out to Rs. 14,743 crore. Similarly, for the NEH States we have provided for 90 per cent of the projected cost of maintenance, and the total grant works out to Rs. 12,796 crore.

10.72 **Thus, for our award period, we recommend Rs. 27,539 crore for the maintenance of PMGSY roads for the years 2021-26, out of which Rs. 14,743 crore is for the general States and Rs. 12,796 crore is for the NEH States. This amount is expected to cover about 2.21 lakh km of roads that fall in the post five-year maintenance period. This grant will be administered by the MoRD. The State-wise and year-wise details are given at Annex 10.5.**

C. Governance and administrative reforms

C.I Judiciary

10.73 An efficient justice delivery system is a central component in implementing the SDG Goal no. 16, that is, peace, justice and strong institutions. During our consultations with the Department of Justice in the Ministry of Law and Justice, we were informed that State Governments did not provide adequately for strengthening the judicial system even after the enhanced tax devolution following the recommendations of the FC-XIV.

10.74 Latest data show that the district and subordinate courts across the country are still grappling with about 3.20 crore pending cases, causing inordinate delays in justice delivery. Two-thirds of the prison population are under-trial prisoners who continue to be incarcerated due to disproportionate delay in trials. Delays and pendency of economic cases are also mounting and this is taking a toll on the economy in terms of stalled projects, mounting legal costs, contested tax revenues and reduced investment.

10.75 The Department of Justice sent a proposal for Rs. 19,312 crore for all States to build fast-track courts, special fast-track courts for cases under the Protection of Children from Sexual Offences (POCSO) Act and appropriate facilities in court complexes. After detailed deliberations, **we recommend grants of Rs. 10,425 crore for fast-track courts for speedier justice delivery in cases of heinous crimes, civil cases of marginalised people, property cases that are over five years old and economic offences as well as special fast-track courts for POCSO cases.** The Department gave an approximate cost of Rs. 82.50 lakh per court per year for starting new fast-track courts as well as running existing fast-track courts. Based upon this cost, 2,530 fast track courts may be started and maintained for five years. We recommend that preference should be given to fast-track court for POCSO cases. The number of fast track courts proposed for each State is based upon the crime rate mentioned in the National Crime Records Bureau data of 2018.

10.76 We are convinced that grants for judiciary recommended by this Commission would aid in ensuring essential infrastructure to facilitate early disposal of cases in several important areas, which would improve the efficiency of the justice delivery system. This will benefit both the society at large and the economy. The State-wise grants are given in Annex 10.6. This grant will be administered by Department of Justice in the Ministry of Law and Justice.

C.II Statistics

10.77 Reliable statistics are absolutely essential for any policy making, implementation and subsequent monitoring. The Ministry of Statistics and Programme Implementation (MoSPI) submitted a detailed proposal to enhance the system of statistical data collection and their dissemination. The proposal contains the expectations from the States for the next five years along with a broad implementation strategy as well as recommendations for State-wise grants. We are convinced that incentivising States for producing robust statistics in a timely manner will go a long way in effective policy making in times to come.

10.78 The grants for statistics for the States have a fixed and a variable grant. A quantum of fixed grants of Rs. 1 crore per district is recommended for all States to support their basic statistical operations. An additional quantum of variable grants is being provided to the States on the basis of two criteria. These are: (a) the level of statistical capacity and development; and (b) the utilisation capacity, based on past expenditure on statistical activities. The statistical capacity and development of a State is assessed on parameters such as existing manpower, status of

compilation of district domestic product, index of industrial production, consumer price index, participation in the National Sample Survey/Annual Survey of Industries and other published statistical exercises. Based on the scores assigned to States on the selected parameters, they have been categorised into three groups and variable grants per district have been recommended for each.

10.79 Based on the scores, the categorisation of States into three groups and proposed quantum of variable grant per district are in Table 10.7. State-wise details are given in Annex 10.7.

Table 10.7: Categories of States for Variable Grants for Statistics

Group	Average score based on total of available indicators	Proposed quantum of variable grant per district	Name of States
I	Greater than or equal to 0.70	Rs. 50 lakh	Andhra Pradesh, Gujarat, Karnataka, Kerala, Odisha, Tamil Nadu, Telangana, Uttar Pradesh, West Bengal (9)
II	Greater than or equal to 0.5 but less than 0.70	Rs. 75 lakh	Assam, Haryana, Himachal Pradesh, Maharashtra, Manipur, Mizoram, Rajasthan, Sikkim (8)
III	Less than 0.5	Rs. 1 crore	Arunachal Pradesh, Bihar, Chhattisgarh, Goa, Jharkhand, Madhya Pradesh, Meghalaya, Nagaland, Punjab, Tripura, Uttarakhand (11)

10.80 We have accepted, after deliberations with experts, the broad outline of the expected activities proposed by MoSPI which is given in Table 10.8. However, this list of indicators is suggestive and may be revised and finalised by MoSPI in consultation with States.

Table 10.8: List of Milestones for Variable Component of Statistics Grants

Milestone	Activities related to the milestone	Release of additional resources/funds (within envelope)
1.	• Compilation and **annual release** of district domestic product (DDP) • Compilation and **monthly release** of State index of industrial production and consumer price index • State monitoring framework for SDGs and **dynamic updating** with National SDG Dashboard	33.33 per cent of variable component
2.	• Participation in NSS surveys and release of estimates at the sub-**State/district levels** within one year of completion of survey; • Using technology for data capture (computer assisted personal interviewing (CAPI) mode), validation and processing.	33.33 per cent of variable component
3.	• Implementing **dynamic updating** of proposed National Business Register • Innovations for improvements in administrative statistics like establishment and household registries; land records, etc. • Dynamic updating with the national integrated information portal being developed by MoSPI	33.33 per cent of variable component

10.81 The variable grants amounting to Rs. 498 crore are based upon the fulfilling of all of the three milestones above. This amount is equally spread across three years, 2023-24 to 2025-26. To avail one-third of this amount in a year, States have to fulfil any one of the three milestones in year 2023-24. In year 2024-25, one of the remaining two milestones should be fulfilled to get another one-third amount and the last milestone should be fulfilled in year 2025-26 to get the remaining amount. The order of completion of these milestones is not specified. The variable component of the grants to be given to States will be based upon the recommendations of MoSPI, which will administer the grant.

10.82 **We recommend total grants to the States, with fixed and variable components, of Rs. 1,175 crore from 2022-23 to 2025-26 for improving the quality of statistics. We also recommend that, initially, the fixed grant of the total allocation, amounting to Rs. 677 crore, which is unconditional, may be released in 2022-23. The remaining variable component of Rs. 498 crore may be disbursed equally over the remaining three years starting 2023-26, based on achievements of milestones against a list of activities as explained before. Both the**

fixed and variable grant will be utilised by the States' statistics department only. The year-wise and State-wise details are given at Annex 10.8. This grant will be administered by MoSPI.

C.III Development of Aspirational Districts and Blocks

10.83 The 'Transformation of Aspirational Districts' programme was initiated by NITI Aayog to expeditiously improve the socio-economic status of 112 relatively underdeveloped districts across the country, that were identified on the basis of certain social and economic development criteria. Driven primarily by the States and instituted for the States, this initiative focuses on the strengths of each district, and identifies the attainable outcomes for immediate improvement, while measuring progress and ranking the selected districts. The three core principles of the programme are: convergence (of Union and State Schemes), collaboration (among citizens and functionaries of Union and State Governments, including district teams) and competition among districts. It focuses on five main themes: health and nutrition, education, agriculture and water resources, financial inclusion and skill development and basic infrastructure, which have a direct bearing on the quality of life and productivity of citizens.

10.84 The Union Government, in its memorandum, has emphasised the need to incentivise aspirational districts through an improvement in key performance indicators developed by NITI Aayog. The baseline ranking for the aspirational districts is based on forty-nine indicators across five sectors: (a) health and nutrition (30 per cent weightage); (b) education (30 per cent); (c) agriculture and water resources (20 per cent); (d) financial inclusion and skill development (10 per cent); and (e) basic infrastructure (10 per cent). We also held extensive consultations with NITI Aayog, and received a formal request for supporting this programme.

10.85 We studied the proposal and held detailed discussions. Based upon our deliberations, we have come to the conclusion that incentivising administrative units like districts or blocks, which are below the national average in critical parameters, on the basis of performance in a transparent manner can be an effective tool of improvement in governance. Such incentives give rise to healthy competition among different units, thereby improving the impact of a scheme/policy across different sectors. The ensuing competition among different public delivery units should lead to greater adoption of innovative and best practices.

Aspirational Districts

10.86 **We recommend Rs. 500 crore over the five-year award period for incentivising aspirational districts.** The performance of a district would be measured on the basis of a performance matrix consisting of selected key performance indicators (KPIs) over a given period of time. The KPIs will be formulated and finalised by NITI Aayog in consultation with States. Based upon this index, ten districts would be selected for a yearly performance grant of Rs. 10 crore each, subject to the following conditions:

i. Districts will receive such an amount only once in the 2021-26 period. If the same district also ranks among the best ten districts, it would receive a certificate, but the allocation would be provided to the next best district observing similar conditionality.

ii. NITI Aayog will define a minimum benchmark of performance that districts will have to achieve to avail the award/grant.

iii. The amount would be in the nature of untied funds and districts would have the flexibility of choosing the projects/activities subject to a negative list to be drawn up by NITI Aayog to ensure that this fund is utilised for critical needs of the district.

iv. Every district that has secured the performance grant would have to get its proposed plan of action and activities approved by a nodal officer designated for this purpose by the State Government and would send such a plan of action to NITI Aayog. The plan has to be developed in consultation with the district and State Government.

10.87 The guiding principles for selection of KPIs and assessment of performance of a district are:

i. To the extent possible, KPIs should be outcome-based indicators. Only very critical process indicators, which are directly linked to flagship schemes of the Union Government, are to be included.

ii. KPIs must be relevant to all districts in India.

iii. Evaluation of performance would be based on an independent survey done by a third party selected through an open competitive process.

Administrative Blocks

10.88 The experience with aspirational districts has been extremely encouraging and NITI Aayog has now proposed that the focus should be on the administrative block as a unit of targeted intervention. We have examined the proposal of NITI Aayog for incentivising blocks in aspirational districts and are in agreement with the proposal. **We recommend that 10 per cent of the blocks in the aspirational districts of each of the concerned States would be selected every year from 2021-22 to 2025-26 on the basis of their performance using an identified performance matrix. These blocks would be rewarded an amount of Rs. 5 crore each. Since there are 915 administrative blocks in the 112 aspirational districts, about 100 blocks, spread over the States that have aspirational districts, would be covered every year. This will translate into an amount of Rs. 2,500 crore for incentivising blocks over the five-year award period. The performance grant will be subject to the following conditions:**

i. A block will receive such performance grant only once in a period of 2021-26. If the same block secures rank among the first blocks in another year, it would receive a certificate but the allocation would be provided to next best block observing similar conditionality.

ii. NITI Aayog will define a minimum benchmark of performance that blocks will have to achieve to avail the award/grant.

iii. The grant would be in the nature of untied funds and the district concerned would have the flexibility of choosing the projects/activities subject to a negative list prescribed by NITI Aayog. While finalising the list of activities /projects, the critical needs of blocks would be given priority.

iv. Every block that has secured a performance grant would get the proposed plan of action/activities approved by the District Administration.

10.89 The guiding principles of selection of KPIs for the evaluation of blocks would be the same as for aspirational districts. However, given the specific priorities, the list of indicators for assessing 10 per cent of the best performing blocks in a State would be State-specific. NITI Aayog would work with each State to arrive at a set of indicators for selecting top 10 per cent of the blocks in each State.

10.90 In order to ensure that competition among districts and among blocks remains fair and transparent, independent third party surveys on a sample basis should be conducted once a year in each district. The performance measurement would be based on the results of these surveys. NITI Aayog should engage agencies for conducting these surveys through competitive bidding. **We recommend Rs. 150 crore for capacity building and surveys in 112 districts and 915 blocks over a period of five years.**

10.91 After completion of the project, districts and blocks would forward utilisation certificates of activities undertaken through State Government to the Union Government.

10.92 Accordingly, **we recommend Rs. 3,150 crore for incentivising aspirational districts and blocks for a period of five years from 2021-22 to 2025-26.** This grant will be administered by NITI Aayog. A summary is given in Table 10.9.

Table 10.9: Requirement of Funds for Aspirational Districts and Blocks

S. No.	Particulars	Yearly	Cumulative for five years (2021 - 2026)
		(Rs. crore)	(Rs. crore)
1	Performance grant to ten best performing aspirational districts (out of 112) @ Rs. 10 crore every year	100	500
2	Performance grant to best performing 100 blocks @ Rs. 5 crore every year	500	2500
3	Surveys and capacity building in all 112 aspirational districts and 915 blocks	30	150
	Total	630	3150

D. Power Sector Reforms

10.93 Para 7(iv) of our ToR enjoins us to consider measurable performance-based incentives for States that have made "progress in increasing capital expenditure, eliminating losses of power sector, and improving the quality of such expenditure in generating future income streams". The power sector has its distinct but interrelated segments of generation, transmission and distribution. The Electricity Act, 2003 provided a framework for the development of the sector by promoting competition, ensuring transparency, rationalising electricity tariffs, distancing government from regulatory responsibilities and protecting consumer interest. It succeeded in bringing investment from the private sector in generation and transmission and resulted in huge augmentation of generation and transmission facilities.

10.94 However, functioning of distribution companies (DISCOMs) have remained a source of strain on State finances and the overall performance of the power sector. In most States, the improvements in the distribution segment are incomplete. This segment has been the weakest link in the entire value chain and has long faced questions of financial sustainability on account of below-cost tariffs to different consumer groups, the supply of un-metered, free electricity to agriculture, States not providing the promised subsidies to the utilities, high aggregate technical and commercial (AT&C) losses and poor regulatory governance. The issue of inadequate revenue realisation and significant functional inefficiencies remain. These factors have weakened the finances of State utilities, lowered the ability to attract private investment in the sector and resulted in heavy reliance upon government support for both investment and working capital. The consequence has been pressure on State finances as well as on the viability of the upstream segments of the power sector, lender banks and financial institutions and, ultimately, acting as a brake on the entire economy.

10.95 Over the past twenty years, a number of reform initiatives have been taken to create incentives to increase metered supply, strengthen transmission and distribution systems and reduce losses. These reform measures have included schemes that offered funding for capital investment and made the terms of financing more attractive for States achieving targets of loss reduction. Some of the key reform initiatives have been the Accelerated Power Development and Reform Programme (APDRP), the Restructured-APDRP, Integrated Power Development Scheme, Financial Restructuring Plan and Ujjwal DISCOM Assurance Yojana (UDAY). These reform measures, generally, had a marginal impact on the functioning of the DISCOMs, though some States have shown improvement.

10.96 In our report for 2020-21, we had noted that we would consider recommending annual financial incentives for top performing States in the power sector. The targets suggested were based on certain broad parameters such as: (a) achieving the reduction targets of AT&C losses, (b) achieving the reduction targets of average cost of supply (ACS) and average revenue realised (ARR) gap, (c) open access to trade and industry to meet their power needs from sources other than the State utilities and (d) to implement direct cash transfers for all consumers eligible for subsidy in a State. We, in our first report, had also urged the Ministry of Power to develop, in

consultation with the States, a monitorable performance index within 2020-21, with State-wise targets and a clear roadmap.

10.97 Since State Governments are the sole owners of an overwhelming majority of the distribution utilities, their financial position is directly affected by the financial health of the utilities. The State Governments have been lending to the power sector specially to fund capital expenditure of transmission companies and DISCOMs, and also to cover their mounting financial losses. In addition to direct lending, State Governments have been providing support to State DISCOMs in the form of grants and subsidies. During the 2014-19 period, States, on an average, have spent 6.6 per cent of their budget on power. State Governments also provide guarantees for the borrowings of DISCOMs from financial institutions. Given that State Governments are guarantors, these resultant contingent liabilities are a risk to State finances, owing to the large outstanding debt and rising losses of DISCOMs. The aggregate losses (after including the subsidy received) for all the utilities increased from Rs. 33,594 crore in 2017-18 to Rs. 61,360 crore in 2018-19.

10.98 The outstanding debt of State Governments as a proportion of gross state domestic product (GSDP) stood at 25.3 per cent as on 31 March 2019. On the same date, the stock of borrowings of DISCOMs, which are not part of the outstanding debt of the States, stood at 2.5 per cent of GDP. The stock of borrowings of DISCOMs of seven States, where its incidence is the highest, averaged 5 per cent of their GSDP. Apart from the rising debt stock, the DISCOMs have also reported liabilities - both financial and non-financial - worth 1.9 per cent of GSDP and payables on account of purchase of power and fuel worth about 1.1 per cent of GSDP on 31 March 2019. This impacts the comprehensive debt profile of the States. The known vulnerabilities of DISCOMs in their commercial operations and their shadow on State finances have compelled us to address the problems in a manner that will create incentives for States to comprehensively reform their power sector.

10.99 The power sector has also been severely impacted by the Covid-19 pandemic and there has been a significant drop in power consumption. During the period April-June 2020 the consumption of power declined by 18.3 per cent on a year on year basis. More importantly, there has been a steeper fall in industrial and commercial consumption, two major revenue earners for the DISCOMs. There is clearly a longer-term impact of the Covid-related slowdown on electricity offtake impacting power demand and, hence, revenues.

10.100 As discussed earlier in the report, the pandemic has had a serious negative impact on the resources of both the Union and State Governments. As a consequence, States urgently require additional resources to address the effects of the pandemic and maintain the standards of service delivery to public. To enhance the resources of the State Governments, the Union Government provided an additional borrowing limit of up to 2 per cent of GSDP in the year 2020-21. Out of this 2 per cent, 0.25 per cent was linked to power reforms. To avail of 0.25 per cent of additional borrowing, States are required to undertake reforms in the year 2020-21, on the lines of the parameters we recommended in our first report:

i. For reduction in AT&C losses in a State as per targets, an additional borrowing limit of 0.05 per cent of its GSDP has been allowed.

ii. For reduction in the ACS-ARR gap in a State as per targets, an additional borrowing limit of 0.05 per cent of its GSDP has been allowed.

iii. For introduction of DBT to all farmers in a State in lieu of free electricity given to them, an additional borrowing limit of 0.15 per cent of its GSDP has been allowed. To become eligible, the State is required to (a) formulate the DBT scheme and (b) implement this scheme in at least one district by 31 December 2020.

10.101 The measures taken by the Union Government in the course of addressing the pandemic have already set in motion a process of incentivising the States to improve the distribution sector. These, along with the proposed amendments to the Electricity Act 2003 and the likely approval of the New Tariff Policy, will further provide momentum to the reform agenda. We believe that these measures need to be continued as the attendant structural reforms are expected to be completed over the next four-five years.

10.102 We had, in our report for 2020-21, indicated our approach for designing a forward looking performance incentive for improvement in the power sector for top performing States. There is clear recognition amongst all stakeholders that a number of steps are required to be taken by all the States and the DISCOMs under them to enable the power sector to become the engine of growth. These include eliminating cross subsidies, expanding metered supply, implementing DBT for transfer of subsidy, reducing ACS-ARR gaps as well as AT&C losses. We also recognise that fresh capital investment is required for last-mile improvements in supply infrastructure. Underlying all these, in our opinion, is the need to increase power demand to give a spurt to the economy and target improvement in the revenue realisation of DISCOMs. Making the increase in revenue realisation the central focus of our approach will also trigger removal of functional and operational inefficiencies that have plagued the distribution sector. Therefore, keeping in view the impact of the pandemic on both demand side and supply side factors in the power sector and on State finances, we considered various options that would provide States with a liquidity cushion to implement structural improvements in the finances of DISCOMs and simultaneously introduce governance improvements. In designing our performance incentive, we also factored in the responsibility of the State Governments and their accountability towards the tax-payers and citizens.

10.103 **Accordingly, we recommend an extra annual borrowing space for the States, of the magnitude of 0.50 per cent of their GSDP for each of the first four years of the award covering the period 2021-22 to 2024-25, based on certain performance criteria in the power sector.** As the DISCOMs' operational efficiency is important to the extended debt profiles of States, we recommend linking this window of additional borrowing space to certain specified measures to improve this operational efficiency. We have made this intervention forward looking, with targeted year-on-year improvements during the 2021-25 period that can be calibrated and

assessed before States are rewarded. We further recommend that for States that achieve the threshold level in terms of performance, the extra borrowing can be used for capital expenditure to upgrade distribution infrastructure.

10.104 We had extensive discussions with a large number of stakeholders and received numerous suggestions on the incentive system that could be set in place to align the interests of the State Government with those of the distribution utilities. Some of the indicators suggested included implementation of corporate governance practices in DISCOMs, implementation of a public private partnership model, procurement of power through tariff-based competitive bidding, smart metering with prepaid facility, commitment to fulfill renewable purchase obligations and switch to DBT for the transfer of subsidy to agricultural and other consumers.

10.105 In the course of our deliberations, we noted that the absence of up-to-date audited accounts is a problem in some of the DISCOMs. Most of them are registered under the Companies Act, 2013 and are required to file their consolidated financial statements as per a mandated schedule. Unless and until proper audited accounts are available, the financial implications of performance cannot be measured. This will make the incentive structure potentially susceptible to gaming. We, therefore, recommend as an entry level condition, that for a State to become eligible for this extra borrowing, it should ensure and certify that all DISCOMs in the State have up-to-date audited accounts. This implies that in determining the eligibility of a State in year (t), all the DISCOMs in the State should have filed their consolidated financial statements for the financial year (t-1) as per the statutory requirements. Unless this condition is fulfilled by all the DISCOMs of the State for the accounts of the previous financial year, the State will not be eligible for the additional borrowing. This entry level condition will only apply for the borrowings in the years from 2022-23 onwards. We expect that this entry level condition will instil discipline and actual performance will get captured to accurately reflect the ACS-ARR gap.

10.106 In our final choice of indicators, we have restricted the number of key indicators that will reflect the outcome of the reforms to four. In order to maintain continuity, we chose to continue with all the three indicators that have been mandated by the Ministry of Finance for the year 2020-21: (a) reduction in AT&C losses; (b) reduction in ACS-ARR gaps; (c) reduction in payment of cash subsidy by adopting DBT. These had also been identified by us in our first report. We have expanded the third indicator to include the reduction in tariff subsidy as a percentage of revenue from the sale of power. This will measure the extent to which State Governments are providing subsidy to the power sector.

10.107 The objective of reform should be to ensure a sustained increase in electricity consumption in the country, with DISCOMs in a position to improve their off-take of power. The three performance indicators address this core concern. Underlying the three indicators should be an incentive to increase the sale of metered energy, for which revenue has actually been collected. Non metered supply poses a challenge for accurate measurement and raises the possibility of including figures that do not actually represent increased energy off take but merely a juggling of transmission and distribution (T&D) losses. For DBT to succeed, the consumption of electricity

by a user needs to be measured and this is only possible with increasing metered supply. The subsidy through DBT will thus get automatically captured. Supply of energy that is not metered or supplied free gets excluded unless there is an up-front payment of subsidy. We have, therefore, added a fourth indicator that looks at per capita consumption of units through metered supply that yield actual revenue. In this, subsidies on the demand side made through DBT will get included as it will reflect actual revenue generation for power sold. But subsidies and supply side transfers that are given through State budgets for unmetered supply will be excluded because it will not reflect actual consumption, as it can also involve unmetered supplies to sectors like agriculture.[4] The availability of up-to-date audited accounts will enable the capture of this vital information central to the four performance indicators identified. Therefore, in making assessment of the performance of the States, the demand side subsidy for metered supply can automatically be identified for inclusion just as supply side subsidy transfers from State Governments can be identified for exclusion. Once the primary focus of States and DISCOMs shifts to the core activity of making the power sector viable and financially stable, it is expected that there will be an incentive for reducing both AT&C losses and supply side subsidies for free supply. The incentive under this component will include both high achievement in percentage terms as well as an increase in absolute number of units. This, in our opinion, will enable the incentive mechanism to cater to both consistent higher performance as well as improvement by laggard states. Unlike past reforms that focused on inputs, our reforms are linked to measurable outcomes and therefore more likely to succeed. Table 10.10 summarises the indicators along with their weights.

[4] A demand side subsidy is a subsidy directed to the consumer, whereas a supply side subsidy is a subsidy directed to the service provider.

Table 10.10: Matrix for Evaluation of Performance of States

	Purpose	Indicator	Measure	Unit	Weightage
1.	Timely submission of audited statements, including consolidated financial statements	Submission of consolidated financial statements of previous financial year	Submission before due date	As per statutory requirement	Entry level condition
2.	Sustained increase in electricity consumption	Per capita consumption of units through metered supply that yields actual revenue. This will include subsidies made through DBT as they reflect actual revenue for power sold. It will exclude subsidies and supply side transfers made through State budget for all types of unmetered supply	Annual percentage increase	Percentage increase	20
			Annual absolute increase	Increase in absolute units	15
3.	Overall operational efficiency	AT&C losses	Annual percentage reduction	Percentage reduction	20
4.	Overall operational efficiency	ACS-ARR gap	Paise /kWh of energy sale	Percentage reduction	20
5.	Reduction of cash subsidy and overall reduction of subsidy	Subsidy payment by DBT	Annual percentage increase	Percentage increase	15
		Tariff subsidy booked as a percentage of revenue from sale of power	Annual Percentage reduction	Percentage reduction	10

10.108 The Ministry of Power (MoP) will be the nodal department for monitoring progress of the indicators and will submit its annual assessment and recommendation to the Ministry of Finance. At the beginning of the financial year, by the month of May, an agreed plan by way of a memorandum of understanding (MoU) between the State Government and MoP will become the base for measuring the eligibility for the incentive borrowing for the next year. For the first year

(2021-22), the past performance can be used. The final decision to grant an extra 0.50 per cent of GSDP as additional borrowing to the State will be taken by the Ministry of Finance, based upon the recommendation of the MoP.

10.109 There may be some States that avail of this additional borrowing window but the finances of the DISCOMs continue to deteriorate. There needs to be a strong disincentive for this. We recommend that a State that does not achieve a certain minimum level of performance, as per the MoU, after having availed of this additional borrowing facility, should be penalised by adjustment of the borrowing undertaken for the power sector from the normal borrowing limit of the State for the following year. The MoP, in consultation with the Ministry of Finance, will work out the details of this mechanism well in advance so that the States are aware of the consequences of poor performance.

10.110 Over the award period of this Commission, we anticipate that the suggested measures will lead to a significant increase in demand for electricity accompanied with increased revenue realisations by DISCOMs, reductions in the operational parameters such as AT&C losses and the ACS-ARR gap. This will have a direct impact on the finances of the DISCOMs and will be reflected in improved financial indicators, such as the reduction in annual losses and total liabilities of the DISCOMs and an increase in their net worth. This will reduce the dependence of DISCOMs on State support and will be reflected both in terms of the annual subsidy outgo from the Consolidated Fund of the State and also the reduction in the total borrowings (and grants) of the DISCOMs from the State Governments.

Other Sector-specific Grants Proposed in Report for 2020-21

10.111 In our report for 2020-21, we had also identified certain sectors for performance-based incentives and grants – nutrition, pre-primary education, railways, police training and housing, enhancing trade including exports and promotion of tourism.

10.112 We recommended a grant for nutrition amounting to Rs. 7,735 crore for the States. The decision was based upon the persisting levels of malnutrition among vulnerable children, pregnant women and lactating mothers (especially in relatively less developed States) that forms a key part of the global hunger index. Various studies confirm that malnutrition has a severe impact on the brain development of children. The amount that we recommended was in addition to the grants allocated by the Union Government under CSS. However, the explanatory memorandum released by the Government of India stated that 'the Commission may review this recommendation as a part of its overall proposal of measurable performance-based incentives for States as per the TOR, in the main report.' In response, we reiterate the urgent need of higher allocation of resources to address persisting acute and chronic undernutrition and hunger and **recommend that the nutrition of children and pregnant and lactating mothers be accorded the highest priority by Government of India through the Integrated Child Development Scheme.**

10.113 In our report for 2020-21, we mentioned that we will examine the feasibility and potential effectiveness of a performance-based incentive related to exports, including its design. We have recommended incentive grants to promote agri-exports in the section on incentives for agricultural reforms earlier in this Chapter. Also, the Union Government recently decided to provide incentives to States by providing additional borrowing limit conditional to 'ease of doing business reform,' among other things. Hence, we believe that separate grants for incentivising exports may not be required at this stage.

10.114 The Ministry of Railways, in its memorandum, projected a significant requirement of funds for on-going works for the next five years. This essentially outlined the requirement of funds for completing the on-going works for State Governments (on cost sharing basis), national projects and for other plan heads (rolling stock, level crossing, signal and telecom and electrification etc.). During our meeting with the Ministry of Railways, we were informed that certain on-going projects related to new lines, gauge conversion and doubling of the railway track lines are being taken up jointly with the States on cost sharing basis. There are thirty-eight such projects where the States are unable to pay their share of the project cost. These projects are, at present, stalled at different stages of implementation, and the current investments are proving to be infructuous. **Hence, it is recommended that the Union Government may put forward an arrangement to ensure completion of these projects at the earliest.**

10.115 We also mentioned in our report that we will consider providing grants for police housing and training. In this respect, after our deliberations, we have recommended such grants for some States, as part of State-specific grants, based upon their submissions to us.

10.116 In our report for 2020-21, we also stated that the Commission will consider recommending performance incentive grants for States to promote tourism. The ongoing pandemic has had a disproportionate impact on the tourism sector and it will take some time for normalcy to return. Any performance incentive in this period of uncertainty would not serve its purpose and we have, therefore, desisted from recommending any incentives for this sector. However, we have recommended grants to some States for specific tourism projects, based on their submissions to us, as part of State-specific grants given in the next section.

State-Specific Grants

10.117 While we agree that most of the funds devolved to States should be untied, formula-based devolution cannot finely target State-specific disabilities, needs and priorities. State-specific grants may help overcome special needs and cost disabilities of States that could not be covered under the formula-based devolution and other sector- specific grants. Hence, grants (including revenue deficit grants, sector-specific grants and State-specific grants) should be optimally combined to maximise the impact of fiscal transfers.

10.118 We requested the States to send their views on our ToR, identify areas requiring support and give their proposals. Though the States largely expressed preference for untied and formula-

based grants, they also submitted proposals for State-specific grants that covered the administrative, revenue and development functions of the State. After going through each of these proposals, we are inclined to recommend State-specific grants to meet some special obligations of regional and national concern. These grants fall under six broad themes: (a) social needs, (b) administrative governance and related infrastructure, (c) conservation and sustainable use of water, drainage and sanitation, (d) preserving culture and historical monuments, (e) high-cost physical infrastructure and (f) tourism. **We recommend State-specific grants of Rs. 49,599 crore during our award period (Table 10.11). A summary of the list of schemes along with the allocated amounts is given at Annex 10.9. Further details of each of the schemes are placed in Annex 10.10.**

Table 10.11: State-wise and Year-Wise Distribution of State-specific Grants

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	0	460	460	690	690	2300
Arunachal Pradesh	0	80	80	120	120	400
Assam	0	275	275	413	412	1375
Bihar	0	453	453	680	681	2267
Chhattisgarh	0	332	332	498	498	1660
Goa	0	140	140	210	210	700
Gujarat	0	572	572	858	858	2860
Haryana	0	400	400	600	603	2003
Himachal Pradesh	0	284	284	426	426	1420
Jharkhand	0	260	260	390	390	1300
Karnataka	0	1200	1200	1800	1800	6000
Kerala	0	220	220	330	330	1100
Madhya Pradesh	0	353	353	530	529	1765
Maharashtra	0	550	550	825	825	2750
Manipur	0	180	180	270	270	900
Meghalaya	0	160	160	240	240	800
Mizoram	0	140	140	210	210	700
Nagaland	0	105	105	158	157	525
Odisha	0	355	355	533	532	1775
Punjab	0	310	310	464	461	1545
Rajasthan	0	464	464	697	697	2322
Sikkim	0	100	100	150	150	500
Tamil Nadu	0	440	440	660	660	2200
Telangana	0	472	472	709	709	2362
Tripura	0	175	175	263	262	875
Uttar Pradesh	0	699	699	1049	1048	3495
Uttarakhand	0	320	320	480	480	1600
West Bengal	0	420	420	630	630	2100
Total	**0**	**9919**	**9919**	**14883**	**14878**	**49599**

General Conditions for State-specific Grants

10.119 The following conditions shall apply with regard to the State-specific grants recommended above:

i. **No funds from any of the State-specific grants may be used for payment of government-owned land. Wherever additional land is required to be acquired from private parties for the project/construction, the State-specific grants may be used for such compulsory acquisition payments, subject to a ceiling of 50 per cent of such land acquisition cost for new greenfield projects. However, for brownfield projects where the infrastructure is complete and functional, the State-specific grants would be for productivity enhancement and reaping externalities of scale. In such brownfield projects, the additional expenditure is primarily on land acquisition (such as airport runway extension); therefore, there need not be any such ceiling for utilisation of the State-specific grant. To expedite the execution of all projects, land acquisition payments as above made in 2021-22 would be eligible for retroactive funding in 2022-23 from the State-specific grants.**

ii. The phasing of the State-specific grants given in Table 10.11 is only indicative; States may communicate to the Union Government their required phasing along with the timeline and benchmarks of physical progress to be achieved. After review, the grant may be released in a maximum of two instalments in a year. However, no grants would be released in 2021-22.

iii. Accounts shall be maintained and utilisation certificates/statements of expenditure should be submitted as per General Finance Rules, 2017 for a particular year before release of the next instalment.

Monitoring of Grants

10.120 To ensure that the objectives for which the grants have been recommended are achieved, it is desirable that the States put a robust review and monitoring mechanism in place. **We recommend that every State should constitute a high level committee for reviewing and monitoring the proper utilisation of State-specific and sector-specific grants. This committee may be headed by the Chief Secretary with the Finance Secretary and the secretaries/heads of relevant departments as members.** The committee should meet at least once a quarter to review the utilisation of the grants and to issue directions for mid-course correction, as necessary.

10.121 The committee should be responsible for monitoring both financial and physical targets and for ensuring adherence to the specific conditionalities in respect of each sector-specific and State-specific grant, wherever applicable. In the year 2021-22, the committee will ensure the preparation of estimates/detailed project report, timelines, deliverables, monitoring mechanism

of the outcomes and overall viability of each project. Thereafter, at the beginning of each year, the committee may approve the projects to be undertaken in each sector for that year, quantify the targets, both in physical and financial terms, and lay down the time period for achieving specific milestones. This committee will also act as the recommendatory body for grants to the Government of India.

10.122 **We recommend that the progress of these projects also be reviewed annually by a committee headed by the Chief Minister with the State Finance Minister and the State ministers concerned as members.**

10.123 We have no doubt that the States themselves would be committed to timely and qualitative implementation of the projects/schemes for which we have provided grants. **We recommend that no conditionalities, other than what we have prescribed, should be imposed by the Union Government for release or utilisation of the grants.**

10.124 States must have flexibility in deciding the basket of projects to be undertaken within each sector, in framing the time schedule for various stages of these projects and in reprioritising within this basket of projects, if necessary.

10.125 **To summarise, after considering all relevant aspects, we have recommended grants-in-aid amounting in aggregate to Rs. 10,33,062 crore.** A year-wise summary of performance based incentives and grants is given in Table 10.12.

Table 10.12: Year–wise Total Grants and Incentives

(Rs. crore)

S.no.	Components	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
1	**Revenue Deficit grants**	118452	86201	51673	24483	13705	294514
2	**Local governments grants**	80297	84703	87181	92087	92093	436361
3	**Disaster management grants**	22184	23294	24466	25688	26969	122601
4	**Sector-specific grants**	12346	23729	24773	33062	36077	129987
i	*Sectoral grants for Health*	*4767*	*6211*	*6368*	*6527*	*7882*	*31755*
ii	*School Education*		*1200*	*1200*	*1200*	*1200*	*4800*
iii	*Higher Education*	*1133*	*1177*	*1259*	*1303*	*1271*	*6143*
iv	*Implementation of agricultural reforms*		*7500*	*7500*	*15000*	*15000*	*45000*
v	*Maintenance of PMGSY roads*	*3731*	*4249*	*5565*	*6151*	*7843*	*27539*
vi	*Judiciary*	*2085*	*2085*	*2085*	*2085*	*2085*	*10425*
vii	*Statistics*	*0*	*677*	*166*	*166*	*166*	*1175*
viii	*Aspirational districts and blocks*	*630*	*630*	*630*	*630*	*630*	*3150*
5	**State-specific grants**	0	9919	9919	14883	14878	49599
	Total	**233279**	**227846**	**198012**	**190203**	**183722**	**1033062**

10.127 A statement indicating total transfers to the States is given in Table 10.13.

Table 10.13: Total Transfers Recommended by FC-XV

(Rs. crore)

States	Share in Central Taxes & Duties	Post Devolution Revenue Deficit	Local Governments	Disaster management	Health	PMGSY roads	Statistics	Judiciary	Higher Education	Agriculture	State Specific	Total Grants-in-Aid (sum of col.3 to 12)	Total Transfers (sum of column 2 & 13)
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*
Andhra Pradesh	170976	30497	18063	6183	877	344	19	295	250	4209	2300	63037	234013
Arunachal Pradesh	74227	0	1618	1382	133	1508	49	20	48	107	400	5265	79492
Assam	132152	14184	10934	4268	2161	3103	57	610	171	748	1375	37611	169763
Bihar	424926	0	35577	7824	3223	1694	77	960	483	1720	2267	53825	478751
Chhattisgarh	143938	0	10368	2387	588	911	54	200	146	917	1660	17231	161169
Goa	16307	0	609	63	56	0	5	15	50	63	700	1561	17868
Gujarat	146938	0	22163	7316	1070	330	51	310	298	2818	2860	37216	184154
Haryana	46177	132	9066	2715	695	128	40	300	146	1696	2003	16921	63098
Himachal Pradesh	35064	37199	3049	2258	377	2222	21	50	70	247	1420	46913	81977
Jharkhand	139712	0	12322	3138	1014	966	48	275	179	677	1300	19919	159631
Karnataka	154077	1631	21877	4369	1233	398	45	295	299	2290	6000	38437	192514
Kerala	81326	37814	12554	1738	607	113	20	405	181	1086	1100	55618	136944
Madhya Pradesh	331642	0	28367	10059	2340	2109	102	690	349	4587	1765	50368	382010
Maharashtra	266877	0	41391	17803	2710	613	63	1240	520	3285	2750	70375	337252
Manipur	30251	9796	1277	234	191	1193	28	30	54	101	900	13804	44055
Meghalaya	32403	3137	1385	363	187	544	23	30	54	86	800	6609	39012
Mizoram	21124	6544	713	259	115	546	14	15	48	86	700	9040	30164
Nagaland	24039	21249	1038	228	153	372	23	10	51	124	525	23773	47812
Odisha	191297	0	15752	8865	962	1949	45	425	218	1271	1775	31262	222559
Punjab	76343	25968	10305	2736	902	230	43	145	156	1966	1545	43996	120339
Rajasthan	254583	14740	27172	8186	1186	1618	57	460	332	3301	2322	59374	313957
Sikkim	16393	1267	360	279	100	484	7	5	45	41	500	3088	19481
Tamil Nadu	172329	2204	25526	5637	1002	506	47	250	347	2632	2200	40351	212680
Telangana	88806	0	13111	2483	624	255	46	245	189	1665	2362	20980	109786
Tripura	29912	19890	1580	378	265	502	17	85	55	228	875	23875	53787
Uttar Pradesh	757879	0	67160	10685	6150	1465	114	1825	893	5334	3495	97121	855000
Uttarakhand	47234	28147	4181	5178	728	2322	25	70	83	277	1600	42611	89845
West Bengal	317828	40115	30393	5587	2106	1114	35	1165	428	3438	2100	86481	404309
Total	**4224760**	**294514**	**427911**	**122601**	**31755**	**27539**	**1175**	**10425**	**6143**	**45000**	**49599**	**1016662**	**5241422**

Note: (1) Amounts under 'Share in Central taxes and duties'-Column 3 are indicative and actual amounts will vary with the size of the divisible pool over the five year award period; (2) An amount of Rs.16,400 crore is not included in the total Grants-in-aids figure in column13. This comprises of three grants (a) School Education (Rs.4,800 crore), (b) Grants for aspirational districts and blocks (Rs.3,150 crore) and (c) Local Bodies grants for (i) Incubation of new Cities (Rs. 8,000 Crore) and (ii) National Data Centre (Rs. 450 Crore)

Summary of Recommendations

A summary of our recommendations is given below:

i. We recommend total revenue deficit grants of Rs. 2,94,514 crore over our award period for seventeen States.

(para 10.19)

ii. We recommend grants of Rs. 4,800 crore (Rs 1,200 crore each year) from 2022-23 to 2025-26 for incentivising the States to enhance educational outcomes . The performance grant received by the State will be utilised by the education department for enhancing educational outcomes and not diverted for use by any other department by the State.

(para 10.37 and 10.39)

iii. We recommend Rs. 6,143 crore for online learning and development of professional courses in regional languages (matribhasha) for higher education in India.

(para 10.43)

iv. We recommend that Rs. 45,000 crore be kept as performance-based incentive for all the States for carrying out agricultural reforms during the award period.

a. We recommend that States may appropriately amend their land-related laws on the lines of NITI Aayog's model law to allow short-term and long-term lease of agricultural land both for agricultural purpose as well as for agro-industry, logistics for agricultural trade and supply chains.

b. We recommend incentive-based grants to States that maintain and augment groundwater stock and put a check on any fall in the water table.

c. We recommend using growth in agricultural exports as a target indicator for the award on export performance of a State.

d. We recommend increasing production of oilseeds, pulses and wood and wood-based products as an indicator to make India self-reliant in pulses, edible oils and wood and wood products.

e. This performance grant for agriculture should be used only for infrastructure and activities related to the development of agriculture and allied sectors by the States.

(para, 10.54, 10.56, 10.59, 10.62, 10.64 and 10.66)

v. We recommend Rs. 27,539 crore for maintenance of PMGSY roads for the years 2021-26, out of which Rs. 14,743 crore is for the general States and Rs. 12,796 crore is for the NEH States.

(para 10.72)

vi. We recommend grants of Rs. 10,425 crore for fast-track courts for speedier justice delivery in cases of heinous crimes, civil cases of marginalised people, five-year-old property cases and economic offences as well as special fast-track courts for POCSO cases.

(para 10.75)

vii. We recommend total grants to the States, with the fixed and variable components, of Rs. 1,175 crore from 2022-23 to 2025-26 for improving the quality of statistics. We also recommend that, initially, the fixed grant of the total allocation, amounting to Rs. 677 crore, which is unconditional may be released in 2022-23. The remaining variable component of Rs. 498 crore may be disbursed equally over the remaining three years starting 2023-26, based on achievements of specified milestones. Both the fixed and variable grants will be utilised by the statistics department only.

(para 10.82)

viii. We recommend Rs. 3,150 crore for incentivising aspirational districts and blocks for a period of five years from 2021-22 to 2025-26.

(para 10.92)

ix. We recommend an extra annual borrowing space for the States, of the magnitude of 0.50 per cent of their GSDP for each of the first four years of the award covering the period 2021-22 to 2024-25, based on certain performance criteria in the power sector.

(para 10.103)

x. We recommend that the nutrition of children and pregnant and lactating mothers may be accorded the highest priority by Government of India through the Integrated Child Development Scheme.

(para 10.112).

xi. We recommend that the Union Government may put forward an arrangement to ensure completion of the pending railways projects at the earliest.

(para 10.114).

xii. We recommend State-specific grants of Rs. 49,599 crore during our award period for social needs, administrative governance and related infrastructure, conservation and sustainable use of water, drainage and sanitation, preserving culture and historical monuments, high-cost physical infrastructure and tourism.

(para 10.118)

xiii. No funds from any of the State-specific grants may be used for payment of government-owned land. Wherever additional land is required to be acquired from private parties for the project/construction, the State-specific grants may be used for such compulsory acquisition payments, subject to a ceiling of 50 per cent of such land acquisition cost for new greenfield projects. However, for brownfield projects where the

infrastructure is complete and functional, the State-specific grants would be for productivity enhancement and reaping externalities of scale. In such brownfield projects, the additional expenditure is primarily on land acquisition (such as airport runway extension); therefore, there need not be any such ceiling for utilisation of the State-specific grant. To expedite the execution of all projects, land acquisition payments as above made in 2021-22 would be eligible for retroactive funding in 2022-23 from the State-specific grants

(para 10.119, i)

xiv. We recommend that every State should constitute a high level committee for reviewing and monitoring the proper utilisation of State-specific and sector-specific grants. This committee may be headed by the Chief Secretary with the Finance Secretary and the secretaries/heads of relevant departments as members. We recommend that the progress of these projects also be reviewed annually by a committee headed by the Chief Minister with the State Finance Minister and the State ministers concerned as members. We recommend that no conditionalities, other than what we have prescribed, should be imposed by the Union Government for release or utilisation of the grants.

(para 10.120, 10.122 and 10.123)

Chapter 11

Defence and Internal Security

In keeping with the terms of reference, the Commission examined the need and urgency to step up outlay on the capital requirements for defence and internal security, identified additional resources and deliberated on the desirability of a separate mechanism for such funding. The Commission examined the capital expenditure projections of the Ministry of Defence as well as of the Ministry of Home Affairs for internal security. After examining all the aspects, we have recommended the constitution of a dedicated Modernisation Fund for Defence and Internal Security to bridge the gaps between the projected budgetary requirement and budget allocation for capital expenditure on defence and internal security. This will be a non-lapsable fund under the Public Accounts and will have four sources of incremental funding: (i) transfers from the Consolidated Fund of India; (ii) disinvestment proceeds of defence public sector enterprises; (iii) proceeds from monetisation of surplus defence land; and (iv) proceeds of receipts from defence land likely to be transferred to State Governments and for public projects in future. The Fund shall have the standard notified rules for its administration, public reporting and audit by the Comptroller and Auditor General. We also recommend that the Ministry of Defence should take immediate measures to innovatively bring down the salaries and pension liabilities and reduce its dependence on defence imports, with a specific roadmap.

11.1 Defence and internal security are the paramount needs of any country and catering to it adequately is a critical sovereign function involving substantial fiscal resources. These are considered to be among the primary charges on the nation's tax resources. In view of the complex and evolving spectrum of security challenges, modernisation of the defence and internal security apparatus is a continuous process, based on threat perception, operational challenges and technological advances. Unlike previous Finance Commissions, our unique terms of reference (ToR) mandated us to give special focus on examining the defence and internal security needs of the country. Para 6 (ii) of the original ToR enjoins us to consider the demands on the resources of the Union Government on account of, among others mentioned, defence and internal security. Para 9A of the additional terms of reference notified on 29 July 2019 mandate us to examine "whether a separate mechanism for funding of defence and internal security ought to be set up, and if so, how such a mechanism could be operationalised".

11.2 In view of the above, we considered all aspects of the issue, including relevant Constitutional provisions, views of Constitutional experts, demands of the sector on resources due to fast-evolving technological changes, geo-political complexities and sector-specific dynamics in procurement, including the synchronisation of the flow of funds with the

procurement cycle. We constituted a special group in order to address the ToR.[1] We also considered the written submissions of some of the States and of the Ministries of Defence, Home Affairs and Finance.

Constitutional Provisions

11.3 Article 51 (a) of the Directive Principle of State Policy stipulates that the State shall endeavour to promote international peace and security. Article 51A lists the Fundamental Duties of every Indian citizen, and clauses (c) and (d) of this Article state that every citizen has a duty to uphold and protect the sovereignty, unity and integrity of India and to defend the country and render national service when called upon to do so. Article 246 (1) provides exclusive power to Parliament to make laws on defence and internal security related matters enumerated in the relevant entries in List I (Union List) of the Seventh Schedule. In addition, Article 355 explicitly states that it is the duty of the Union to protect every State against external aggression and internal disturbance and to ensure that the government of every State is carried on in accordance with the provisions of the Constitution.

11.4 `Public order' and 'Police' are the first and second entries respectively in the List II (State List) of the Seventh Schedule. This bestows on State Governments the primary responsibility of maintaining law and order, preventing, detecting and investigating crime and prosecuting criminals. On the other hand, Entry 2 A of the Union List I empowers the Union Government to deploy any armed force of the Union or any other force subject to the control of the Union in aid of civil power. The Union Government, thus, supplements the efforts of the States in the maintenance of law and order. It also provides financial assistance to States for modernisation of their police forces in weaponry, communication, equipment, mobility, training and other infrastructure. Further, intelligence inputs are regularly shared by the central security and intelligence agencies with the law enforcement agencies of States to prevent crime and law and order related incidents. In addition, various matters related to public order and police are so closely intertwined with emerging areas of internal security, insurgency, terrorism, cyber security and other elements of external aggression that the subject of internal security becomes the collective responsibility of both Union and State Governments.

11.5 This summarises the Constitutional roles of the Union and the State Governments in preserving external and internal security and the intricate relationship between them. Both of them cannot work in water tight compartments and preserving security is a continuum of roles and responsibilities of both in the federal system.

Analysis of Defence Expenditure

11.6 Defence expenditure has, over time, been characterised by a higher share of revenue

[1] The details of the constitution of the group and meetings are given in Volume II of the Report (Annex 1.18 and 1.35)

expenditure, huge pension bills and lower capital expenditure with high dependence on import of defence equipment. It has become imperative to review the structure of defence expenditure in order to ensure greater predictability and stability in the flow of adequate funds for its capital needs and to find ways to reduce growth in revenue expenditure, especially rising pension outlays.

11.7 The Ministry of Defence (MoD) has the highest allocation among all Union ministries. Over the last ten years, the defence budget has shown a trend growth rate of 9.6 per cent. Within this, revenue expenditure has grown at 11 per cent and capital expenditure at only 6.1 per cent (Table 11.1). The higher growth of revenue expenditure is mainly on account of rising outlays on defence pension, which has increased at the rate of 15.7 per cent.

Table 11.1: Analysis of Total Defence Expenditure (Revenue and Capital)

(Rs. crore)

Financial Year	Defence revenue expenditure	As % of GDP	As per cent of revenue expenditure of Union Govt	Defence capital expenditure	As % of GDP	As % of capital expenditure of Union Govt	Total defence expenditure (revenue + capital)	As % of GDP	As % of total expenditure of Union Govt
2011-12	144147	1.65	12.6	69526	0.80	43.8	213673	2.45	16.4
2012-13	158545	1.59	12.8	72097	0.73	43.2	230642	2.32	16.4
2013-14	173912	1.55	12.7	80222	0.71	42.7	254134	2.26	16.3
2014-15	201929	1.62	13.8	83076	0.67	42.2	285005	2.29	17.1
2015-16	210306	1.53	13.7	83614	0.61	33.0	293920	2.13	16.4
2016-17	260067	1.69	15.4	91484	0.59	32.1	351551	2.28	17.8
2017-18	284273	1.66	15.1	95431	0.56	36.3	379704	2.22	17.7
2018-19	303657	1.60	15.1	99802	0.53	32.4	403459	2.13	17.4
2019-20 RE	333449	1.63	14.2	115371	0.56	33.1	448820	2.20	16.6
2020-21 BE	352823	1.57	13.4	118555	0.53	28.8	471378	2.10	15.5
TGR (%) (2011-21)	**11.0**			**6.1**			**9.6**		

Notes: 1. Defence revenue expenditure includes defence services revenue, defence misc.(civil) revenue and defence pensions.

2. Defence capital expenditure includes capital outlay and defence misc. (civil) capital.

3. TGR = trend growth rate

11.8 Although as a proportion of gross domestic product (GDP), total defence expenditure has decreased between 2011-12 and 2018-19 (from 2.5 per cent to 2.1 per cent), the proportion of total defence expenditure in total Union Government expenditure has increased from 16.4 per cent to 17.4 per cent during the same period. This is also in the background of a decline in total Union Government expenditure from 14.9 per cent of GDP in 2011-12 to 12.2 per cent of GDP in 2018-19. The increase is largely accounted for by defence revenue expenditure which rose from

12.6 per cent of the Union Government's revenue expenditure in 2011-12 to 15.1 per cent in 2018-19 on account of higher outgo on salaries and pensions, with the implementation of revised pay scales following the recommendations of the Seventh Central Pay Commission. On the other hand, the share of defence capital expenditure in the total capital expenditure of the Union Government has declined from 43.8 per cent to 32.4 per cent during the same period.

Review of Defence Capital Outlay

11.9 Defence capital outlay includes expenditure on the purchase of defence equipment, weaponry, aircraft, naval ships, land and the cost of construction of roads and bridges in border areas. Capital outlay on defence in 2020-21 (BE) is Rs. 1.14 lakh crore, which accounts for 24.1 per cent of the total defence budget (including defence pension). This indicates a decline since 2011-12, when the capital outlay was 31.8 per cent of total defence budget. Similarly, between 2011-12 and 2018-19, capital outlay as a proportion of total Union Government expenditure declined from 5.2 per cent to 4.1 per cent, and as a proportion of GDP from 0.8 per cent to 0.5 per cent. (Table 11.2).

Table 11.2: Capital Outlay of Defence Services

(Rs. crore)

Financial Year	BE	Actual	Annual growth (%)	Actual as % of BE	Capital outlay as % of GDP	Capital outlay as % of total Union expenditure	Capital Outlay as % oftotal defence expenditure*
2011-12	69199	67902	9.4	98.1	0.8	5.2	31.8
2012-13	79579	70499	3.8	88.6	0.7	5.0	30.6
2013-14	86741	79125	12.2	91.2	0.7	5.1	31.1
2014-15	94588	81887	3.5	86.6	0.7	4.9	28.7
2015-16	94588	79958	-2.4	84.5	0.6	4.5	27.2
2016-17	86340	86371	8.0	100.0	0.6	4.4	24.6
2017-18	86529	90445	4.7	104.5	0.5	4.2	23.8
2018-19	94011	95231	5.3	101.3	0.5	4.1	23.6
2019-20 RE	103394	110394 (RE)	15.9	106.8	0.5	4.1	24.6
2020-21 BE	113734	113734 (BE)	3.0		0.5	3.7	24.1
TGR (%) (2011-21)		5.7 %					

* Total defence expenditure include defence pension.
TGR = trend growth rate

11.10 A key feature of defence capital expenditure is the dependence on imports. According to the Stockholm International Peace Research Institute, India was the fourth-largest importer of defence goods and services in 2018. Imports of military hardware result in the country losing out on the multiplier effects on the economy as well as on spin-offs in terms of technical and scientific inventions and innovations, which domestic production will result in. Furthermore, the dependence on foreign suppliers for military hardware not only entails huge expenditure on imports, but also makes national security vulnerable to vagaries of supply during emergencies. There has been a recent thrust for indigenous production of defence equipment but it needs to be matched with predictability and stability in the flow of adequate resources for capital investment as part of overall strategy of defence modernisation.

Expenditure on Pensions

11.11 Defence pensions cover payment of service pension, gratuity, family pension, disability pension, commuted value of pension and leave encashment for retired personnel of the three services and also employees of ordnance factories. Defence pension, as a proportion of total defence allocation, has risen from 17.6 per cent to 28.4 per cent between 2011-12 to 2020-21 (BE). It has grown at trend growth rate of 15.7 per cent in the last ten years (2011-2021) against 9.6 per cent growth in the entire defence sector. As a proportion of GDP, it increased from 0.4 per cent to 0.6 per cent and as a proportion of revenue expenditure of the Union Government expenditure from 3.3 to 5.1 per cent (Table.11.3).

Table 11.3: Defence Pension Expenditure

Financial Year	Defence pension (in Rs. crore)	Percentage of defence expenditure*	Percentage of GDP	Percentage of revenue expenditure of Union Government
2011-12	37569	17.58	0.43	3.3
2012-13	43368	18.80	0.44	3.5
2013-14	45500	17.90	0.41	3.3
2014-15	60450	21.21	0.48	4.1
2015-16	60238	20.49	0.44	3.9
2016-17	87826	24.98	0.57	5.2
2017-18	92000	24.23	0.54	4.9
2018-19	101775	25.23	0.54	5.1
2019-20 RE	117810	26.25	0.58	5.0
2020-21 BE	133825	28.39	0.60	5.1
TGR(%) (2011-21)	15.7			

* Total defence expenditure include defence pension.
TGR = trend growth rate

11.12 From 2016-17 onwards, consequent to the implementation of the Seventh Central Pay Commission award and the One Rank One Pension (OROP) scheme for defence services employees, the defence pension expenditure has started growing at a faster rate than the capital outlay on defence services. As the overall resources were limited, this increase in defence pension expenditure impacts the availability of funds for defence modernisation.

Analysis of Expenditure on Internal Security

11.13 The budget for the Ministry of Home Affairs (MHA) constituted 4.8 per cent of the total expenditure of the Union Government in 2018-19. Of the total budget expenditure of MHA for 2018-19, 81.7 per cent is on the police, 12.5 per cent is on grants made to Union Territories and 5.8 per cent is on miscellaneous items such as disaster management, rehabilitation of refugees and migrants, census and Cabinet.

Expenditure on Police and Central Armed Police Forces

11.14 In 2015-16, of the total expenditure of Rs. 80,000 crore by the MHA, 79 per cent (Rs. 63,000 crore) was spent on the police (which includes the Central Armed Police Forces (CAPFs)[2] and Delhi Police). In 2018-19, out of a total expenditure of Rs.1.12 lakh crore by MHA, 82 per cent (Rs. 92,000 crore) was spent on police. In 2020-21, 63 per cent of the budget allocation of Rs. 1.67 lakh crore for MHA has been allocated for the police. The decline in the share of the police in the expenditure of the Ministry is mainly because the allocation for Jammu and Kashmir and Ladakh is now routed through the MHA budget in 2020-21, following the reorganisation of the erstwhile state of Jammu and Kashmir into two Union Territories of Jammu and Kashmir and Ladakh.

11.15 The CAPFs are estimated to receive a total allocation of Rs. 78,000 crore in 2020-21 (BE). This accounts for 74 per cent of the expenditure on police. Table 11.4 shows the distribution between revenue and capital expenditure for total police and seven CAPFs between 2015-16 and 2020-21(BE).

[2] The seven Central Armed Police Forces (CAPFs) are: Assam Rifles, Border Security Force, Central Industrial Security Force, Central Reserve Police Force, Indo-Tibetan Border Police, National Security Guard and Sashastra Seema Bal

Table 11.4: Total Police and CAPFs Expenditure

(Rs. crore)

Years	Police Expenditure			Share of revenue expen diture %	Share of capital expen diture %	of which expenditure on CAPFs			Share of revenue expen diture %	Share of capital expen diture %
	Revenue	Capital	Total			Revenue	Capital	Total		
2015-16	54280	9055	63335	85.7	14.3	43935	734	44669	98.4	1.6
2016-17	64203	8851	73054	87.9	12.1	51529	946	52475	98.2	1.8
2017-18	71352	10535	81887	87.1	12.9	56801	1206	58007	97.9	2.1
2018-19	82209	9484	91693	89.7	10.3	66507	1164	67671	98.3	1.7
2019-20 (RE)	93455	9748	103203	90.6	9.4	74687	1482	76169	98.1	1.9
2020-21 (BE)	95398	9846	105244	90.6	9.4	76414	1473	77887	98.1	1.9
TGR %	**12.4**	**1.7**	**11.1**			**12.2**	**14.7**	**12.3**		

Note: 1. Police expenditure includes expenditure on CAPFs, modernisation of police, Delhi Police, police infrastructure, IB and border infrastructure

11.16 Though the budget allocations on police have increased at a nominal rate of 11.1 per cent during the 2015-16 to 2020-21(BE) period, this has been largely on account of revenue expenditure, which has grown at a rate of 12.4 per cent, while the growth of capital expenditure has been only 1.7 per cent. Capital expenditure is for procurement of machinery and equipment and motor vehicles, whereas revenue expenditure is on items such as salaries, arms and ammunition and clothing. The share of revenue expenditure in police grants has progressively increased from 85.7 per cent to about 90.6 per cent from 2015-16 to 2020-21(BE) while the share of the capital expenditure has declined from 14.3 per cent to 9.4 per cent.

Views of the Union Government

Ministry of Defence

11.17 In its memorandum, the Ministry of Defence (MoD) sought adequate funding through alternate sources in order to meet its increasing requirements. It pointed out that budgetary allocations, which have declined over the years, are inadequate to fund large defence acquisitions. Further, reallocation of resources and appropriation from other budget heads like health, education and infrastructure create their own set of problems. Hence, the Ministry represented, a separate and dedicated funding mechanism for capital expenditure will provide assurance of availability and predictability in the flow of funds and this will help to plan and build strategic defence capabilities.

11.18 For the award period 2021-26, the MoD has estimated that, going by current trends, it will

receive an allocation of Rs. 9.01 lakh crore for capital outlay and this is based on a growth rate of 16 per cent. However, the defence plan projection on the capital account is Rs. 17.46 lakh crore for the same period. As a result, the projected shortfall is Rs. 8.45 lakh crore. (Table 11.5)

Table 11.5: Estimated Shortfall in Allocations for Defence Services

(Rs. crore)

Heads	2021-22	2022-23	2023-24	2024-25	2025-26	Total 2021-26
Capital expenditure						
Defence plan projection	286058	314663	346130	380743	418817	1746411
Allocation (estimated)	131054	152022	176346	204562	237291	901275
Shortfall (estimated)	155004	162641	169784	176181	181526	845136
Revenue expenditure						
Defence plan projection	323556	357529	387919	428650	465086	1962740
Allocation (estimated)	223237	238863	255584	273474	292618	1283776
Shortfall (estimated)	100319	118666	132335	155176	172468	678964

Source: MoD note dated 25 August 2020

Allocation (estimated) - Revenue projections grown @ 7 per cent per annum and capital projections @ 16 per cent per annum over 2020-21(BE).

11.19 The MoD stated that if the projections made in the defence plan for committed liabilities on on-going capital acquisitions are taken into account, along with the new acquisitions planned, the three services would substantially run short of funds in the coming years. It was further highlighted that there is a total shortfall (on both revenue and capital accounts) of Rs. 7,37,357 crore in the Ministry's defence plan projections for the three forces for the period 2017-18 to 2020-21.

11.20 The Ministry drew attention to the fact that consistent shortfalls in the defence budget over a long period has resulted in serious capability gaps, compromising the operational preparedness of the services. Consequently, they have to resort to ad-hoc mechanisms such as postponement of a few procurements and delaying payments, resulting in high carry forward of unmet requirements and committed liabilities. Therefore, there is an urgent need to explore new, multiple and dedicated avenues of raising resources to infuse additional funds for modernisation and technological upgradation of the country's defence capabilities.

11.21 The MoD has suggested several options for funding defence modernisation:

i. carving out a certain portion of the shareable pool for defence and internal security before the vertical devolution;

ii. monetisation of defence land;

iii. a defence or national security cess;

iv. defence bonds;

v. making the profits that accrue to defence public sector enterprises (DPSEs) and ordnance factories from defence exports available exclusively for defence purposes;

vi. proceeds from the disinvestment of DPSEs;

vii. augmentation of defence receipts by reimbursement of expenditure incurred on Humanitarian Aid and Disaster Relief, aid to State and civil authorities and United Nations missions;

viii. one-time lump-sum grants to the defence services by re-appropriation of underutilised heads across various demands of grants by the Ministry of Finance; and

ix. exemption from levy of statutory duties like customs duty, goods and services tax (GST) and integrated GST on the purchase and acquisitions by the services.

Ministry of Home Affairs

11.22 In its memorandum and subsequent submissions, the MHA highlighted inadequate allocations by both Union and State Governments for internal security and stressed on the need for earmarking a higher allocation for this. Though the budget allocations have increased at a nominal rate of 11-12 per cent, this has been largely on the revenue account and allocations for capital expenditure have remained almost stagnant. The share of revenue expenditure in police grants has increased progressively from 78 per cent in 2009-10 to about 90 per cent in 2020-21, while the share of capital expenditure has shrunk from 22 per cent to 10 per cent during this period. The Ministry also drew attention to the fact that the scheme for Assistance to States for Modernisation of Police Forces, which is capital intensive, is also significantly under-funded.

11.23 The capital allocation by the MHA is largely for development of police infrastructure, border infrastructure and provisioning schemes. The funds for police infrastructure cater to the capital requirements of the CAPFs and cover construction of buildings for offices, residences and the like. Border infrastructure relates to the construction of border out-posts, observation towers, border fencing and border roads. Provisioning requirements comprise procurement of arms, machinery and equipment such as night vision devices, hand-held thermal imagers and unmanned aerial vehicles as well as communication equipment, which are required by the CAPFs for their operational requirements.

11.24 Like the MoD, the MHA also emphasised the need for increase in outlays with greater degree of predictability in allocations. At the same time, it pointed out that the increased devolution to States did not result in any incremental increase by State Governments in their allocations to the police. Thus, the MHA felt that there is a definite need for a separate mechanism for funding of internal security, as the Ministry did not have many alternative sources for funding,

such as sale of surplus land. It requested the Commission to recommend a sectoral grant over our five-year award period, as indicated in our Report for the Year 2020-21. The Ministry sought a specific purpose grant of Rs. 63,385 crore for internal security over the five-year award period, based on the shortfall between budgetary projections and allocations for capital heads for CAPFs and other organisations of MHA as well as for the Scheme for Modernisation of Police Forces. It also suggested that this provision may be allocated in the form of a separate fund, distinct from any allocation for defence, as States have a shared responsibility for internal security.

11.25 The projected revenue and capital expenditure for police over the five years of our award period is given in Table 11.6.

Table: 11.6: Projections for Police (Union Government)

(Grant 48-Police)

(Rs. crore)

Heads	2021-22	2022-23	2023-24	2024-25	2025-26
Revenue	105240	121026	139180	160057	184066
Capital @	12969	14803	16485	18054	20301
Total	118209	135829	155665	178111	204367

@ Includes Central sector expenditure on schemes.

Source: MHA email dated 1 September 2020

Ministry of Finance

11.26 The Ministry of Finance (MoF) stated that defence expenditure is entirely the responsibility of the Union Government as it is a Union List subject. However, States also enjoy the benefits of peace within the country and security at the national borders. Economic growth and development in States will not be possible without these two fundamental sovereign functions being satisfactorily carried out. Hence there is merit in recognising expenditure on defence as the first charge on the tax resources of the Union. It further stated that the Union Government's requirements for the defence sector are an inviolable priority. It is imperative that defence expenditure keeps pace with the security challenges facing the country. Defence expenditure grew at 9.1 per cent during the award period of the Fourteenth Finance Commission (FC-XIV) period (2015-2020) and the Ministry projected an annual average growth rate of 10.3 per cent during the award period of the FC-XV.

11.27 The Ministry has acknowledged that it may not be possible for the Commission to set aside expenditure on defence from the pool of shareable taxes, but it urged that the imperative of defence expenditure be recognised while considering the requirements of the Union. With heavy capital expenditure being incurred by the MoD in the last ten years, the burden of maintenance of defence acquisitions is going to increase the demand for revenue expenditure in the coming years.

11.28 The MoF further stated that defence planning and capability building is a lengthy process which requires long term commitment of funds. Consistent increase in the capital outlay on defence services is required for aircraft and aero-engines, heavy and medium vehicles, other equipment, research and development and other special projects of the defence services.

11.29 In the context of internal security, the MoF has stated that though 'public order' and 'police' are the responsibilities of States, Article 355 of the Constitution enjoins the Union to protect every State against external aggression and internal disturbances. The expectation from the Union Government is much more than strictly required under Constitutional or legal provisions. Given the limited capacities of States to invest in police modernisation and special projects, there is need for the Union Government to provide a thrust for training, capacity building and modernisation to increase the capacity of the State police forces.

11.30 Areas affected by left-wing extremism, the North East and Jammu and Kashmir are the three main theatres of internal security challenges. The Union Government's support through the deployment of forces, enhancing the capacities of the State police and a number of developmental interventions have helped bring about a steady improvement in the security scenario over the years. This supportive role of the Union Government needs to continue.

Views of the States

11.31 Some of the States expressed their views on a separate mechanism for funding of defence and internal security. They have suggested that any likely recommendation for financing a separate mechanism for funding of defence and internal security should not result in a reduction in the size of the divisible pool. The allocation of funds for defence and internal security is the responsibility of the Union Government, which can make the necessary allocation from within its own share of the divisible pool, non-shareable resources such as non-tax revenues, borrowings and non-debt capital receipts. If the Commission carves out this expenditure head from within the divisible pool, there may be reduction of resources allocated to the States. They further stressed that the Union may, without any prejudice to the States, create a non-lapsable fund from the resources within the Consolidated Fund of India and not by attempting to shrink the divisible pool.

Views of Constitutional Experts on Sovereign's Role on Security

11.32 We are acutely aware that, within the given Constitutional framework, there are complex questions involving on the role of governments (both the Union and the States) and citizens in defence and internal security. We studied the opinions of Constitutional experts obtained by previous Finance Commissions in this regard. We also sought the opinion of Shri. K. Parasaran, former Attorney General of India and this guided us in our approach. A gist of his opinion is provided in Box 11.1.

Box 11.1: Opinion of Shri K Parasaran

The legal opinion by Shri. Parasaran has emphasised that the sovereign power must always bear in mind that a depleted treasury will prejudice the defence of the nation against external aggression and its ability to contain internal disturbances. He referred to Article 355 and cited a Supreme Court order:

"*In the Constitutional scheme of things, it is very clear that while considerable autonomy and functional prerogatives have been accorded to State Governments, nevertheless clearly greater powers and prerogatives over a complex range of all - encompassing subjects are vested with the Union because the latter bears the first and final responsibility for the performance of the fundamental sovereign function of any political state-maintenance of robust security environment. A contextual construction of a provision in the Constitution of India would show that the sovereign function of maintenance of national security is squarely vested with the Union." (Pragyasingh Chandrapalsingh Thakur vs State of Maharashtra, 2014 (1), Bom CR (Cri) 135)*

Further quoting Article 51 (a) and Article 51A(c) and (d), Shri. Parasaran has averred that "citizens are expected to cooperate with the measures taken by the State towards securing defence and internal security." Additionally, the legal opinion stated that the Supreme Court has observed that the duty of every citizen of India is the collective duty of the State.

From the above, two inferences are made: "first, upholding India's sovereignty, including by ensuring adequate defence and internal security is the duty of the Union with a corresponding duty of various States and the citizens to cooperate with the Union and States in this task. Second, though the fulfillment of this duty is a shared responsibility (State understood as all citizens put together and all its agencies), the Union under Article 355 is specifically obliged to protect States against external aggression and internal disturbance. Thus the Union has been vested with a specific constitutional directive to ensure defence of India and national security."

Deliberations of the Group Constituted on Defence and Internal Security

11.33 This Group was constituted to hold focussed deliberations on the main reference whether a separate mechanism for funding of defence and internal security ought to be set up, and if so, how such a mechanism could be operationalised. The Group, after careful consideration of all aspects related to the needs, available resources and medium term projections of capital investment for defence modernisation, examined the proposals of the MoD and MHA.

11.34 It was recognised that the requirement of resources for defence has increased significantly due to the advances in technology and weapon systems, use of unconventional tools of warfare and threat of conflicts on multiple fronts. It was also agreed that even as the challenges have grown, there has been a decline in allocations to the defence forces. Defence planning and capability building requires long term commitment of funds. To facilitate realistic planning which is aligned with the likely resource availability, certain predictability/certainty in budgetary allocations is essential.

11.35 Complex procurement procedures and insufficient availability of funds over a prolonged period of time have resulted in shortages in critical defence equipment. The requirement of the

armed forces for modernisation can be meaningfully met if there is certainty in the commitment of financial support to it in the form of dedicated fund, based on approved modernisation plans, at least for a five year-period on a continuing basis.

11.36 The objective of such a modernisation fund would be to bridge the gap between the actual requirement for specified purposes (like acquisition of equipment for modernisation) and the allocation in a given year. Thus, it would supplement the annual budgetary allocation, whenever required. This would help in eliminating the prevailing uncertainty in providing adequate funds for various defence capability development and infrastructure projects.

11.37 In view of this, the Group recommended the creation of a non-lapsable Defence Modernisation Fund. An integral part of such a non-lapsable fund is to have a specific source of funds. The Group deliberated the merits and demerits of operating the fund outside the Public Account, as the MoD had proposed. It was felt that if a special purpose vehicle administers such a fund, then there is no need to have non-lapsable system. After considering all aspects and views of the MoF, the Group recommended operating such a fund through the Public Account of India, within the norms of Parliamentary procedures on approval of annual demands of grants.

11.38 The MoD has proposed Rs. 55,000 crores as the annual size of the fund. The basis for estimating this amount is the average gap between projection and allocation of funds for the capital segment during the last five years (Table. 11.7).

Table.11.7: Projection and Allocation of Funds for Capital Investments in Defence Services

(Rs. crore)

Year	Projection	Allocation	Shortfall
2016-17	121930	78587	43343
2017-18	132872	86488	46384
2018-19	172203	93982	78221
2019-20	170904	110394 (RE)	60510
2020-21	175702	113734 (BE)	61968
Total	773611	483185	290426
Average	154722	96637	58085

Source: MoD's Base Paper dated 16 July 2020 and ID note dated 25 August, 2020 submitted to FC-XV

11.39 The Group also considered the different options proposed by the MoD for funding of the defence modernisation fund as elaborated in para 11.21. After considering all these options, the Group felt that many of these proposed sources of funding would interfere with the Constitutional mandate of the Finance Commission in the distribution of the shareable pool of Central taxes

between the Union and the States, or amount to shifting or reshuffling of resources. The Group felt that the creation of the non-lapsable fund could be done through additional resource mobilisation. These could be in the form of levy of a moderate cess on direct taxes and import duty, cess on petrol and diesel, disinvestment proceeds of DPSEs and monetisation of surplus land.

11.40 To raise additional resources, the MoD suggested three major sources of land which can be considered for monetisation: (a) land available after the closure of military farms; (b) abandoned air fields and camping grounds, and (c) encroached land for which efforts should be made to recover the cost of the land. The financial details worked out by the MoD are as follows:

(i) Approximately 20,000 acres of land in use by military farms can be offered to other Union Government departments, State Governments and public sector entities.

(ii) Approximately 749 acres of land costing Rs. 2,216 crore have been sought for public projects.

(iii) Approximately 1,243 acres of defence land are under encroachment, including by State Government agencies. The estimated cost is about Rs. 10,000 crore.

(iv) Abandoned air fields and camping grounds of approximately 8,000 acres of land.

(v) Approximately 1,559 acres of land worth Rs. 18,836 crore is being used by State Governments for which working permission has been accorded.

11.41 The MoD further stated that a gestation period of seven to eight years has been assumed for the true realisation of the proceeds from monetisation of defence land. The realisation of funds from such monetisation was assumed at approximately Rs. 18,000 crore - Rs. 10,000 crore from realisation of proceeds from encroached land and Rs. 8,000 crore from public projects such as roads, flyovers and road over bridges, airports, railway lines and metro rail. The MoD estimated that Rs. 10,000 crore can be realised through this mechanism during this Commission's award period. The year-wise details are given in Table 11.8.

Table 11.8 Annual Incremental Accrual of Resources

(Rs. crore)

	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Amount estimated	1000	1500	2000	2500	3000	10000

Source: MoD's Base Paper dated 27 July 2020 submitted to FC-XV

11.42 The Group discussed the matter and recommended that the Ministry should endeavour to monetise this surplus land with a clear action plan to realise the targeted sums annually, so that the full proceeds can be utilised through the non-lapsable defence fund.

11.43 The MoD assessed that approximately Rs. 5,000 crore per year can be realised through disinvestment of DPSEs. The Group felt that this amount could also become part of the proposed fund.

Approach

11.44 We carefully considered the opinion of Constitutional experts and the deliberations of the Group constituted by us. We noted that upholding India's sovereignty, including by ensuring adequate defence and internal security, is the duty of the Union and the States, and citizens had a corresponding duty to cooperate with the Union in this task. Secondly, though the fulfilment of this duty is a shared responsibility (State understood as all citizens put together and all its agencies), the Union under Article 355 is specifically obliged to protect States against external aggression and internal disturbance. Thus, the Union has been vested with a specific constitutional directive to ensure the defence of India and national security.

11.45 In their assessment of Union finances, earlier Finance Commissions as well as this Commission have examined the requirements of defence on revenue account in detail. However, financing capital expenditure on defence has never been addressed nor provided for in the assessments on the demand on the resources of the Union. Such requirements have been left to be met from the borrowings, as in the case of other types of capital investment. We recognise the ultimate and final responsibility of the Union Government in this regard. At the same time, considering the need and urgency to step up investment in financing defence capital requirements, we acknowledge the need to identify additional resources and the desirability of a separate mechanism for such funding.

11.46 It needs to be recognised also that in the inter-governmental transfer system, as per our Constitutional design, there is a flow of transfers from Union to States, but there is no mechanism for a reverse flow. We also recognise the Constitutional principles that preclude us from pre-empting any amount from the divisible pool of resources. Further, keeping in view our recommendation and approach for simplification of tax structures and reduction of dependence on cesses and surcharges suggested in our Report, we have also desisted from recommending any new or additional cess or surcharge for this purpose which would have accrued to the Union Government as an additional source of revenue.

11.47 We have inferred on the basis of our consultations and analysis that capital expenditure on defence, unlike other investments in social and economic sectors, does not result in remunerative returns. It provides, "the basis for the first and foundational sovereign function of any political state – the maintenance of a robust security environment."[3] By its nature, it falls in the category of committed expenditure of the Union Government.

11.48 In making our recommendations to identify additional resources for this requirement, we

[3] Pragyasingh Chandrapalsingh Thakur v State of Maharashtra, 2014 (1) Bom CR (Cri) 135

have looked at the totality of the transfer system, comprising of multiple channels within the framework of fiscal consolidation. Finance Commissions since the FC-XI have adopted an approach based on fiscal consolidation and bench-marked indicative total transfers from the Union. In the past, there were Finance Commission transfers through devolution and grants and transfers through the Planning Commission. Additionally, there were Centrally sponsored schemes (CSS). At present, the transfers comprise primarily Finance Commission transfers and transfers through CSS.

11.49 The FC-XI had recommended an overall cap on transfers to States from all sources as a key consideration towards fiscal consolidation. As it noted, "we have set a notional limit on the overall revenue transfers taking into account the legitimate needs of the Union to meet its revenue expenditure liabilities." For this the gross revenue receipts of the Union Government were taken as a bench mark. Gross revenue receipts comprise tax revenues and non-tax revenues, and excludes non-debt capital receipts (primarily disinvestment proceeds). FC-XII, FC-XII and FC-XIV have all followed the approach, but with varying benchmark levels. Table11.9 gives the size of devolution and recommended transfers from gross revenue receipts. However, it is important to keep in mind that the limits have been exceeded almost continuously since 2006-07[4].

Table 11.9: Indicative Transfer Limits from Gross Revenue Receipts (in percentage)

Finance Commission	Devolution from the divisible pool	Indicative transfer limit from GRR from all sources	Actual transfers during the relevant period
Eleventh (2000-2005)	29.50	37.50	34.96
Twelfth (2005-2010)	30.50	38.00	47.39
Thirteenth (2010-2015)	32.00	39.50	48.22
Fourteenth (2015-2020)	42.00	49.00	49.10

11.50 Keeping in view the extant strategic requirements for national defence in the global context, we have, in our approach, re-calibrated the relative shares of Union and States in gross revenue receipts by reducing our grants component by 1 per cent. This will enable the Union to set aside resources for the special funding mechanism that we have proposed in the subsequent paragraphs. Based on our assessment of the gross revenue receipts of the Union Government for the entire award period of 2021-22 to 2025-26, in nominal terms, this dispensation may leave Rs. 1.53 lakh crore with the Union Government. However, in our scheme as indicated in Table 11.10, the overall indicative transfers to the States may remain at the level of the FC-XIV period to address the needs and expectations of the States.

[4] Detailed analyses of the expenditure are contained in the Report of the Thirteenth Finance Commission, Report of the Fourteenth Finance Commission and Chapter 3 of this Report.

Table 11.10: Transfers as Percentage of Gross Revenue Receipts

Gross Revenue Receipts	FC-XIV*	FC-XV
Revenue deficit grants	1.81	1.92
Disaster Risk Management	0.45	0.80
Grants to local governments to States	2.43	2.85
Sector-specific grants	0.00	0.85
State specific grants	0.00	0.32
FC grants to States	4.68	6.74
Tax devolution	30.59	27.55
Total FC- grants + devolution	**35.27**	**34.29**
Non-FC grants (excluding GST Compensation)	12.81	12.82
GST compensation	2.08	4.02
Aggregate transfers (including GST compensation)	50.16	51.13
Aggregate transfers (excluding GST compensation)	49.10	49.08

*FC-XIV ratios are calculated based on provisional actuals of 2019-20 and actuals for other years.

11.51 We recommend that the total amount of Rs. 1.53 lakh crore, as calculated on an annual basis in Table 11.11 should be earmarked for additional investment in defence capital expenditure and for capital expenditure on internal security. We are also of the view that there should be a separate mechanism that satisfies the principles of non-lapsability and incrementality and the proposed fund is meant for such specific purpose, along with dedicated resources of an incremental nature. We, therefore, recommend that this amount should go into a specifically created non-lapsable fund and expenditure out of that fund will be governed as described later.

Table 11.11: Indicative Amount for Investment in Defence and Internal Security Capital Fund

(Rs. crore)

Years	Assessed GRR	Annual Indicative Amount
2021-22	2429405	24294
2022-23	2684208	26842
2023-24	2999062	29991
2024-25	3381073	33811
2025-26	3841639	38416
Total	15335387	153354

11.52 Among the various options proposed by the MoD and deliberated upon by the Group constituted for this purpose, we have identified the following:

(i) The MoD has substantial surplus land at its disposal. Monetisation of this can generate substantial resources if there is an effective and robust framework for the identification, valuation and disposal of such land. We, therefore, recommend that the MoD should, at the earliest, put in place a mechanism for generating additional resources from monetisation of land, including payments for defence land likely to be transferred to State Governments and for public projects in the future.

(ii) We have also considered whether the proceeds of disinvestment of DPSEs should go as general non-debt capital receipts into the Consolidated Fund or should the amount be made available for defence capital investment. Taking into account the wide gap between the requirement and availability of funds, we are of the view that the proceeds of disinvestment of DPSEs should also be part of the non-lapsable fund.

11.53 Taking cognizance of all these factors, we made following specific and general recommendations on defence and internal security for our five-year award period:

Specific Recommendations

11.54 **The Union Government may constitute, in the Public Account of India, a dedicated, non-lapsable fund, Modernisation Fund for Defence and Internal Security (MFDIS), to bridge the gap between projected budgetary requirements and budget allocation for defence and internal security. This may be called *Rashtriya Suraksha Naivedyam Kosh* or any other appropriate name. The proceeds of the fund will be utilised for the following three purposes:**

(i) capital investment for modernisation of defence services;

(ii) capital investment for CAPFs and modernisation of state police forces, as projected by MHA; and

(iii) a small component as welfare fund for our soldiers and para-military personnel.

The fund shall have the standard notified rules for its administration, public reporting, and audit by the Comptroller and Auditor General.

11.55 We expect that the Union Government will provide the identified amounts for each year, as specified in Table 11.11, in the Union Budget on an annual basis. We suggest a suitable budget line may be opened for "Investment in MFDIS (*Rashtriya Suraksha Naivedyam Kosh*)" (or any other appropriate name) specifically for this amount that will be made available as an additionality, over and above the normal budgetary capital outlay for defence. In the second stage, the amount will be transferred to the Public Account.

11.56 **This Fund will have four specific sources of incremental funding:**

(i) transfers from Consolidated Fund of India;

(ii) disinvestment proceeds of DPSEs;

(iii) proceeds from the monetisation of surplus defence land, including realisation of arrears of payment for defence land used by State Governments and for public projects and cost recovered of encroached land; and

(iv) proceeds of receipts from defence land likely to be transferred to State Governments and for public projects in future.

The total indicative size of the proposed MFDIS over the period 2021-26 is Rs. 2,38,354 crore.

11.57 From the above, we expect that an estimated additional amount, as given year-wise in Table 11.12, to become available over the five-year of our award period:

Table 11.12: Annual Targets for the Proposed MFDIS

(Rs. crore)

S. No.	Sources of Revenue	Amount to be used for	2021-22	2022-23	2023-24	2024-25	2025-26	Total 2021-26
1	Transfers from Consolidated Fund (para 11.51)	**Defence & Internal Security**	24294	26842	29991	33811	38416	**153354**
2	Disinvestment proceeds of DPSEs	**Defence**	7000	7000	8000	9000	9000	**40000**
3	Monetisation of defence lands*	**Defence**	6000	7000	8000	9000	10000	**40000**
4	Payments for defence land likely to be transferred to State Governments and for public projects in future	**Defence**	400	600	900	1300	1800	**5000**
5	**Gross Total**		**37694**	**41442**	**46891**	**53111**	**59216**	**238354**

* Includes realisation of arrears of payment for defence land used by State Governments and for public projects and cost recovered of encroached land.

11.58 **The maximum size of the recommended fund is Rs. 51,000 crores per annum. Any amount exceeding the same shall be deposited into the Consolidated Fund.**

11.59 **This amount shall be maintained in the Public Account and shall be operated through the extant procedures for operating such accounts.**

11.60 **The unutilised amount from the normal budgetary allocations to the MoD and MHA for capital expenditure shall not be part of the Fund and should be governed as per the principles of the annual budget process.**

11.61 **The MoD would have exclusive rights over the use of the amounts deposited in the Fund from the sources of revenue mentioned at serial no. 2, 3 and 4 in Table 11.12. The MHA will only be permitted to use the fund that is earmarked for it from the source of revenue mentioned at serial no. 1 of Table 11.12. The amount proposed for capital expenditure towards internal security for five years is Rs. 50,000 crore and the year-wise amount is given in Table 11.13. Out of this Rs. 50,000 crore, the MHA will allocate Rs. 500 crore for redeveloping/improving the residential facilities for police personnel in Delhi. This would be augmented by Rs. 100 crore per annum for improved communication systems and technology upgradation of the police personnel.**

Table 11.13: Amount Earmarked for Internal Security from the Proposed MFDIS During the Award Period of FC-XV

(Rs crore)

	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Amount earmarked for internal security	8000	9000	10000	11000	12000	50000

11.62 **The fund may be operated by a suitably empowered High Powered Committee (HPC) notified by the Union Government. This may be headed by the Cabinet Secretary and consist of the Secretaries of Defence, Home and Expenditure and the Chief of Defence Staff.** The Committee will also monitor the entire mechanism to ensure realisation of targeted annual proceeds, assess the service-wise annual needs and make allocations to them. It shall also monitor the conditions mentioned by us for operating such Fund.

11.63 Apart from this, **the HPC would also allocate Rs. 1,000 crore per annum for the welfare of families of defence and CAPF personnel who sacrifice their lives in frontline duties.** As this is more in the nature of a humanitarian support, we would suggest simple processes and procedures that would enable this amount to be quickly placed at the disposal of the heads of the services in respect of defence forces and heads of the CAPFs engaged in internal security for disbursal.

General Recommendations

11.64 **We also expect that over the next year or two (medium-term), the Union Government will review its existing expenditures and rationalise and re-prioritise them to**

focus on certain key sectors and interventions with nation-wide externalities, defence and internal security. This will reduce pressures on the revenue account of the Union to enable higher capital expenditure within the available fiscal space.

11.65 **Due to overall fiscal constraints, the MoD should also take immediate measures to innovatively bring down the salaries and pension liabilities.**

11.66 **The MoD has been examining various possibilities of reforms in defence pension, as deliberated by relevant Parliamentary Committees. These are:**

i. bringing service personnel currently under the old pension scheme into the New Pension Scheme (NPS) or a separate NPS for the armed forces;

ii. increasing the retirement age of personnel below officer ranks to a reasonable level;

iii. transfer of retired personnel to other services, like the paramilitary forces, after active service of a certain duration; and

iv. resettlement of ex-servicemen through skill development courses.

We recommend that the MoD take appropriate reform measures, without losing much time, on these lines or any other innovative approach, in order to ensure the growth of defence pensions are at par with non-defence pensions.

11.67 **We also recommend that the MoD shall reduce its dependence on defence imports with a specific roadmap by corresponding enhancement in indigenous production at a faster rate.** The Ministry shall prepare and implement a time-bound action plan in this regard and MoF outlays for defence expenditure should incentivise such a roadmap. By the end of 2025-26, the endeavour of the MoD should be that not more than 30 per cent of defence capital outlay is through foreign vendor imports.

Summary of Recommendations

i. The Union Government may constitute in the Public Account of India, a dedicated non-lapsable fund, Modernisation Fund for Defence and Internal Security (MFDIS), to bridge the gap between projected budgetary requirements and budget allocation for defence and internal security. This may be called *Rashtriya Suraksha Naivedyam Kosh* or any other appropriate name. The proceeds of the fund will be utilised for the following three purposes:

(a) capital investment for modernisation of defence services;

(b) capital investment for CAPFs and modernisation of state police forces as projected by MHA; and

(c) a small component as welfare fund for our soldiers and para-military personnel.

The fund shall have the standard notified rules for its administration, public reporting, and audit by the CAG.

(para 11.54)

ii. This Fund will have four specific sources of incremental funding:

a. transfers from the Consolidated Fund of India;

b. disinvestment proceeds of DPSEs;

c. proceeds from the monetisation of surplus defence land, including realisation of arrears of payment for defence land used by State Governments and for public projects and cost recovered of encroached land; and

d. proceeds of receipts from defence land likely to be transferred to State Governments and for public projects in future.

The total indicative size of the proposed MFDIS over the period 2021-26 is Rs. 2,38,354 crore.

(para 11.56/Table 11.12)

iii. The maximum size of the recommended fund is Rs 51,000 crore per annum. Any amount exceeding the same shall be deposited into the Consolidated Fund. This amount shall be maintained in the Public Account and shall be operated through the extant procedures for operating such accounts. The unutilised amount from the normal budgetary allocations to the MoD and MHA for capital expenditure shall not be part of the Fund and should be governed as per the principles of the annual budget process.

(para 11.58, 11.59 and 11.60)

iv. The MoD would have exclusive rights over the use of the amounts deposited in the Fund from the specified sources of revenue mentioned at serial no. 2, 3 and 4 in Table 11.12. The MHA will only be permitted to use the fund that is earmarked for it from the source of revenue mentioned at serial no.1 of Table 11.12. The amount proposed for capital expenditure towards internal security for five years is Rs. 50,000 crore and the year-wise amount is given at Table 11.13. Out of this Rs. 50,000 crore, the MHA will allocate Rs. 500 crore for redeveloping/improving the residential facilities for police personnel in Delhi. This would be augmented by Rs. 100 crore per annum for improved communication systems and technology upgradation of the police personnel.

(para 11.61/Tables 11.12 and 11.13)

v. The fund may be operated by a suitably empowered High Powered Committee (HPC) notified by the Union Government. This may be headed by the Cabinet Secretary and consist of the Secretaries of Defence, Home and Expenditure and the Chief of Defence Staff. The HPC would also allocate Rs. 1,000 crore per annum for the welfare of families of the defence and CAPF personnel who sacrifice their lives in frontline duties.

(para 11.62 and 11.63)

vi. We also expect that over the next year or two (medium-term), the Union Government will review its existing expenditures and rationalise and re-prioritise them to focus on certain key sectors and interventions with nation-wide externalities, defence and internal security. This will reduce pressures on the revenue account of the Union to enable higher capital expenditure within the available fiscal space.

(para 11.64)

vii. Due to overall fiscal constraints, the MoD should also take immediate measures to innovatively bring down the salaries and pension liabilities.

(para 11.65 and 11.66)

viii. We also recommend that MoD shall reduce its dependence on defence imports with a specific roadmap by corresponding enhancement in indigenous production at a faster rate.

(para 11.67)

Chapter 12

Fiscal Consolidation Roadmap

Fiscal consolidation has been one of the guiding principles of India's economic policy and macro-economic management. Successive Finance Commissions have analysed the road map and challenges for consolidation and laid down the steps for achieving it. Our terms of reference also mandate us to recommend a fiscal consolidation road map. We start with the background, including the terms of reference of the Commission relevant to this Chapter. We then summarise the views expressed on the subject by previous Finance Commissions, Union and State Governments and the Reserve Bank of India. Next, we review the current status of deficit and debt of the Union and State Governments as well as their consolidated position. Based on all the above, we discuss our approach and delineate a road map for debt and deficit of the Union and State Governments in the next five years. While doing this, we recognise upfront the immediate resource requirements for fighting the pandemic, the demands on government budgets for stimulating the economy and the need to gradually consolidate the debt position of the general government in the latter half of our award period. Given the tentative nature of the economic outlook, we recommend that this issue should be revisited forthwith, once the needs of essential health expenditures to tackle the pandemic and its aftermath, as well as the pace of economic recovery become clearer.

Background

12.1 Para 5 of the Commission's terms of reference (ToR) enjoins us to review the current status of the finance, deficit, debt levels, cash balances and fiscal discipline efforts of the Union and the States. We are also mandated to recommend a fiscal consolidation roadmap for sound fiscal management, taking into account the responsibility of the Union Government and State Governments to adhere to appropriate levels of general and consolidated government debt and deficit levels, while fostering higher inclusive growth in the country, guided by the principles of equity, efficiency and transparency.

12.2 Further, para 6 requires us to consider, among other things, the demand on the resources of the Union Government, particularly on account of defence, internal security, infrastructure, railways, climate change, commitment towards administration of Union Territories without legislature, and other committed expenditure and liabilities; and the demand on the resources of the State Governments, particularly on account of financing socio-economic development and critical infrastructure, assets maintenance expenditure, balanced regional development and impact of the debt and liabilities of their public utilities.

12.3 The ongoing Covid-19 pandemic and the resultant economic contraction have

significantly changed the magnitude of demands on the resources of the Union and State Governments. We have done an assessment of the requirements to meet these demands in Chapters 4 and 9 of this Report. This assessment also forms the basis of our approach and recommendations on the fiscal roadmap of the general government.

Views of Previous Finance Commissions

12.4 Even when explicitly not part of their ToR, all Finance Commissions, starting with the Second, have dealt with State debt issues. From the FC-VI onwards, review of the States debt became a part of the ToR. Up to the FC-VIII, while reviewing State debt positions, Finance Commissions estimated the non-Plan capital gap of States to suggest debt relief measures, with particular reference to Central loans to States. From the FC-IX onwards, the debt position was reviewed as a whole and corrective measures were suggested. The ToR for the FC-X asked it to suggest corrective fiscal measures, keeping in view the financial requirement of the Union Government. ToRs from the FC-XI onwards have mandated Commissions to consider the long-term sustainability of debt.

12.5 The FC-XII recommended the Debt Consolidation and Relief Facility for States, with the condition that they could avail of it if they enacted a fiscal responsibility legislation that prescribes specific annual deficit reduction targets in order to ultimately eliminate the revenue deficit and reduce the fiscal deficit to 3 per cent of GSDP. It recommended discontinuing the role of the Union Government in lending to the States, and also suggested setting up of a sinking fund for the amortisation of loans, and guarantee redemption funds for the discharge of the States' obligations under guarantees.

12.6 The FC-XIII recommended that the Union should achieve a revenue surplus by 2014-15 and that States with zero revenue deficit or surplus in 2007-08 should maintain those levels while other States should eliminate the revenue deficit by 2014-15. A fiscal deficit target of 3 per cent of GSDP was recommended for all States, but with different target dates for general States and North-Eastern and Himalayan (NEH) States. For 2014-15, it set a combined debt to gross domestic product (GDP) target of 68 per cent for the general government, split into 44.8 per cent for the Union and 24.3 per cent for the States. It also recommended: (a) aligning the National Small Savings Fund (NSSF) to the market rate of interest and resetting interest rates on NSSF loans to States subject to certain conditions; (b) conditional write-off of specified loans given by the Union to the States; and (c) an independent review and monitoring, to be instituted by the Union Government, of the implementation of its own fiscal responsibility and budget management process.

12.7 The FC-XIV recommended a ceiling on the fiscal deficit at 3 per cent of GDP from 2016-17 up to 2019-20 for the Union Government. For all States, the fiscal deficit targets and annual borrowing limits were anchored to an annual limit of 3 per cent of GSDP. However, States could get flexibility on this on the primary condition that there is no revenue deficit in the year in which

borrowing limits are to be fixed and in the immediately preceding year. Once this condition is met, a 0.25 per cent flexibility over and above the 3 per cent ceiling was allowed if the debt-GSDP ratio was less than or equal to 25 per cent in the preceding year. Another 0.25 per cent flexibility was allowed on fulfilling the condition that the interest payments are less than or equal to 10 per cent of the revenue receipts in the preceding year. Moreover, if a State was not able to fully utilise its sanctioned borrowing limit of 3 per cent of GSDP in any particular year, this un-utilised borrowing amount (calculated in rupees) could be availed only in the following year but within the award period. It also recommended that State Governments be excluded from the operations of the NSSF, with effect from 1 April 2015.

12.8 The FC-XIV made detailed recommendations on the fiscal responsibility framework:

i. The Union Government may amend its Fiscal Responsibility and Budget Management (FRBM) Act, 2003 to reflect the fiscal roadmap, omit the definition of effective revenue deficit and mandate the establishment of an independent fiscal council to undertake ex-ante assessment.

ii. The Union Government may take expeditious action to bring into effect Section 7A of the FRBM Act for the purposes of ex-post assessment.

iii. The Union and State Governments may also amend their respective FRBM Acts to provide a statutory ceiling on the sanction of new capital works to an appropriate multiple of the annual budget provision.

iv. Both the Union and State Governments may report extended public debt as a supplement to the budget document, keeping in mind the importance of risks arising from guarantees, off-budget borrowings and accumulated losses of financially weak public sector enterprises.

Views of the States

12.9 Many States argued that uniform and inflexible fiscal rules undermine the fiscal autonomy of the States and lead to decline in their development expenditure. To deal with the Covid-19 pandemic, many States have requested us to relax the norms relating to fiscal deficit and debt and allow them to raise more financial resources during our award period. Some of them also urged us to recommend raising the ways and means accommodation to them during the award period.

12.10 A few States felt that the enforcement of fiscal rules is not symmetrical between the Union and the States. While the States are subject to annual borrowing limits fixed by the Union based on fiscal adjustment path/FRBM limits, there is no such mechanism to enforce fiscal discipline on the part of the Union. In the adoption of fiscal targets, there should be uniform treatment for the Union and the States. The Union Government amended its FRBM Act and dispensed with the revenue deficit target altogether. But borrowing targets of the States are set with reference to the revenue deficit.

12.11 Many States requested that we avoid the imposition of any condition under Article 293(3) of the Constitution. Net budgetary borrowing ceilings for the States are already fixed by the Government of India at the beginning of every fiscal year as per the fiscal deficit target specified in the FRBM Act. Specifying further conditions restrains entitled borrowings and the fiscal space of the States.

12.12 A suggestion was made to permit States to breach the FRBM borrowing limits in the event of a shortfall in tax devolution. It was also suggested that States should be allowed a higher debt ceiling of at least 30 per cent of GSDP, because under the debt target of 20 per cent of GSDP, many of them would have to keep fiscal deficit below 3 per cent of GSDP. There were also proposals for building in escape clauses for States under the FRBM framework.

12.13 Most North-eastern States maintained that private investment is totally absent in their region in critical sectors like power, road, network, airport, etc. They suggested that some relaxation under the FRBM Act for higher borrowings to finance capital outlays may be considered for them.

12.14 Another demand is that the States may be allowed prematurely to retire their high cost debt (such as under NSSF) based on existing market dynamics. This will allow States to refinance their loans at lower interest rates and decrease their debt servicing cost.

12.15 Some States argued that the combined debt target may be different if the implicit nominal GDP growth changes, as compared to the implicit growth assumption of 11 per cent per annum that was used for deriving the 60 per cent target. Fiscal deficit and debt targets should be made consistent. Since the fiscal deficit limits for both the Union and the States are currently 3 per cent, capping the total debt at 20 per cent of GDP for the aggregate of States is unwarranted.

12.16 At times, some States have to take recourse to market borrowing just to avail of their full borrowing limit and this leads to excessive cash balances. They proposed that we may incentivise the States to avoid this by recommending the carry forward of the unutilised borrowing limit to the succeeding years within the award period. This will also provide the required flexibility to the State Governments to adopt a counter-cyclical fiscal policy. Countercyclical fiscal space can be created also through relaxation of fiscal targets in times of slow growth, institution of a budget stabilisation fund to build up buffers and fixation of a range of targets instead of fixed targets.

Views of the Union Government

12.17 The Union Government submitted that this Commission should define 'debt' consistently and clearly for both the Union and the States, against the current situation where different documents use different definitions of debt. It suggested the adoption of the definition used in the Status Paper on Government Debt, with inclusion of fully-serviced bonds and other extra-budgetary resources and deduction of multilateral/bilateral loans taken on the States' account on back-to-back basis for computing the Union's debt and liabilities. It also said that State's

liabilities to the Union need to be excluded from general government debt to avoid double counting.

12.18 The Union Government urged the Commission to incentivise States to amend their FRBM acts to bring the debt-GDP ratio to 20 per cent of their GSDP by 2024-25, by linking its transfers to fulfilment of this goal.

12.19 It was suggested that the States should also strive for a robust borrowing programme by integrating their financial management systems with Accountant General's and Reserve Bank of India's (RBI) financial system. **The State Governments may explore the formation of independent public debt management cells (PDMCs) similar to the one at the Union Government level.**

12.20 The Union Government requested us to define what is permissible as States' borrowing and prescribe that any liability taken outside permissible sources of borrowing should be prohibited. It also requested us to recommend a reporting system for any such borrowings. It held that the Union Government should have the authority to regulate market borrowings of a State, if the latter is found to be raising unauthorised off-budget borrowings.

12.21 The Union Government also felt that we should not recommend revenue deficit grants for any State, since all major States have adequate revenue raising powers to meet legitimate expenditure. Only the States which are not using their fiscal powers or were fiscally mismanaged in the past or have undertaken excessive debt and are running populist schemes fail to generate enough resources to meet their expenditure. Some of the hill states which may be fiscally unsustainable can be helped by way of specific grants.

12.22 In the revised memorandum, the Union Government expressed difficulty in projecting fiscal deficit and debt because of the uncertainty caused by the Covid-19 pandemic. It preferred to follow a glide path for reducing fiscal deficit, while also keeping the following steps in mind:

i. maintaining transparency in the market borrowing programme by effective dissemination of the borrowing calendar to investors;

ii. conducting investor interaction with other stakeholders regularly;

iii. creating benchmarks of desired tenors by issuing sizeable volumes to enhance investor participation and liquidity;

iv. elongating the maturity profile of the debt portfolio and building a smooth yield curve;

v. issuing a variety of instruments that help investors manage their portfolio efficiently; and

vi. continuing with the rationalisation of interest rates on small savings schemes and other instruments like provident fund and special securities in line with the interest rates prevailing in the economy.

Views of the Reserve Bank of India

12.23 The RBI wanted the States to pursue an active debt management strategy similar to that followed by the Union, in terms of buyback, switches and non-standard issuances towards consolidation of outstanding debt. Passive consolidation involves issuing a few new securities and reissuing them repetitively until they reach a cap. The buyback of securities will not only help in consolidation but will also reduce the cost of borrowings. The buyback and switches are undertaken for the purpose of bringing down elevated redemption pressures in the near term.

12.24 The RBI felt that oversupply of State development loans (SDLs) in the market needs to be dis-incentivised in the interest of all stakeholders, including States. SDLs have not been able to attract foreign portfolio investors due to lack of financial information on the States. Regular disclosure of the financial position of the States and their credit rating will help broaden the investor base. **Credit rating will also reinforce fiscal discipline and lead to better pricing of SDLs. The States should define and disclose contingent liabilities transparently, estimate them and assess the risks associated with them.**

12.25 The surplus cash balances of the States have increased over a period of time. Investing these balances in Intermediary Treasury Bills (ITBs) leads to negative spreads in the form of interest rate differential between market borrowings and the returns on the ITBs. Avenues for States to invest their surplus in short maturities other than treasury bills are limited. Thus, States may be allowed to invest in cash management bills of the Government of India through a non-competitive route as a measure to minimise the negative carry of the States to the maximum possible extent.

12.26 The RBI felt that the **States should build more avenues for short-term borrowings other than ways and means advances/overdraft (WMA/OD) facility, which has monetary policy implications.** Such a facility may help States meet the temporary mismatches in their revenue flows without any limits at market-determined cost.

Review of the Current Position

FRBM Framework

12.27 The FRBM Act, as amended in 2018, defines the debt of the Union Government to include: (a) its outstanding liabilities on the security of the Consolidated Fund of India, including external debt valued at current exchange rates; (b) the outstanding liabilities in the public account of India; and (c) such financial liabilities of any body corporate or other entity owned or controlled by it, which the Government is to repay or service from the annual financial statement, reduced by the cash balance available.

12.28 On the operational details of fiscal targeting, the Act specifies the following:

(i) The Union Government shall: (a) take appropriate measures to limit the fiscal deficit up to 3 per cent of GDP by 31 March 2021; (b) endeavour to ensure that the general

government debt does not exceed 60 per cent and the Union Government debt does not exceed 40 per cent of GDP by the end of 2024-2025; and, (c) not give additional guarantees with respect to any loan on the security of the Consolidated Fund of India in excess of 0.5 per cent of GDP in any financial year.

(ii) Annual fiscal deficit target can be exceeded in a year, but by not more than 0.5 per cent of GDP, on specified grounds. In such instances, a statement explaining the reasons thereof and the path of return to the annual prescribed targets shall be laid before both Houses of Parliament.

(iii) If any deviation is made in meeting the obligations under the Act, owing to unforeseen circumstances, the Finance Minister will make a statement in both Houses of Parliament explaining the reasons for the deviation and the remedial measures proposed.

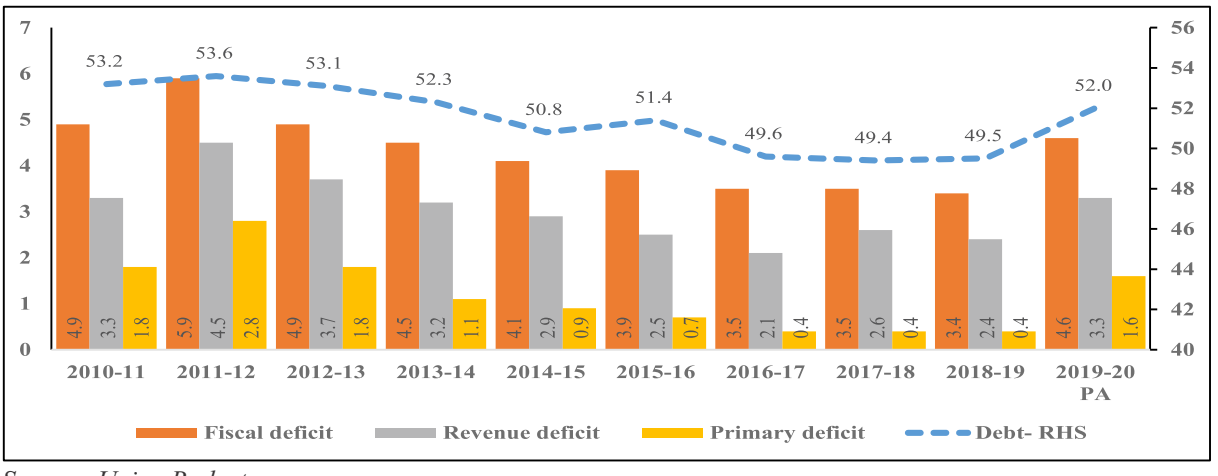
12.29 About half the States amended their FRBM Acts between 2015 and 2018, consequent to the award of the FC-XIV, generally aligning their debt and deficit targets to the Commission's recommendations. Most of the State Governments have their fiscal deficit targets fixed at or below 3 per cent of GSDP. The borrowings by States are governed by the Article 293 (3) of the Constitution that stipulates that State Governments cannot take any loan without the consent of the Union Government, if any part of a loan either given to the State by the Union Government or guaranteed by the Union is still outstanding.

Debt and Deficits of the Union

12.30 During the entire period of our review, from 2010-11 to 2019-20, the fiscal deficit of the Union Government remained above the target prescribed under the FRBM Act. As Figure 12.1 shows, the fiscal deficit reached its peak level of 5.9 per cent of GDP in 2011-12 and improved to 3.4 per cent in 2018-19. However, with slowing economy and declining tax revenue collection, fiscal deficit worsened to 4.6 per cent of GDP in 2019-20.

Figure 12.1 : Union Government Fiscal Indicators

(as % of GDP)



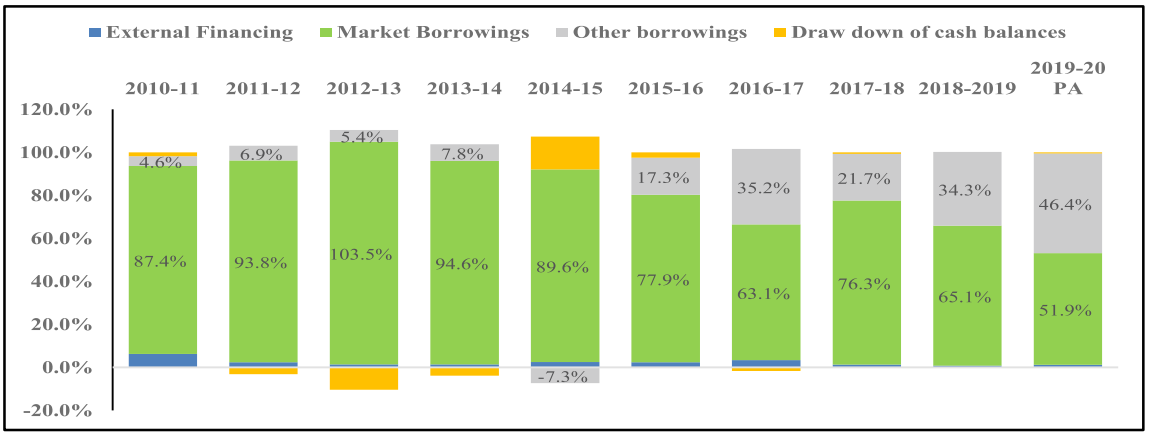
Source : Union Budget

12.31 During the period of our review, 70 per cent of the fiscal deficit of the Union was accounted for by the revenue deficit, leaving just 30 per cent of the net borrowing available for capital expenditure purposes. The primary deficit has shown a declining trend from 2.8 per cent of GDP in 2011-12 to 0.4 per cent in 2018-19. However, in 2019-20, it spiked to 1.6 per cent of GDP.

12.32 The debt-GDP ratio of the Union improved from 53.2 per cent in 2010-11 to 49.4 per cent in 2017-18 before again deteriorating to 52 per cent in 2019-20 (Figure 12.1). As per the definition of Central Government debt in the amended FRBM Act, the outstanding debt has been adjusted for external debt at current exchange rates. The debt in 2019-20 also includes stock of EBRs, which are to be fully serviced from the Union Budget[1]. This was reported for the first time in the Union Budget 2019-20 presented in July 2019.

12.33 A significant change in the composition of the financing of the Union's fiscal deficit was noticed during the period under review. The proportion of market borrowing in financing reached a peak level of 103.5 per cent of the fiscal deficit in 2012-13 and then gradually declined to reach just 51.9 per cent of fiscal deficit in 2019-20 (Figure 12.2). This would impact the overall cost of finance and the maturity profile of the Union Government's debt stock.

Figure 12.2: Financing of Fiscal Deficit of the Union



Source : RBI for the years till 2018-19 and CGA for 2019-20 PA

12.34 Apart from the reported EBR, the Union Government has been resorting to off-budget financing in the form of deferment of expenditure to the following year. The details of such off-budget financing are presented in Chapter 3 paragraph 3.51. The stock of EBR on account of fertilizer subsidies as of March 2020 was around Rs. 40,000 crore.

12.35 In the case of the food subsidy, in order to cover the shortfall in the budget allocation, the Union Government asks the Food Corporation of India (FCI) to resort to a number of instruments such as bonds, unsecured short-term loans as well as loans from the NSSF. The outstanding stock of NSSF loans to FCI as of March 2020 was Rs. 3.2 lakh crore.

[1] As defined in para 4 of MTFP 2019-20, fully serviced means principal and interest both paid through Annual Financial Statement. This may be at variance with the 'Central Government Debt' defined under FRBM Act, 2003.

Debt and Deficits of the States

12.36 At an aggregate level, the States have maintained their fiscal deficit below the target of 3 per cent of GSDP for most of the years in our review period, except 2015-16 and 2016-17. This slippage was on account of the Ujjwal DISCOM Assurance Yojana (UDAY) scheme, under which States were to take over certain part of DISCOM debt stock on their own balance sheets. This is reflected in higher fiscal deficit in those years.

12.37 The pressure on the States' fiscal position has been rising, as can be seen from the rising primary deficit of the States. The States' primary deficit in 2010-11 was 0.6 per cent of aggregate GSDP, and then rose to 2 per cent in 2016-17 before improving to around 1 per cent in the 2019-20 budget estimates of the States.

12.38 The total debt of the States declined to 22.8 per cent of GSDP in 2013-14 and then rose to 25.9 per cent in 2016-17 due to the impact of UDAY and remained stable at that level for three years. In 2019-20, it has been budgeted to rise sharply to 27.3 per cent of GSDP. Actual outturn of outstanding debt at the end of 2019-20 might be higher than this due to the slowing of the economy and expected tax revenue shortfall.

Table 12.1: Revenue Deficit (+)/Surplus (-) of the States

Indicators	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 RE
Number of States with revenue deficit	10	6	6	11	15	10	10	10	10	15
Revenue deficit as % of all-State GSDP*	0.59	0.40	0.38	0.48	0.84	0.56	0.77	0.65	0.68	1.00
Number of States with revenue surplus	18	22	22	17	14	19	19	19	19	13
Revenue surplus as % of all-State GSDP*	-0.63	-0.69	-0.60	-0.38	-0.45	-0.51	-0.49	- 0.50	-0.55	-0.23
Aggregate revenue deficit/surplus as % of all-State GSDP	-0.04	-0.29	-0.22	0.10	0.39	0.04	0.28	0.15	0.13	0.77
Aggregate fiscal deficit as % of all-State GSDP	2.4	2.0	2.1	2.3	2.9	3.2	3.6	2.5	2.5	3.2

** revenue deficit refers to aggregate revenue deficit of States that had revenue deficit and revenue surplus refers to aggregate revenue surplus of States that had revenue surplus.*

Source : Finance Accounts and MoSPI

Note: Total number of States during 2010-11 to 2013-14 is twenty-eight because Telangana was not a separate State. The number of States in 2019-20 is twenty-eight because Jammu & Kashmir ceased to be a State.

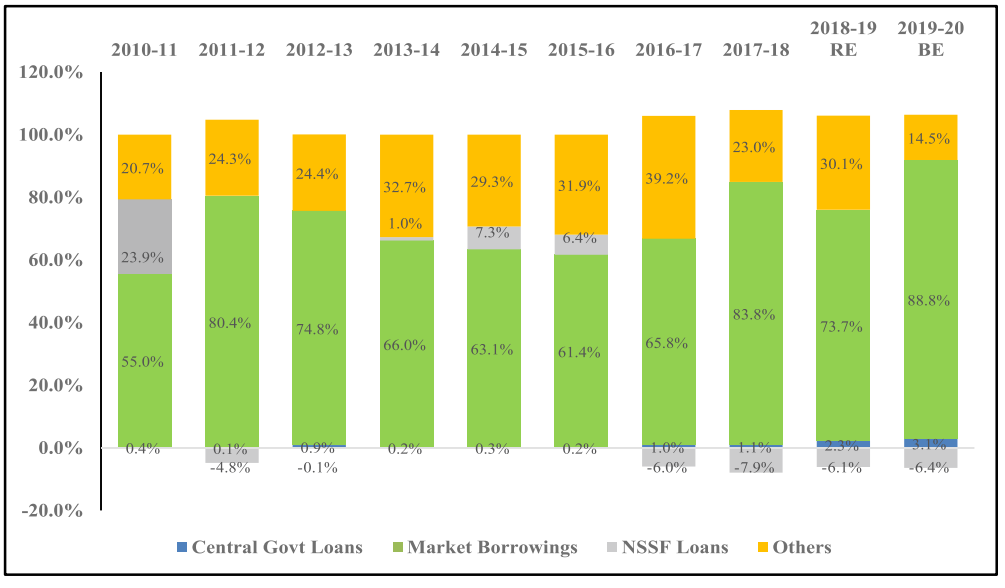
12.39 The revenue deficit of the States at an aggregate level is expected to be 0.77 per cent of

GSDP in 2019-20. During our review period, the aggregate revenue deficit has shown two clear trends. One, the States in the aggregate are in revenue deficit consistently since 2013-14. Two, before that, they reported revenue surplus for three consecutive years.

12.40 Table 12.1 provides a disaggregated picture of the deficits of States. A majority of States remained revenue surplus during the entire period of review. Among the large States, Bihar, Gujarat, Karnataka, Madhya Pradesh, Odisha and Uttar Pradesh have reported revenue surplus in all the years under review. Andhra Pradesh (post re-organisation), Haryana, Kerala, Punjab and West Bengal have reported revenue deficit in all the years. Tamil Nadu and Rajasthan have reported revenue deficit in the last seven years.

12.41 Figure 12.3 depicts the financing pattern of the fiscal deficit of the States. The proportion of market borrowing in financing has been fluctuating during our review period. However, it remains the major source of financing. States have, on the whole, significantly reduced their deficit financing through NSSF securities. This also gets reflected in the reduction in the share of NSSF securities in the total aggregated liabilities of the States to 8 per cent in 2019-20 from 27 per cent in 2010-11. Central loans to States now constitute only 4 per cent of total aggregate liabilities, as compared to 8 per cent in 2010-11.

Figure 12.3: Financing of the States' Fiscal Deficit



Source : Based on RBI's Handbook of Statistics on Indian Economy, 18 Sep 2020

12.42 During our review period, many States have resorted to financing of public expenditure through EBRs or off-budget borrowings. This has been noted by the CAG, in its reports on finances of State Governments. However, due to the general lack of reporting of such EBRs, we are unable to factor them into our calculations.

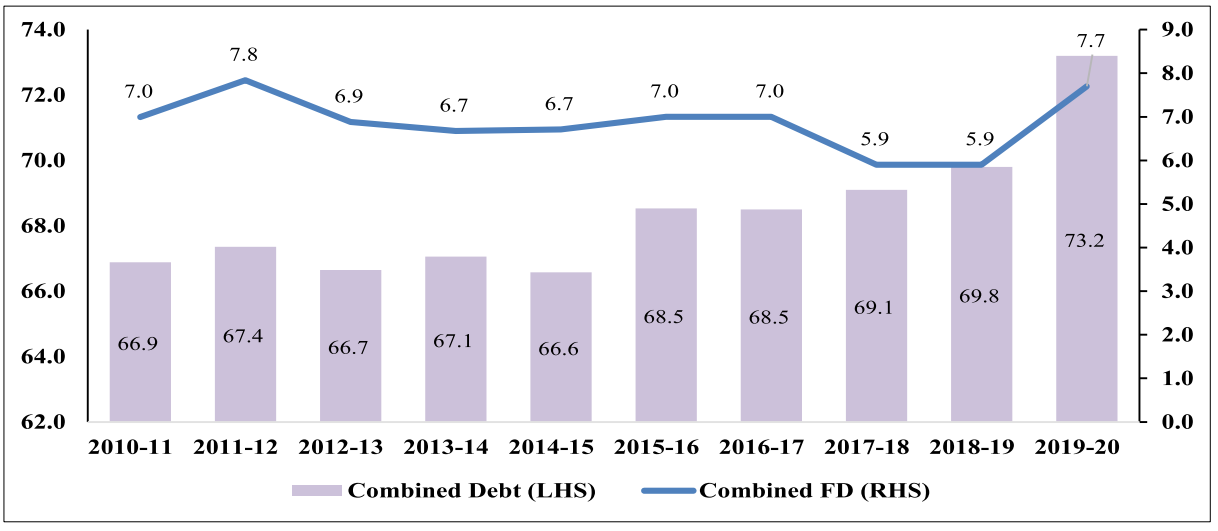
Review of Debt and Deficit of the General Government

12.43 The Union Government amended the FRBM Act through the Finance Act 2018. In the reformed FRBM framework, the focus is on limiting general government debt. It mandates the Union Government to endeavour to ensure that the general government debt does not exceed 60 per cent of GDP. We have adjusted inter-governmental transactions while consolidating at the general government level. These inter-governmental transactions included the stock of Central loans to the States, the stock of NSSF securities and Treasury Bills held by the State Governments.

12.44 The combined fiscal deficit of the general government during the review period reached the peak of 7.8 per cent of GDP in 2011-12 and was estimated to be around 7.7 per cent in 2019-20 (Figure 12.4).

Figure 12.4: General Government Debt and Deficit

(as % of GDP)



Source : Union Budget and Finance Account and our estimates

12.45 The debt-GDP ratio of the general government remained above the target of 60 per cent throughout our review period. It remained stable at around 66 per cent during the 2010-11 to 2014-15 period. Later, due to the implementation of the UDAY scheme, it breached the 68 per cent mark and remained above that level. Debt-GDP ratio saw a significant jump of more than 3 percentage points in 2019-20 due to the slowing of the economy and the shortfall in tax revenues. Both in terms of direction and quantum, combined debt during 2015-20 period did not follow the fiscal roadmap prescribed by the FC-XIV.

12.46 In the consolidated debt, ratio of debt of the Union to the States changed from 70:30 observed during the 2010-15 period to 67:33 in the last five years. At the general government level, conditions for debt sustainability - nominal growth of GDP being higher than nominal interest rate - was being met during the review period.

Path of Fiscal Consolidation for the Union Government

12.47 There are many competing considerations that exert considerable pressure on the finances of the Union Government. The balance of these considerations determined our deficit and debt path for the Union Government.

12.48 While assessing the revenue expenditure of the Union and the State Governments, we adopted normative principles with the objective of opening up space for higher allocations on health and other urgent expenditure needs and of ensuring fiscal sustainability in the medium term. We expect that the discipline that we have envisaged is strictly observed in the provision for salaries and allowances, other establishment-related expenses, pensions and subsidies. However, there are inescapable compulsions related to: (a) interest liabilities of the Union, which accounted for 29 per cent of its revenue expenditure in 2018-19 and which faces an upward pressure due to elevated borrowing requirements in the first half of our award period; (b) requirement to fund the upkeep of defence assets adequately; and (c) need to support important national priorities like health, science and technology and external affairs. Balancing the considerations of discipline, prudence and adequacy, we have pegged the trend growth rate of the own revenue expenditure of the Union Government at 6.9 per cent during our award period vis-a-vis 9.5 per cent growth during the 2015-16 to 2019-20 period.

12.49 We have also maintained that **since the overall responsibility of macro-fiscal balance rests with the Union Government, it should support the budgets of State Governments and local governments generously in the next five years.** However, the responsibility of balancing budgets of States lies primarily with their governments. We have explained our position and cautionary observations on the persistent revenue deficits run by many State Governments in Chapter 10 on grants-in-aid. However, considering the need to manage the transition smoothly, we have recommended support to seventeen State budgets with revenue deficit grants, mostly in the first three years. We have also recommended grants to State Governments for important sectors like health, education, rural roads and agricultural reforms.

12.50 We have also increased the grants for disaster risk management from 0.45 per cent of the gross revenue receipts of the Union Government during 2015-16 to 2019-20 to 0.80 per cent during 2021-22 to 2025-26. Likewise, the grants to the local self-governments have been stepped up from 2.43 per cent of the gross revenue receipts to 2.85 per cent. Overall, our recommendation for grants to the State Governments is estimated at 6.74 per cent of the gross revenue receipts of the Union Government, as compared to 4.68 per cent in the case of the FC-XIV.

12.51 Another major component of the revenue account of the Union Government is the schematically-tied transfers to State Governments, prominently by way of Centrally sponsored schemes (CSS). We have examined the issue of CSS in detail. The following are the findings and recommendations from our analysis:

(i) In February 2017, the Union Government indicated that, for aligning the schemes with the financial resources cycle of the Union and State Governments, ongoing schemes

would be co-terminus with the Finance Commission cycles. This meant that the continuation of the schemes would be contingent on outcome review, fresh appraisal and approval. To eliminate overlap of activities/objectives, the fresh proposal for continuation of the scheme was required to reflect a clear convergence architecture with other similar schemes of the Union.

(ii) Till recently, there seemed to be confusion about the number of existing CSS, indicating the complexity of the entire structure. The Department of Expenditure, Ministry of Finance, has recently drawn up a list of 131 CSSs. The Union Budget 2020-21 shows that fifteen of the thirty umbrella CSS account for about 90 per cent of the total allocation under CSS. Many umbrella schemes have, within them, a number of small schemes, some of them with negligible allocations.

(iii) It is important to gradually stop the funding for those CSS and their sub-components which have either outlived their utility or have insignificant budgetary outlays not commensurate to a national programme. There should also be a minimum threshold funding size for the approval of a CSS. This will help both the Union and the State Governments to focus on "the continuing imperative of the national development programme" as mentioned in our ToR. It will also help the participating Governments to ensure that the rights-based schemes are adequately funded.

(iv) There are two pre-conditions for carrying out this task.

(a) **The first is to fix a threshold amount of annual appropriation below which the funding for a CSSs may be stopped. Below the stipulated threshold, the administrating department should justify the need for the continuity of the scheme.**

(b) **The second requirement is to conduct an independent evaluation of all the CSS. We understand that the Department of Expenditure had asked NITI Aayog to conduct a third-party evaluation of all the CSS. This task should be completed within a stipulated timeframe. Further, the flow of monitoring information should be regular and should include, apart from routine statements of financial and physical progress, credible information on output and outcome indicators.**

(v) Clarity and stability in the share of the Union Government in CSS is important for the fiscal arithmetic of the States. **The funding pattern of the CSSs should be fixed upfront in a transparent manner and should be kept stable.**

12.52 We have assessed that keeping the aggregate size of the schematic transfers from the Union to the States at the FC-XIV levels (12.81 per cent of the gross revenue receipts) will be adequate to work around the above-recommended framework. We have made this provision in our projections of the revenue expenditure of the Union.

12.53 All the above, coupled with the loss of the gross revenue receipts base because of the steep

contraction in 2020-21 and the need for public expenditure for economic recovery, exerts significant upward pressure on the revenue account of the Union Government. The summary impact of the afore-mentioned developments is that the revenue deficit of the Union Government cannot be eliminated by 2025-26. This also means that it is impossible to pursue the FRBM path of fiscal deficit of 3 per cent of GDP even by 2025-26, unless the economy gains a greater momentum than expected. From the assessment of the Union finances in Chapter 4, it is clear that a 3 per cent fiscal deficit will not cover the revenue account imbalance till 2024-25 and will barely cover it in 2025-26. What makes the balance difficult is also the estimated deceleration in the non-debt capital receipts, including interest receipts and divestment proceeds, from 0.5 per cent of GDP during the FC-XIV period to 0.4 per cent during our award period.

12.54 Considering the macro-stabilisation function of the Union Government, the space for counter-cyclical investment spending cannot be allowed to shrink because of compulsions on the revenue account, including that of supporting the budgets of the State and local governments. The increased requirement of defence capital spending is an added compulsion. The following indicative fiscal path will bring the space for capital expenditure of the Union during 2021-22 to 2025-26, close to the levels of the FC-XIV period, relative to the GDP.

Table 12.2: Indicative Deficit and Debt Path for the Union Government

(% of GDP)

	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Revenue deficit	5.9	4.9	4.5	3.9	3.3	2.8
Fiscal deficit	7.4	6.0	5.5	5.0	4.5	4.0
Total liabilities	62.9	61.0	61.0	60.1	58.6	56.6

12.55 The debt to GDP ratio of the Union Government is projected to increase substantially in 2020-21 (Table 12.2) on account of two factors – the estimated contraction of nominal GDP by 6 per cent and the increase in the fiscal deficit to GDP ratio owing to a sharp contraction in revenues amidst heightened expenditure needs. As GDP growth and revenues pick up in subsequent years, relieving the pressure on fiscal deficit, the debt to GDP ratio of the Union gradually declines.

12.56 The numbers presented in Table 12.2 are based on our assessment of GDP growth and the revenue and expenditure path of the Union Government presented in Chapter 4. Considering the uncertainty in the economic outlook and revenue path of the Union Government for the next five years, Table 12.3 considers a range of possibilities for the fiscal deficit for the Union. The range of deficits presented in the table reflects the uncertainty about the impact of the pandemic on the economy, its implications for the revenues of the Union and the resource requirements for fighting the pandemic and for stimulating the economy. The upper and lower limits, 0.5 percentage point of GDP above and below the assessed terminal year deficit, lends flexibility to fiscal targeting of the Union, depending on the course of economic recovery. We have used the

middle range of fiscal deficit in Table 12.3 for the calculation of the liabilities of the Union Government presented in Table 12.2.

Table 12.3: Range of Union Government's Fiscal Deficit

(% of GDP)

	2021-22	2022-23	2023-24	2024-25	2025-26
In case economic recovery is slower than assessed	6.5	6.0	5.5	5.0	4.5
If our macro-economic assessment holds	6.0	5.5	5.0	4.5	4.0
In case economic recovery is faster than assessed	6.0	5.5	5.0	4.0	3.5

Path of Fiscal Consolidation for the State Governments

12.57 The capital expenditure of all States as a proportion of GDP was 2.6 per cent during the 2011-2019 period, while the revenue deficit was 0.1 per cent and fiscal deficit was 2.7 per cent. Based on our calculations of the revenue gap of States after taking into account the own revenue receipts and tax devolution, we have recommended a total revenue deficit grant of Rs. 2,94,514 crore for seventeen States from 2021-22 to 2025-26. In principle, once the estimated revenue deficit is taken care of with a matching provision for revenue deficit grant, the whole borrowing space under fiscal deficit is available for capital spending. It is from this perspective that we approached the issue of the net borrowing limit (gross borrowing minus repayment) of the State Governments.

12.58 **While fixing the borrowing limit for States in absolute amounts, one important issue is the size of GSDP in the year under consideration (year 't'), because the GSDP data certified by the National Statistical Office (NSO) is only available with a lag of at least two years**. To overcome this difficulty, the FC-XIV recommended a practical method: "In our view, the difficulties in obtaining up-to-date GSDP data can be overcome by adopting a practical and reasonable methodology that factors in the trends of recent years to arrive at a close proximate of the likely GSDP for arriving at the borrowing limit. We recommend that for the purpose of assigning state-specific borrowing limits as a percentage of GSDP for a given fiscal year (t), GSDP should be estimated on the basis of the annual average growth rate of the actual GSDP observed during the previous three years or the average growth rate of GSDP observed during the previous three years for which actual GSDP data are available. This growth should be applied on the GSDP of the year t - 2. Specifically, GSDP for the year (t-1) and the given fiscal year (t) should be estimated by applying the annual average growth rate of GSDP in t - 2, t - 3 and t - 4 years on the base GSDP (at current prices) of t - 2. We recommend that State estimates of GSDP published by the CSO should be used for this purpose.".

12.59 This is a time-tested methodology which **we also recommend without any change, with the caveat that the NSO should provide estimates of GSDP to the Department of Expenditure for this purpose. In the interest of transparency, we recommend that the NSO may publish this information.**

12.60 The borrowing limit for the year 2020-21 has already been decided. The Government of India had indicated that the States' net borrowing ceiling for 2020-21 was fixed initially at Rs. 6.41 lakh crore, following the extant method for arriving at the GSDP and the borrowing limit. Responding to the demands by the States for an increase in the borrowing limit from 3 per cent in 2020-21 in view of the unusual fiscal pressures, the Government of India stepped up the borrowing limits of States from 3 per cent to 5 per cent for the year. Of the additional 2 per cent, 0.5 per cent was unconditional and the remaining 1.5 per cent was conditional. Out of the conditional component, 1 per cent of the GSDP is to be given in 4 tranches of 0.25 per cent, with each tranche linked to specified reform actions related to distribution of electricity, universalisation of the One Nation One Ration card scheme, ease of doing business and revenues of urban local bodies. The remaining 0.50 per cent is permissible if milestones are achieved in at least three out of the four reform areas. We assessed that as States are generally revenue-stressed in the current year, most of them may avail of the additional borrowing facility offered to them in varying degrees. Hence, we expect that the all-State fiscal deficit will be around 4.5 per cent of the aggregate GSDP.

12.61 Following the recommended methodology for GSDP projection mentioned earlier, the GSDP growth rate for the year 2021-22 will be determined by the observed GSDP growth rates in the years 2017-18, 2018-19 and 2019-20. It is more than likely that FRBM-mandated 3 per cent of GSDP (worked out using these growth rates for 2021-22) will be lower than the borrowing room of 5 per cent of GSDP available to the States in 2020-21. In order to avoid a sudden drop in the resource availability to the States, **we recommend that the normal net borrowing limit of State Governments for the year 2021-22 may be fixed at 4 per cent of GSDP**.

12.62 In line with the recommended methodology, the GSDP growth rate for the year 2022-23 will be determined by the observed GSDP growth rate in the years 2018-19, 2019-20 and 2020-21, assuming that the growth rate for 2020-21 becomes available at the stage of fixing the borrowing limit for that year. The contraction in 2020-21 will depress the average growth of the aforesaid three years with adverse impact on the net borrowing limits of States. The steeper the contraction for a State in 2020-21, the higher will be such impact on the borrowing limit. **Considering this, we recommend that the normal net borrowing limit of State Governments for the year 2022-23 may be fixed at 3.5 per cent of GSDP.**

12.63 The impact of the contraction in 2020-21 will continue to be present in the borrowing limits of the States for the years 2023-24 and 2024-25 also. However, this impact is likely to be counterbalanced by the sharp recovery in growth projected for 2021-22. Hence, **we recommend that the normal net borrowing limit to the State Governments for the three-year period of 2023-24 to 2025-26 may be fixed at 3 per cent of GSDP.**

12.64 **If a State is not able to fully utilise its sanctioned borrowing limit, as specified above, in any particular year during the first four years of our award period (2021-22 to 2024-25), it will have the option of availing this unutilised borrowing amount (calculated in rupees) in any of the subsequent years within our award period.**

12.65 Based on these assumptions, we have worked out the debt path for States, as presented in Table 12.4. Since all estimated revenue deficits are met by equivalent provision of revenue deficit grant, the revenue surpluses run by the States are reflected by the negative numbers on revenue deficit presented in the table. The State debt in aggregate tapers off gradually after 2022-23. This is similar to the pattern in the debt path of the Union shown in Table 12.2. The State-specific indicative debt paths are given in Annex 12.1.

Table 12.4: Indicative Deficit and Debt Path for State Governments

(% of GSDP)

	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Revenue deficit*	-0.1	-0.5	-0.8	-1.2	-1.7	-2.5
Fiscal deficit	4.5	4.0	3.5	3.0	3.0	3.0
Total liabilities	33.1	32.6	33.3	33.1	32.8	32.5

* negative values indicate surplus and positive values indicate deficit

Note: While arriving at the total liabilities of States for the year 2021-22, an aggregate fiscal deficit of 3.5 per cent of GSDP is taken because some States may not avail of the full unconditional net borrowing space of 4 per cent

Incentive-based Extra Borrowing Space for the States

12.66 The ToR of the Commission enjoins us to consider measurable performance-based incentives for States that have made progress in, among other things, eliminating losses of the power sector. In most of the States, the functioning of distribution companies (DISCOMs) has remained a source of strain on State finances, despite the initiatives in the past including UDAY.

12.67 As on 31 March 2019, the stock of borrowings of DISCOMs stood at 2.5 per cent of GDP. This is not reported as part of the State liabilities. However, State Governments are the sole owners of an overwhelming majority of the distribution utilities. Apart from the rising debt stock, the DISCOMs have also reported liabilities – both financial and non-financial -worth 1.9 per cent of GSDP and payables on account of purchase of power and fuel worth about 1.1 per cent of GSDP. This means that the debt profile of the States changes if we extend the definition of their debt to include DISCOMs debt also.

12.68 We had, in our Report for 2020-21, noted that we would consider recommending annual financial incentives in the power sector for top performing States. Out of the 2 per cent extra borrowing space offered by the Union Government to State Governments, 0.25 per cent was

linked to power reforms, on the lines of the parameters indicated by us in our Report for 2020-21. Considering the centrality of the financial strength of DISCOMs to the soundness of State finances, we have recommended an additional borrowing space of 0.5 per cent of GSDP for States, during the four-year period 2021-22 to 2024-25. This is a conditional borrowing space - the recommended modalities for availing this borrowing space is detailed in Chapter 10 relating to our recommendations on grants in aid.

12.69 The upper limit of fiscal deficit presented in Table 12.5 assumes that States will avail fully of the extra unconditional borrowing room recommended for them in 2021-22 and 2022-23 as well as the incentive-based extra borrowing space given for the power sector during 2021-22 to 2024-25. However, given the revealed preference of many States to borrow less than the available borrowing space, they may revert to their normal borrowing pattern below 3 per cent of their GSDP from 2021-22. In this scenario, the all-State average of fiscal deficit in 2021-22 and 2022-23 can also be around 3 per cent of GSDP. Table 12.5 gives a possible range of all-State deficit as percentage of GSDP from 2021-22 to 2025-26.

Table 12.5: Range of all-State Fiscal Deficit under the Recommended Space for Borrowing

(% of GSDP)

	2021-22	2022-23	2023-24	2024-25	2025-26
Upper limit- (If all States use the full borrowing space available)	4.5	4.0	3.5	3.5	3.0
Lower limit- (States, on an average, reach the current FRBM limit)	3.0	3.0	3.0	3.0	3.0

General Government Deficit and Debt

12.70 The general government deficit and debt profile, presented in Table 12.6, combines the calculations presented for the Union and the States separately in the previous tables and figures, with two differences. First, Table 12.6 presents the calculations for States as percentage of GDP while Table 12.1 and Table 12.4 presented them as percentage of all-State GSDP. Secondly, while combining the debt of the Union and the States to arrive at the consolidated debt, we have netted inter-governmental transactions to avoid double-counting.

Table 12.6: Indicative Deficit and Debt Path for the General Government

(% of GDP)

	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Revenue deficit-Union	5.9	4.9	4.5	3.9	3.3	2.8
Revenue deficit-States	-0.1	-0.4	-0.8	-1.1	-1.6	-2.4
Revenue deficit-combined	5.8	4.5	3.7	2.8	1.7	0.4
Fiscal deficit-Union	7.4	6.0	5.5	5.0	4.5	4.0
Fiscal deficit-States	4.2	3.3	3.3	2.8	2.8	2.8
Fiscal deficit-combined	11.6	9.3	8.8	7.8	7.3	6.8
Total liabilities-Union	62.9	61.0	61.0	60.1	58.6	56.6
Total liabilities-States	31.1	30.7	31.3	31.1	30.9	30.5
Netting (*)	4.2	3.4	2.7	2.1	1.7	1.4
Total liabilities-combined	89.8	88.3	89.6	89.1	87.8	85.7

(*) The items netted include the stock of Union Government loans to the States, the stock of NSSF securities and Treasury Bills held by the State Governments.

12.71 Reflecting the patterns in the Union and State debt relative to GDP, the combined debt also increases steeply in 2020-21 and then declines gradually. **The combined debt exhibits a smooth downward trajectory during the last three years, that is, 2023-24 to 2025-26.**

12.72 There are risks on the downside to the calculations on the debt path of the general government presented in Table 12.6. First, we made our calculations based on the middle range of fiscal deficit of the Union Government given in Table 12.3 and the numbers used for arriving at the total liabilities of the State Governments in Table 12.4. In the event that the Union or the States prefer to stimulate the economy with greater investment spending, or if the health and recovery needs of fighting the pandemic stay elevated beyond mid-2021, they may prefer to borrow close to the maximum limit available. Second, we have not considered possible demands on the budget of the Union on account of the recapitalisation of the financial system. This is because our discussions indicated that the requirements and choice among the different options of recapitalisation will depend on an assessment of the depth of the impact of the Covid-19 pandemic on the financial system. Third, to make our stand clear, we are not including or quantifying the debt implications of borrowing for managing the GST compensation for States. The fiscal deficit and debt path worked out by us from 2020-21 to 2025-26 excludes the borrowing that the States or the Union may do under any arrangement worked out between the Union and the States, consequent upon decisions in the GST Council. Finally, if GDP growth falters in the later part of our award period, there will be a threat to the sustainability of debt of the

general government in many ways. Hence, it is important that the additional fiscal space that we have recommended for the first part of our award period is utilised well to protect and improve productive capacity.

Off-budget and Contingent Liabilities and Fiscal Rules

12.73 We have noted that the off-budget financing of budgetary expenditures has proliferated in the last five years. The Union Government has started disclosing off-budget liabilities to the extent that such liabilities are repaid and serviced from the annual financial statement. There is still a significant amount of off-budget expenditure that is subject to subtle interpretations of the law and escape the calculations of deficit and debt. In the case of the many State Governments, despite efforts, we have not been able to arrive at tenable numbers of such liabilities. There is virtually no such disclosure in the budget documents and accounts of States.

12.74 Our position on off-budget liabilities, as stated elsewhere, is that these obligations need to be cleared in a time-bound manner, but the resources for doing so cannot be found from the regular inflow of tax and non-tax revenues. For this purpose, additional resources should be mobilised by the respective governments, including through monetisation of assets.

12.75 Detailed analysis revealed that there is a substantial portion of implicit contingent liabilities, outside the framework of standard guarantees that can eventually devolve heavily on the State Governments. We also found that the risk profile of these implicit liabilities is varied. The State-specific amounts are also very different relative to their budget size and GSDP. It is important to analyse the breadth of these liabilities. However, for the present, we recommend that governments at all tiers may observe strict discipline by resisting any further additions to the stock of off-budget transactions and contingent liabilities which is against the norms of fiscal transparency and detrimental to fiscal sustainability. **One very important purpose of our recommendation for higher borrowing limit to the Union and State Governments is to foster transparency and to avoid build-up of non-transparent liabilities.**

12.76 The amendments carried out in 2018 to the FRBM Act were based on the findings of the Report of the FRBM Review Committee of 2017. The slowdown of the economy thereafter, accentuated by the Covid-19 pandemic, has changed the configuration of real GDP growth, interest rates, interest-growth differential, net financial savings of the household sector, saving-investment balance and the need for external financing. **In view of the uncertainty that prevails at the stage that we have done our analysis, as well as the contemporary realities and challenges, we recognise that the FRBM Act needs a major restructuring and recommend that the time-table for defining and achieving debt sustainability may be examined by a High-powered Inter-governmental Group. This High-powered Group can craft the new FRBM framework and oversee its implementation. It is important that the Union and State Governments amend their FRBM Acts, based on the recommendations of the Group, so as to ensure that their legislations are consistent with the fiscal sustainability framework put in place.** This is why we have termed the debt path we have worked out as 'indicative', while addressing the ToR to recommend a fiscal consolidation roadmap for sound fiscal management.

Summary of Recommendations

12.77 The fundamental principles that we have kept in mind while arguing out our case for fiscal consolidation are the following:

(i) The macro-stabilisation function of prudently supporting the State budgets to help them overcome the current crisis rests with the Union Government. However, the responsibility of balancing the budgets of State Governments lies primarily with those Governments themselves.

(para 12.49)

(ii) The current strain on the revenues of the Union and State Governments calls for strict discipline in revenue expenditure, opening up space for higher allocations on health and other urgent expenditure needs while ensuring fiscal sustainability in the medium term.

(para 12.48)

(iii) It is important that all committed expenditures and developmental expenditures are met from the augmented borrowing space recommended for the Union and the State Governments, without resort to off-budget or any non-transparent means of financing for any expenditures.

(para 12.75)

(iv) The Union Budget 2020-21 shows that fifteen of the thirty umbrella CSS account for about 90 per cent of the total allocation under CSS. Many umbrella schemes have, within them, a number of small schemes, some of them with negligible allocations. A threshold amount of annual appropriation should be fixed below which the funding for a CSSs may be stopped. Below the stipulated threshold, the administrating department should justify the need for the continuation of the scheme. As the life cycle of ongoing schemes has been made co-terminus with the cycle of Finance Commissions, the third-party evaluation of all CSS should be completed within a stipulated timeframe. The flow of monitoring information should be regular and should include credible information on output and outcome indicators. The funding pattern of the CSSs should be fixed upfront in a transparent manner and should be kept stable.

(para 12.51)

(v) For the State Governments, we have recommended that the normal limit for net borrowing may be fixed at 4 per cent of GSDP in 2021-22, 3.5 per cent in 2022-23 and be maintained at 3 per cent of GSDP from 2023-24 to 2025-26 . The term 'normal' is used to clarify that we have not accounted for any additional borrowing to be done by the State Governments to manage the shortfall in GST compensation to them, or the incentive-based additional borrowing space that we have recommended for power sector reforms in Chapter 10.

(para 12.61 to para 12.63)

(vi) If a State is not able to fully utilise its sanctioned borrowing limit as specified above, in any particular year during the first four years of our award period (2021-22 to 2024-25), it will have the option of availing this unutilised borrowing amount (calculated in rupees) in any of the subsequent years within our award period.

(Para 12.64)

(vii) We recommend that for the purpose of assigning State-specific borrowing limits as a proportion of GSDP for a given fiscal year, the estimates of GSDP published by the NSO should be used according to the procedure detailed in paragraphs 12.58 and 12.59.

(viii) We have assessed that, given the compulsions on the revenue account of the Union Government, including of lending support to the budgets of sub-national governments, they may have to follow an elevated path of fiscal deficit with a terminal year (2025-26) target of 4 per cent of the GDP.

(para 12.54 and Table 12.2)

(ix) With the recommended path for the fiscal deficit of the Union and the State Governments, we have shown that the consolidated debt of the general government will have a downward trajectory during 2023-24 to 2025-26. The differentiated debt to GSDP path of the State Governments for 2021-26 is outlined at Annex 12.1.

(para 12.65, 12.70 to 12.72 and Table 12.6)

(x) In view of the uncertainty that prevails at the stage that we have done our analysis, as well as the contemporary realities and challenges, we recognise that the FRBM Act needs a major restructuring and recommend that the time-table for defining and achieving debt sustainability may be examined by a High-powered Inter-governmental Group. This High-powered Group can craft the new FRBM framework and oversee its implementation. It is important that the Union and State Governments amend their FRBM Acts, based on the recommendations of the Group, so as to ensure that their legislations are consistent with the fiscal sustainability framework put in place.

(para 12.76)

(xi) Disclosure of the financial positions of the States and their credit rating will help in broadening the investor base. Credit rating will also reinforce self-discipline on the fiscal front and lead to better pricing of SDLs. The States and the Union should define contingent liabilities transparently, estimate them and assess the risks associated with them.

(para 12.24)

(xii) State Governments may explore formation of independent public debt management cells which will chart their borrowing programme efficiently.

(para 12.19)

(xiii) States should have more avenues for short-term borrowings other than the WMA/OD facility provided by RBI, which has monetary policy implications. Such a facility may help States in meeting the temporary mismatches in their revenue flows at market-determined cost.

(para 12.26)

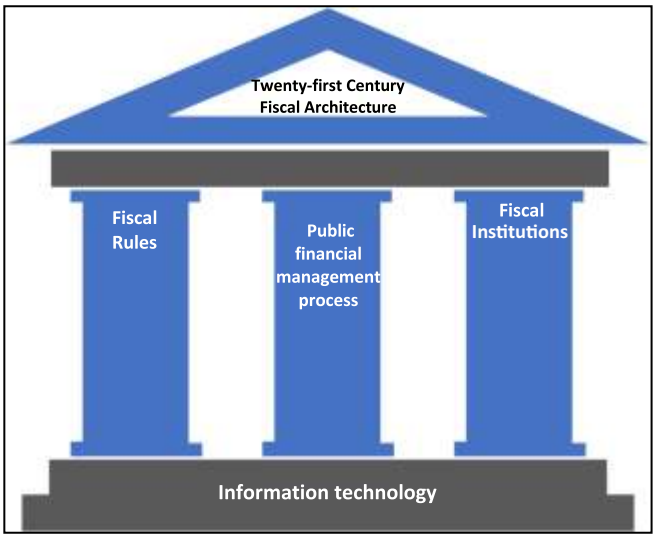
Chapter 13

Fiscal Architecture for Twenty-First Century India: Fiscal Rules, Financial Management and Institutions

This chapter defines the steps to bring India's fiscal architecture to twenty-first century international standards. The need for this has become even more imperative, given the strain on public finances as a result of the Covid-19 pandemic crisis.

We believe that if India wants to achieve its full potential for economic growth and development over the medium term, it has to improve the quality and efficiency of public spending and financial management across all levels of government.

India's twenty-first century fiscal architecture should be built on three mutually-reinforcing pillars:



- *fiscal rules across all levels of government which set the institutional and budgetary framework for fiscal sustainability;*
- *a public financial management system which provides complete, consistent, reliable and timely reporting of the fiscal indicators that are part of the first pillar; and*
- *an independent assessment mechanism so as to provide assurance and advice on the working of the other two pillars.*
- *This chapter, accordingly, recommends that all levels of government move steadily in this direction, with a mix of institutional reforms and the use of modern technology.*

13.1 Para 5 of the terms of reference (ToR) specifically mandates us to address issues related to the future fiscal architecture for India. As discussed in earlier chapters, these issues arise in the context of recommending a fiscal consolidation roadmap for sound fiscal management, guided by the principles of equity, efficiency and transparency. We have also been asked to assess the need

to improve the quality of public spending and to promote savings by adopting the public financial management system (ToR 7 (iii), (iv) and (v)). The ToR also include the option to propose measurable performance-based incentives for achieving these savings at the appropriate levels of government.[1]

13.2 Raising the quality and efficiency of public spending is a critical challenge for India, given overall resource constraints. The strain on public finances from the Covid-19 crisis, especially the need for reprioritising expenditures and financing the health and infrastructure response, accentuates the importance of ensuring that public financial management policies, processes and systems adopt best practices. There is considerable evidence of the high costs of inefficiencies in fiscal management, especially for key health and education outcomes. Studies highlight that with improved efficiency, States could, on average, raise their output indicators by 30 per cent with the same level of inputs.[2] There is also clear correlation with higher capacity and better governance stemming from improved public financial management practices. Thus, the quality of public financial management[3] has direct implications for the delivery of public services and sustaining economic growth.

13.3 International experience confirms that a public financial management system with strong budget institutions are critical to the delivery of effective fiscal outcomes and the overall path to fiscal consolidation.[4] Thus, improving public financial management would raise intended programme outcomes and the quality of service delivery, release public and private resources for productive sectors and catalyse sustainable growth. In particular, reprioritising public expenditure during the current Covid crisis becomes essential as government resources are constrained. At the same time, international experience also confirms that financial crises have frequently been triggered by the realisation of risks stemming from ineffective surveillance at all levels of government, especially from sub-national governments and extra budgetary borrowing of the 'public sector'.

13.4 These factors have special implications for all levels of the government. Many of the key economic, social and environmental challenges are in the purview of the States and local governments. The costs of inefficiencies in fiscal and financial management are becoming more important as the volume of untied resources available to the States have risen and these have highlighted the need for intensifying public financial management reforms to raise the quality of development expenditure and overall public investment management. With States accounting for roughly half of India's general government fiscal deficit, the strength of States' fiscal rules legislations and their consistency with the amended Fiscal Responsibility and Budget

[1] These may include: conditional transfers, requiring States to adopt specific public financial management practices and standards and performance as a prerequisite for specific transfers; and capacity-building grants to assist states acquire the skills and technical assistance needed to implement specific reforms.

[2] Mohanty, Ranjan Kumar & Bhanumurthy, N.R., 2018. "Assessing Public Expenditure Efficiency at Indian States," Working Papers 18/225, National Institute of Public Finance and Policy. https://www.nipfp.org.in/media/medialibrary/2018/03/WP_2018_225.pdf

[3] public financial management refers to the set of laws, rules, systems and processes used to mobilise revenue, and allocate and account for the use of public funds, and has four main objectives – fiscal discipline, allocative efficiency, operational efficiency and accountability.

[4] Schwartz, Gerd, Manal Fouad, Torben Hansen, and Geneviève Verdier, eds. September 2020. Well Spent: How Strong Infrastructure Governance Can End Waste in Public Investment. Washington, DC: International Monetary Fund.

Management (FRBM) Act, 2003 of the Union Government are also important to ensure the sustainability of public finances and macro-economic stability.

13.5 This will mean strengthening budgetary institutions at all levels of government to better anchor the framework for inter-governmental reform, meet policy priorities as efficiently as possible and deliver better development outcomes. Building India's fiscal architecture towards these ends is central to the future of India's fiscal federalism.

13.6 This chapter is organised as follows. In the context of best international practice and experience, it first reviews the implementation of India's fiscal rules and the adequacy of the supporting institutional framework for its effective implementation as well as the implications for the States. Within the institutional framework, it then looks at the links between these fiscal rules and public financial management, on the one hand, and the need for an independent institution to monitor compliance and assess underlying macroeconomic and budgetary forecasts, on the other. In short, having a fiscal rule raises the bar on the needed strength of the underlying public financial management processes and institutions. Finally, the chapter recommends the institutional way forward to gain consensus for and implement the three pillars that constitute the best practice fiscal architecture for Twenty-First Century India.

Fiscal Rules

International Experience

13.7 Many G-20 countries have set fiscal rules, including at sub-national levels, with the objective of strengthening budget institutions and management practices as well as their accountability. These rules have evolved over time, trying to balance credibility with flexibility. Overall, well designed and well implemented fiscal rules have helped contain a deficit bias, strengthen market credibility of the commitment to fiscal sustainability and allowed counter-cyclical fiscal management. By increasing the predictability of fiscal policy, they have helped lower output volatility and raise sustainable growth.

13.8 However, the challenge with fiscal rules is at least two-fold. One, to ensure that the rules are well designed. Two, to ensure that the public financial management systems and institutions allow the rules to be well monitored and implemented. Unless both challenges can be met, fiscal rules can quickly lose their relevance and credibility.

13.9 With respect to the first challenge on the design of fiscal rules, a broader "second generation fiscal framework" has become apparent in the past decade following the global financial crisis of 2008 and is characterised by greater flexibility and enforcement mechanisms:

i. Countries are now increasingly adopting more than one fiscal rule to better balance credibility (the need to create a fiscal anchor) with flexibility (the need to respond to economic shocks). One challenge with having multiple rules, however, is that they can sometimes be internally inconsistent and complex to monitor, verify and communicate.

ii. Hence, the second-generation fiscal rules typically rely on `escape clauses' or

equivalent mechanisms (using structural deficits) to create flexibility. These were generally incorporated after the global financial crisis (prior to which many existing fiscal rules did not have escape clauses), along with enhancements of specific monitoring, enforcement, communication, and transparency mechanisms. In most cases, countries are already using the flexibility in their fiscal rules to deviate or suspend the rules in response to the Covid pandemic. For example, the European Union activated the general escape clause to suspend the adjustment that member states have to do to meet their fiscal targets.

iii. Countries also often adopt "automatic correction mechanisms" which specify in advance how deviations from the rule will be handled. This is now a requirement for European Union countries that have signed the "Fiscal Compact." Other escape clauses impose limits on how long fiscal policy can deviate from the targets in the rule, including specifying the nature of the plan to return to the rule, with publication of the supporting medium-term fiscal strategy.

13.10 With respect to the second challenge on monitoring, countries with successful fiscal rules have also implemented overarching public financial management laws to ensure that these systems were sufficiently developed to support the fiscal rules. International evidence is clear that countries with weak public financial management systems and weak budget procedures were unable to monitor and effectively control fiscal targets and rules.

India's Fiscal Rule: Challenges in Implementation

13.11 Compared with other emerging market countries, India was relatively early in its adoption of fiscal rules through the enactment of the FRBM Act in 2003, mirrored by the successive adoption of fiscal responsibility legislation by all the States[5]. Since then, through a number of amendments, the Union has updated the FRBM Act, adopted multiple fiscal indicators as target indicators, added direct rules on the Union and the General Government debt ceilings, clarified the escape clauses, made the Medium Term Expenditure Framework (MTEF) statement mandatory for the Union, and tried to bring India into the second generation of fiscal rules (changes to the FRBM Act in 2018 are contained in Box 13.1).

13.12 However, challenges in implementing these fiscal rules remain, as the underlying public financial management system meets only a fraction of best practice standards. The majority of the practices affecting budget formulation, execution and reporting are still without sufficient legislative strength; they are, instead, governed by a multiplicity of constitutional provisions, executive rules, orders and manuals. These have been replicated at the State level, but without consistency in framework and practices across levels of government, resulting in marked differences in the extent to which the Union and the States have progressed (Annex 13.1).

[5] Only Karnataka's Fiscal Responsibility Act of 2002 predates the FRBM Act, 2003 of the Union Government

Box 13.1: Recent Amendments to FRBM Act, 2003

The major amendments made through the Finance Act 2018 in the FRBM Act are;

- Government debt became the primary anchor, with the fiscal deficit as the key operational target. The fiscal deficit was to be reduced to 3 per cent of gross domestic product (GDP) by the end of financial year 2020-21.
- Achieving the General Government debt target of 60 per cent of GDP and Central Government debt target of 40 per cent by the end of financial year 2024-25.
- The scope of 'Central Government Debt' has been expanded to include the total outstanding liabilities on the security of the Consolidated Fund of India and Public Accounts plus financial liabilities of any body, corporate, or other entity owned or controlled by the Central Government, which the Government is to repay or service from the Annual Financial Statement.
- Widening of grounds (escape clauses) on which the Union Government is allowed to breach the deficit targets, including national security, act of war, national calamity, collapse of agriculture, structural reforms and decline in real output growth. However, any deviation from the fiscal deficit target shall not exceed one-half per cent of GDP.
- In case of an increase in real output growth of a quarter by at least 3 percentage points above its average of the previous four quarters, reduce the fiscal deficit by at least one-quarter per cent of GDP in a year.

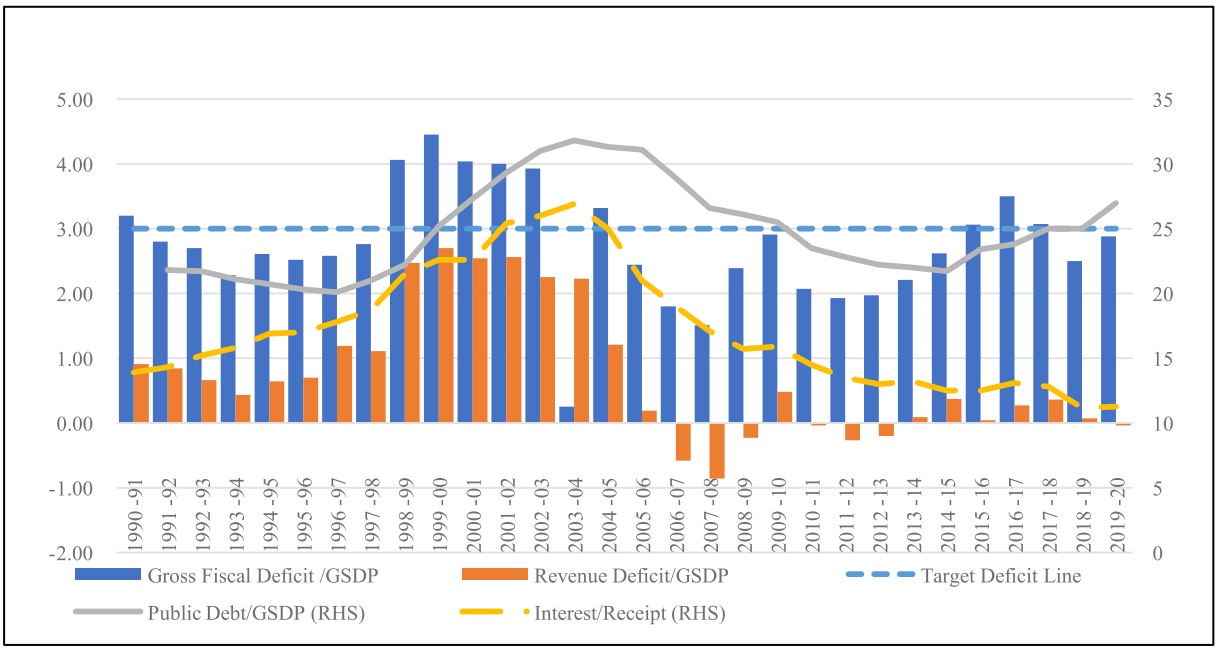
13.13 As a result, there are significant inconsistencies and gaps in the public financial management framework that affect the consistency, comprehensiveness and reliability of fiscal statistics across all levels of government.[6] In addition, the fiscal deficit defined in the revised FRBM Act (as the balance of operations incurring into the Consolidated Fund of India) falls short of the new debt ceiling that covers a broader definition of accounts and implementing agencies that deliver public services on behalf of the government. In practice, this has led to the fiscal rules being effectively circumvented, in particular by the use of public sector entities for off-budget fiscal operations, inconsistent budget classification and accounting practices (and the misclassification of revenues and expenditures) and the use of the public accounts for budgetary purposes.

13.14 The absence of an independent fiscal institution to assess and evaluate the fiscal plan as well as performance and forecasts published by governments (as is now the reality in many advanced and emerging market countries) has also further diminished the capacity to monitor compliance. Thus, target dates have been periodically shifted, escape clauses have been modified and compliance to the FRBM Act continues to reflect the discretion of the government. Most

[6] A summary review of such gaps in the existing public financial management system is given in Annex 13.2, with greater differences across the States that still needs to be fully assessed.

States have not legislated their outstanding debt targets and their MTEFs have not been developed consistently to reflect their strategic budgeting and planning. As a result, after early improvement in fiscal consolidation following the enactment of fiscal rules, the deficits of many States have recently been on a rising trajectory (Figure 13.1).

Figure 13.1: Indian States' Aggregate Fiscal Positions (in per cent)



Source: Finance Accounts of States and RBI Database.

Note: 2019-20 is budget estimates

13.15 Recent reports of the Comptroller and Auditor General (CAG) on the Union Government's compliance with the FRBM Act list many of the mismatches between the Act's provisions and reported outcomes. These involve the use of one-off measures to enable compliance, such as deferring payments, raising off-budget financing[7], and the transfer of funds from the Consolidated Fund to the Public Accounts in case of some states which risk distorting the assessment of fiscal activity. Similar observations have also been made in the CAG's reports on State Finances published every year for all the States.

13.16 More fundamentally, the challenge remains of strengthening budget institutions as a whole, and the underlying public finance and accountability architecture. This involves updating the coverage and availability of critical fiscal data across levels of government to be commensurate with the FRBM rules. As we discuss later in this Chapter, this is essential also to build market discipline which will supplement the role of fiscal rules in strengthening fiscal discipline.

[7] Report of the Comptroller and Auditor General of India on Compliance of the Fiscal Responsibility and Budget Management Act, 2003 for the year 2016-17, Report No. 20 of 2018. In the absence of a legislation or accounting standards, material circumvention in financial reporting does not influence the audit opinion of the CAG on the finance accounts.

13.17 Principal among the challenges is that India does not compile or monitor consistent general government fiscal aggregates on a timely basis.[8] Against this, the number of countries providing general government data has nearly doubled in past decade.[9] This reflects the reality that India's fiscal reporting systems at the Union and the State levels are not aligned with international practice, despite the last four Finance Commissions making specific recommendations on the implementation of public financial management reforms (Annex 13.3).

13.18 From the recommendations of previous Finance Commissions, three themes stand out: (a) strengthening the budgetary process and the performance orientation of budgets; (b) moving towards the adoption of accrual accounting; and (c) standardising and consolidating key fiscal and financial information across Union and State Governments and local bodies, including all "other liabilities" such as from off-budget borrowing and accumulated losses from State-owned enterprises. This last point is particularly important given the difficulties in assembling a comprehensive, coherent set of fiscal data for the States and the third tier of government that allows for in-depth analysis of policy options.

13.19 To address this issue, a central lesson from international experience is to define the public financial management framework for India and its constituents, strengthen budgetary institutions at key stages of the fiscal process, prescribe the accounting standards and precise definitions for target fiscal indicators and ensure consistency of the fiscal rules across all levels of government. The lack of progress in these areas continues to distort the alignment of the budget and expenditures with government policy priorities, hinders effective expenditure control, raises the public costs of inefficiency on fiscal management and creates opportunities for creative accounting and biased forecasts.

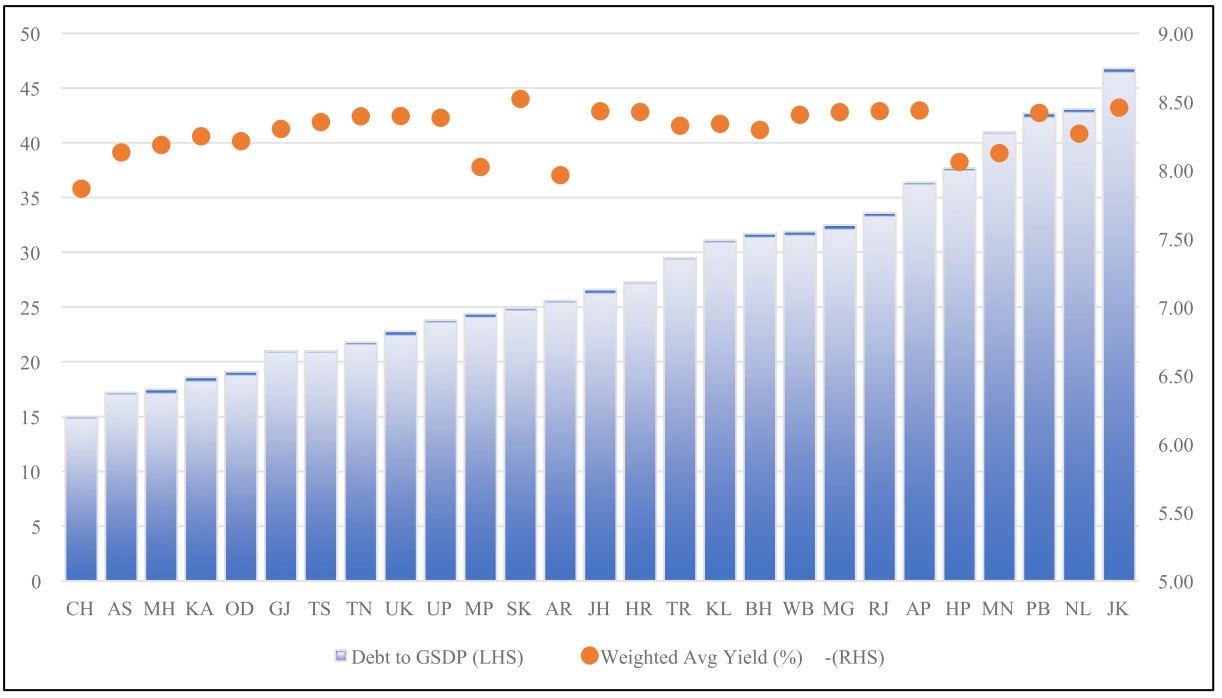
13.20 Looking ahead, public financial management reforms at the sub-national level should be consistent with reforms at the Union Government level, in terms of a clear framework, ensuring consistent and well defined targets and accounting standards, timely, comprehensive and reliable reporting of sub-national fiscal operations and strengthening automatic deviation correction mechanisms and sanctions for non-compliance. In particular, the sub-national reforms should seek to define sub-national debt targets that are consistent with general government debt reduction targets. These objectives will also require consistent updates to individual State fiscal responsibility legislations.

13.21 This approach not only seeks to ensure the internal consistency of the rules at the Union and the States levels, but also provide more incentives to strengthen sub-national revenue collection, make borrowing a function of repayment capacity and better capture differences in the States' financial conditions. This is a critical issue given the growing need to build market financing for the States and the third tier, especially the municipalities.

[8] The CAG does prepare a combined revenue and finance account (CFRA) for the Union and the States, but it is not in accessible format and it is published after a considerable time lag.

[9] A good example of high frequency and detailed sub-national government data is Brazil, where fiscal data on deficits and debt are available at quarterly intervals and disaggregated below the sub-national government level.

Figure 13.2: Challenges of Market Discipline in the States (2018-19)



Source: Reserve Bank of India

13.22 As of now, despite periodic efforts by the Reserve Bank of India (RBI) to increase the transparency of States' market borrowing, there is virtually no correlation between the States' fiscal metrics and its borrowing costs (Figure 13.2). This is because of expectations of implicit sovereign guarantees which result in moral hazard, despite the Union having stopped intermediating in the raising of borrowings by States. Building sustainable market finances for the States and local governments clearly requires reliable and consistent information on their finances on a timely basis, as discussed below. International evidence demonstrates that the strength of fiscal institutions, as discussed later in this chapter, helps improve credit rating and reduce credit costs.

Public Financial Management Reforms

13.23 The challenges faced in implementing India's fiscal rule are testimony to the lack of a public financial management system that mirrors and supports India's fiscal responsibility legislations and allows the debt consolidation roadmap to be met with equity, efficiency and transparency (as specified in para 5 of our ToR). Over the decades, India has tried to adapt international best practices toward this end and has successively committed to meeting related international standards in the public financial management system, but comprehensive coverage remains distant, as significant gaps continue to exist.

13.24 Among the weakest links in fiscal management is linking the fiscal rule (and overall fiscal strategy) to budget process and implementation within and across different tiers of government - mainly, how well the MTEF is integrated with the bottom-up costing of programs and budgets prepared by the line departments in the Union Government and the States.

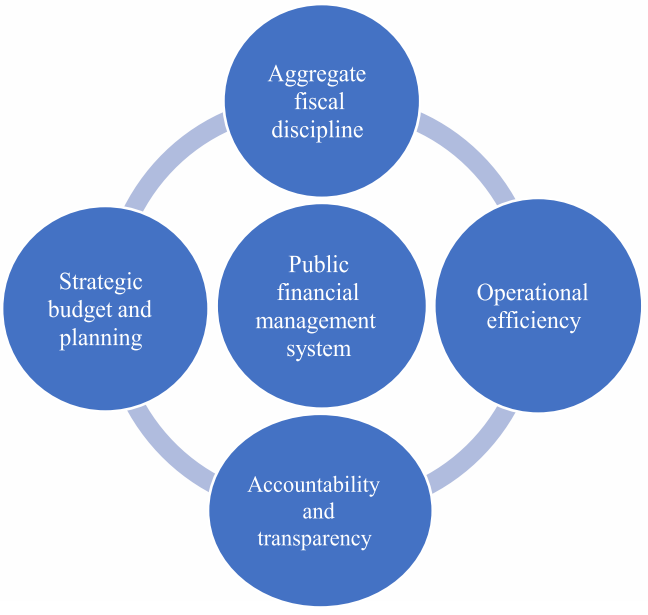
13.25 Consistent with international experience, this section details four overarching objectives of public financial management and goes on to recommend the reforms necessary to bring the system to international standards, while improving the quality of spending and promoting public savings (Figure 13.3):

i. **Aggregate fiscal discipline:** budget formulation and execution in accordance with the defined fiscal policy objectives and consistent with fiscal rules.

ii. **Strategic budgeting and planning:** the ability to implement policy priorities through the strategic allocation of resources.

iii. **Operational efficiency:** delivering intended policy outcomes in an efficient manner through a robust system of budget execution.

Figure 13.3: Objectives of Public Financial Management System



iv. **Accountability and transparency:** important cross-cutting dimensions to ensure comprehensive, accurate and timely fiscal information is available, and oversight institutions (both internal and external) and mechanisms are in place for public consultation and engagement.

Aggregate Fiscal Discipline

Fiscal Coverage and Reporting

13.26 Building on the definition of 'Central Government Debt' in the amended FRBM Act, the Union and State accounts should include debts of all government entities and agencies/corporations that deliver public services on behalf of the Union or State Governments, including all autonomous bodies, parastatals, and extra-budgetary funds at the Union and State levels. This is critical, given the recognised need to ensure that all such bodies without independent revenue streams are part of government fiscal operations and of fiscal reporting of

deficit and debt.

13.27 **Appropriate amendments may, therefore, also be taken up by the States in their respective fiscal responsibility legislations to ensure consistency with the amended Union Government FRBM Act and, in particular, with the definition of debt.**

13.28 In this context, while the Union and many of the States have enacted laws regulating the issue of explicit guarantees and their inclusion in debt reporting, a complete reporting mechanism of explicit and implicit guarantees (due to government being the majority shareholder) is not yet in place. **Hence, the Government Accounting Standards and Advisory Board (GASAB), building on its continuing work, is best placed to develop accounting standards for financial reporting and disclosures of broader 'public debt', which can form the basis for a reporting framework for contingent liabilities, along with standard norms for recognising the risk of such liabilities arising for the Union and the States after following due process.**

13.29 Such consistency will allow the Union Government to take necessary measures to extend fiscal coverage and reporting to cover the consolidated general government accounts and, separately, also, to the public sector borrowing requirement.[10]

13.30 These reforms, supported by a modernisation of the budget and account code classification (chart of accounts)[11], would also allow Governments to move towards adopting the internationally acceptable Government Finance Statistics Framework, consistent with the international commitments made.

Macroeconomic and Fiscal Forecasting

13.31 Union and State Governments should regularly publish, along with the underlying assumptions and methodology, medium-term macroeconomic and fiscal forecasts and link the fiscal targets to the forward macroeconomic projections. Fiscal forecasts should systematically identify the impact of all new revenue and expenditure policies – with a consolidated view of fiscal policy initiatives across ministries and levels of government. This framework should be integrated with each Finance Commission report to provide rolling multi-year expenditure limits.

13.32 The Union and the State Governments should strive to improve the accuracy and consistency of such macroeconomic and fiscal forecasting by using the latest techniques and developing the technical capacities of personnel involved in the forecasting and budgeting process.

[10] Public sector borrowing requirement refers to the total net borrowings of the general government and public sector enterprises owned or controlled by Union and State Governments. It includes the borrowing of the public sector to arrive at the borrowing space left for the private sector to borrow.

[11] For example, one such set of recommendations are in the report of the Committee Constituted to Review the List of Major and Minor Heads of Accounts (LMMHA) of Union and States headed by C. R. Sundaramurti

Strategic Budget and Planning

13.33 The Union and many of the States present the medium-term policy statements (medium term fiscal policy or MTFP and MTEF) as part of the budget, as prescribed in their respective fiscal responsibility legislations. The Union and some State Governments also produce outcome budget documents. However, underlying budgetary processes to plan for the medium-term and measure budget performance have not been reformed or changed. Hence, there is a misalignment between the annual budget exercise, medium-term planning and outcome budgets. Thus, it is essential to adopt performance-based budgeting practices. For example, capital investment projects are generally spread over many years. However, in the annual budgetary exercise, expenditure is appropriated only for the year, with many projects being left incomplete or delayed due to the non-allocation or inadequate allocation of funds in subsequent years. Meanwhile, new capital commitments are taken up, disregarding the adequacy of fiscal space to accommodate new projects. Such an approach towards project and programme investments is highly inefficient, as often the benefits of the investment cannot be realised even after capital spending has taken place.

13.34 To correct the misalignment in strategic budgeting, a medium-term budget and debt framework should be published, building on the reliable and rolling three-year MTEF and the annual MTFP statement. The frameworks should confirm that the projected tax provisions and expenditure programmes enable the fiscal targets to be met in a sustainable manner, without special one-off measures in annual budgets to meet the gap.

Performance Orientation of Budgets

13.35 Integrate performance information (defining outcomes and output indicators and targets) for high priority programmes in the budget documentation of the Union and States for decision-making and the legislative process. This will strengthen transparency and accountability in budget presentation, approval and execution.

13.36 Moving towards performance or programme-based budgets will require changes in the present budget and account code classification (chart of accounts). This should result in consistent programme and economic classification, which can also be adaptable to include future changes in programmes or schemes.[12] This will help integrate programme spending with intended outcomes and shift the focus of legislature oversight to the outcomes of the programmes. The Union Government has already announced its intention to synchronise Centrally sponsored schemes (CSS) with the Finance Commission cycle. Similarly, States may also like to synchronise their own schemes and programmes with their resource allocation cycles. In **addition, periodic evaluations and mid-term spending reviews could be built in for high**

[12] Many committees in the past have recommended changes in the Chart of Accounts (LMMH). Those may be looked into and appropriately implemented.

priority programmes by the Union ministries and State Governments in collaboration with the Ministry of Finance.

Operational Efficiency

13.37 Improved transparency of assumptions and outside scrutiny will build the accuracy of revenue forecasting and avoid revenue outturns significantly different from budget projections. This will limit the number and purpose of supplementary budgets with explicit accounting and financial reporting requirements for special purpose and extra budgetary financing vehicles. Both factors would increase budget credibility and lift the generally weak Public Expenditure and Financial Accountability (PEFA) ratings of many States.[13]

13.38 Though the Treasury Single Account (TSA) has been implemented at both the Union and the State levels, many States continue to borrow even while holding large cash balances in bank accounts held by government-controlled entities. **Therefore, we recommend to strengthen cash management practices for each State and the Union Government through the more comprehensive Treasury Single Account (TSA) mechanism. This will allow a more effective management of cash, including of government entities and agencies, and special purpose vehicles that are financing government activity.**

Transparency and Accountability

13.39 Fiscal transparency not only contributes to sound economic management and effective policy formulation, but it also helps in strengthening budgetary practices and improving accountability. Transparency is the key ingredient for leveraging the full potential of a sound public financial management system.

Availability of Public Information

13.40 **All the data and information related to Union and State fiscal operations, such as pre-budget and related policy statements, and mid-year reviews, should be made available to the public in a reliable, timely and comparable manner.** This would allow wider understanding and appreciation of the Union and State budgetary process. Technology can be used to create a single and transparent portal with all such information available as per the National Data Sharing and Accessibility Policy (NDSAP) of the Government of India.

13.41 **There is also room to improve the timeliness of audited financial reports of governments, ensuring they are prepared within six months of the year-end and audited**

[13] PEFA is a methodology for assessing public financial management performance. It identifies ninety-four characteristics (dimensions) across thirty-one key components of public financial management (indicators) in seven broad areas of activity (pillars). For details on methodology refer to PEFA Framework for assessing public financial management (PEFA Secretariat 2016). The RBI has recently assessed States' performance on select PEFA indicators and noted that twenty-three States had a rating below B, i.e. C or D on the indicator of aggregate expenditure and revenue out-turns, pointing to the need to establish baselines for States' performance and monitoring and possibly incentivising improvement using the PEFA framework for assessment.

within nine months, with specific responsibilities for maintaining such timelines assigned at each stage of preparation of audited financial statements.

13.42 The CAG which is mandated to carry out the role of accounts compilation and finalisation for almost all the States, as well as being the auditor of both the Union and the States, is already in the process of establishing common fiscal data standards. This would eventually ensure availability of standardised data through a public web portal for granular level fiscal statistics of the Union and the States, both for historic audited fiscal data, as well as high frequency fiscal data for the current year in downloadable database formats.

Fiscal Accounting

13.43 Consistent with international practice, and the recommendations of successive Finance Commissions, **we recommend that a time-bound plan should be prepared for the phased adoption of standard-based accounting and financial reporting for the Union and the States, while the eventual adoption of accrual-based accounting is being considered.**

13.44 One of the primary concerns of the Commission is maximising reliability, accessibility, consistency and timeliness of the financial reporting across all levels of government. Use of information technology can provide a solution to this problem. Many States have developed Integrated Financial Management Systems (IFMS)[14] for managing financial operations in a very efficient and secure way. However, there are issues of the comprehensiveness and coverage of such systems as well as the ability to talk to other systems. **We urge the Union and States to prepare IT protocols and a comprehensive plan to allow for data sharing and aggregation across all levels of government at the earliest.**

Comprehensive Public Financial Management: The Way Forward

13.45 Moving in this direction will not be easy. India has tried, over time, to take individual and incremental reforms to successive parts of the public financial management system. These have generally been stand-alone in nature, focusing on particular (and dispersed) dimensions of public financial management that have been difficult to integrate and sustain. There is, therefore, a need to evolve and agree on a comprehensive public financial management reform strategy for both the Union and the States, recognising the need for policy, regulatory and institutional reforms and leveraging technology to drive these reforms. Within this comprehensive strategy, there is still room to move ahead incrementally in a sequenced manner, provided the reform initiatives are carefully integrated and coordinated across all levels of government. International experience

[14] IFMS is an IT-based solution which provides platform for public financial management processes including budget formulation, execution (e.g. budgetary control, cash management, treasury operations), accounting, auditing, reporting; and integrates them with other functionalities like e-procurement, payroll or human resources management, debt management etc. IFMS is used as a generic name for any system which is defined as above. However, IFMS must be distinguished from Management Information System (MIS).

[15] Most large emerging market (South Africa, Brazil, and Indonesia), and advanced countries (Australia, Canada, the UK, and OECD countries) have established public financial management Legislations.

points to the rising number of large emerging and advanced countries with modern and comprehensive public financial management laws[15], that set out the quality and standards for the entire public financial management cycle, and confirm the need for overarching reform of India's public financial management system to align it with its peers.

13.46 It is well-recognised that a strong public financial management system is an essential aspect of the institutional framework for effective public service delivery – both are closely associated with poverty reduction and economic growth. Countries with strong and accountable public financial management systems tend to deliver services more efficiently, effectively and equitably, and regulate markets more efficiently and fairly. In this sense, good public financial management is a necessary building block for most development outcomes.

13.47 The Constitution of India provides a public financial management framework at a fairly high level.[16] This is supported by various statutes, subordinate legislations, guidelines, manuals, government orders and so on instituted at different points in time, with some of them going back to the pre-independence period. While many reforms have been initiated, they have been largely standalone, and primarily driven by the use of information technology such as direct benefit transfer (DBT) and Financial Management Information System. Thus, the underlying public financial management structure is piecemeal, has not yet seen significant reforms and does not have a comprehensive legislative framework backing it.

13.48 More recently, Covid-19 has inflicted incalculable social, economic and structural damage globally and has brought to surface the fault lines in the fiscal and public financial management architecture of many countries. This crisis has also highlighted the need for expenditure prioritisation and more efficient resource allocation.

13.49 In this context, the need for public financial management reforms in India arises from three very compelling arguments:

i. To bridge the gap between the high-level public financial management framework in the Constitution and the detailed guidelines, rules, regulations and manuals and, thereby, codify the principles and processes, while providing them statutory strength.

ii. To enable a review and rationalisation of the existing rules and regulations, some of which date back to the pre-independence era and make them internally consistent between the Union and the States.

iii. To build a more resilient public finance framework with capacity to better manage and mitigate future shocks.

[16] The main articles dealing with this are Articles 112 to 117, and 202 to 207 that provide 'Procedure in Financial Matters'.

Box 13.2: Key Elements of Public Finance Management Reforms in India

Both for the Union and the States, the critical gaps and reform priorities in the public financial management framework include:

- Strengthening the fiscal responsibility framework and ensuring that the FRBM Act is fully supported by the institutional framework for public financial management at different levels of government.
- Building fiscal reporting by aligning the public investment programmes of the Union and the States, wherever applicable, through a medium-term prioritisation of programmes and projects, within a medium-term expenditure framework.
- Ensuring the fiscal strategy and fiscal risk exercises, that are already part of the FRBM Act, are closely aligned with the annual budget exercises of the Union and the States.
- Ensuring uniformity in the definition of fiscal indicators and the standard reporting framework of the Union and States.
- Building outcome budgeting by linking the budget with performance in terms of outputs and outcomes, by modernising and enabling the underlying budget structures and processes.
- Key enabling elements towards outcome-based budgeting include: (a) adoption of an outcome-oriented stance to budgeting by reforming the budget classification and chart of accounts; (b) according legislative appropriation at the programme level instead of 'object head'; (c) allowing freedom to the executive to move funds within pre-defined rules; and (d) introducing a practice of 'carry over' for flexibility to pay for expenditure incurred till the last day of the financial year during a pre-defined window in the next financial year.
- Enhanced and standard based financial reporting: The essence of reforms in financial reporting are (a) to bring government accounting in line with internationally accepted accounting and reporting standards by standard setting by an independent accounting standards body and providing for progressive implementation, including the transition from cash to accrual based accounting; (b) strengthening executive ownership over the maintenance of accounts; and (c) setting clear timelines for production of accounts, completion of audit and tabling before the Legislature.
- Bringing appropriate legislative oversight on these and related public financial management functions based on consensus among all stakeholders
- Such a public financial management framework in India would bring clarity to the roles and responsibilities of various functionaries and entities, fill the gaps in accountability, enhance the oversight by the legislature and civil society and strengthen the areas of fiscal responsibility, budget management, and financial management, including accounting and reporting. Such an overarching framework, with legislative strength, would improve accountability and transparency and, thereby, improve governance.
- These elements would "*address issues related to the future fiscal architecture for the country guided by the principles of equity, efficiency and transparency*".

13.50 **Therefore, we recommend a comprehensive framework with essential elements of public financial management for consideration and deliberation by all the stakeholders (Box 13.2). This framework needs to be developed further in consultation with the States and other relevant stakeholders, and the nature of its implementation agreed upon. We believe that such a public financial management framework, if implemented, would bring India's second pillar of its fiscal architecture to global best practices in the twenty-first century. One such overarching legal framework, prepared by independent domain experts, is placed on our website for future reference.**

Fiscal Institutions

13.51 Our review of international experience suggests that there is also high correlation between establishing fiscal rules and setting up independent fiscal councils, the number of which has tripled since 2005. The evidence confirms that they have complemented each other in assessing and monitoring fiscal policy, ensuring the effective implementation of fiscal rules and strengthening fiscal performance. In particular, evidence points out that adequate external and independent scrutiny makes for better compliance with fiscal rules through their influence on the accuracy of budget forecasts. In many countries, fiscal councils are also helping meet the growing need for better coordination between the centre and the states, and the consistency of the fiscal targets across levels of government. Overall, fiscal councils constitute the third pillar of fiscal architecture.

13.52 While there is variation in the institutional models of fiscal councils internationally, there is broad agreement on critical factors to ensure their good functioning. Among these factors, effective independence and non-partisanship are perceived as being essential to the success of fiscal councils, underpinned by a clear legal framework that ensures they have a statutory footing, with provisions relating to leadership, resources, mandate and functions, publications and access to information. Regarding their independence, a clear model is that of the stand-alone United States Congressional Budget Office (CBO, which has legal separation from the executive and parliament, whereas the United Kingdom's Office for Budget Responsibility (OBR) has a dual line of responsibility to the executive and the parliament, although it is a legally separate entity with its own oversight board. About a third of today's fiscal councils are independent bodies based in parliament, with a stronger focus on assisting parliamentary oversight of the budget. It is uncommon for fiscal councils to be housed within the executive, in national audit offices, or the central bank (partly reflecting the different skill sets involved).

13.53 In India, despite the recommendations of successive Finance Commissions and other bodies to go in this direction, progress has lagged. As a result, as discussed earlier, institutional gaps have persisted in the production, collation, coordination and publication of fiscal data, as well as in independently reviewing fiscal projections and the medium-term budgetary framework across levels of government.

13.54 Among its recommendations in these areas, the Thirteenth Finance Commission (FC-XIII) had proposed that the Union Government should institutionalise independent review and monitoring of its own FRBM process. In this context, the 2015 amendment to the Rules under FRBM Act, 2003 incorporated a set of provisions requiring the CAG to periodically review the implementation of the FRBM Act. However, this is being done as a periodic post-facto review. What is required is continuing ex-ante monitoring and assessment of the internal consistency of revenue, expenditure, and deficit targets, under the fiscal responsibility legislations of the Union and the State Governments, and their effective implementation. These could be among the key functions of a fiscal council.

13.55 The FC-XIV had also made a strong case for legally institutionalising an independent fiscal institution.[17] The case was emphasised recently by the FRBM Review Committee and by the National Statistical Commission.

13.56 **We recommend the establishment of an independent Fiscal Council with powers to access records as required from the Union as well as the States. The fiscal council would have only an advisory role clearly separated from enforcement, which is the prerogative of the other organs of the government.**

13.57 Based on international experience, some indicative functions of the proposed fiscal council can be:

(i) providing multi-year macro-economic and fiscal forecasts;

(ii) evaluating fiscal performance vis-à-vis targets across levels of government;

(iii) assessing the appropriateness and consistency of fiscal targets in the States;

(iv) carrying out an independent assessment of long-term fiscal sustainability;

(v) assessing fiscal policy statements by governments under fiscal responsibility legislations;

(vi) advising on the conditions for using escape clauses under fiscal responsibility legislations;

(vii) policy costing of new measures with significant fiscal implications;

(viii) providing analytical support to the Finance Commissions, including at the State levels; and

(ix) publication of all their reports and underlying methodologies.

13.58 The mandate of a fiscal council could be broadened to cover not only the production of macroeconomic and fiscal forecasts to inform the budget, but also to advise on setting and recalibrating fiscal targets and rules at national and sub-national levels, as well as monitoring

[17] The FV-XIV also advocated the case for performance grants for Gram Panchayats and municipalities to promote the availability of reliable data on local bodies' receipt and expenditure through audited accounts; and, for the urban local bodies, publication of information on provision of basic services.

compliance with such targets and rules. The fiscal council can also work towards improving the quality of fiscal statistics at all levels of government.

Moving Ahead

13.59 The real challenge in establishing these pillars of the fiscal architecture lies in motivating, launching and sustaining such coordinated institutional reforms. **Toward this end, the Ministry of Finance could launch the process of stakeholder consultations and prepare a time-bound plan for the implementation of comprehensive public financial management reforms at all levels of government. Such consultation could bring together all the relevant stakeholders like the Finance departments of States, CAG of India (and subordinate field offices of Accountant General in States), Controller General of Accounts, Reserve Bank of India and technical research bodies working in the area of public financial management systems. Such a process could also become part of the discussion agenda of existing forums of Union-State consultations, such as the Inter-State Council or the governing council of NITI Aayog.**

13.60 The objective would be to put in place a consultative process to promote deliberation and awareness of the reform agenda with the publication of regular reports on implementation. Publication of information on the progress of reforms and benchmarking of progress across States will facilitate third-party review and scrutiny from interested non-governmental organisations, thereby exercising pressure to sustain reform.

13.61 International experience suggests that major reforms such as these may typically take several years for completion of all of its elements. Regular monitoring will help decision-makers keep track of reforms over time. It will also help track progress and performance across States. Hence, there is need of an institutional mechanism driving budgetary and public financial management reforms in a coordinated, transparent and inclusive way across levels of government to deliver consistency, transparency and accountability.

Summary of Recommendations

I. Appropriate amendments may, therefore, also be taken up by the States in their respective fiscal responsibility legislations to ensure consistency with the amended Union Government FRBM Act and, in particular, with the definition of debt. (*Para 13.27*)

ii. The Government Accounting Standards and Advisory Board (GASAB), building on its continuing work, is best placed to develop accounting standards for financial reporting and disclosures of broader 'public debt', which can form the basis for a reporting framework for contingent liabilities, along with standard norms for recognising the risk of such liabilities arising for the Union and the States after following due process. (*Para 13.28*)

iii. The Union and the State Governments should strive to improve the accuracy and consistency of such macroeconomic and fiscal forecasting by using the latest techniques and developing the technical capacities of personnel involved in the forecasting and budgeting process. (*Para 13.32*)

iv. Strengthen cash management practices for each State and the Union Government through the more comprehensive Treasury Single Account (TSA) mechanism. This will allow a more effective management of cash, including of government entities and agencies, and special purpose vehicles that are financing government activity. (*Para 13.38*)

v. All the data and information related to Union and State fiscal operations, such as pre-budget and related policy statements, and mid-year reviews, should be made available to the public in a reliable, timely and comparable manner. (*Para 13.40*)

vi. There is also room to improve the timeliness of audited financial reports of governments, ensuring they are prepared within six months of the year-end and audited within nine months, with specific responsibilities for maintaining such timelines assigned at each stage of preparation of audited financial statements. (*para 13.41*)

vii. A time-bound plan should be prepared for the phased adoption of standard-based accounting and financial reporting for the Union and the States, while the eventual adoption of accrual-based accounting is being considered. (*Para 13.43*)

viii. A comprehensive framework with essential elements of public financial management for consideration and deliberation by all the stakeholders. This framework needs to be developed further in consultation with the States and other relevant stakeholders, and the nature of its implementation agreed upon. We believe that such a public financial management framework, if implemented, would bring India's second pillar of its fiscal architecture to global best practices in the twenty-first century. (*Para 13.50*)

ix. The establishment of an independent Fiscal Council with powers to access records as required from the Union as well as the States. The fiscal council would have only an advisory role clearly separated from enforcement, which is the prerogative of the other organs of the government. (*Para 13.56*)

x. The Ministry of Finance could launch the process of stakeholder consultations and prepare a time-bound plan for the implementation of comprehensive public financial management reforms at all levels of government. (*Para 13.59*)

Chapter 14
Summary of Recommendations

Pandemic Times: Analysis for the Future 2021-26

1. We have treated the expenditures arising out of current transactions separately from the accumulated liabilities of extra-budgetary transactions. We quote from our report for 2020-21, "Outstanding extra-budgetary liabilities need to be clearly identified and eliminated in a time-bound manner with transparent reporting of deficit and debt as provided in the amended FRBM Act of 2018". We reiterate this statement. The liability of the accumulated burden needs to be fully met and will need additional resources beyond our projections to be mobilised by the Union Government, through administrative and governance reforms that will release scarce resources for clearing outstanding liabilities. We expect that the Union Government will draw up an appropriate plan for introducing such measures that will ensure repayments in a time-bound manner. As we have factored in the entire current expenditure requirements of the Union and State Governments for the award period, they should not take further recourse to any extra budgetary resources.

(para 4.43 to 4.48)

2. Our analysis and projections at different stages were affected by inconsistent accounting of receipts and expenditure that made it very difficult to ensure comparability of the base level of expenditure and revenue across States. It is important that these accounting differences are ironed out forthwith to facilitate comparison of important components of State Government expenditure and consistent State level fiscal analysis and the aggregation with the Union's accounts.

(para 4.79)

Resource Mobilisation

3. The pandemic has given rise to two competing considerations in the short to medium term. First, there is the need for sizeable resources for the general government to deal successively with the increased demands for health interventions and medical infrastructure, income generation programmes and fiscal support for economic revival. Second, the sharp contraction in economic activity has adversely affected revenue collection, especially tax revenues. This fiscal predicament has been described as a 'scissors effect' in Chapter 2. Fully meeting the estimated tax gap could result in a 5 percentage point improvement in the tax-GDP ratio from its level of 16 per cent in 2019-20 over the medium term. But this would happen only with significant improvement in governance of tax administration across the three tiers of government. The changes required to close the tax gap are both administrative/operational and tax policy-related. In the ensuing section, our recommendations are arranged in three segments; (a) administrative/operational changes, (b) tax policy changes and (c) other changes that will help achieve the full potential.

(para 5.42)

Administrative/Operational Changes

4. The IT platform of GST needs to be rectified forthwith and strict compliance ensured with the timelines of filing GST returns, which should lead to seamless invoice-matching and identification of frauds. This should also facilitate regular flow of consistent data on turnovers, output GST, input tax credits and net collections, with possible degree of disaggregation to facilitate scrutiny, analysis and feedback to policy.

(para 5.8 to 5.10)

5. The unit level information from GSTN should help in expanding the breadth of direct taxes. Tax authorities need to overcome technical impediments and operationalise the tax information system efficiently. (Action by Union and the States)

(para 5.8 to 5.10 and annex 5.1)

6. States will need to step up field efforts for expanding the GST base and for ensuring compliance, commensurate with their field strength and infrastructure for VAT and GST collection. (Action by States).

(para 5.26)

7. With the help of information from GST returns, the increasing number of formal transactions and the trail of bank transactions, the direct tax administration should track individual proprietorships and partnerships more effectively (Income Tax – Action by Department of Revenue, Government of India).

(para 5.15)

8. Closer co-ordination should be ensured between agencies involved in TDS and TCS, filers of withholding tax and information filers for various financial transactions to trace assessees not filing returns. (Income Tax – Action by Department of Revenue, Government of India).

(para 5.17)

9. To reduce excessive dependence on income tax on salaried incomes, it is important to expeditiously expand coverage of provisions relating to TDS and TCS to more transactions and incomes, which will leave behind an audit trail that acts as a deterrent to tax evasion. (Income Tax – Action by Department of Revenue, Government of India).

(para 5.15 to 5.17)

10. Another issue that calls for urgent departmental resolution, irrespective of revenue consequences, is the disputed direct taxes. Timely clarifications and removal of doubts by authorities, review and improvement in the quality of orders passed and conduct of multi-year audits as against the current single-year audit will help stem the origin of disputes. The constitution of an apex body at the highest level in the CBDT and CBIC to clarify all matters of interpretation will help ensure consistency and uniformity across jurisdictions. The data on disputes should be maintained on a case-wise basis, facilitating analysis of cases and drawing of lessons for the future. (Income Tax—Action by Department of Revenue, Government of India).

(para 5.22 to 5.24)

11. At the State Government level, stamp duty and registration fees have large untapped potential. States should integrate computerised property records with registration of transactions and capture market value of properties. State Governments should also streamline their methodology of property valuation to yield regular and realistic updating of property values. This will also help property taxation at the third tier of government. (Stamp duty and registration fees-Action by State Governments).

(para 5.27 to 5.31)

Tax policy changes

12. The inverted duty structure between intermediate inputs and final outputs present in the GST for many items should be resolved by streamlining its multiple rate structure. This can be corrected even without the weighted effective tax rate going up, with a salutary impact on net revenue collections of the general government. (GST—Appropriate recommendations by Union and the States for action by the GST Council).

(para 5.7)

13. Efficiency gains can be similarly reaped in customs duty collections by reducing its multiple rate structure: (a) broad banding of industrial finished products on MFN basis; (b) broad banding for intermediate industrial products and industrial raw materials on MFN basis; (c) streamlining and reducing non-tariff barriers; and (d) continuing with zero rating of imports, to facilitate exports for global value chains. The changes at (a) to (c) above may be made in calibrated fashion. (Customs Duty—Action by Department of Revenue, Government of India).

(para 5.13)

14. The myriad exemptions under different direct tax laws that breeds tax evasion, especially by the richer groups, will need to be reduced. Incentives leading to ambiguous interpretations and evasion will need to be eliminated. The concessions given to perquisites also need to be reviewed comprehensively. The threshold limits may be kept at the current level for some time to build stability in the tax regime and to ensure greater predictability and better tax planning for the taxpayer. (Income Tax—Action by Department of Revenue, Government of India).

(para 5.15, 5.16 and 5.21)

15. The Union Government may initiate action for a Constitutional amendment to effect a change that enables periodic revision of the limits of professions tax upon the recommendations of the President of India, after taking into cognisance a recommendation to this effect by the Finance Commission. (Action by Department of Revenue, Government of India).

(para 5.36 to 5.41)

Institutional and tax policy changes that will help achieve the full potential

16. It is important to restore the revenue neutrality of the GST rate, which was compromised by the multiple rate structure and several downward adjustments of rates. The rate structure can be rationalised by merging the rates of 12 per cent and 18 per cent. The system can be operated

with a three-rate structure of a merit rate, standard rate and demerit rate. Efficiency and revenue gains require that exemptions be minimised. (GST—Appropriate recommendations by the Union and the States for action by the GST Council).

(para 5.10 and Box 5.1)

17. Over-reliance on consumption-based taxes by the general government, which reduces the progressivity of the tax system, should be reduced by widening the net of income and asset-based taxation. Different tiers of the Government should review their Constitutional entitlements to income and asset-based taxation and assess the feasibility of each untapped tax power, so that the erosion of the tax base and evasion of tax payments can be halted. Wherever inadequate devolution of taxation powers hinders resource mobilisation at the third tier of Government, especially in asset-based taxes, such devolution should be immediately undertaken and local administrative capacity strengthened.

(Annex 5.2)

Towards Cooperative Federalism: Balancing Equity and Efficiency

18. We recommend retaining the vertical share of 41 per cent of the divisible pool of taxes for the States during the award period of this Commission.

(para 6.29)

19. To arrive at the inter se shares of States in the devolution, we have retained the horizontal devolution formula recommended in our report for the year 2020-21.

(para 6.41)

20. On horizontal devolution, while we agree that the Census 2011 population data better represents the present need of States, to be fair to, as well as reward, the States which have done better on the demographic front, we have assigned a 12.5 per cent weight to the demographic performance criterion.

(para 6.54)

21. The horizontal formula and the weights attached to the criteria are summarised in Table 6.4.

(para 6.57)

22. For the period 2021-22 to 2025-26, the inter se shares of States in the net proceeds of the taxes (divisible pool) as recommended by this Commission, based on the methodology described are given in Table 6.5.

(para 6.58)

Empowering Local Governments

23. The total size of the grant to local governments should be Rs. 4,36,361 crore for the

period 2021-26. We favour a fixed amount rather than a proportion of the divisible pool of taxes to ensure greater predictability of the quantum and timing of fund flow.

(para 7.60)

24. Of these total grants, Rs. 8,000 crore is performance-based grants for incubation of new cities and Rs. 450 crore is for shared municipal services**.** A sum of Rs. 2,36,805 crore is earmarked for rural local bodies, Rs. 1,21,055 crore for urban local bodies and Rs. 70,051 crore for health grants through local governments.

(para 7.61, 7.62 and 7.93)

25. For inter se distribution among States for rural and urban local bodies, weightage of 90 per cent should be given to population and 10 per cent to the area of the State. The grant to each State is detailed at Annex 7.4.

(para 7.62 and 7.93)

26. We recommend that all States which have not done so, must constitute SFCs, act upon their recommendations and lay the explanatory memorandum as to the action taken thereon before the State legislature on or before March 2024. After March 2024, no grants should be released to a State that has not complied with the Constitutional provisions in respect of the SFC and these conditions. The MoPR will certify the compliance of all Constitutional provisions by a State in this respect before the release of their share of grants for 2024-25 and 2025-26.

(para 7.58)

27. The entry level condition for rural and urban local bodies availing any grants due to them is having both provisional and audited accounts online in the public domain. States will receive grants for those rural and urban local bodies that have their provisional accounts for the previous year and audited accounts for the year before the previous, available online.

(para 7.76 to 7.78, 7.95 and 7.96)

28. For urban local bodies, apart from the entry level condition of having both provisional and audited accounts online in the public domain, after 2021-22, fixation of minimum floor for property tax rates by the relevant State followed by consistent improvement in the collection of property taxes in tandem with the growth rate of State's own GSDP will be an additional mandatory pre-condition.

(para 7.95 to 7.99, 7.101 and 7.102)

29. To supplement the resources needed to fulfil national priorities, 60 per cent of the grants to rural local bodies should be tied to supporting and strengthening the delivery of two categories of basic services: (a) sanitation and maintenance of ODF status; and (b) drinking water, rain water harvesting and water recycling.

(para 7.84 and 7.85)

30. Urban local bodies have been categorised into two groups, based on population, and different norms have been used for flow of grants to each, based on their specific needs and aspirations. For cities with million-plus population (Million-Plus cities), 100 per cent of the

grants are performance-linked through the Million-Plus Cities Challenge Fund (MCF). Basic grants are proposed only for cities/towns having a population of less than a million.

(para 7.104,7.105 and 7.128)

31. Category I cities (urban agglomerations with a population of more than one million) will be treated as a single unit for monitoring of performance indicators of ambient air quality and service level benchmarks. One-third of the total MCF of each city is earmarked for achieving ambient air quality. The balance two-third of the city-wise MCF is earmarked for achieving service level benchmarks for drinking water (including rainwater harvesting and recycling) and solid waste management. For drinking water (including rainwater harvesting and recycling) and sanitation and solid waste management criteria under service level benchmarks, the MoHUA shall act as the nodal ministry for determining the eligible urban local bodies.

(para 7.111 to 7.127)

32. Sixty per cent of the basic grants for urban local bodies in non-Million-Plus cities should be tied to supporting and strengthening the delivery of: (a) sanitation and solid waste management and attainment of star ratings as developed by the MoHUA; and (b) drinking water, rain water harvesting and water recycling.

(para 7.130 and 7.131)

33. We recommend that for the five-year award period (2021-22 to 2025-26) grants should go to all the three tiers of panchayati raj institutions.Since no resident of India should be denied a share of the local body grants, these should be distributed to even those areas which are not required to have panchayats (Fifth and Sixth Schedule areas and Excluded Areas) for augmenting their resources to provide basic services by similar local level bodies.

(para 7.63 to 7.68)

34. State Governments, while deciding the share of basic grant among various urban local bodies in cities other than Million-Plus cities, shall make allotment of grants (only under basic grants) on a per capita basis for the Cantonment Boards falling within the State.

(para 7.133 and 7.134)

35. The grants recommended by us for rural local bodies and non-Million-Plus cities shall be released in two equal instalments each year in June and October after ascertaining the entry level benchmarks and other requirements recommended by us. The States shall transfer grants-in-aid to the local bodies within ten working days of having received them from the Union Government. Any delay beyond ten working days will require the State Governments to release the same with interest as per the effective rate of interest on market borrowings/State Development Loans for the previous year.

(para 7.135)

36. Since health grants are meant for addressing the gaps in primary health infrastructure, the allocations would not be on a per capita basis for States or for local governments. Based on the MoHFW proposal, the recommended year-wise State-wise fund allocation for this purpose is provided at Annex 7.10. The MoHFW shall closely coordinate with respective State Governments and work out a mechanism for flow and utilisation of these health grants and also

involve panchayati raj institutions at all three levels by entrusting them with the responsibility to supervise and manage the delivery of health services in a phased manner. No conditions or directions other than those indicated in para 7.147 should be imposed either by the Union or the State Governments, or any authority, for releasing the grants for health.

(para 7.136 to 7.147)

37. A sum of Rs. 8,000 crore is recommended to States as grants for incubation of new cities and Rs. 450 crore for facilitating shared municipal services.

(para 7.148 to 7.154)

38. Since the ceiling for professions tax has not been revised for the last three decades, it is time that the relevant amendment to the Constitution is carried out on a priority basis.

(para 7.155 and 7.156)

Disaster Risk Management

39. The ratio of contribution by Union and States to the State-level allocations for disaster management recommended by FC-XIII should be maintained. Thus, States are to contribute 25 per cent of funds of SDRF and SDMF except the NEH States which shall contribute 10 per cent, and the rest is to be provided by the Union Government.

(para 8.34)

40. Mitigation Funds should be set up at both the national and State levels, in line with the provisions of the Disaster Management Act. The Mitigation Fund should be used for those local level and community-based interventions which reduce risks and promote environment-friendly settlements and livelihood practices.

(para 8.43 and 8.46)

41. Allocation of disaster management funds to SDRMFs should be based on factors of past expenditure, area, population and disaster risk index (which reflect States' institutional capacity, risk exposure and hazard and vulnerability respectively). Assuming an annual increase of 5 per cent, we arrive at the total corpus of Rs.1,60,153 crore for States for disaster management for the duration of 2021-26, of which the Union share is Rs. 1,22,601 crore and States share is Rs. 37,552 crore.

(para 8.51, 8.52 and 8.53)

42. Total States allocation for SDRMF should be subdivided into funding windows that encompass the full disaster management cycle. Thus, the SDRF should get 80 per cent of the total allocation and the SDMF 20 per cent. The SDRF allocation of 80 per cent should be further distributed as follows: Response and Relief – 40 per cent; Recovery and Reconstruction – 30 per cent; and Preparedness and Capacity-building – 10 per cent. While the funding windows of the SDRF and SDMF are not interchangeable, there could be flexibility for re-allocation within the three sub-windows of SDRF.

(para 8.54)

43. The allocation for the NDRMF should be based on expenditure in previous years. Assuming an annual increase of 5 per cent, the total national allocation for disaster management is estimated to be Rs. 68,463 crore for the duration of 2021-26.

(para 8.59)

44. The allocation for the NDRMF should also be subdivided into funding windows similar to that of States' allocation for disaster management. Hence, the NDRF should get 80 per cent of the total allocation for the NDRMF, with further division into 40 per cent for Response and Relief, 30 per cent for Recovery and Reconstruction and 10 per cent for Preparedness and Capacity-building. The NDMF should be allotted 20 per cent of the total allocation for the NDRMF. If required, the Ministry of Home Affairs may examine the need for amending the Disaster Management Act to create three sub-windows within the NDRF. While the funding window of NDRF and NDMF should be maintained, there could be flexibility for re-allocation within these sub-windows.

(para 8.60 and 8.61)

45. To discourage excessive and unsubstantiated demands from States, all Central assistance through the NDRF and NDMF should be provided on a graded cost-sharing basis. States should contribute 10 per cent for assistance up to Rs. 250 crore, 20 per cent for assistance up to Rs. 500 crore and 25 per cent for all assistance exceeding Rs. 500 crore.

(para 8.63)

46. A Recovery and Reconstruction Facility should be set up within the NDRF and SDRF. Assistance for recovery and reconstruction is generally a multi-year programme, and the assistance, shared between the Union and States, needs to be released annually against expenditures and only as a percentage of total cost.

(para 8.68 and 8.69)

47. State Governments need to have essential disaster preparedness to respond effectively to disasters. Their institutions and facilities must be equipped and well-functioning to meet the exigencies of a situation. The preparedness and capacity-building grants could be used to support the SDMAs, SIDMs, training and capacity-building activities and emergency response facilities. A similar window of preparedness and capacity-building should be made available within the NDRF, which could be used to support national agencies.

(para 8.70 and 8.73)

48. Major capital works required for proper upstream river basin management (to mitigate annual flood disasters caused by river erosion) with gestation periods of ten to fifteen years cannot be accommodated through Finance Commission award. Therefore, we recommend that such projects should be considered as national priority projects. Only such holistic projects can help address flood mitigation properly. A piecemeal approach will simply result in yearly washing away of river embankments.

(para 8.92)

49. There should be six earmarked allocations for a total amount of Rs. 11,950 crore for certain priority areas, namely, two under the NDRF (Expansion and Modernisation of Fire Services and Resettlement of Displaced People affected by Erosion) and four under the NDMF

(Catalytic Assistance to Twelve Most Drought-prone States, Managing Seismic and Landslide Risks in Ten Hill States, Reducing the Risk of Urban Flooding in Seven Most Populous Cities and Mitigation Measures to Prevent Erosion).

(para 8.96)

50. A streamlined system of payment to the Ministry of Defence by the Ministry of Home Affairs should be institutionalised through mutual consultations. Three options for the system of payment have been outlined.

(para 8.108)

51. In order to strengthen institutional capacities, a dedicated capacity should be set up to supervise the NDRMF and SDRMF and augment disaster funding through other sources. In addition, a disaster database should be developed to help assess the impact of expenditures on different aspects of disaster management. Other interventions such as disbursing assistance to women members of households will make disaster management more effective and efficient. NDMA, as a leading agency in disaster management, needs to be proactive and collaborate with States in pushing the agenda of reforms in disaster management.

(para 8.111, 8.114, 8.115 and 8.117)

52. To improve and streamline the access of Central assistance to the states, the existing system of assessment of the damages caused by any natural calamity should be replaced by a two-stage assessment – an initial humanitarian needs assessment for response and relief assistance and a post-disaster needs assessment (PDNA) for recovery and reconstruction needs.

(para 8.113)

53. All the new funding windows need to be supported through development of guidelines, the drawing up of which should be led by the NDMA.

(para 8.116)

54. An annual report at the national level may record all the allocations, expenditures, key achievements and results against various indicators developed for the implementation of the SFDRR. The contribution of these allocations to national and State capacities may be evaluated against a set of indicators determined by the NDMA.

(para 8.118)

55. In the event of SDRMF and NDRMF assistance falling short of the required assistance, the Union and States should have recourse to other financial instruments. These instruments are identified as reconstruction bonds, contingent credit/stand-by facility with international financial institutions, crowdfunding platforms and corporate social responsibility.

(para 8.119)

56. Insurance mechanisms, which act as a social safety net and supplement the existing financial mechanisms, need to be introduced in partnership with insurance companies after due diligence is done. These mechanisms are: national insurance scheme for disaster-related deaths, synchronising relief assistance with crop insurance, risk pool for infrastructure protection and recovery, and access to international reinsurance to the outlier hazard events

(para 8.131 and 8.139)

Pandemic and Beyond: Building Resilience in Health Sector

57. We recommend that health spending by States should be increased to more than 8 per cent of their budget by 2022.

(para 9.41, i)

58. We recommend that primary health care should be the number one fundamental commitment of each and every State and that primary health expenditure should be increased to two-thirds of the total health expenditure by 2022.

(para 9.41, ii)

59. We recommend that public health expenditure of Union and States together should be increased in a progressive manner to reach 2.5 per cent of GDP by 2025.

(para 9.41, iii)

60. Centrally sponsored schemes (CSS) co-financed by the Government of India should be flexible enough to allow States to adapt and innovate. Top-down mandates and strictures on programme implementation are the antithesis of an open-source model. CSS should grant States significant latitude to tailor implementation modalities to local realities.

(para 9.41, iv)

61. There is a need to shift the focus of inter-governmental fiscal health financing from inputs to outputs/outcomes while advancing the measurement agenda as an accountability tool. Complementary to the flexibility noted above, the Union Government can shift the focus of CSS and transfers away from line-items and activities and towards outputs and outcomes, with States being empowered to choose their own pathways to achieve results.

(para 9.41, v)

62. Given the inter-State disparity in the availability of medical doctors, it is essential to constitute an All India Medical and Health Service as is envisaged under Section 2A of the All-India Services Act, 1951. For this purpose, the Union Public Service Commission (UPSC) would need to do annual recruitments, based on the State-wise requisitions by each State Government. We urge the Union Government to implement this proposal in coordination with State Governments.

(para 9.41, vii)

63. The MBBS curriculum should be restructured to make it competency based. A certain degree of specialisation should be included in the curriculum and the MCI/NMC should develop small courses on wellness clinic, basic surgical procedures, anaesthesia, obstetrics and gynaecology, eye, ENT etc. for MBBS doctors and encourage AYUSH as an elective subject for medicine undergraduates.

(para 9.41, viii)

64. The asymmetric distribution of medical colleges needs to be corrected as most of them are situated in the western and southern parts of India. All public health facilities including district hospitals, private sector facilities and corporate hospitals should be utilised for starting specialist

DNB courses which will not only enhance the service provisioning but will also ensure the availability of trained human resource.

(para 9.41, ix)

65. Measures should be taken to assign a larger role for nursing professionals and the concept of nurse practitioner, physician assistant and nurse anaesthetist should be introduced for better utilisation of nursing professionals. The early passage of this legislation should be fast-tracked given its multiplier benefits.

(para 9.41, xi)

66. The total grants-in-aid support to the health sector over the award period works out to be Rs. 1,06,606 crore, which is 10.3 per cent of the total grants-in-aid recommended by us. This forms about 0.1 per cent of GDP. The grants for the health sector will be unconditional.

(para 9.49)

67. We recommend health grants aggregating to Rs. 70,051 crore for urban HWCs, building-less sub centre, PHCs, CHCs, block level public health units, support for diagnostic infrastructure for the primary healthcare activities and conversion of rural sub centres and PHCs to HWCs. These grants will be released to the local governments. Given the importance of health grants to fight the pandemic, we have not put any conditions for release of these grants to the local governments.

(para 9.51)

68. We recommend Rs. 15,265 crore for critical care hospitals. This includes Rs. 13,367 crore for general States and Rs 1,898 crore for NEH States. The inter se distribution of this grant is made on the basis of per capita health expenditure distance method, which is similar to the income distance method recommended in the horizontal formula. However, the inter se distribution is made separately for general and NEH States.

(para 9.54)

69. We recommend Rs. 469 crore for States for building public health laboratories. The remaining share may come from the Union Government as part of PM-ASBY.

(para 9.57)

70. We recommend Rs. 13,296 crore for training of the allied healthcare workforce. Out of this, Rs. 1,986 crore will be for NEH States and Rs. 11,310 crore for general States. Based on the number of district and sub-divisional hospitals given by the MoHFW, we have provided Rs. 3 crore per facility for each State. To determine the variable amount for each State, we have used the per capita health expenditure distance method as described in the section on critical care hospitals.

(para 9.60)

71. We recommend Rs. 2,725 crore for starting DNB courses in district hospitals for overcoming the shortfall of specialists.

(para 9.64)

72. All the grants will be administered by the MoHFW. Though various components have been earmarked, we are cognisant of the fact that some inter-component adjustments within each State's overall share may be required in future years, as per the emerging ground realities. Hence, within each State's respective share, inter-component flexibility is allowed in consultation with the MoHFW.

(para 9.65)

Performance-based Incentives and Grants

73. We recommend total revenue deficit grants of Rs. 2,94,514 crore over our award period for seventeen States.

(para 10.19)

74. We recommend grants of Rs. 4,800 crore (Rs. 1,200 crore each year) from 2022-23 to 2025-26 for incentivising the States to enhance educational outcomes. The performance grant received by the State will be utilised by the education department for enhancing educational outcomes and not diverted for use by any other department by the State.

(para 10.37 and 10.39)

75. We recommend Rs. 6,143 crore for online learning and development of professional courses in regional languages (*matribhasha*) for higher education in India.

(para 10.43)

76. We recommend that Rs. 45,000 crore be kept as performance-based incentive for all the States for carrying out agricultural reforms during the award period.

a. We recommend that States may appropriately amend their land-related laws on the lines of NITI Aayog's model law to allow short-term and long-term lease of agricultural land both for agricultural purpose as well as for agro-industry, logistics for agricultural trade and supply chains.

b. We recommend incentive-based grants to States that maintain and augment groundwater stock and put a check on any fall in the water table.

c. We recommend using growth in agricultural exports as a target indicator for the award on export performance of a State.

d. We recommend increasing production of oilseeds, pulses and wood and wood-based products as an indicator to make India self-reliant in pulses, edible oils and wood and wood products.

e. This performance grant for agriculture should be used only for infrastructure and activities related to the development of agriculture and allied sectors by the States.

(para 10.54, 10.56, 10.59, 10.62, 10.64 and 10.66)

77. We recommend Rs. 27,539 crore for maintenance of PMGSY roads for the years 2021-26, out of which Rs. 14,743 crore is for the general States and Rs. 12,796 crore is for the NEH States.

(para 10.72)

78. We recommend grants of Rs. 10,425 crore for fast-track courts for speedier justice delivery in cases of heinous crimes, civil cases of marginalised people, five-year-old property cases and economic offences as well as special fast-track courts for POCSO cases.

(para 10.75)

79. We recommend total grants to the States, with the fixed and variable components, of Rs. 1,175 crore from 2022-23 to 2025-26 for improving the quality of statistics. We also recommend that, initially, the fixed grant of the total allocation, amounting to Rs. 677 crore, which is unconditional may be released in 2022-23. The remaining variable component of Rs. 498 crore may be disbursed equally over the remaining three years starting 2023-26, based on achievements of specified milestones. Both the fixed and variable grants will be utilised by the statistics department only.

(para 10.82)

80. We recommend Rs. 3,150 crore for incentivising aspirational districts and blocks for a period of five years from 2021-22 to 2025-26.

(para 10.92)

81. We recommend an extra annual borrowing space for the States, of the magnitude of 0.50 per cent of their GSDP for each of the first four years of the award covering the period 2021-22 to 2024-25, based on certain performance criteria in the power sector.

(para 10.103)

82. We recommend that the nutrition of children and pregnant and lactating mothers may be accorded the highest priority by Government of India through the Integrated Child Development Scheme.

(para 10.112)

83. We recommend that the Union Government may put forward an arrangement to ensure completion of the pending railways projects at the earliest.

(para 10.114)

84. We recommend State-specific grants of Rs. 49,599 crore during our award period for social needs, administrative governance and related infrastructure, conservation and sustainable use of water, drainage and sanitation, preserving culture and historical monuments, high-cost physical infrastructure and tourism.

(para 10.118)

85. No funds from any of the State-specific grants may be used for payment of government-owned land. Wherever additional land is required to be acquired from private parties for the project/construction, the State-specific grants may be used for such compulsory acquisition payments, subject to a ceiling of 50 per cent of such land acquisition cost for new greenfield projects. However, for brownfield projects where the infrastructure is complete and functional, the State-specific grants would be for productivity enhancement and reaping externalities of scale. In such brownfield projects, the additional expenditure is primarily on land acquisition (such as airport runway extension); therefore, there need not be any such ceiling for utilisation of the State-specific grant. To expedite the execution of all projects, land acquisition payments as

above made in 2021-22 would be eligible for retroactive funding in 2022-23 from the State-specific grants.

(para 10.119, i)

86. We recommend that every State should constitute a high level committee for reviewing and monitoring the proper utilisation of State-specific and sector-specific grants. This committee may be headed by the Chief Secretary with the Finance Secretary and the secretaries/heads of relevant departments as members. We recommend that the progress of these projects also be reviewed annually by a committee headed by the Chief Minister with the State Finance Minister and the State ministers concerned as members. We recommend that no conditionalities, other than what we have prescribed, should be imposed by the Union Government for release or utilisation of the grants.

(para 10.120, 10.122 and 10.123)

Defence and Internal Security

87. The Union Government may constitute in the Public Account of India, a dedicated non-lapsable fund, Modernisation Fund for Defence and Internal Security (MFDIS), to bridge the gap between projected budgetary requirements and budget allocation for defence and internal security. This may be called *Rashtriya Suraksha Naivedyam Kosh* or any other appropriate name. The proceeds of the fund will be utilised for the following three purposes:

(a) capital investment for modernisation of defence services;

(b) capital investment for CAPFs and modernisation of state police forces as projected by MHA; and

(c) a small component as welfare fund for our soldiers and para-military personnel.

The fund shall have the standard notified rules for its administration, public reporting and audit by the CAG.

(para 11.54)

88. This Fund will have four specific sources of incremental funding:

a. transfers from the Consolidated Fund of India;

b. disinvestment proceeds of DPSEs;

c. proceeds from the monetisation of surplus defence land, including realisation of arrears of payment for defence land used by State Governments and for public projects and cost recovered of encroached land; and

d. proceeds of receipts from defence land likely to be transferred to State Governments and for public projects in future.

The total indicative size of the proposed MFDIS over the period 2021-26 is Rs. 2,38,354 crore.

(para 11.56/Table 11.12)

89. The maximum size of the recommended fund is Rs 51,000 crore per annum. Any amount exceeding the same shall be deposited into the Consolidated Fund. This amount shall be maintained in the Public Account and shall be operated through the extant procedures for

operating such accounts. The unutilised amount from the normal budgetary allocations to the MoD and MHA for capital expenditure shall not be part of the Fund and should be governed as per the principles of the annual budget process.

(para 11.58, 11.59 and 11.60)

90. The MoD would have exclusive rights over the use of the amounts deposited in the Fund from the specified sources of revenue mentioned at serial no. 2, 3 and 4 in Table 11.12. The MHA will only be permitted to use the fund that is earmarked for it from the source of revenue mentioned at serial no.1 of Table 11.12. The amount proposed for capital expenditure towards internal security for five years is Rs. 50,000 crore and the year-wise amount is given at Table 11.13. Out of this Rs. 50,000 crore, the MHA will allocate Rs. 500 crore for redeveloping/improving the residential facilities for police personnel in Delhi. This would be augmented by Rs. 100 crore per annum for improved communication systems and technology upgradation of the police personnel.

(para 11.61/Tables 11.12 and 11.13)

91. The fund may be operated by a suitably empowered High Powered Committee (HPC) notified by the Union Government. This may be headed by the Cabinet Secretary and consist of the Secretaries of Defence, Home and Expenditure and the Chief of Defence Staff. The HPC would also allocate Rs. 1,000 crore per annum for the welfare of families of the defence and CAPF personnel who sacrifice their lives in frontline duties.

(para 11.62 and 11.63)

92. We also expect that over the next year or two (medium-term), the Union Government will review its existing expenditures and rationalise and re-prioritise them to focus on certain key sectors and interventions with nation-wide externalities, defence and internal security. This will reduce pressures on the revenue account of the Union to enable higher capital expenditure within the available fiscal space.

(para 11.64)

93. Due to overall fiscal constraints, the MoD should also take immediate measures to innovatively bring down the salaries and pension liabilities.

(para 11.65 and 11.66)

94. We also recommend that MoD shall reduce its dependence on defence imports with a specific roadmap by corresponding enhancement in indigenous production at a faster rate.

(para 11.67)

Fiscal Consolidation Roadmap

95. The macro-stabilisation function of prudently supporting the State budgets to help them overcome the current crisis rests with the Union Government. However, the responsibility of balancing the budgets of States lies primarily with their governments.

(para 12.49)

96. The current strain on the revenues of the Union and State Governments calls for strict discipline in revenue expenditure, opening up space for higher allocations on health and other urgent expenditure needs while ensuring fiscal sustainability in the medium term.

(para 12.48)

97. It is important that all committed expenditures and developmental expenditures are met from the augmented borrowing space recommended for the Union and the State Governments, without resort to off-budget or any non-transparent means of financing for any expenditures.

(para 12.75)

98. The Union Budget 2020-21 shows that fifteen of the thirty umbrella CSS account for about 90 per cent of the total allocation under CSS. Many umbrella schemes have, within them, a number of small schemes, some of them with negligible allocations. A threshold amount of annual appropriation should be fixed below which the funding for a CSS may be stopped. Below the stipulated threshold, the administrating department should justify the need for the continuation of the scheme. As the life cycle of ongoing schemes has been made co-terminus with the cycle of Finance Commissions, the third-party evaluation of all CSS should be completed within a stipulated timeframe. The flow of monitoring information should be regular and should include credible information on output and outcome indicators. The funding pattern of the CSS should be fixed upfront in a transparent manner and should be kept stable.

(para 12.51)

99. For the State Governments, we have recommended that the normal limit for net borrowing may be fixed at 4 per cent of GSDP in 2021-22, 3.5 per cent in 2022-23 and be maintained at 3 per cent of GSDP from 2023-24 to 2025-26. The term 'normal' is used to clarify that we have not accounted for any additional borrowing to be done by the State Governments to manage the shortfall in GST compensation to them, or the incentive-based additional borrowing space that we have recommended for power sector reforms in Chapter 10.

(para 12.61 to 12.63)

100. If a State is not able to fully utilise its sanctioned borrowing limit as specified above, in any particular year during the first four years of our award period (2021-22 to 2024-25), it will have the option of availing this unutilised borrowing amount (calculated in rupees) in any of the subsequent years within our award period

(para 12.64)

101. We recommend that for the purpose of assigning State-specific borrowing limits as a proportion of GSDP for a given fiscal year, the estimates of GSDP published by the NSO should be used according to the specified procedure.

(para 12.58 and 12.59)

102. We have assessed that, given the compulsions on the revenue account of the Union Government, including of lending support to the budgets of sub-national governments, they may have to follow an elevated path of fiscal deficit with a terminal year (2025-26) target of 4 per cent of the GDP.

(para 12.54 and Table 12.2)

103. With the recommended path for the fiscal deficit of the Union and the State Governments, we have shown that the consolidated debt of the general government will have a downward trajectory during 2023-24 to 2025-26. The differentiated debt/ GSDP path of the State Governments for 2021-26 has also been outlined by us at Annex 12.1.

(para 12.65, 12.70 to 12.72 and Table 12.6)

104. In view of the uncertainty that prevails at the stage that we have done our analysis, as well as the contemporary realities and challenges, we recognise that the FRBM Act needs a major restructuring and recommend that the time-table for defining and achieving debt sustainability may be examined by a High-powered Inter-governmental Group. This High-powered Group can craft the new FRBM framework and oversee its implementation. It is important that the Union and State Governments amend their FRBM Acts, based on the recommendations of the Group, so as to ensure that their legislations are consistent with the fiscal sustainability framework put in place.

(para 12.76)

105. Disclosure of the financial positions of the States and their credit rating will help in broadening the investor base. Credit rating will also reinforce self-discipline on the fiscal front and lead to better pricing of SDLs. The States and the Union should define contingent liabilities transparently, estimate them and assess the risks associated with them.

(para 12.24)

106. State Governments may explore formation of independent public debt management cells which will chart their borrowing programme efficiently.

(para 12.19)

107. States should have more avenues for short-term borrowings other than the ways and means advances and over draft (WMA/OD) facility provided by RBI, which has monetary policy implications. Such a facility may help States in meeting the temporary mismatches in their revenue flows at market-determined cost.

(para 12.26)

Fiscal Architecture for Twenty-First Century India: Fiscal Rules, Financial Management and Institutions

108. Appropriate amendments may, therefore, also be taken up by the States in their respective fiscal responsibility legislations to ensure consistency with the amended Union Government FRBM Act and, in particular, with the definition of debt.

(para 13.27)

109. The Government Accounting Standards and Advisory Board (GASAB), building on its continuing work, is best placed to develop accounting standards for financial reporting and disclosures of broader 'public debt', which can form the basis for a reporting framework for

contingent liabilities, along with standard norms for recognising the risk of such liabilities arising for the Union and the States after following due process.

(para 13.28)

110. The Union and the State Governments should strive to improve the accuracy and consistency of such macroeconomic and fiscal forecasting by using the latest techniques and developing the technical capacities of personnel involved in the forecasting and budgeting process.

(para 13.32)

111. Strengthen cash management practices for each State and the Union Government through the more comprehensive Treasury Single Account (TSA) mechanism. This will allow a more effective management of cash, including of government entities and agencies, and special purpose vehicles that are financing government activity.

(para 13.38)

112. All the data and information related to Union and State fiscal operations, such as pre-budget and related policy statements, and mid-year reviews, should be made available to the public in a reliable, timely and comparable manner.

(para 13.40)

113. There is also room to improve the timeliness of audited financial reports of governments, ensuring they are prepared within six months of the year-end and audited within nine months, with specific responsibilities for maintaining such timelines assigned at each stage of preparation of audited financial statements.

(para 13.41)

114. A time-bound plan should be prepared for the phased adoption of standard-based accounting and financial reporting for the Union and the States, while the eventual adoption of accrual-based accounting is being considered.

(para 13.43)

115. A comprehensive framework with essential elements of public financial management for consideration and deliberation by all the stakeholders. This framework needs to be developed further in consultation with the States and other relevant stakeholders, and the nature of its implementation agreed upon. We believe that such a public financial management framework, if implemented, would bring India's second pillar of its fiscal architecture to global best practices in the twenty-first century.

(para 13.50)

116. The establishment of an independent Fiscal Council with powers to access records as required from the Union as well as the States. The fiscal council would have only an advisory role clearly separated from enforcement, which is the prerogative of the other organs of the government.

(para 13.56)

117. The Ministry of Finance could launch the process of stakeholder consultations and prepare a time-bound plan for the implementation of comprehensive public financial management reforms at all levels of government.

(para 13.59)

N.K. Singh
Chairman

Ajay Narayan Jha
Member

Anoop Singh
Member

Ashok Lahiri
Member

Ramesh Chand
Member (Part-time)

New Delhi
30 October, 2020

I wish to record my deep appreciation of the outstanding support, domain knowledge and sustained dedication of all the Members of the Commission. This report is a joint endeavour, with each Member contributing immeasurably. The intense deliberations supported by their experience and areas of specialty were of immense value to the Commission, especially helping it to address a somewhat challenging set of terms of reference given to us by the President. Their valuable advice and their unstinted commitment are gratefully acknowledged.

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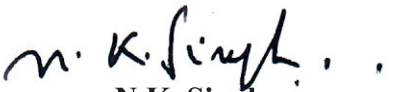

N.K. Singh
Chairman

New Delhi
30 October, 2020

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FINANCE COMMISSION IN COVID TIMES

Report For 2021-26



XV FINANCE COMMISSION

Volume-II Annexes
October 2020

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Annex 1.1
(para 1.11 and 1.12)

THE GAZETTE OF INDIA: EXTRAORDINARY

[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE

(Department of Economic Affairs)

NOTIFICATION

New Delhi, the 27th November, 2017

S.O. 3755(E).—The following order made by the President is to be published for general information:—

ORDER

In pursuance of clause (1) of article 280 of the Constitution, read with the provisions of the Finance Commission (Miscellaneous Provisions) Act, 1951 (33 of 1951), the President is pleased to constitute a Finance Commission consisting of Shri N.K. Singh, Member of Parliament and former Secretary to the Government of India, as the Chairman and the following four other members, namely:—

1	Shri Shaktikanta Das Former Secretary to the Government of India	Member
2	Dr. Anoop Singh Adjunct Professor, Georgetown University	Member
3	Dr. Ashok Lahiri Chairman (Non-executive, part time) Bandhan Bank	Member (Part time)
4	Dr. Ramesh Chand Member, NITI Aayog	Member (Part time)

2. Shri Arvind Mehta shall be the Secretary to the Commission.
3. The Chairman and the other members of the Commission shall hold office from the date on which they respectively assume office up to the date of submission of Report or 30th day of October, 2019, whichever is earlier.
4. The Commission shall make recommendations as to the following matters, namely:—

(i) The distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under Chapter I, Part XII of the Constitution and the allocation between the States of the respective shares of such proceeds;

(ii) The principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues under Article 275 of the Constitution for purposes other than those specified in the provisos to clause (1) of that article; and

(iii) The measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State on the basis of the recommendations made by the Finance Commission of the State.

5. The Commission shall review the current status of the finance, deficit, debt levels, cash balances and fiscal discipline efforts of the Union and the States, and recommend a fiscal consolidation roadmap for sound fiscal management, taking into account the responsibility of the Central Government and State Governments to adhere to appropriate levels of general and consolidated government debt and deficit levels, while fostering higher inclusive growth in the country, guided by the principles of equity, efficiency and transparency. The Commission may also examine whether revenue deficit grants be provided at all.

6. While making its recommendations, the Commission shall have regard, among other considerations, to:

(i) The resources of the Central Government and the State Governments for the five years commencing on 1stApril 2020 on the basis of the levels of tax and the non-tax revenues likely to be reached by 2024-25. In the context of both tax and non-tax revenues, the Commission will also take into consideration their potential and fiscal capacity;

(ii) The demand on the resources of the Central Government particularly on account of defence, internal security, infrastructure, railways, climate change, commitments towards administration of UTs without legislature, and other committed expenditure and liabilities;

(iii) The demand on the resources of the State Governments, particularly on account of financing socioeconomic development and critical infrastructure, assets maintenance expenditure, balanced regional development and impact of the debt and liabilities of their public utilities;

(iv) The impact on the fiscal situation of the Union Government of substantially enhanced tax devolution to States following recommendations of the 14th Finance Commission, coupled with the continuing imperative of the national development programme including New India – 2022;

(v) The impact of the GST, including payment of compensation for possible loss of revenues for 5 years, and abolition of a number of cesses, earmarking thereof for compensation and other structural reforms programme, on the finances of Centre and States; and

(vi) The conditions that GoI may impose on the States while providing consent under Article 293(3) of the Constitution.

7. The Commission may consider proposing measurable performance-based incentives for States, at the appropriate level of government, in following areas:

(i) Efforts made by the States in expansion and deepening of tax net under GST;

(ii) Efforts and Progress made in moving towards replacement rate of population growth ;

(iii) Achievements in implementation of flagship schemes of Government of India, disaster resilient infrastructure, sustainable development goals, and quality of expenditure;

(iv) Progress made in increasing capital expenditure, eliminating losses of power sector, and improving the quality of such expenditure in generating future income streams;

(v) Progress made in increasing tax/non-tax revenues, promoting savings by adoption of Direct Benefit Transfers and Public Finance Management System, promoting digital economy and removing layers between the government and the beneficiaries;

(vi) Progress made in promoting ease of doing business by effecting related policy and regulatory changes and promoting labour intensive growth;

(vii) Provision of grants in aid to local bodies for basic services, including quality human resources, and implementation of performance grant system in improving delivery of services;

(viii) Control or lack of it in incurring expenditure on populist measures; and

(ix) Progress made in sanitation, solid waste management and bringing in behavioural change to end open defecation.

8. The Commission shall use the population data of 2011 while making its recommendations.
9. The Commission may review the present arrangements on financing Disaster Management initiatives, with reference to the funds constituted under the Disaster Management Act, 2005 (53 of 2005), and make appropriate recommendations thereon.
10. The Commission shall indicate the basis on which it has arrived at its findings and make available the State wise estimates of receipts and expenditure.
11. The Commission shall make its report available by 30th October, 2019, covering a period of five years commencing 1st April, 2020.

New Delhi — Sd/-

Dated the 27th November, 2017 — RAM NATH KOVIND

President of India

[No. 10(1)-B(S)/2016]

PRASHANT GOYAL, Jt. Secy. (Budget)

Annex 1.2
(para 1.11)

THE GAZETTE OF INDIA: EXTRAORDINARY

[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE

(Department of Economic Affairs)

CORRIGENDUM

New Delhi, the 4th December, 2017

S.O. 3802(E).—In the notification of the Government of India in the Ministry of Finance (Department of Economic Affairs) number S.O.3755(E), dated the 27th November, 2017 published in the Gazette of India, Extraordinary, dated the 27th November, 2017 in line 3, paragraph 1, for "Member of Parliament" read "former Member of Parliament" .

[F. No.10(1)-B(S)/2016]

PRASHANT GOYAL, Jt. Secy.

Annex 1.3
(para 1.11)

THE GAZETTE OF INDIA: EXTRAORDINARY

[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE

(Department of Economic Affairs)

NOTIFICATION

New Delhi, the 17th May, 2018

S.O. 1964(E).—The following order made by the President to be published for general information:—

ORDER

Whereas, the Fifteenth Finance Commission has been constituted by the President by an Order published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide notification of the Government of India in the Ministry of Finance, (Department of Economic Affairs) number S.O. 3755 (E), dated the 27th November, 2017, and Dr. Ashok Lahiri was appointed as a Member (Part time) of the said Commission;

And, whereas, Dr. Ashok Lahiri has resigned as Chairman (Non-executive, part time) Bandhan Bank; And, whereas, the President is pleased to appoint Dr. Ashok Lahiri as Member of the Finance Commission and for that purpose makes the following amendment in the Order aforesaid, namely: -

In the said Order, in paragraph 1, for serial number 3 and the entries relating thereto, the following serial number and entries shall be substituted, namely: -

"3. Dr.Ashok Lahiri - Member"
Former Chief Economic Adviser,
Ministry of Finance
and
Former Chairman (Non-executive, part time)
Bandhan Bank

Sd/-
RAM NATH KOVIND
President of India
[F. No. 10(3)-B(S)/2016]
ARVIND SHRIVASTAVA, Jt. Secy. (Budget)

Note : The principal notification for constitution of the Finance Commission was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O. 3755 (E), dated the 27th November, 2017.

Annex 1.4
(para 1.11)

THE GAZETTE OF INDIA: EXTRAORDINARY

[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE

(Department of Economic Affairs)

NOTIFICATION

New Delhi, the 12th December, 2018

S.O. 6142(E).—The following Order made by the President to be published for general information:-

ORDER

Whereas, the Fifteenth Finance Commission has been constituted by the President with the Notification of the Government of India, in the Ministry of Finance (Department of Economic Affairs) published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-Section (ii), vide S.O. 3755(E), dated the 27th November, 2017 and Shri Shaktikanta Das was appointed as Member of the said Commission.

And, whereas, Shri Shaktikanta Das has resigned as Member from the said Commission and the President has been pleased to accept the said resignation with effect from the 11th December 2018.

New Delhi
Dated the 12th December, 2018

Sd/-
(RAM NATH KOVIND)
President of India

[F. No. 10(1)-B(S)/2016]
ARVIND SHRIVASTAVA, Jt. Secy. (Budget)

Note: The Principal notification for constitution of the Finance Commission was published in the Gazette of India, Extraordinary vide number S.O. 3755 (E), dated the 27th November, 2017

Annex 1.5
(para 1.11)

THE GAZETTE OF INDIA: EXTRAORDINARY

[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE

(Department of Economic Affairs)

NOTIFICATION

New Delhi, the 27th February, 2019

S.O. 1040(E).—The following Order made by the President to be published for general information:-

ORDER

Whereas, the Fifteenth Finance Commission has been constituted by the President by an order of the Government of India, in the Ministry of Finance (Department of Economic Affairs) published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), vide S.O. 3755(E), dated the 27th November, 2017 and Shri Shaktikanta Das was appointed as one of the Member of the said Commission.

And whereas, Shri Shaktikanta Das had resigned as Member from the said Commission and the President had pleased to accept the said resignation with effect from the 11th December 2018 by an order of the Government of India, in the Ministry of Finance (Department of Economic Affairs) published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), vide S.O. 6142(E), dated the 12th December, 2018;

Now, therefore, in pursuance of clause (1) of article 280 of the Constitution, read with sections 3, 4 and 6 of the Finance Commission (Miscellaneous Provisions) Act, 1951 (33 of 1951), the President is pleased to appoint Shri Ajay Narayan Jha as Member of the Finance Commission with effect from the 1st March, 2019 and for that purpose makes the following amendment in the aforesaid Order dated the 27th November, 2017, namely:-

In the said Order, in paragraph 1, for serial number 1 and the entries relating thereto, the following serial number and entries shall be substituted, namely:-

"1. Shri Ajay Narayan Jha, - Member"
Finance Secretary,
Government of India

New Delhi
Dated the 27th February, 2019

Sd/-
(RAM NATH KOVIND)
President of India

[F. No. 10(1)-B(S)/2016]
ARVIND SHRIVASTAVA, Jt. Secy. (Budget)

Note: The Principal order for constitution of the Finance Commission was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), vide number S.O. 3755(E), dated the 27th November, 2017.

Annex 1.6
(para 1.17)

THE GAZETTE OF INDIA: EXTRAORDINARY

[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE

(Department of Economic Affairs)

NOTIFICATION

New Delhi, the 29th July, 2019

S.O. 2691(E). —The following order made by the President is published for general information:-

ORDER

In pursuance of clause (1) of article 280 of the Constitution, read with the provisions contained in the Finance Commission (Miscellaneous Provisions) Act, 1951 (33 of 1951), the President is pleased to further amend the order number S.O.3755 (E), dated the 27th November, 2017, published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), dated the 27th November, 2017, namely:-

In the said order,-

(a) in paragraph 3, for the words, figures and letters "the 30th day of October, 2019", the words, figures and letters "the 30th day of November, 2019" shall be substituted;

(b) after paragraph 9, the following paragraph shall be inserted, namely:- "9A. The Commission shall also examine whether a separate mechanism for funding of defence and internal security ought to be set up, and if so, how such a mechanism could be operationalised.";

(c) in paragraph 11, for the words, figures and letters "the 30th day of October, 2019", the words, figures and letters "the 30th day of November, 2019" shall be substituted.

New Delhi — Sd/-

Dated the 29th July, 2019 — (RAM NATH KOVIND)

President of India

[F. No. 10 (1)-B(S)/2016/vol.III]

ARVIND SRIVASTAVA, Jt. Secy. (Budget)

Note: - The principal order was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O.3755 (E), dated the 27th November, 2017 and subsequently amended vide the following notifications, namely:-

(i) S. O. 3802(E), dated the 4th December, 2017;

(ii) S. O. 1964(E), dated the 17th May, 2018;

(iii) S. O. 6142(E), dated the 12th December, 2018;

(iv) (S. O. 1040(E), dated the 27th February, 2019.

Annex 1.7
(para 1.18)

THE GAZETTE OF INDIA: EXTRAORDINARY

[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE

(Department of Economic Affairs)

NOTIFICATION

New Delhi, the 29th November, 2019

S.O. 4308(E).—The following order made by the President is published for general information:—

ORDER

In pursuance of clause (1) of article 280 of the Constitution, read with the provisions contained in the Finance Commission (Miscellaneous Provisions) Act, 1951 (33 of 1951), the President is pleased to further amend the order number S.O.3755 (E), dated the 27th November, 2017, published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), dated the 27th November, 2017, namely:-

In the said order, -

(a) in paragraph 3, for the words, figures and letters, "date of submission of report or the 30th day of November, 2019", the words, figures and letters, "date of submission of final report or 30th day of October, 2020" shall be substituted;

(b) after paragraph 10, the following paragraph shall be inserted, namely:- "10A. The Commission shall submit two reports, namely a first report for financial year 2020-21 and a final report for an extended period of 2021-22 to 2025-26."

(c) for paragraph 11, the following paragraph shall be substituted, namely:- "11. The Commission shall make its final report available by 30th day of October, 2020 covering a period of five years commencing 1st April, 2021".

Sd/-

RAM NATH KOVIND

President of India

[F.No.10 (1)-B(S)/2019]

RAJAT KUMAR MISHRA, Jt. Secy. (Budget)

Note: The principal order was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O.3755 (E), dated the 27th November, 2017 and subsequently amended vide the following notifications, namely:-

(i) S. O. 3802(E), dated the 4th December, 2017;

(ii) S. O. 1964(E), dated the 17th May, 2018;

(iii) S. O. 6142(E), dated the 12th December, 2018;

(iv) S. O. 1040(E), dated the 27th February, 2019;

(v) S. O. 2691(E), dated the 29th July, 2019.

Annex 1.8

ToR-wise Mapping of the Chapters of FC-XV Report

	Terms of References of FC-XV	Chapters
4.	The Commission shall make recommendations as to the following matters, namely:—	
	(i) The distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under Chapter I, Part XII of the Constitution and the allocation between the States of the respective shares of such proceeds;	**6**
	(ii) The principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues under Article 275 of the Constitution for purposes other than those specified in the provisos to clause (1) of that article; and	**10**
	(iii) The measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State on the basis of the recommendations made by the Finance Commission of the State.	**7**
5.	The Commission shall review the current status of the finance, deficit, debt levels, cash balances and fiscal discipline efforts of the Union and the States, and recommend a fiscal consolidation roadmap for sound fiscal management, taking into account the responsibility of the Central Government and State Governments to adhere to appropriate levels of general and consolidated government debt and deficit levels, while fostering higher inclusive growth in the country, guided by the principles of equity, efficiency and transparency. The Commission may also examine whether revenue deficit grants be provided at all.	**3,10, 12,13**
6.	While making its recommendations, the Commission shall have regard, among other considerations, to:	
	(i) The resources of the Central Government and the State Governments for the five years commencing on 1stApril 2020	**4,5,6,12**

	Terms of References of FC-XV	Chapters
	on the basis of the levels of tax and the non-tax revenues likely to be reached by 2024-25. In the context of both tax and non-tax revenues, the Commission will also take into consideration their potential and fiscal capacity;	
(ii)	The demand on the resources of the Central Government particularly on account of defence, internal security, infrastructure, railways, climate change, commitments towards administration of UTs without legislature, and other committed expenditure and liabilities;	**4,6,11,12**
(iii)	The demand on the resources of the State Governments, particularly on account of financing socio-economic development and critical infrastructure, assets maintenance expenditure, balanced regional development and impact of the debt and liabilities of their public utilities;	**4,5,6,9,10,12**
(iv)	The impact on the fiscal situation of the Union Government of substantially enhanced tax devolution to States following recommendations of the 14th Finance Commission, coupled with the continuing imperative of the national development programme including New India – 2022;	**4,6,12**
(v)	The impact of the GST, including payment of compensation for possible loss of revenues for 5 years, and abolition of a number of cesses, earmarking thereof for compensation and other structural reforms programme, on the finances of Centre and States; and	**5,4 ,6,12**
(vi)	The conditions that GoI may impose on the States while providing consent under Article 293(3) of the Constitution.	**4,12**
7.	The Commission may consider proposing measurable performance-based incentives for States, at the appropriate level of government, in following areas:	
(i)	Efforts made by the States in expansion and deepening of tax net under GST;	**5,10**
(ii)	Efforts and Progress made in moving towards replacement rate of population growth ;	**6,10**

Terms of References of FC-XV	Chapters
(iii) Achievements in implementation of flagship schemes of Government of India, disaster resilient infrastructure, sustainable development goals, and quality of expenditure;	**8,10,13**
(iv) Progress made in increasing capital expenditure, eliminating losses of power sector, and improving the quality of such expenditure in generating future income streams;	**10,13**
(v) Progress made in increasing tax/non-tax revenues, promoting savings by adoption of Direct Benefit Transfers and Public Finance Management System, promoting digital economy and removing layers between the government and the beneficiaries;	**5,10,13**
(vi) Progress made in promoting ease of doing business by effecting related policy and regulatory changes and promoting labour intensive growth;	**10**
(vii) Provision of grants in aid to local bodies for basic services, including quality human resources, and implementation of performance grant system in improving delivery of services;	**7,10**
(viii) Control or lack of it in incurring expenditure on populist measures; and	**10**
(ix) Progress made in sanitation, solid waste management and bringing in behavioural change to end open defecation.	**7,10**
8. The Commission shall use the population data of 2011 while making its recommendations.	**6, 7, 10**
9. The Commission may review the present arrangements on financing Disaster Management initiatives, with reference to the funds constituted under the Disaster Management Act, 2005 (53 of 2005), and make appropriate recommendations thereon.	**8**
9A. The Commission shall also examine whether a separate mechanism for funding of defence and internal security ought to be set up, and if so, how such a mechanism could be operationalised.	**11**
10. The Commission shall indicate the basis on which it has arrived at its findings and make available the State wise estimates of receipts and expenditure.	**4, 6, 12**

Annex 1.9

List of Sanctioned Posts

SN	Name of the Post	No. of Posts	Pay Level (7th CPC)
1	Secretary	1	15
2	Joint Secretary	2	14
3	Economic Adviser	1	14
4	Director	4	13
5	Joint Director	3	12
6	Private Secretary to Chairman	1	12
7	Deputy Director	6	11
8	PPS/Addl. PS	5	11
9	Librarian and Information Officer	1	11
10	Assistant Director	8	10
11	Admn. & A/C Officer	1	10
12	Assistant Accounts Officer	1	8
13	Steno Grade-B	6	8
14	Economic Officer	10	7
15	Assistant Section Officer	4	7
16	Cashier	1	6
17	Steno Grade-C	8	7
18	Hindi Steno Grade-C	1	7
19	Steno Grade-D	4	4
20	Senior Sectt. Assistant (UDC)	2	4
21	Telephone Operator	1	2
22	Hindi Typist	1	2
23	Junior Sectt. Assistant (LDC)	3	2
24	Staff Car Driver	5	2
25	MTS	5	1
	Total	**85**	

Annex 1.10
(Chapter 14, Vol. I)

List of Functionaries	
Chairman	Shri N. K. Singh
Members	Shri Shaktikanta Das (Resigned on 11.12.2018) Shri Ajay Narayan Jha (vice Shri Shaktikanta Das) Prof. Anoop Singh Dr. Ashok Lahiri Dr. Ramesh Chand
Secretary	Shri Arvind Mehta
Additional Secretary	Shri Mukhmeet S. Bhatia
Joint Secretary	Dr. Ravi Kota (up to 11.08.2020)
Economic Adviser	Shri Antony Cyriac
Media Adviser	Ms. Maushumi Chakravarty
Directors	Shri Bharat Bhushan Garg Shri Gopal Prasad (up to 15.09.2020) Shri Jasvinder Singh (Retired on 31.07.2020) and joined as consultant on 01.08.2020 Shri Kandarp V. Patel
Joint Directors	Ms. Aditi Pathak Shri Anand Singh Parmar Shri Manish Dev Ms. Shikha Dahiya Ms. Sweta Satya
Sr. Principal Private Secretary	Shri S. Sudarshan
Under Secretary	Shri S. R. Raja OSD to Chairman
Deputy Directors	Shri Nitish Saini (up to 17.12.2019) Shri Ritesh Kumar Shri Sandeep Kumar Shri Vijay Kumar Mann
Library & Information Officer	Shri D. K. Sharma
Principal Private Secretary	Shri J. K. Wadhwa (Retired on 31.12.2019 and joined as consultant on 01.01.2020 Shri P. Venkat Swamy

List of Functionaries	
	Shri R. Thyagarajan
	Shri S. Puttanna
	Shri Sansar Chand Birdi
Assistant Directors	Shri Mahesh Kumar
	Shri Mukesh Kumar Singh
	Shri Pankaj Gera (up to 13.12.2019)
	Shri Parveen Jain
	Shri R. Suresh
	Shri Salam Shyamsunder Singh
	Shri Sushant Kumar Bajaj
	Shri Vikas Ahlawat
Junior Sectt. Assistant	Shri Hari Dutt
Consultant	Shri A. C. Mehta
	Shri Abhishek Singh
	Shri Ashok Kumar Verma
	Shri Balbir Singh
	Shri Bhola Ram
	Shri Eugene Francis
	Shri J. K. Ahuja
	Shri N. Dwarkanathan
	Shri P.L.N. Murthy
	Shri Prakash A
	Shri Ravinder Kumar
	Shri S. Gopalkrishnan
	Ms. Shatakshi Garg (up to 30.08.2020)
Junior Consultant	Shri Aniket
Assistant Director (OL)	Shri Sanjeev Nayan Saha
Senior Translation Officer	Dr. Anand Prakash Yadav
	Shri Anup Shaw
	Shri Jaiveer
	Shri Om Prakash Singh

Annex 1.11

No.A.19011/2/2017-Ad.III

Government of India

Ministry of Finance

Department of Economic Affairs

New Delhi, October, 27, 2017

OFFICE ORDER

Sub: Delegation of Powers of Head of Department to Shri Arvind Mehta, Officer on Special Duty to the Fifteenth Finance Commission – regarding.

In exercise of powers conferred on this Department vide Rule 13(2) of the Delegation of Financial Powers Rules, 1978, it has been decided that Shri Arvind Mehta, IAS (HP:84) offices on Special Duty in the Fifteenth Finance Commission will exercise all the powers vested in a Head of Department to administer the Budget placed at the disposal of the Fifteenth Finance Commission with effect from the date of the order:

Provided that no power under this sub-rule shall be re-delegated in respect of:

a) Creation of posts;

b) Write-off of losses; and

c) Re-appropriation of funds exceeding 10 per cent of the original budget provision for either of the primary units of appropriation or sub-head, i.e. , the primary unit or sub-head from which the funds are being re appropriated or the primary unit or sub-head to which the funds are to be re appropriated, whichever is less.

2. This issues with the approval of competent authority and with the concurrence of Integrated Finance Division vide their FTS No.356116/JS&FA(Finance)/2017 dated 26.10.2017.

Sd/-

(Sunil Kumar Gupta)

Under Secretary to the Govt. of India

Copy to:

1. Shri Arvind Mehta, IAS (HP:84), Officer on Special Duty, Advance Cell in the Fifteenth Finance Commission, North Block, New Delhi

2. Deputy Director(Budget)[Shri Rajeev Nayan Sharma], Department of Economic Affairs, North Block – w.r.t. their ID No 10(1)-B(S)/2017 (Part) 20-10-2017.

3. Assistant Director, Finance Commission Division, Department of Expenditure, CGO Complex, Lodhi Road, New Delhi.
4. O/o the Principal Director of Audit, Economic & Service Ministries, AGCR Building, IP Estate, New Delhi
5. O/o the Chief Controller of Accounts, Department of Economic Affairs, Ministry of Finance (Internal Audit Wing), RFA Barracks, Church Road, New Delhi.
6. Pay & Accounts Officer, Department of Economic Affairs, North Block.
7. D.D.O. Department of Economic Affairs, North Block.

8-20. JS(ACC)/JS(Budget)/DS(Admn.)/US(IF(I)/Ad-I/I-A/II/IV/V/Finance Library/Vigilance/ Protocol/HIC/Guard File.

Annex 1.12

Fifteenth Finance Commission
Rules of Procedure

In exercise of the powers vested by Clause (4) of Article 280 of the Constitution of India and Section 8 of the Finance Commission (Miscellaneous Provisions) Act, 1951 (XXXIII of 1951), the Fifteenth Finance Commission lays down the following rules to determine its procedure, viz.

1. Formal meetings of the Commission shall be held as and when necessary for taking evidence and/or for meeting representatives of the Central and State Governments and other public bodies and persons. The time and place of such meetings shall be fixed by the Secretary after ascertaining the convenience of the Chairman and Members.
2. Internal meetings of the Commission shall be informal.
3. All meetings of the Commission shall be held in private session.
4. Meetings shall ordinarily be so arranged that all the Members are present. If for unavoidable reasons, any Member is unable to attend, meetings may still be held if at least three Members including the Chairman are present. If for any reason, the Chairman is unable to attend, he may nominate one of the members to chair the meeting.
5. Such officer(s) of the Commission shall be present at the meetings of the Commission as are so directed by the Secretary, in consultation with the Chairman.
6. The minutes of the proceedings of informal meetings (unless otherwise decided) shall be maintained by the Secretary in the form of a Minute-book and shall be circulated to the members. The minutes shall be put up for confirmation in the next meeting of the Commission.
7. No verbatim record of the proceedings of the formal meetings of the Commission shall ordinarily be kept. When no verbatim record is kept, a summary of the proceedings of the meetings shall be prepared by or under the direction of the Secretary as soon as possible and shall be circulated to the Members of the Commission. When a verbatim record is kept, the portion relating to each witness shall be sent to him before it is finally taken on record. Alternatively, the Commission may also request the concerned witnesses to send their statements in writing.
8. No information relating to the meetings or the work of the Commission shall be furnished to the press by any member of the staff except under the direction of the Chairman or Secretary.

9. The Secretary of the Commission, under the general direction of the Chairman, shall be in overall charge of the office of the Commission and shall be responsible to the Commission for its proper functioning.

10. All communications from the Commission, other than a formal report, shall be signed by the Chairman or the Secretary (or by an officer not below the rank of a Deputy Secretary authorized by the Secretary to sign on his behalf) as may be appropriate, but no communication purporting to express the views of the Commission shall be issued without its approval.

11. The Secretary shall submit to the Commission all communications or proposals relating to the terms and conditions of service of the Chairman/Members of the commission or such matters, which personally concern them. Action in such matters will be taken only in consultation with the Chairman/ Member(s)/Commission, as may be appropriate.

12. The Secretary shall keep the Commission informed from time to time of all important matters pertaining to the work of the Commission.

13. All appointments to gazetted posts of the Commission, including those made by transfer from other Governments or Government Departments except those where the approval of Appointments Committee of Cabinet is required, shall be made by the Secretary. The appointments requiring the approval of the Appointments Committee of Cabinet and those of consultants shall be made with the approval of the Chairman.

14. Appointments of staff other than those referred to in Rule 13, including staff obtained on transfer from other Governments or Government Departments shall be made by the Secretary, or by an officer not below the rank of Deputy Secretary, duly authorised by him.

15. The provisions of rules 13 and 14 shall be subject to the condition that in respect of appointments of the personal staff of the Members of the Commission, the Member concerned shall be consulted.

16. The Secretary may grant leave, whether regular or casual, to a Gazetted Officer. As regards the non-Gazetted staff, the leave may be sanctioned by an officer not below the rank of Deputy Secretary authorised by the Secretary for the purpose. In the case of the personal staff of the Chairman and members of the Commission, they will be duly consulted before leave is granted to them.

17. The budget and the revised estimates of the Commission shall be submitted to the Commission for approval before they are communicated by the Secretary to the Finance Ministry.

18. All communications received by the Commission dealing with the matters on which they have to submit a report to the President, all material placed before the Commission and all discussions at the meeting of the Commission shall be treated as confidential.

19. The Commission may engage relevant institutes and experts for study/inputs as decided by the Commission.

Annex 1.13
(para 1.24)

Fifteenth Finance Commission

PUBLIC NOTICE
Inviting Suggestion on ToR

1. The Fifteenth Finance Commission invites suggestions on issues related to the terms of reference from the members of the general public, institutions and organizations.

2. The Fifteenth Finance Commission has been constituted by the President in pursuance of the provisions of the Constitution of India under the Chairmanship of Sh. N. K. Singh, vide a gazette notification dated 27th November, 2017. The other members of the Commission are Shri Shaktikanta Das; Dr.Anoop Singh; Dr.Ashok Lahiri and Dr.Ramesh Chand. The Commission shall make recommendations covering a period of five years commencing on the 01st April 2020 as to the following matters:-

(i) The distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under Chapter I, Part XII of the Constitution and the allocation between the States of the respective shares of such proceeds;

(ii) The principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues under Article 275 of the Constitution for purposes other than those specified in the provisos to clause (1) of that article; and

(iii) The measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State on the basis of the recommendations made by the Finance Commission of the State.

3. The Commission shall review the current status of the finance, deficit, debt levels, cash balances and fiscal discipline efforts of the Union and the States, and recommend a fiscal consolidation roadmap for sound fiscal management, taking into account the responsibility of the Central Government and State Governments to adhere to appropriate levels of general and consolidated government debt and deficit levels, while fostering higher inclusive growth in the country, guided by the principles of equity, efficiency and transparency. The Commission may also examine whether revenue deficit grants be provided at all.

4. While making its recommendations, the Commission shall have regard, among other considerations, to:

   (i) The resources of the Central Government and the State Governments for the five years commencing on 1st April 2020 on the basis of the levels of tax and the non-

tax revenues likely to be reached by 2024-25. In the context of both tax and non-tax revenues, the Commission will also take into consideration their potential and fiscal capacity;

(ii) The demand on the resources of the Central Government particularly on account of defence, internal security, infrastructure, railways, climate change, commitments towards administration of UTs without legislature, and other committed expenditure and liabilities;

(iii) The demand on the resources of the State Governments, particularly on account of financing socioeconomic development and critical infrastructure, assets maintenance expenditure, balanced regional development and impact of the debt and liabilities of their public utilities;

(iv) The impact on the fiscal situation of the Union Government of substantially enhanced tax devolution to States following recommendations of the 14th Finance Commission, coupled with the continuing imperative of the national development programme including New India – 2022;

(v) The impact of the GST, including payment of compensation for possible loss of revenues for 5 years, and abolition of a number of cesses, earmarking thereof for compensation and other structural reforms programme, on the finances of Centre and States; and

(vi) The conditions that GoI may impose on the States while providing consent under Article 293(3) of the Constitution.

5. The Commission may consider proposing measurable performance-based incentives for States, at the appropriate level of government, in following areas:

(i) Efforts made by the States in expansion and deepening of tax net under GST;

(ii) Efforts and Progress made in moving towards replacement rate of population growth;

(iii) Achievements in implementation of flagship schemes of Government of India, disaster resilient infrastructure, sustainable development goals, and quality of expenditure;

(iv) Progress made in increasing capital expenditure, eliminating losses of power sector, and improving the quality of such expenditure in generating future income streams;

(v) Progress made in increasing tax/non-tax revenues, promoting savings by

adoption of Direct Benefit Transfers and Public Finance Management System, promoting digital economy and removing layers between the government and the beneficiaries;

(vi) Progress made in promoting ease of doing business by effecting related policy and regulatory changes and promoting labour intensive growth;

(vii) Provision of grants in aid to local bodies for basic services, including quality human resources, and implementation of performance grant system in improving delivery of services;

(viii) Control or lack of it in incurring expenditure on populist measures; and

(ix) Progress made in sanitation, solid waste management and bringing in behavioural change to end open defecation.

6. The Commission shall use the population data of 2011 while making its recommendations.

7. The Commission may review the present arrangements on financing Disaster Management initiatives, with reference to the funds constituted under the Disaster Management Act, 2005 (53 of 2005), and make appropriate recommendations thereon.

8. The Commission shall indicate the basis on which it has arrived at its findings and make available the State wise estimates of receipts and expenditure.

9. The Notice as well as relevant material on the previous Finance Commission is available on the website of the Finance Commission http://fincomindia.nic.in.

10 The Finance Commission would encourage suggestions/views from all interested organisations and individuals which may be sent by 30th April, 2018 in any of the following manner:

(I) By post, addressed to the Secretary, Fifteenth Finance Commission, 9th Floor, Jawahar Vyapar Bhawan, Tolstoy Marg, New Delhi-110001.

(ii) Through e-mail to: secy-xvfc@gov.in.

(iii) Through website http://fincomindia.nic.in by clicking on hyperlink 'call for suggestions'.

Annex 1.14
(para 1.24)

Fifteenth Finance Commission

PUBLIC NOTICE
Inviting Suggestion on Additional ToR

1. The Fifteenth Finance Commission invites suggestions on issues related to the additional terms of reference, issued vide Notification No. S.O. 2691 (E) dated 29th July 2019, of Ministry of Finance and published in Gazette of India, from the members of the general public, institutions and organizations.
2. The relevant paragraph of the additional ToR is extracted below :-

   " "9A. The Commission shall also examine whether a separate mechanism for funding of defence and internal security ought to be set up, and if so, how such a mechanism could be operationalised.";"
3. The Notice as well as relevant material on the previous Finance Commission is available on the website of the Finance Commission h ttp://fincomindia.nic.in.
4. The Finance Commission would encourage suggestions/views from all interested organisations and individuals which may be sent by 10th October, 2019 in any of the following manner:

   (i) By post, addressed to the Secretary, Fifteenth Finance Commission, 9th Floor, Jawahar Vyapar Bhawan, Tolstoy Marg, New Delhi-110001.

   (ii) Through e-mail to: secy-xvfc@gov.in.

   (iii) Through website http://fincomindia.nic.in by clicking on hyperlink 'call for suggestions'.

Annex 1.15
(para 1.23)

No. 5/6/UF-XVFC-2018

Fifteenth Finance Commission
Union Finance & Coordination

Jawahar Vyapar Bhawan, 9th Floor
1, Tolstoy Marg, New Delhi-110 001
16th April, 2018

OFFICE MEMORADUM

Subject : Constitution of the Advisory Council to the Commission

The Fifteenth Finance Commission hereby constitutes an Advisory Council with the following members:

i. Dr. Arvind Virmani, President Forum for Strategic Initiatives

ii. Dr. Surjit S. Bhalla, Part-time Member of PMEAC and Senior Indian Analyst for the Observatory Group and Chairman of Oxus Research and Investments

iii. Dr. Sanjeev Gupta, Ex-Deputy Director (Fiscal Affairs Department), IMF

iv. Prof. Pinaki Chakraborty, Professor (NIPFP)

v. Shri Sajjid Chinoy, Chief India Economist, JP Morgan

vi. Shri Neelkanth Mishra , Managing Director and the Credit Suisse India Economist and Strategist

2. The role and the function of the Advisory Council will be:

i. To advise the Commission on any issue or subject related to the Terms of Reference (ToR) of the Commission, which may be of relevance;

ii. To assist in the preparation of any paper or research study which would enhance the Commission's understanding on the issues contained in its ToR; and

iii. To help in broadening the Commission's ambit and understanding to seek best national and international practices on matters pertaining to fiscal devolution and improving the quality and reach and enforcement of its recommendations.

3. The Commission may hold two meetings in the year 2018 and at best three meetings in the year, 2019 of this Council.

4. The Commission would bear the cost of travel and facilitate other logistic arrangements, as admissible.
5. The Commission may consider modification of the Council membership and its role and function, as deemed necessary.
6. This issues with the approval of the Competent Authority.

Sd/-

(Arvind Mehta)

Secretary (XV-FC)

Annex 1.15 (Cont.)
(para 1.23)

No. 5/6/UF_XVFC-2018
Fifteenth Finance Commission

Jawahar Vyapar Bhawan, 9th Floor
1, Tolstoy Marg, New Delhi-110 001
16th August, 2018

OFFICE MEMORADUM

Subject : Inclusion of two new members to the Advisory Council to the Commission.

In partial modification of OM of even number dated 16th April 2018, the following additional names have been included as member of the Advisory Council to the Commission.

i. Dr. D.K. Srivastava, Professor, Madras School of Economics & Member 12th Finance Commission.

ii. Dr. Indra Rajaraman, Member, 13th Finance Commission.

All other contents of the aforesaid OM will remain unaltered.

Sd/-
(Arvind Mehta)
Secretary (XV-FC)

Encl: OM of even number dated 16.04.2018

Annex 1.15 (Cont.)
(para 1.23)

No. 5/6/UF-XVFC-2018
Fifteenth Finance Commission

Jawahar Vyapar Bhawan, 21st Floor
1, Tolstoy Marg, New Delhi-110 001
27th August, 2018

OFFICE MEMORADUM

Subject : Inclusion of 1 (one) new member to the Advisory Council to the Commission.

In partial modification of OM of even number dated 16th April 2018(enclosed), the following additional name has been included as member of the Advisory Council to the Commission.

i. Dr. Prachi Mishra, Managing Director
Global Macro Research, Goldman Sachs, Mumbai, India

All other contents of the aforesaid OM will remain unaltered.

Sd/-
(Arvind Mehta)
Secretary (XV-FC)

Annex 1.15 (Cont.)
(para 1.23)

No. 5/6/UF-XVFC-2018
Fifteenth Finance Commission

Jawahar Vyapar Bhawan, 21st Floor
1, Tolstoy Marg, New Delhi-110 001
20th December, 2018

OFFICE MEMORADUM

Subject : Inclusion of two new members to the Advisory Council to the Commission.

In partial modification of OM of even number dated 27th August 2018(enclosed), the following additional names have been included as members of the Advisory Council to the Commission.

i. Dr. M. Govinda Rao

ii. Dr. Omkar Goswami

2. The role and functions of the Advisory Council were delineated in the original OM of even number dated 16th April 2018, copy of which is also enclosed.

Sd/-
(Arvind Mehta)
Secretary (XV-FC)

Annex 1.15 (Cont.)
(para 1.23)

No. 5/6/UF-XVFC-2018
Fifteenth Finance Commission

Jawahar Vyapar Bhawan, 21st Floor,
1, Tolstoy Marg, New Delhi – 110001
Dated: May 1, 2019

OFFICE MEMORANDUM

Subject: Inclusion of 1 (One) new member to the Advisory Council to the Commission.

In partial modification of OM of even number dated 16th April 2018, the following additional name has been included as member of the Advisory Council to the Commission.

i. **Dr. Krishnamurthy Subramanian**
Chief Economic Adviser, Government of India

All other contents of the aforesaid OM will remain unaltered.

Sd/-
(Arvind Mehta)
Secretary (XV-FC)

Annex 1.15 (Cont.)
(para 1.23)

No. 5/6/UF-XVFC-2018
Fifteenth Finance Commission

Jawahar Vyapar Bhawan, 21st Floor,
1, Tolstoy Marg, New Delhi – 110001
Dated: June 12, 2019

OFFICE MEMORANDUM

Subject: Resignation of a member of the Advisory Council to the Commission

Based on the request made by Dr. Pinaki Chakraborty, his resignation from the Advisory council of the Commission has been accepted.

Sd/-
(Kandarp Patel)
Joint Director (XV-FC)

Annex 1.16
(para 1.23)

No. 5/17/UF-XVFC-2018
Fifteenth Finance Commission
Union Finance & Coordination

Jawahar Vyapar Bhawan,
9th Floor,1, Tolstoy Marg,
New Delhi - 110001
Dated: 1st May, 2018

OFFICE MEMORANDUM

Subject : Constitution of the High Level Group on Health Sector

The Fifteenth Finance Commission has been constituted under the order of the Hon'ble President vide order dated 27th November, 2017. The copy of the Terms of Reference (ToR) of the Commission is enclosed. The Commission, in the discharge of its mandate, hereby constitutes a High Level Group of Health Sector with following Convenor and Members:

(i) Dr. Devi Shetty, Chairman, Narayana Health City, Bangalore;

(ii) Dr. Deelip Govind Mhaisekar, Vice Chancellor, Maharashtra University of Health Science, Nashik, Maharashtra;

(iii) Dr. Naresh Trehan, Medanta City, Gurgaon;

(iv) Dr. Randeep Guleria, Director, AIIMS, New Delhi (Convenor);

(v) Dr. Bhabatosh Biswas, Prof & HOD of Cardio Thoracic Surgery, R.G.Kar Medical College, Kolkata; and

(vi) Prof. K. Srinath Reddy, President of Public Health Foundation of India.

2. The role and the function of the High Level Group of Health Sector will be:

(a) To evaluate the existing regulatory framework in the Health sector and examine its strength and weaknesses for enabling a balanced yet faster expansion of the health sector keeping in view India's Demographic profile;

(b) To suggest ways and means to optimise the use of existing financial resources and to incentivise the State Governments effort on fulfilment of well-defined health parameters, in India; and

(c) To holistically examine best international practices for the health sector and seek to benchmark our framework to these practices for optimising benefits keeping in mind our local issues.

3. The Commission looks forward to valuable advice, guidance and support from the High Level Health Group.

4. This issues with the approval of the competent authority.

Sd/-

(Arvind Mehta)

Secretary

Special Invitees : 1) Dr. V.K. Paul, Member, Niti Aayog, New Delhi,

2) Dr.(Prof.) Aarti Vij, AIIMS, New Delhi,

3) Other Distinguished Personalities

The report of the group is available on the website of the Finance Commission at -https://fincomindia.nic.in/under the heading 'Studies Reports'

Annex 1.17
(para 1.23)

No. 3/20/SF/XVFC-2018

FIFTEENTH FINANCE COMMISSION

TOLSTOY MARG, JAWAHAR VAYAPAR BHAWAN,
21st Floor, STC Building
New Delhi- 110 001.

Dated: 11.02.2019

NOTIFICATION

During the recent visit of the Fifteenth Finance Commission to the State of Punjab, the State Government brought to the notice of the Commission about the impending fiscal crisis arising out of legacy debt of Rs 30,584 crore. This was due to accumulated Cash Credit Limit (CCL) gap during the span of more than a decade related to procurement of food grains for the central pool in Punjab. It was stated that this burden was allegedly imposed by the Union Government by converting the CCL gap into a clean long-term loan for the State. Further, it was stated that this ballooned its fiscal deficit to 12.34 per cent of GSDP in 2016-17 and the debt servicing of this amount would alone amount to Rs 3,240 crore per annum till Sept 2034. This will result in total outflow of Rs 57,358 crore during the repayment tenure of this loan.

2. The State Government also pleaded that the Fifteenth Finance Commission may sympathetically consider the matter and award a suitable debt relief package otherwise, the State Government would fail to concentrate on development expenditure and the state is facing "worse than a debt trap scenario" wherein the debt servicing liability is more than its gross borrowings.

3. In the above context, in order to facilitate the Commission to examine the matter In a fair, reasonable and appropriate to all stakeholders, a Committee comprising of the following is constituted to examine the above matter comprehensively and recommend suitable measures:

(i)	Shri Ramesh Chand, Member, XVFC	- Chairman
(ii)	Shri Ravi Kant, Secretary, Department of Food & Public Distribution.	- Member
(iii)	Shri Rajeev Ranjan, Additional Secretary, Department of Expenditure, Ministry of Finance.	- Member

(iv) Shri Ravi Mittal, Additional Secretary, Department of Financial Services, Ministry of Finance. - Member

(v) Chief Secretary, Government of Punjab - Member

(vi) Dr. Ravi Kota, Joint Secretary, XVFC - Member Secretary

4. The Terms of Reference (ToR) for the Committee are as follows:

On Legacy Debt of Accumulated CCL Gap (Debt stock issue)

(a) To look into all aspects of outstanding issues of the legacy debt of Government of Punjab arising out of accumulated CCL (food credit) gap with reference to Food Corporation of India/Department of Food and Public Distribution.

(b) To recommend contours of suitable resolution that would be fair and appropriate to all the stakeholders and the State of Punjab. It would also enable the State to manage the fiscal challenge arising out of debt stock and servicing cost due to the legacy debt.

On Current Accumulation of CCL Gap (Debt flow issue)

© To examine the current issue (other than legacy debt burden) related to the CCL gap in order to ascertain the root causes for such gap.

(d) To recommend appropriate measures to overcome the causes identified so as to ensure the CCL gap does not exist in the successive procurement seasons.

5. The Committee shall submit its report within **six weeks** from the date of its constitution.

This has the approval of the Chairman, Fifteenth Finance Commission.

Sd/-

(Arvind Mehta)

Secretary Fifteenth Finance Commission

Annex 1.18
(para 1.23)

F.No.5/103/UF-XVFC/2019
Fifteenth Finance Commission
(Union Finance and Coordination)
*****

9th Floor, Jawahar Vyapar Bhawan,
1 Tolstoy Marg, New Delhi-110001
Dated:13th January, 2020

OFFICE MEMORANDUM

Subject: Constitution of the Group to examine the issues on Defence and Internal Security

The Fifteenth Finance Commission has been constituted by the President vide notification no. S.O. 3755(E) dated 27th November, 2017 (copy enclosed). The copies of Terms of References (ToRs) dated 29.7.2019 and 29.11.2019 of the Fifteenth Finance Commission (FC-XV) are also enclosed. The Commission has decided to constitute a Group on Defence and Internal Security with the following Chairman and Members:

i)	Shri N.K Singh, Chairman, Fifteenth Finance Commission	– Chairman
ii)	Shri A.N.Jha, Member, Fifteenth Finance Commission	- Member
iii)	Secretary, Ministry of Home Affairs	- Member
iv)	Secretary, Ministry of Defence	- Member
v)	Secretary (Expenditure), Ministry of Finance	– Member

2. The mandate of the Group on Defence and Internal Security will be 'to examine whether a separate mechanism for funding of defence and internal security ought to be set up, and if so, how such a mechanism could be operationalised'.

3. This issues with the approval of the Competent Authority.

Sd/-
(Jasvinder Singh)
Director

Special Invitees

1) General Mr. Bipin Rawat, Chief of Defence Staff, Ministry of Defence
2) General Mr. Manoj Mukund Naravane, Chief of Army Staff, Ministry of of Defence

Annex 1.19
(para 1.23)

F.No.5/102/UF-XVFC/2020
Fifteenth Finance Commission
(Union Finance and Coordination)
*****

9th Floor, Jawahar Vyapar Bhawan,
1 Tolstoy Marg, New Delhi-110001
Dated:6th February, 2020

OFFICE MEMORANDUM

Subject: Constitution of the High Level Expert Group on Agriculture Exports

The Fifteenth Finance Commission has been constituted by the President vide notification no. S.O. 3755(E) dated 27th November, 2017 (copy enclosed). A copy of Terms of Reference (ToR) dated 29.11.2019 of the Fifteenth Finance Commission (FC-XV) is also enclosed. The Commission has decided to constitute a High Level Expert Group on Agriculture Exports in pursuance of its ToR (para 7) i.e to recommend measurable performance incentives for States to encourage agri exports as well as to promote crops to enable high import substitution. The composition of the group is given below:

(i)	Shri Sanjiv Puri, Chairman and Managing Director, ITC	**– Chairman**
(ii)	Ms. Radha Singh, Former Agriculture Secretary	**- Member**
(iii)	Representative of Ministry of Food Processing Industries	**- Member**
(iv)	Chairman, Agricultural and Processed Food Products Export Development Authority (APEDA), Ministry of Commerce and Industry	**- Member**
(v)	Shri Suresh Narayanan, CMD, NESTLE India	**- Member**
(vi)	Mr. Jai Shroff, CEO-UPL Limited	**– Member**
(vii)	Shri Sanjay Sacheti, Country Head India-Olam Agro India Ltd	**- Member**
(viii)	Dr. Sachin Chaturvedi, Director General, RIS	**- Member**

2. The Committee is free to seek assistance of any other institution or entity as considered appropriate for completion of the work. It is requested that the Committee may submit its recommendations within three months for further consideration of the Commission.

3. The Terms of Reference of the Group is Annexed.

4. This issues with the approval of the Competent Authority.

Sd/-

(Jasvinder Singh)

Director

Ph. 011-23701004

Email: jasvinder.singh@nic.in

Annexe

Terms of Reference:

1. To assess export & import substitution opportunities for Indian agricultural products (commodities, semi-processed, and processed) in the changing international trade scenario and suggest ways to step up exports sustainably and reduce import dependence.
2. To recommend strategies and measures to increase farm productivity, enable higher value addition, ensure waste reduction, strengthen logistics infrastructure etc. related to Indian agriculture, to improve the sector's global competitiveness
3. To identity the impediments for private sector investments along the agricultural value chain and suggest policy measures and reforms that would help attract the required investments.
4. To suggest appropriate performance-based incentives to the state governments for the period 2021-22 to 2025-26, to accelerate reforms in the agriculture sector as well as implement other policy measures in this regard.

Representative of Ministry of Food Processing Industries - Shri Manoj Joshi, Additional Secretary.

The report of the group is available on the website of the Finance Commission at -https://fincomindia.nic.in under the heading 'Studies Reports'

Annex 1.20
(para 1.23)

File No. 8/30/EA-XVFC/2018
Fifteenth Finance Commission.

Dated. 18.03.2020
21st Floor, Jawahar Vyapar Bhawan,
New Delhi.

Subject: **Constitution of a Committee to Review Fiscal Consolidation Roadmap of the General Government -regarding.**

Chairman, XV-FC has constituted a committee to review fiscal consolidation roadmap of the general government. Following is the composition of the Committee.

1.	Shri N. K. Singh, Chairman, XV-FC	- Chairman
2.	Shri A. N. Jha, Member, XV-FC	- Member
3.	Dr. Anoop Singh, Member, XV-FC	- Member
4.	Representative of CAG	- Member
5.	Representative of CGA	- Member
6.	Joint Secretary (Budget), DEA, MoF	- Member

Outside Experts

7.	Dr. Sajjid Z Chinoy	- Member
8.	Dr. Prachi Mishra	- Member

Representatives from State Governments

9.	Shri. S. Krishnan, Additional Chief Secretary, Government of Tamil Nadu	- Member
10.	Sh. Anirudh Tiwari, Principal Secretary Government of Punjab	- Member

2. Analytical and data support to the committee will be provided by a team from National Institute of Public Finance & Policy, New Delhi.

3. Economic Division of the Finance Commission Secretariat shall facilitate and support the working of the Committee.

4. Terms of Reference of the Committee are,

   (i) The Committee shall make recommendations on the definition of deficit and debt for the Central government, overall states, the General Government and public sector enterprises by considering all explicit and measurable liabilities of the sovereign and by bringing in consistency between the definition of debt (stock) and deficit (flow).

   (ii) The Committee shall also lay down the principles for arriving at the debt of the general government debt and consolidated public sector with appropriate netting to avoid double-counting.

   (iii) The Committee shall define contingent liabilities, provide quantifiable measures of such liabilities, wherever possible, and specify conditions under which "contingent" liabilities become "explicit" liabilities of the public sector.

   (iv) Based on the above definition, the Committee shall review the current status of deficit and debt at different levels.

   (v) Based on the above, the Committee shall recommend a debt and fiscal consolidation roadmap for FY21-FY25 for the Central Government, overall States and General Government (and attempt building up scenarios for public sector enterprises.

5. This is issued with the approval of the Competent Authority.

Sd/-

(Kandarp V Patel)

Joint Director

Annex 1.21
(para 1.32)

Studies Commissioned on "Evaluation of State Finances"

S.No.	State	Name of Institute
1	Andhra Pradesh	Centre for Economic and Social Studies, Hyderabad
2	Assam	Gawahati University, Assam
3	Arunachal Pradesh	Rajiv Gandhi Institute, Arunachal Pradesh
4	Bihar	Asian Development Research Institute,
5	Chhattisgarh	National Institute of Financial Management, Faridabad
6	Goa	Goa University, Goa
7	Gujarat	Gujarat Institute of Development Research, Ahmedabad
8	Haryana	MDI, Gurgaon
9	Himachal Pradesh	Sh. D.K. Sharma
10	Jammu & Kashmir*	NIPFP
11	Jharkhand	Xavier School of Management (XLRI), Jamshedpur
12	Karnataka	Institute for Social and Economic Change, Bengaluru
13	Kerala	CDS, Trivandrum
14	Madhya Pradesh	Indian Institute of Management, Indore
15	Maharashtra	Gokhale Institute of Politics and Economics
16	Manipur	Manipur University
17	Meghalaya	Rajiv Gandhi Indian Instt. Of Management
18	Mizoram	Mizoram University
19	Nagaland	Nagaland University
20	Odisha	Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar
21	Punjab	Indian School of Business, Mohali
22	Rajasthan	Centre for Environment & Development studies
23	Sikkim	Sikkim University
24	Tamil Nadu	Madras School of Economics
25	Telangana	Indian School of Business, Hyderabad
26	Tripura	Tripura University
27	Uttarakhand	National Institute of Financial Management, Faridabad
28	Uttar Pradesh	Department of Applied Economics Lucknow
29	West Bengal	Indian Statistical Institute, Delhi

** Jammu and Kashmir became UT on 31st October 2019*

The above studies are available on the website of the Finance Commission at -https://fincomindia.nic.in under the heading 'Studies Reports'

Annex 1.22
(para 1.33)

List of other Studies Commissioned

S.No	Subject	Name of Institute/Organization
1	Resource sharing between Centre and States and allocation across States: Some issues in balancing Equity and Efficiency	Institute of Economic Growth, New Delhi
2	Pay Commissions: Fiscal Implications	Institute of Economic Growth, New Delhi
3	Cyclically adjusted Primary Balance for Centre and States in India	Institute of Economic Growth, New Delhi
4	Ayushman Bharat: Costs and Finances of the Prime Minister's Jan Arogya Yojana	Institute of Economic Growth, New Delhi
5	Development Expenditure in the States post Fourteenth Finance Commission Award: How Have States Spent the Award Money?	Indian Council for Research on International Economic Relations, New Delhi
6	Development Expenditure in the States post Fourteenth Finance Commission Award: An Assessment of the Centrally Sponsored Schemes	Indian Council for Research on International Economic Relations, New Delhi
7	Finances of Municipal Corporations in Metropolitan Cities of India	Indian Council for Research on International Economic Relations, New Delhi
8	State of Municipal Finances in India	Indian Council for Research on International Economic Relations, New Delhi
9	Projection of Tax Revenue on Petroleum Products and Sales Tax and State's Own Tax Revenue (SOTR) Effort Analysis of States in India	Xavier University, Bhubaneshwar
10	Resource allocation in lieu of State's Demographic Achievements in India: An evidence based approach	Centre for Development Studies, Kerala
11	Cesses and Surcharges: Concept, Practice and Reform	Vidhi Centre for Legal Policy, New Delhi
12	Examining the legal basis for the conditions that the Government of India may impose on States while providing consent under Article 293(3) of the constitution	Vidhi Centre for Legal Policy, New Delhi
13	Cleaning constitutional cobwebs: Reforming the Seventh Schedule	Vidhi Centre for Legal Policy, New Delhi
14	Examination of the legal basis for conditional transfers to States and issues relating to performance-based incentives for States	Vidhi Centre for Legal Policy, New Delhi

S.No	Subject	Name of Institute/Organization
15	Forest Conservation through fiscal federalism: lessons from past experience	The Energy and Resources Institute, New Delhi
16	Strengthening Green Fiscal Federalism in India	The Energy and Resources Institute, New Delhi
17	Agricultural subsidies	Indian Statistical Institute, New Delhi
18	Measurable performance-based incentives for States in India	National Council of Applied Economic Research, New Delhi
19	Urban Infrastructure Development and Resilience Building by ULBs	Indian Institute for Human Settlements, Bengaluru
20	Devolution of Union Finance Commission Grants to Panchayats	Accountability Initiative, Centre for Policy Research, New Delhi
21	Analysis of Fund Flows to Rural Local Bodies	Accountability Initiative, Centre for Policy Research, New Delhi
22	Contingent Liability Management Framework	CRISIL, New Delhi
23	Design of intergovernmental fiscal transfers in India to Rural Local Governments (RLGs)	Indian Institute of Public Administration, New Delhi
24	Air Pollution: Enabling outcome linked clean air finance	World Resources Institute, New Delhi
25	Macroeconomic policy simulations for the 15th FC period	National Institute of Public Finance and Policy, New Delhi
26	Overview of State Finance Commission Reports	National Institute of Public Finance and Policy, New Delhi
27	Fiscal Implications of Introduction of Goods and Services Tax	National Institute of Public Finance and Policy, New Delhi
28	Study on Municipal Finances	Janaagraha, Bengaluru
29	Current state and sources of air pollution and solutions	The Nature Conservancy, New Delhi
30	Disaster risk management financing*	UNDP

**The study was fully sponsored by NDMA.*

The above studies are available on the website of the Finance Commission at -https://fincomindia.nic.in under the heading 'Studies Reports'

Annex 1.22(A)
(para 1.21)

List of PPT Presentations and Studies by Multilateral and other Organisations.

1. XV-FC IMF meeting on 27 February 2018

(i) "Fiscal Targets Across Government Levels" By, Adrienne Cheasty and Luc Eyraud

(ii) "Flexibility and Discipline at the Sub national Level" By Adrienne Cheasty and Luc Eyraud

2. XV Finance Commission Conference on "Issues in Fiscal Federalism" with International Monetary Fund March 27 and 28, 2018.

(i) "Constraining Sub national Borrowing through Rules and Controls" By Luc Eyraud

(ii) "Market Discipline at the State Level" By Adil Mohommad, Racha Moussa, and Lesley Fisher

(iii) "The Role of Municipalities and Other Local Governments" By Robin Boadway and Andrew Hodge

(iv) "Equalization: Rationale, Design and Implementation" By Robin Boadway, Queen's University Canada

(v) "Conditionality in Inter-Governmental Transfers" By Elif Ture (IMF)

(vi) "Implications of the GST on Intergovernmental Fiscal Relations" By Robin Boadway, Queen's University Canada

3. Fifteenth Finance Commission of India—OECD High-Level Roundtable On Fiscal Relations Across Levels of Government, Wednesday 4 April 2018, New Delhi, India

(i) "Sub-national debt and fiscal targets" By Ronnie Downes

(ii) "Revenue sharing, transfers and fiscal equalisation: The tax perspective" By David Bradbury

(iii) "Revenue Sharing, Transfers and Fiscal Equalization" By Jonathan Coppel

(iv) "Broad messages on transfers and fiscal equalisation" BY Sean M. Dougherty

(v) "The Quality of Public Spending, Performance Incentives and Regional

Development" By Rudiger Ahrend

(vi) "Fiscal relations across levels of government: Performance incentives and regional policy The EU experience" By Peter Berkowitz

(vii) "Informality and Fiscal Frameworks" By Piritta Sorsa

(viii) "Designing Fiscal Rules for Sub national Government" By Hansjörg Blöchliger

(ix) "Fiscal rules: sub-national implications" By Ronnie Downes

(x) "Fiscal rules, sub-national debt and insolvency frameworks- The Austrian Experience" By Philipp Päcklar

4. The World Bank Conference on "International Experience in Fiscal Transfers", July 30-31, 2018 – Monday

(i) "Intergovernmental Fiscal Relations in Australia", By Bob Searle

(ii) "Reforming vertical programmes- The case of South Africa" By David Savage

(iii) "Inter-governmental Fiscal Transfers and Performance Grants in Brazil" By Deborah Wetzel

(iv) "The economic impacts of HFE: lessons from Australia" By Jonathan Coppel

(v) "Dealing with Horizontal and Vertical Fiscal Imbalances: Lessons from Canada's very decentralized federal system" By Marcelin Joanis

(vi) "The German experience of addressing vertical and horizontal fiscal imbalances" By Paul Bernd Spahn

(vii) "Discussion with 15th Finance Commission" By Roy Bahl

5. World Bank, the OECD and the ADB on "Fiscal Relations Across Levels of Government" on 4th April, 2019

(I) "Sub national Fiscal Rules – Principles and Experiences" By Jorge Martinez (GSU)

(ii) "Models and Options for India" By Rangeet Ghosh (WB)

(iii) "International experience with fiscal equalisation and transfers" By Sean Dougherty (OECD)

(iv) "The Role of Performance Incentives in Intergovernmental Fiscal Transfers Design" Navendu Karan (ADB)

(v) "Asian Experience in Fiscal Equalization and Intergovernmental Fiscal Transfers Design" By Cigdem Akin (ADB)

(vi) "Public Financial Management (PFM)- Towards a Reform Agenda" By Adrian Fozzard (WB) and Manoj Jain (WB)

(vii) "International experience with budget processes in central and sub-national governments" By Delphine Moretti (OECD)

(viii) "State Finance Commissions and Rural Local Governments" By Farah Zahir (WB)

(ix) "Property Taxation: India's Position and International Experiences" By Mohan Nagarajan (WB)

6. XV-FC and IMF meeting on 17 January 2020

(i) "India: Resource Mobilization for the Next Five Years" By Ruud de Mooij, Arbind Modi, Li Liu, Dinar Prihardini, and Juan Carlos Benitez

7. WRI Meeting on Air pollution on 20 May 2019

(i) Clean Air for All: Financing Clean Air in India

8. TNC meeting on Forest sector on 30 April 2019

(i) Intergovernmental Fiscal Transfers for Strengthening the Forest Sector

9. World Bank Meeting on Health Sector on 6 July, 2020

(i) India's Health System in the Time of COVID-19

10. List of Study Reports submitted by ADB, IMF, World Bank, WRI and TNC

(i) **ADB Study Report on** "The Asian Experience in Intergovernmental Fiscal Transfers"

(ii) **Wold Bank Report on** "Strengthening Public Financial Management in India: Improving Outcomes from Public Spending"

(iii) **IMF Study Report on** "India Resource Mobilization for the Next Five Years"

(iv) **WRI study on**" Clean Air for All: Financing Clean Air in India"

(v) A study on "Strengthening India's Forest Sector" by 14 researchers from 7 different institutes namely **Tata Trusts, The Nature Conservancy, United Nations Environment Programme, World Resources Institute India, Institute of Economic Growth, Independent Researcher (formerly with TERI) and Global Ever Greening Alliance & Independent Consultant**

(vi) World Bank Report on "Property Taxation in India: India's Position, International Experiences, Issues, and Ideas for Reform"

The above ppts and studies are available on the website of the Finance Commission at -https://fincomindia.nic.in under the heading 'Studies Reports'

Annex 1.23
(para 1.20)

Finance Commission's Meetings (FC-XV)

Meetings	Date	Meetings	Date
1st Meeting	4 December 2017	30th Meeting	28 June 2019
2nd Meeting	6 December 2017	31st Meeting	2 July 2019
3rd Meeting	11 December 2017	32nd Meeting	9 July 2019
4th Meeting	10 January 2018	33rd Meeting	11 July 2019
5th Meeting	15 January 2018	34th Meeting	12 July 2019
6th Meeting	29 January 2018	35th Meeting	16 July 2019
7th Meeting	5 February 2018	36th Meeting	22 July 2019
8th Meeting	21 February 2018	37th Meeting	30 July 2019
9th Meeting	14 March 2018	38th Meeting	2 August 2019
10th Meeting	19 March 2018	39th Meeting	6 August 2019
11th Meeting	18 April 2018	40th Meeting	20 August 2019
12th Meeting	20 April 2018	41st Meeting	22 August 2019
13th Meeting	16 May 2018	42nd Meeting	23 August 2019
14th Meeting	4 June 2018	43rd Meeting	29 August 2019
15th Meeting	23 August 2018	44th Meeting	31 August 2019
16th Meeting	28 August 2018	45th Meeting	9 October 2019
17th Meeting	22 October 2018	46th Meeting	10 October 2019
18th Meeting	26 October 2018	47th Meeting	11 October 2019
19th Meeting	3 January 2019	48th Meeting	14 October 2019
20th Meeting	13 February 2019	49th Meeting	15 October 2019
21st Meeting	3 April 2019	50th Meeting	17 October 2019
22nd Meeting	9 April 2019	51st Meeting	30 October 2019
23rd Meeting	16 April 2019	52nd Meeting	31 October 2019
24th Meeting	23 April 2019	53rd Meeting	1 November 2019
25th Meeting	30 April 2019	54th Meeting	8 November 2019
26th Meeting	7 May 2019	55th Meeting	11 November 2019
27th Meeting	14 May 2019	56th Meeting	18 November 2019
28th Meeting	21 May 2019	57th Meeting	19 November 2019
29th Meeting	28 May 2019	58th Meeting	25 November 2019

Meetings	Date	Meetings	Date
59th Meeting	27 November 2019	90th Meeting	3 July 2020
60th Meeting	17 December 2019	91st Meeting	6 July 2020
61st Meeting	28 December 2019	92nd Meeting	7 July 2020
62nd Meeting	14 January 2020	93rd Meeting	9 July 2020
63rd Meeting	18 February 2020	94th Meeting	10 July 2020
64th Meeting	3 March 2020	95th Meeting	13 July 2020
65th Meeting	11 March 2020	96th Meeting	14 July 2020
66th Meeting	7 April 2020	97th Meeting	15 July 2020
67th Meeting	10 April 2020	98th Meeting	16 July 2020
68th Meeting	16 April 2020	99th Meeting	17 July 2020
69th Meeting	20 April 2020	100th Meeting	20 July 2020
70th Meeting	28 April 2020	101st Meeting	21 July 2020
71st Meeting	5 May 2020	102nd Meeting	22 July 2020
72nd Meeting	12 May 2020	103rd Meeting	23 July 2020
73rd Meeting	19 May 2020	104th Meeting	24 July 2020
74th Meeting	20 May 2020	105th Meeting	27 July 2020
75th Meeting	26 May 2020	106th Meeting	28 July 2020
76th Meeting	28 May 2020	107th Meeting	29 July 2020
77th Meeting	2 June 2020	108th Meeting	5 August 2020
78th Meeting	9 June 2020	109th Meeting	6 August 2020
79th Meeting	10 June 2020	110th Meeting	7 August 2020
80th Meeting	11 June 2020	111th Meeting	10 August 2020
81st Meeting	12 June 2020	112th Meeting	11 August 2020
82nd Meeting	16 June 2020	113th Meeting	17 August 2020
83rd Meeting	17 June 2020	114th Meeting	18 August 2020
84th Meeting	18 June 2020	115th Meeting	19 August 2020
85th Meeting	19 June 2020	116th Meeting	20 August 2020
86th Meeting	22 June 2020	117th Meeting	24 August 2020
87th Meeting	29 June 2020	118th Meeting	25 August 2020
88th Meeting	30 June 2020	119th Meeting	26 August 2020
89th Meeting	1 July 2020	120th Meeting	27 August 2020

Meetings	Date	Meetings	Date
121st Meeting	28 August 2020	137th Meeting	29 September 2020
122nd Meeting	31 August 2020	138th Meeting	2 October 2020
123rd Meeting	2 September 2020	139th Meeting	3 October 2020
124th Meeting	7 September 2020	140th Meeting	5 October 2020
125th Meeting	8 September 2020	141st Meeting	6 October 2020
126th Meeting	9 September 2020	142nd Meeting	7 October 2020
127th Meeting	10 September 2020	143rd Meeting	8 October 2020
128th Meeting	11 September 2020	144th Meeting	11 October 2020
129th Meeting	14 September 2020	145th Meeting	12 October 2020
130th Meeting	15 September 2020	146th Meeting	13 October 2020
131st Meeting	16 September 2020	147th Meeting	17 October 2020
132nd Meeting	21 September 2020	148th Meeting	19 October 2020
133rd Meeting	23 September 2020	149th Meeting	26 October 2020
134th Meeting	25 September 2020	150th Meeting	28 October 2020
135th Meeting	26 September 2020	151st Meeting	30 October 2020
136th Meeting	28 September 2020		

Annex 1.24
(Para 1.24)

List of the Chairman's Meetings with Eminent Personalities/Organisations

Sr. No.	Meetings	Date
1	Dr. Urjit Patel, Governor, along with three Deputy Governors of Reserve Bank of India at Mumbai	7 December 2017
2	Shri K. Ramarao, Principal Secretary Finance, Govt. of Telangana, along with Dr. G R Reddy, Advisor and Dr. Rajiv Sharma, Chief Advisor at New Delhi	12 January 2018
3	Shri Sushil Kumar Modi, Deputy Chief Minister of Bihar	5 June 2018
4	Shri Anil Kumar Khachi, Additional Chief Secretary (Finance), Government of Himachal Pradesh	13 July 2018
5	Shri Krishna Vats and Officials from UNDP, World Banks and NDMA	27 July 2018
6	Shri Siddharth Bhattacharya, Education Minister of Assam	10 September 2018
7	Shri. Arun Jaitley, Cabinet Minister, Ministry of Finance	10 September 2018
8	Presentation by Bill & Melinda Gates Foundation on 'Water Sanitation & Hygiene'	24 September 2018
9	Shri Prakash Pant, Finance Minister, Uttarakhand	29 September 2018
10	Shri Himanta Biswa Sarma, Finance Minister, Assam	8 October 2018
11	Shri Amit Mitra, Finance Minister, West Bengal	26 October 2018
12	Shri Shaktikanta Das, Governor, Reserve Bank of India	17 December 2018
13	Shri Prakash Javadekar, Cabinet Minister, Ministry of Human Resource Development and Secretary, Ministry of Human Resource Development	21 December 2018
14	Shri Nitin Gadkari, Cabinet Minister, Ministry of Road Transport & Highways	24 December 2018
15	Shri Sambhaji Chhatrapati, Member of Parliament, Rajya Sabha	4 January 2019
16	Shri R.K. Mathur, Adviser to Chief Minister, Tripura and Shri G.S.G. Iyyengar, Prl. Resident Commissioner, Tripura	4 January 2019
17	Shri Karan Avtar Singh, Chief Secretary, Punjab	28 January 2019
18	Shri Arvind Panagariya, Former Vice-Chairman, Niti Aayog	1 April 2019
19	Shri K.K Venugopal, Attorney General of India	13 April 2019
20	Shri Lakhanpal, Chairman, Punjab Finance Commission	15 April 2019
21	Shri K. Parasaran, Sr. Advocate, Supreme Court	2 May 2019

Sr. No.	Meetings	Date
22	Presentation by CS, Uttarakhand, Finance and Tourism Secretaries	6 May 2019
23	Smt Nirmala Sitharaman, Cabinet Minister, Ministry of Finance	6 June 2019
24	Shri Arvind Kejriwal, Chief Minister, Delhi	10 July 2019
25	Shri Rajiv Mehrishi, Comptroller and Auditor General of India	11 July 2019
26	Shri Anil Baijal, Lieutenant Governor, Delhi	12 July 2019
27	Shri Arvind Kejriwal, Chief Minister, Delhi and Shri Manish Sisodia, Finance Minister, Delhi	26 July 2019
28	Chief Minister's conclave at Dehradun/Mussoorie	27 and 28 July 2019
29	Shri Pu TJ. Lalnuntluanga, Minister of State for Law & Transport, Mizoram	30 July 2019
30	Shri Anil Baijal, Lieutenant Governor, Delhi	1 August 2019
31	Shri Godisela Rajesham Goud, Chairman, State Finance Commission, Telangana	5 August 2019
32	Shri Jai Ram Thakur, Chief Minister, Himachal Pradesh	6 August 2019
33	Shri V. Narayanasamy, Chief Minister, Puducherry	21 August 2019
34	Shri Ashok Gehlot, Chief Minister, Rajasthan	23 August 2019
35	Shri Buggana Rajendranath, Finance Minister, Andhra Pradesh	4 October 2019
36	Shri Shrikant Baldi, Chief Secretary, Himachal Pradesh	9 October 2019
37	Shri Nagendra Nath Sinha, Chairman, NHAI	10 October 2019
38	Prof. K VijayRaghavan, Principal Scientific Adviser to Government of India	11 October 2019
39	Shri Dharmendra Pradhan, Cabinet Minister, Ministry of Petroleum and Natural Gas	16 October 2019
40	Shri Alok Nigam, Additional Chief Secretary to Government, Haryana	7 November 2019
41	Shri Harish Rao, Finance Minister, Telangana & Shri Ramakrishna Rao, chief secretary (finance) , Telangana	28 January 2020
42	Shri David Lipton, First Deputy Managing Director, IMF	14 February 2020
43	Shri Buggana Rajendranath, Finance Minister, Andhra Pradesh	2 March 2020
44	Shri Prem Singh Tamang, Chief Minister, Sikkim	7 March 2020
45	Shri Neiphiu Rio, Chief Minister, Nagaland	12 March 2020
46	Shri Chowna Mein, Dy. Chief Minister, Arunachal Pradesh	13 March 2020
47	Ms. Renata, Dessallien, United Nation	28 September 2020

Annex 1.25(A)
(para 1.31)

List of Meetings of the Commission with Hon'ble President, Vice President, Prime Minister and Finance Minister (New Delhi)

Sr. No.	Meetings	Date
1	Shri Arun Jaitley, Cabinet Minister, Ministry of Finance	4 December 2017
2	Shri Arun Jaitley, Cabinet Minister, Ministry of Finance	13 January 2018
3	Shri Ram Nath Kovind, Hon'ble President of India	15 February 2018
4	Shri Narendra Modi, Hon'ble Prime Minister of India	6 March 2018
5	Shri M. Venkaiah Naidu, Hon'ble Vice President of India	18 May 2018
6	Shri Ram Nath Kovind, Hon'ble President of India	5 December 2019
7	Smt. Nirmala Sitharaman, Cabinet Minister, Ministry of Finance	6 December 2019
8	Shri Narendra Modi, Hon'ble Prime Minister of India	12 December 2019

Annex 1.25(B)
(para 1.24)

List of Meetings of the Commission with Individuals/Organisations

Sr. No.	Meetings	Date
1	Ms. Poonam Gupta, Economist and Shri Junaid Ahmad, India Country Director, South Asia, and other officials of World Bank	9 February 2018
2	Joint introductory meeting through video conferencing with officials from Organisation for Economic Co-operation and Development	21 February 2018
3	Ministers/Member of Parliaments from Tamil Naidu	19 April 2018
4	Shri Marco Buti, Director General (Economic and Financial Affairs), European Commission	17 May 2018
5	Indian Institute of Public Administration, New Delhi (Presentation on Devolution to Local Government and Governance Issues)	20 June 2018
6	Madras School of Economics, Chennai (Presentation on A comparison of the efficiency of public expenditure by the Central Government and by the State Governments on an average)	21 June 2018
7	Madras School of Economics, Chennai (Presentation on A comparison of the efficiency of public expenditure on a few selected items such as education and health by a set of selected State Governments)	21 June 2018
8	Ms. Gabriela Ramos, Chief and officials of Organisation for Economic Co-operation and Development	3 July 2018
9	United Nations Development Programme/National Disaster Management Authority (Presentation on Disaster Risk Management Financing)	8 August 2018 and 8 October 2018
10	Shri S. K. Misra, Chairman, Indian Trust for Rural Heritage and Development	14 September 2018
11	Shri Nitin Anand, Commissioner GST, Bihar	14 September 2018
12	National Institute of Public Finance and Policy, New Delhi (Presentation on Macroeconomic Policy simulation model)	8 October 2018 and 15 May 2019

13	Indian Institute of Public Administration, New Delhi (Presentation on Measures needed to improve own resources of the Panchayats)	14 December 2018
14	Shri Arbind Modi, Ex-Member Central Board of Direct Taxes	13 August 2019
15	Visit to Ladakh	15 to 18 September 2019
16	Visit to Andhra Pradesh*	18 to 20 December, 2019
17	Shri Rakesh Nath, Ex-Member, Appellate Tribunal for Electricity and Ex- Chairperson, Central Electricity Authority(CEA)	3 August 2020
18	Dr. Aromar Revi, Director, IIHS	5 August 2020
19	Chief Minister of Haryana**	28 September 2020

* Meeting attended by Chairman, Secretary/ Other officers of FC-FV
** Meeting attended by Chairman, Member(AL) Secretary/ Other officers of FC-FV

Annex 1.26
(para 1.24 and 1.30)

Meetings held with Ministries/Departments of Union Government (New Delhi)

Sr. No.	Meetings	Date
1 (a)	Comptroller and Auditor General of India	16 January 2018
1 (b)	Comptroller and Auditor General of India (Presentation on Railways Finances by Principal Director)	16 May 2018
1 (c)	Comptroller and Auditor General of India and officials	8 July 2019
2	Controller General of Accounts (Presentation on Public Financial Management System)	3 April 2018
3 (a)	Special Secretary and Member, Central Board of Indirect Taxes and Customs and officials	9 April 2018
3 (b)	Chairman, Central Board of Indirect Taxes and Customs and officials	24 August 2018
4	Chairman, Central Board of Direct Taxes and officials	10 April 2018
5 (a)	Chiefs of Defence Forces and officials	16 April 2018
5 (b)	Smt. Nirmala Sitharaman, Cabinet Minister, Ministry of Defence and officials	20 April 2018
5 (c)	Shri Rajnath Singh, Cabinet Minister, Ministry of Defence and officials	30 August 2019
6 (a)	Shri Rajnath Singh, Cabinet Minister, Ministry of Home Affairs and officials	19 April 2018
6 (b)	Officials of Ministry of Home Affairs (MHA) and National Disaster Management Authority (NDMA)	9 July 2020
7 (a)	Secretary and officials of Ministry of Drinking Water and Sanitation	14 May 2018
7 (b)	Shri Gajendra Singh Shekhawat, Cabinet Minister, Ministry of Jal Shakti and officials of Departments of Water Resources, River Development & Ganga Rejuvenation and Drinking Water and Sanitation	23 July 2019
7 (c)	Shri Gajendra Singh Shekhawat, Cabinet Minister, Ministry of Jal Shakti and officials of Departments of Water Resources, River Development & Ganga Rejuvenation	31 August 2019
7 (d)	Shri Gajendra Singh Shekhawat, Cabinet Minister, Ministry of Jal Shakti and officials	17 June 2020

Sr. No.	Meetings	Date
8 (a)	Chief Economic Adviser and officials of Department of Economic Affairs, Ministry of Finance	1 June 2018
8 (b)	Secretary and officials of Department of Expenditure, Ministry of Finance	11 April 2019
8 (c)	Secretaries and officials of Departments of Economic Affairs, Revenue and Expenditure, Ministry of Finance	15 May 2019
8 (d)	Secretary and officials of Department of Expenditure and Budget Division, Ministry of Finance	26 August 2019
8 (e)	Secretary and officials of Department of Revenue, Ministry of Finance	6 March 2019
8 (f)	Secretary, Department of Revenue, Ministry of Finance	22 June 2020
8 (g)	Secretaries of Department of Economic Affairs and Department of Expenditure, Ministry of Finance	2 July 2020
8 (h)	Secretary, Department of Revenue, Ministry of Finance and officials	8 July 2020
8 (i)	Secretary, Department of Financial Services, Ministry of Finance	31 July 2020
8 (j)	Secretary, Department of Investment and Public Asset Management, Ministry of Finance	4 August 2020
9 (a)	Chief Executive Officer and officials of Unique Identification Authority of India	4 June 2018
9 (b)	Secretary and officials of Ministry of Electronics and Information Technology	21 May 2019
10 (a)	Shri Piyush Goyal, Cabinet Minister, Ministry of Railways and officials	5 June 2018
10 (b)	Chairman, Railway Board and officials	8 August 2019
10 (c)	Chairman, Railway Board and officials	27 January 2020
11 (a)	Additional Director General and officials of Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation	18 June 2018
11 (b)	Deputy Director General and officials of National Account Division, Ministry of Statistics and Programme Implementation	18 June 2019
11 (c)	Director General and officials of National Sample Survey Office (NSSO), Ministry of Statistics and Programme Implementation	6 July 2018
12 (a)	Secretary and officials of Ministry of Panchayati Raj and Ministry of Rural Development	11 July 2018

Sr. No.	Meetings	Date
12 (b)	Secretary and officials of Ministry of Rural Development	11 April 2019
12 (c)	Secretary and officials of Ministry of Panchayati Raj	26 April 2019
12 (d)	Secretary and officials of Department of Rural Development	20 January 2020
12 (e)	Shri Narendra Singh Tomar, Cabinet Minister, Ministry of Agriculture & Farmers Welfare, Rural Development and Panchayati Raj and officials of Ministry of Panchayati Raj	25 June 2020
12 (f)	Shri Narendra Singh Tomar, Cabinet Minister, Ministry of Agriculture & Farmers Welfare, Rural Development and Panchayati Raj and officials of Ministries of Agriculture & Farmers' Welfare and Rural Development	26 June 2020
13 (a)	Vice Chairman (Dr. Rajiv Kumar) and officials of NITI Aayog	27 July 2018
13 (b)	Vice Chairman (Dr. Rajiv Kumar) and officials of NITI Aayog	15 April 2019
13 (c)	Vice Chairman (Dr. Rajiv Kumar) and officials of NITI Aayog	8 August 2019
13 (d)	Dr. V. K. Paul, Member, NITI Aayog and Secretary and officials of Ministry of Health and Family Welfare	14 January 2020
13 (e)	Vice Chairman (Dr. Rajiv Kumar) and officials of NITI Aayog	27 January 2020
14	Ms. Sushma Swaraj, Cabinet Minister, Ministry of External Affairs and Officials	5 November 2018
15	Secretary and officials from Department of Justice, Ministry of Law and Justice#	6 December 2018
16	Secretary and officials from Ministry of Tribal Affairs#	11 December 2018
17	Department of Heavy Industry, Ministry of Heavy Industries and Public Enterprises (Presentation on FAME India Scheme by Joint Secretary)	18 December 2018
18 (a)	Shri Jagat Prakash Nadda, Cabinet Minister, Ministry of Health & Family Welfare and officials from Departments of Health and Family Welfare and Health Research	19 December 2018
18 (b)	Chief Executive Officer, Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana	19 July 2019
18 (c)	Dr. Harsh Vardhan, Cabinet Minister, Ministry of Health & Family Welfare and officials from Departments of Health and Family Welfare	23 August 2019
18 (d)	Dr. Harsh Vardhan, Cabinet Minister, Ministry of Health and Family Welfare and officials	13 July 2020

Sr. No.	Meetings	Date
19	Shri Nitin J. Gadkari, Cabinet Minister, Ministry of Road Transport & Highways and Ministry of Shipping and officials	2 January 2019
20 (a)	Cabinet Secretary and officials of the Cabinet Secretariat, Secretary, Department of Economic Affairs and Secretary, Department of Expenditure, Ministry of Finance	21 January 2019
20 (b)	Cabinet Secretary and officials from the Cabinet Secretariat, Finance Secretary and Secretary, Department of Economic Affairs and Secretary, Department of Expenditure, Ministry of Finance	16 March 2019
21 (a)	Shri Hardeep Singh Puri, Minister of State (IC), Ministry of Housing and Urban Affairs and officials	4 February 2019
21 (b)	Additional Secretary, Ministry of Housing and Urban Affairs#	13 August 2019
21 (c)	Shri Hardeep Singh Puri, Minister of State (IC), Ministry of Housing and Urban Affairs and officials	21 August 2019
21 (d)	Shri Hardeep Singh Puri, Minister of State (IC) of the Ministry of Housing and Urban Affairs and officials	17 July 2020
22 (a)	Shri Prakash Javadekar, Cabinet Minister, Ministry of Human Resource Development and officials of Department of School Education and Literacy	13 February 2019
22 (b)	Shri Prakash Javadekar, Cabinet Minister, Ministry of Human Resource Development and officials of Department of Higher Education	22 February 2019
22 (c)	Shri Ramesh Pokhriyal 'Nishank', Cabinet Minister, Ministry of Human Resource Development and officials of Department of School Education and Literacy	21 August 2019
22 (d)	Joint Secretary, Department of School Education & Literacy and Shri Ashish Dhawan, Founder & Chairman, Central Square Foundation	17 January 2020
22 (e)	Shri Ramesh Pokhriyal 'Nishank', Cabinet Minister, Ministry of Human Resource Development and officials of Department of School Education and Literacy	29 June 2020
22 (f)	Shri Ramesh Pokhriyal 'Nishank', Cabinet Minister, Ministry of Human Resource Development and officials of Department of Higher Education	29 June 2020

Sr. No.	Meetings	Date
23 (a)	Shri R.K. Singh, Minister of State (IC), Ministry of Power and New and Renewable Energy and officials	15 February 2019
23 (b)	Shri R.K. Singh, Minister of State (IC), Ministry of Power and New and Renewable Energy and officials	12 March 2019
23 (c)	Shri R.K. Singh, Minister of State (IC), Ministry of Power and New and Renewable Energy and officials	8 August 2019
23 (d)	Shri R.K. Singh, Minister of State (IC), Ministry of Power and Ministry of New and Renewable Energy	21 January 2020
23 (e)	Shri R.K. Singh, Minister of State (IC), Ministry of Power and officials	29 May 2020
24 (a)	Secretary and officials of Ministry of Environment, Forest & Climate Change	15 March 2019
24 (b)	Shri Prakash Javadekar, Cabinet Minister, Ministry of Environment, Forest & Climate Change and officials	1 August 2019
24 (c)	Shri Prakash Javadekar, Cabinet Minister, Ministry of Environment, Forest & Climate Change and officials	30 May 2020
25	Shri Shripad Yesso Naik, Minister of State (IC), Ministry of AYUSH and officials	18 July 2019
26	Shri Prahlad Singh Patel, Minister of State (IC), Ministry of Tourism and Ministry of Culture and officials	27 August 2019
27 (a)	Ms. Harsimrat Kaur Badal, Cabinet Minister, Ministry of Food Processing Industries and officials	4 September 2019
27 (b)	Secretary and officials from Ministry of Food Processing Industries and Chairman and officials of APEDA	5 February 2020
28	Ms. Smriti Zubin Irani, Cabinet Minister, Ministry of Women and Child Development and officials	14 September 2019
29	Secretary and officials from Department of Commerce and Secretary and officials of Ministry of Tourism	28 January 2020
30	Shri Pronab Sen, Chairman, Standing Committee on Statistics and Secretary and officials from Ministry of Statistics and Programme Implementation	6 February 2020

- Meetings held at Secretary, XVFC level

Annex 1.27
(para 1.21 and 1.24)

Meetings with Economist, Domain Experts, International and Other Organisations

Sr. No.	Meetings/Conferences/Workshops	Date
1	Reserve Bank of India at New Delhi	15 January 2018
2	National Institute of Public Finance and Policy at New Delhi	5 February 2018
3	Delegation from International Monetary Fund at New Delhi	27 February 2018
4	Conference with Senior Editors at New Delhi	28 February 2018
5	Ethopian Delegation at New Delhi*	5 March 2018
6	Members of Parliament at New Delhi	14 March 2018
7	International Monetary Fund at New Delhi	27 and 28 March 2018
8	High-Level Roundtable Conference with Organisation for Economic Co-operation and Development (OECD) at New Delhi	4 April 2018
9	Workshop with Agricultural Scientists at Chandigarh	3 May 2018
10	Economists/Domain experts at New Delhi	14 May 2018
11	Economists/Domain experts at New Delhi	17 May 2018
12	Delegation from World Bank at New Delhi	30 and 31 July 2018
13	Asian Development Bank (ADB) Officials at New Delhi	16 August 2018
14	Western Region Economists at Pune	21 August 2018
15	Economists at Chennai	5 September 2018
16	Delegation from Commission on Revenue Allocation (CRA), Kenya at New Delhi*	24 September 2018
17	International workshop on financing Disaster Risk Management in India by UNDP, NDMA, World Bank and XV-FC at New Delhi	12 and 13 November 2018
18	Economists from London School of Economics at New Delhi	15 February 2019
19	High-level roundtable conference organised by the Commission in partnership with the World Bank, the OECD and the ADB at New Delhi	4 April 2019
20	Shri Shaktikanta Das, Governor Reserve Bank of India and other officers of RBI at Mumbai	8 May 2019
21	Economists and Financial Institutions at Mumbai	9 May 2019
22	Economists at Bengaluru	24 June 2019

Sr. No.	Meetings/Conferences/Workshops	Date
23	Prof. Karthik Muralidharan, Tata Chancellor's Professor of Economics, University of California at New Delhi	8 July 2019
24	GST Council Meeting at Goa**	19 and 20 September 2019
25	Presentation by International Monetary Fund at New Delhi	17 January 2020
26	Shri Sarthak Saxena, Deputy Commissioner, GSTN at New Delhi	10 February 2020
27	World Bank Officials	6 July 2020

* Meetings held at Secretary, FC-XV level
** Meeting attended by Chairman and Secretary, FC-XV

Annex 1.28
(para 1.25)

Meetings held with the Accountants General of States (New Delhi)

Sr. No.	Name and Designation	State	Date
1	Shri John K Sellate, Principal Accountant General	Arunachal Pradesh	19 March 2018
2	Shri Sushil Kumar Thakur, Accountant General (Audit) and Shri S. Chatterjee, Accountant General (A & E)	Jammu & Kashmir**	21 March 2018
3	Ms. Rashmi Aggarwal, Accountant General (Audit)	Assam	23 April 2018
4	Ms. Mahua Pal, Principal Accountant General (Audit)	Haryana	2 May 2018
5	Shri S Sunil Raj, Accountant General (General and Social Sector Audit)	Kerala	11 May 2018
6	Shri K. R. Sriram, Principal Accountant General (General and Social Sector Audit) and Shri H K Dharmadarshi, Principal Accountant General (Economic & Revenue Sector Audit)	Gujarat	3 July 2018
7	Shri M. S. Subrahmanyam, Principal Accountant General and Shri Sreeraj Ashok, Deputy Accountant General	West Bengal	6 July 2018
8	Shri Nedunchezhian C, Accountant General (Audit)	Jharkhand	20 July 2018
9	Ms Sangita Choure, Principal Accountant General Audit I	Maharashtra	7 August 2018
10	Ms Devika Nayar, Principal Accountant General (General and Social Sector Audit)	Tamil Nadu	28 August 2018
11	Shri I. D. S. Dhariwal, Principal Accountant General (Audit)	Himachal Pradesh	11 September 2018
12	Shri Nilotpal Goswami, Principal Accountant General (Audit)	Bihar	14 September 2018
13	Shri L V Sudhir Kumar, Principal Accountant General (Audit)	Andhra Pradesh	24 September 2018

Sr. No.	Name and Designation	State	Date
14	Shri S. Alok, Principal Accountant General (Audit)	Uttarakhand	8 October 2018
15	Shri C. A. Bodh, Principal Accountant General (Audit)	Manipur	14 November 2018
16	Shri A. P. Chophy, Accountant General (Audit)	Nagaland	14 November 2018
17	Shri Basantia B, Accountant General (General and Social Sector Audit)	Odisha	3 January 2019
18	Shri Manish Kumar, Accountant General (Audit)	Tripura	15 January 2019
19	Ms. Punam Pandey, Principal Accountant General	Punjab	22 January 2019
20	Ms. Rebecca Mathai, Principal Accountant General (Audit)	Telangana	14 February 2019
21	Shri L. Tochhawng, Principal Accountant General	Mizoram	20 March 2019
22	Shri Stephen Hongray, Principal Accountant General (Audit)	Meghalaya	20 May 2019
23	Ms. E.P. Nivedita, Principal Accountant General (General and Social Sector Audit)	Karnataka	7 June 2019
24	Shri R. K. Pandey, Accountant General (General and Social Sector Audit)*	Madhya Pradesh	3 July 2019
25	Shri D. R. Patil, Principal Accountant General (Audit)	Chhattisgarh	15 July 2019
26	Shri R.G.Viswanathan, Principal Accountant General	Rajasthan	13 August 2019
27	Shri Sushil Kumar, Principal Accountant General (Audit)	Sikkim	12 September 2019
28	Shri Jayant Sinha, Principal Accountant General, (Economic, Revenue Sector Audit)	Uttar Pradesh	11 October 2019
29	Shri Ashutosh Joshi, Principal Accountant General	Goa	16 January 2020

* Held at Bhopal, Madhya Pradesh
** Jammu and Kashmir became UT on 31st October 2019

Annex 1.29
(para 1.29)

List of Meetings with Nodal officers of States

Sr. No.	Meetings	Date
1	Southern States at Hyderabad, Telangana	9 February 2018
2	Eastern States at Ranchi, Jharkhand	15 February 2018
3	North Eastern and Himalyan States at New Delhi	22 February 2018
4	Northern and Western States at New Delhi	23 February 2018

Annex 1.30
(para 1.29)

Itinerary of FC-XV Visits to States

Sr. No.	Name of the State	Date		Meeting with the Chief Minister
		From	To	
1	Arunachal Pradesh	5 April 2018	8 April 2018	6 April 2018
2	Assam	25 April 2018	28 April 2018	26 April 2018
3	Haryana	3 May 2018	4 May 2018	4 May 2018
4	Kerala	28 May 2018	31 May 2018	29 May 2018
5	West Bengal	16 July 2018	18 July 2018	17 July 2018
6	Gujarat	23 July 2018	25 July 2018	23 July 2018
7	Jharkhand	1 August 2018	3 August 2018	2 August 2018
8	Tamil Nadu	4 September 2018	8 September 2018	6 September 2018
9	Maharashtra	17 September 2018	19 September 2018	19 September 2018
10	Himachal Pradesh	25 September 2018	28 September 2018	26 September 2018
11	Bihar	1 October 2018	4 October 2018	3 October 2018
12	Andhra Pradesh	9 October 2018	12 October 2018	11 October 2018
13	Uttarakhand	15 October 2018	18 October 2018	16 October 2018
14	Nagaland	27 November 2018	28 November 2018	28 November 2018
15	Manipur	29 November 2018	30 November 2018	30 November 2018
16	Odisha	8 January 2019	11 January 2019	9 January 2019
17	Tripura	16 January 2019	18 January 2019	17 January 2019
18	Punjab	29 January 2019	1 February 2019	30 January 2019
19	Telangana	18 February 2019	20 February 2019	19 February 2019
20	Mizoram*	25 March 2019	26 March 2019	25 March 2019
21	Meghalaya	3 June 2019	5 June 2019	4 June 2019
22	Karnataka	23 June 2019	26 June 2019	25 June 2019
23	Madhya Pradesh	3 July 2019	5 July 2019	4 July 2019
24	Chhattisgarh	23 July 2019	25 July 2019	25 July 2019
25	Rajasthan	6 September 2019	9 September 2019	9 September 2019
26	Sikkim	23 September 2019	26 September 2019	24 September 2019
27	Uttar Pradesh	19 October 2019	22 October 2019	22 October 2019
28	Goa	23 January 2020	24 January 2020	24 January 2020

*Meeting held with Chief Secretary of the State

Annex 1.31

List of the Meetings with Institutions/Organisations which have been assigned studies by FC-XV

Sr. No.	Topic	Institution	Date
1	Cyclically Adjusted Primary Balance for Centre and States in India	Institute of Economic Growth, New Delhi	13 June 2018 and 19 March 2019
2	Pay Commissions: Fiscal Implications	Institute of Economic Growth, New Delhi	13 June 2018 and 19 March 2019
3	Resource Sharing between Centre and States and allocation across states: Some issues in balancing equity and efficiency	Institute of Economic Growth, New Delhi	13 June 2018
4	Development Expenditure in the States Post Fourteenth Finance Commission Award: How have States Spent the Award Money	Indian Council for Research on International Economic Relations, New Delhi	14 June 2018
5	Development Expenditure in the States Post Fourteenth Finance Commission Award: An assessment of the Centrally Sponsored Schemes	Indian Council for Research on International Economic Relations, New Delhi	14 June 2018, 15 September 2018 and 25 January 2019
6	Finances of Municipal Corporations in Metropolitan Cities of India	Indian Council for Research on International Economic Relations, New Delhi	14 June 2018 and 21 September 2018
7	State of Municipal Finances in India	Indian Council for Research on International Economic Relations, New Delhi	14 June 2018 and 21 September 2018
8	Study on Municipal Finances	Janaagraha, Bengaluru	20 June 2018 and 9 April 2019
9	Projection of Tax Revenue on Petroleum Products and Sales Tax and State's Own Tax Revenue (SOTR) Effort Analysis of States in India	Xavier University, Bhubaneswar	22 June 2018
10	Resource allocation in lieu of State's Demographic Achievements in India: An evidence based approach	Centre for Development Studies, Kerala	28 June 2018 and 25 April 2019
11	Forest conservation through fiscal federalism: lessons from past experience	The Energy and Resources Institute, New Delhi	28 June 2018 and 2 November 2018

Sr. No.	Topic	Institution	Date
12	Strengthening green fiscal federalism in India	The Energy and Resources Institute, New Delhi	28 June 2018 and 2 November 2018
13	Measurable, performance-based incentives for States in India	National Council of Applied Economic Research, New Delhi	5 July 2018, 19 December 2018 and 7 March 2019
14	Ayushman Bharat: Costs and Finances of the Prime Minister's Jan Arogya Yojana	Institute of Economic Growth, New Delhi	13 July 2018 and 18 December 2018
15	Devolution of Union Finance Commission Grants to Panchayats	Accountability Initiative, Centre for Policy Research, New Delhi	6 August 2018, 15 March 2019 and 6 May 2019
16	Urban Infrastructure Development and Resilience Building by ULBs	Indian Institute for Human Settlements, Bengaluru	8 August 2018
17	Agricultural subsidies	Indian Statistical Institute, New Delhi	23 August 2018 and 12 December 2018
18	Cesses and Surcharges: Concept, Practice and Reform	Vidhi Centre for Legal Policy, New Delhi	13 September 2018
19	Examination of the legal basis for conditional transfers to States and issues relating to performance-based incentives for States	Vidhi Centre for Legal Policy, New Delhi	13 September 2018
20	Current state and sources of air pollution and solutions	The Nature Conservancy	20 December 2018
21	Combined presentation on air pollution and forest-related fiscal transfers	The Naure Conservancy, World Resources Institute, The Energy and Resources Institute	30 April 2019
22	Air pollution: Enabling outcome linked clean air finance	World Resources Institute	20 May 2019
23	Fiscal implications of introduction of GST	National Institute of Public Finance & Policy	7 June 2019

Annex 1.32

List of the Meetings of the Advisory Council of the Commission (New Delhi)

Sr. No.	Meetings	Date
1	First	17 May 2018
2	Second	21 February 2019
3	Third	16 May 2019
4	Fourth	13 September 2019
5	Fifth	16 December 2019
6	Sixth	13 February 2020
7	Seventh	23-24 April 2020
8	Eighth	25-26 June 2020
9	Ninth	4-5 September 2020

Annex 1.33

List of the Meetings with High Level Group on Health Sector (New Delhi)

Sr. No.	Meetings	Date
1	First	20 August 2018
2	Second	8 February 2019
3	Third	22 May 2019
4	Fourth	30 August 2019
5	Fifth	21 May 2020

Annex 1.34

List of the Meetings of the Cash Credit Limit Committee to review CCL Gap of Punjab (New Delhi)

Sr. No.	Meetings	Date
1	First	14 February 2019
2	Second	20 March 2019
3	Third	2 August 2019

Annex 1.35

List of the Meetings of the Group Constituted to examine the issues on Defence and Internal Security (New Delhi)

Sr. No.	Meetings	Date
1	First	4 March 2020
2	Second	18 May 2020

Annex 1.36

List of the Meetings of the High Level Expert Group on Agriculture Exports

Sr. No.	Meetings	Date
1	First	24 February 2020
2	Second	17 March 2020
3	Third	30 April 2020
4	Fourth	12 May 2020
5	Fifth	11 June 2020
6	Sixth	9 July 2020
7	Seventh	31 July 2020

Annex 1.37

List of the Meetings of the Fiscal Consolidation Roadmap Committee (New Delhi)

Sr. No.	Meetings	Date
1	First	21 May 2020

Annex 1.38

List of Participants of Meetings with Nodal Officers of States (A to D)

A	Meeting with representatives of Southern States held at Dr. MCR HRD Institute of Telangana, Hyderabad, Telangana on 09.02.2018
1.	Shri M. Ravi Chandra, Spl. Chief Secretary (Finance), Andhra Pradesh
2.	Shri B. Venkateswara Rao, OSD, Finance Department, Andhra Pradesh
3.	Shri B. Soban, Consultant, Finance Department, Andhra Pradesh
4.	Shri C. Balaji, Distt. Panchayat Officer, Andhra Pradesh
5.	Shri G. Vinod Kumar Consultant, Andhra Pradesh
6.	Shri Gopalkrishna, Finance Department, Karnataka
7.	Shri Purushotham Singh, Special Officer, ZP, Karnataka
8.	Shri Minhaj Alam, Secretary (Finance Resources), Kerala
9.	Shri B. Pratheep Kumar, Joint Secretary, Finance Department, Kerala
10.	Shri P. Karthikaraj, Research Assistant, Finance Department, Kerala
11.	Shri M. Arvind, Dy. Secretary, Finance Department, Tamil Nadu
12.	Shri H. Krishnanuuni, Dy. Secretary, Finance Department, Tamil Nadu
13.	Shri Giriraj Kumar, Under Secretary, Finance Department, Tamil Nadu
14.	Shri V. Giriraj, Finance Department, Maharashtra
15.	Shri Vaibhav R. Rajeghatge, Dy. Secretary, Finance Department, Maharashtra
16.	Smt. Vidya H. Waghmare, Under Secy., Finance Department, Maharashtra
17.	Shri G. R. Reddy, Advisor to Government of Telangana
18.	Shri K. Ramakrishna Rao, Prl. Finance Secretary, Telangana
19.	Shri N. Siva Sankar, Prl. Secretary (Finance), Telangana
20.	Dr. B. Janardhan Reddy, Commissioner, GHMC
21.	Dr. P. K. Sreedevi, Director of Municipal Administration, Telangana
22.	Shri Vikas Raj, Prl. Secretary, PR&RD, Telangana
23.	Smt. Neetu Kumari Prasad, Commissioner & Director, PR&RD Telangana
24.	Shri G. S. Rammohan Rao, Addl. Finance Secretary, Telangana
25.	Shri Ch. V. Sai Prasad, Joint Secretary, Telangana
Fifteenth Finance Commission	
26.	Shri Arvind Mehta, Secretary
27.	Shri Mukhmeet S. Bhatia, Joint Secretary
28.	Shri Jasvinder Singh, Director
29.	Shri Ritesh Kumar, Assistant Director
30.	Shri Sandeep Kumar, Assistant Director
31.	Shri Mahesh Kumar, Assistant Director

B	Meeting with representatives of Eastern States held at Ranchi, Jharkhand on 15.02.2018
1.	Ms. Sujata Chaturvedi, Pr. Secretary (Finance), Bihar
2.	Shri Manoranja Daas, Finance Commission Cell, Bihar
3.	Shri K. D. Projjwal, Bihar
4.	Shri Najar Hussain, Bihar
5.	Shri Rajesh Kumar Tiwari, Section Officer, Bihar
6.	Shri Sunil Kumar, Section Officer, Bihar
7.	Shri Gaurav Kumar, MIS (Expert), Bihar
8.	Shri Binod Kumar Tiwari, Bihar
9.	Shri Sanjeev Mittal, Bihar
10.	Dr. A. K. Singh, Jt. Secretary (Finance), Chhattisgarh
11.	Shri Arvind Kujur, OSD Finance Department, Chhattisgarh
12.	Shri Sukhdev Singh, Addl. Chief Secretary (Finance), Jharkhand
13.	Shri Satendra Singh, Secretary (Expenditure), Jharkhand
14.	Shri Harishwar Dayal, Director-in-Chief, CFS, Jharkhand
15.	Shri A. K. Ratan, Joint Secretary (UD & HD), Jharkhand
16.	Shri Navneet Kumar, Consultant, Jharkhand
17.	Shri Chandan Kumar, Jharkhand
18.	Shri Nilhani Kumar, IPRD, Ranchi, Jharkhand
19.	Shri Lal Hemant N. Shahdev, Under Secretary (UD & HD), Jharkhand
20.	Shri Ranjet Ranjan Pal, Under Secretary, Panchayati Raj, Jharkhand
21.	Shri Satya Narayan Prasad, A.O. (Finance), Jharkhand
22.	Shri Debendra Kumar Jean, Odisha
23.	Shri Rupa Narayan Das, Joint Secretary (Finance) , Odisha
24.	Shri Devpriya Biswah, Deputy Secretary (Finance) , Odisha
25.	Shri P. A. Siddiqui, Secretary (Finance), West Bengal
26.	Ms. Ujjaini Datta, Addl. Secretary (Finance), West Bengal
27.	Shri J. Datta, Advisor (Budget), West Bengal
28.	Shri Pawan Kadyan, Joint Secretary (Finance), West Bengal
29.	Dr. Anal Jyoti Chakrarbarti, Deputy Secretary (Finance), West Bengal
Fifteenth Finance Commission	
30.	Shri Arvind Mehta, Secretary
31.	Shri Mukhmeet S. Bhatia, Joint Secretary
32.	Shri Gopal Prasad, Director
33.	Shri Nitish Saini, Deputy Director
34.	Ms. Aditi Pathak, Deputy Director
35.	Shri Sandeep Kumar, Assistant Director
36.	Shri Mahesh Kumar, Assistant Director

C	Meeting with representatives of North Eastern and Himalyan States held at 4th Floor, Knowledge Centre, STC Building, Janpath New Delhi on 22.02.2018
1.	Shri G. N. Sinha, OSD (Finance Commission), Arunachal Pradesh
2.	Shri S. R. Dongre, Adviser (Finance), Arunachal Pradesh
3.	Shri N. T. Glow, Spl. Secretary (Fin. Commission), Arunachal Pradesh
4.	Shri Shyam Jaganathan, Commissioner & Secretary (Finance), Assam
5.	Shri Hemanta Kumar Dewri, Director (Finance), Assam
6.	Shri Matilal Sarkar, Joint Director (Finance), Assam
7.	Shri Abhey Pant, OSD to Finance Secretary, Himachal Pradesh
8.	Shri Rekhi Ram, Dy. Secretary, Budget, Himachal Pradesh
9.	Shri Jeet Ram, Supdt. Budget, Himachal Pradesh
10.	Shri Madan Verma, Supdt. , Himachal Pradesh
11.	Shri Vipin Kumar, Assistant, Himachal Pradesh
12.	Shri Vishal Sharma, Addl. Secretary (Finance), Jammu & Kashmir
13.	Shri Owais Ahmed, Deputy Secretary (Finance), Jammu & Kashmir
14.	Dr. Priya Badyal, Accounts Officer, Jammu & Kashmir
15.	Ms. Monika Lahotra, Accounts Officer, Jammu & Kashmir
16.	Shri Ravinder Singh, Joint Secretary, Manipur
17.	Shri P. K. Agrahari, Secretary (Finance), Meghalaya
18.	Shri E. Y. Chen, Director, Meghalaya
19.	Shri M. Lyngdoh, Spl. Officer & Under Secretary, Meghalaya
20.	Pu Lalmalsawma, Secretary (Finance), Mizoram
21.	Pu Lalhimngmawai Sailo, Jt. Secretary (Finance), Mizoram
22.	Pu C Lungmuanpuia, Under Secretary/Nodal Officer, Mizoram
23.	Shri Y. Kikheto Sema, Secretary, Budget, Nagaland
24.	Shri Kekhwezo Kepfo, Jt. Secretary, Nagaland
25.	Shri Ketoulhou Metha, Sr. Research Officer, Budget, Nagaland
26.	Shri Pradhan, Principal Director (Finance), Sikkim
27.	Shri Benu Kumar Mukhia, Director (Finance), Sikkim

28.	Shri Akinchan Sarkar, Joint Secretary (Finance), Tripura
29.	Shri L.N. Pant, Addl. Secretary (Finance), Uttarakhand
30.	Shri I.K. Pande, Adviser (Retired), Uttarakhand

Fifteenth Finance Commission

31.	Shri Arvind Mehta, Secretary
32.	Shri Mukhmeet S. Bhatia, Joint Secretary
33.	Shri Antony Cyriac, Economic Adviser
34.	Shri Gopal Prasad, Director
35.	Shri Anand Singh Parmar, Joint Director
36.	Ms. Sweta Satya, Deputy Director
37.	Shri Kandarp V Patel, Deputy Director
38.	Shri Nitish Saini, Deputy Director
39.	Ms. Aditi Pathak, Deputy Director
40.	Ms. Shikha Dahiya, Deputy Director
41.	Shri Ritesh Kumar, Assistant Director
42.	Shri Sandeep Kumar, Assistant Director
43.	Shri Mahesh Kumar, Assistant Director
44.	Shri Pankaj Gera, Economic Officer

D	Meeting with representatives of Northern and Western States held at 4th Floor, Knowledge Centre, STC Building, Janpath New Delhi on 23.02.2018
1.	Dr. Y. Durgaprasad, Director, Planning, Goa
2.	Shri Hemant Desai, Budget Analyst, Goa
3.	Shri Prasad Powar, Assistant, FDMD, Goa
4.	Shri Shailesh Naik, Assistant, FDMD, Goa
5.	Shri Mukesh H. Dholakia, Dy. Director, Gujarat
6.	Shri P.M. Nair, Dy. Section Officer, Gujarat
7.	Dr. R. S. Malhan, Director, Planning, Haryana
8.	Shri Udai Veer, Research Officer, Haryana
9.	Shri P.K. Roy, Deputy Secretary Finance, Madhya Pradesh
10.	Shri Brij Pal Singh, Research Officer, Madhya Pradesh
11.	Smt. Paramjit Kaur, Dy. Director, Punjab
12.	Shri Lalit Goyal, Research Officer, Punjab
13.	Shri Ashutosh Vajpeyi, Joint Secretary (EA), Rajasthan
14.	Shri Sanjeev Mittal, Pr. Secy. (Finance), Uttar Pradesh
15.	Mr. Sidharth Srivastava, Jt. Director (Finance), Uttar Pradesh
16.	Shri Ashok Kumar, Dy. Director (Finance), Uttar Pradesh
Fifteenth Finance Commission	
17.	Shri Arvind Mehta, Secretary
18.	Shri Mukhmeet S. Bhatia, Joint Secretary
19.	Shri Antony Cyriac, Economic Adviser
20.	Shri Gopal Prasad, Director
21.	Shri Anand Singh Parmar, Joint Director
22.	Ms. Sweta Satya, Deputy Director
23.	Shri Kandarp V Patel, Deputy Director
24.	Shri Nitish Saini, Deputy Director
25.	Ms. Aditi Pathak, Deputy Director
26.	Ms. Shikha Dahiya, Deputy Director
27.	Shri Ritesh Kumar, Assistant Director
28.	Shri Sandeep Kumar, Assistant Director
29.	Shri Mahesh Kumar, Assistant Director
30.	Shri Pankaj Gera, Economic Officer

Annex 1.39

List of Participants of Meetings with State Governments

1. Andhra Pradesh (09-12 October, 2018)

Representatives of State Government

1	Shri Nara Chandrababu Naidu	Hon'ble Chief Minister
2	Shri N.Chinarajappa	Hon'ble Deputy Chief Minister
3	Shri Pithani Satyanarayana	Labour, Employment, Training and Factories
4	Shri C. Kutumba Rao	Vice Chairman AP Planning Board
5	Dr. D. Sambasiva Rao	Special Chief Secretary to government (CT, P&E, R&S), Revenue Department
6	Dr. Manmohan Singh	Special Chief Secretary to Government (Land, Endowments & Disaster Management), Revenue
7	Shri Budithi Rajasekhar	Special Chief Secretary to Government (FAC) (Marketing) Agriculture & Co-op Department
8	Shri Neerabh Kumar Prasad	Special Chief Secretary to Government, TR&B Department
9	Shri Satish Chandra	Special Chief Secretary to Chief Minister
10	Smt. Poonam Malakondaiah	Special Chief Secretary, Health, Medical & Family Welfare
11	Shri K.S. Jawahar Reddy	Principal Secretary to Government(RD) PR&RD
12	Shri Shamsher Singh Rawat	Principal Secretary to Government (SW and TW) SW Department
13	Shri Ajay Jain	Principal Secretary to Government Energy, Infrastructure & Investment
14	Shri K.Vijayanand	Principal Secretary to Government(FAC), Information Technology, Electronics and Communications
15	Shri G. Anantha Ramu	Principal Secretary to Government EFS&T

16	Shri Muddada Ravichandra	Principal Finance Secretary(FAC) & Secretary (R&E)
17	Shri Gopal Krishna Dwivedi	Principal Secretary to Government, Animal Husbandry Department and Fisheries
18	Shri L. Prem Chandra Reddy	Ex-officio Prl. Secretary to Government (SR) General Administration
19	Smt. B. Udaya Lakshmi	Principal Secretary to Government Backward Classes Welfare Department
20	Ms.A.R. Anuradha	Prl. Secretary to Government, Home Department
21	Shri Sashibhushan Kumar	Secretary to Government (Minor, Medium and Major Irrigation) Water Resources
22	Shri Mukesh Kumar Meena	Secretary to Government (Tourism), YAT&C Department
23	Shri Peeyush Kumar	Secretary to Government(FP), Finance
24	Shri K.V.V.Satyanarayana	Special Secretary to Government(I&BF) Finance Department
25	Shri Siddharth Jain	Commissioner, Industries Department
26	Shri K. Kanna Babu	Director, MA&UD Department
27	Shri A.S. Dinesh Kumar	MD, AP Fiber
28	Shri K. Ramgopal	secretary to Government, (Minorities Welfare) Minorities Welfare
29	Shri Kantilal Dande	Managing Director A.P. State Housing Corporation Ltd.
30	Shri Arun Kumar	Commissioner, Secretary (FAC), WCD Dept.
31	Shri D. Venkata Ramana	Secretary to Government, Law Department
32	Shri Sanjay Gupta	C.E.O. & Ex-Officio Secretary to Govt., Planning
33	Shri NVS Babu	MD, APSRTC

34	Shri V.Rama Manohar	Special Commissioner, CRDA
35	Dr. G. Soma Sekharam	Director, Animal Husbandry Dept.
36	Shri N.Y. Sastry Director	DE&S, Planning Department
37	Dr. Dakshinamurthy	Advisor, Planning Department
38	Shri V. Krishna Devaraya	CEO, APCFSS
39	Shri Bitra Venkateswar Rao	OSD (FC), Finance Department
40	Shri D. Surendra	JFA, Finance Department

Representatives of Urban Local Bodies

1	Shri Koneru Shridhar	Mayor, Vijayawada Municipal Corporation
2	Shri Abdul Azeez	Mayor Nellore Municipal Corporation
3	Smt. Madamanchi swaroopa	Mayor, Ananthapuram Municipal Corporation
4	Shri Tumula Atchutavalli	Chairperson, Municipal Office, Old City, Bobbili
5	Shri P. Rajya Lakshmi Reddy	Chairperson, Municipal Office, Ichapuram
6	Shri Kotikalapudi Govinda Rao	Chairperson, Bhimavaram Municipality
7	Shri Yalavarthi Shrinivasa Rao	Chairperson, Gudivada Municipality
8	Shri Chundru Shri Vara Prakash	Chairperson, Mandapeta Municipal Office
9	Smt. Y. Padmavathi	Chairperson, Nandigama N.P
10	Smt. Sajja Hemalatha	Chairperson, Ponnur Municipal Office
11	Shri Thadivaka. Shrinivasa Rao	Chairperson, Repalle Municipal Office
12	Smt. K.Mahalakshmi	Chairperson, Tadepalli Municipal Bhavan
13	Smt. Donthu Sarada	Mayor, Chairperson, Venkatagiri Municipal Office
14	Smt. Kotrike Gayatridevi	Chairperson, Dhone Municipal Office

Representatives of Rural Local Bodies

1	Smt. Gadde Anuradha	ZPP, Chairperson, Krishna District
2	Smt. Swathi Rani Shobha	ZPP, Chairperson, Vijayanagarm District
3	Smt. Jaya Lakhmi	ZPTC, Tenali Mandal, Guntur District
4	Shri Dilip Chakravarthy	ZPTC, Peapully Mandal, Kurnool District

5	Shri D. Sreenivasa Murhty	ZPTC, Gudibanda Mandal, Ananthapur District
6	Shri P.C. Samba Sivam	MPP, Kuppam, Chittoor District.
7	Shri Krishna Kiran,	MPP, Vinjamur, Nellore DiShrict.
8	Shri D. Rama Subba Reddy	MPTC, Thiruvanthapuram, Bhadvel Mandal, Kadapa District
9	Shri Peesa Krishna	MPTC, Narannapeta, Shrikaulam District.
10	Shri K Udaya Bhaskara Rao	Sarpanch, Manduvaripalem Panchyat, Ongole Division and Mandal, Prakasmam District.
11	Shri Amabti Surya Prakasa Rao	Sarpanch, Gudivada Panchyat, Peddapuram Manadal and Division, East Godavari District.
12	Shri K.S. Jawahar Reddy	Principal Secretary to Government(RD) PR&RD

Representatives of Trade & Industry

1	Shri Ramakanth Inani	Vice President, Federation of Telangana & AP Chambers of Commerce & Industry,(FTAPCCI)
2	Shri K. Subba Rao	President, Federation of AP Small and Medium Industries Association(FAPSIA)
3	Shri A. Satyanarayana	Executive Director, The AP Chambers of Commerce & Industry Association
4	Shri.N.Rahgava Rao	ED. AP Spinning Mills Association
5	Smt.. B. Ramadevi	President, Association of lady Enterpreneureres of India (ALEAP)
6	Ms. Narla Malathi	President
7	Ms. Jhansi	Secretary, COWE-AP Chapter Vijayawada Women's Organization
8	Shri Siddharth Jain	Commissioner, Industries Department

Representatives of Political Parties

1	Shri P.J. Chandra Sekhar Rao	CPI
2	Shri K.N.Reddy	CPI
3	Shri P. Madhu	CPI(M)
4	Shri Y. Venkateswara Rao	CPI(M)
5	Dr. U. Venkateswarlu	YSRCP
6	Shri D.N.Krishna	YSRCP
7	Prof. D.A.R. Subrahmanyam	BJP
8	Shri Sudhir Rambhotla	BJP
9	Dr. P. Krishnaiah	TDP
10	Shri T. Sravan Kumar	TDP

2. Arunachal Pradesh (5-8 April, 2018)

Representatives of State Government

1	Shri Pema Khandu	Chief Minister
2	Shri Chowna Mein	Deputy Chief Minister
3	Shri Mohesh Chai	Minister
4	Shri Alo Libang	Minister
5	Shri Nabam Rebia	Minister
6	Shri Wangki Lowang	Minister
7	Shri Honchun Ngandam	Minister
8	Shri Kamlung Mosang	Minister
9	Shri Bamang Felix	Minister
10	Shri Jarkar Gamlin	Parliamentary Secretary
11	Smt Gum Tayeng	Advisor to HCM
12	Shri Tai Tagak	Commissioner
13	Dr. M. Surya Prakash	Chief Engineer
14	Shri Katung Wahge	Director Housing
15	Shri Techi Gubin	Advisor (Finance)
16	Shri S.R. Dongre	Director

17	Shri Tajuk Charu	Secretary (Cooperation)
18	Shri Onit Panyang	Director (AHV)
19	Shri N.D. Minto	Sr. Adviser(Finance)
20	Shri Jagdish Sinha	Director (IWT)
21	Shri Charu Tayum	Director (Audit & Pension)
22	Shri A. Basit	Dy. Director (PR)
23	Shri Nabam Rajesh	Director (ATI)
24	Shri Pate Marik	Director (F&Cs)
25	Shri Liyok Borang	D.E.E
26	Shri Tapi Gao	Director (IT&C)
27	Smt. Neelam Yapin Tana	Director (IT&C)
28	Dr. D. Padung	State Nodal Officer, National Health Mission, Arunachal Pradesh
29	Shri M.E. Ori	Secretary (F&Cs)
30	Shri J. Angu	Joint Secretary(TPT)
31	Shri Habung Donyi	Director (AGRI)
32	Shri Kesang Tsering	Jt. Director (AGRI)
33	Shri Tadu Game	S.P. Itanagar
34	Shri S.S. Kalsiq	Minister
35	Shri Tumke Bagra	Deputy Speaker
36	Shri S.B.K. Singh	Deputy General Of Police
37	Shri Gautam Sen	Consultant (15th FC)
38	Shri G.N. Sinha	OSD-XVFC
39	Shri Rabindra Kumar	PCCF (P&D)
40	Shri R.K. Singh	Special Secretary (Env.& Forest)
41	Shri Omkar Singh	PCCF & Principal Secretary (E&F)
42	Shri Himanshu Gupta	Special Secretary (HCM)
43	Shri Sonam Chombay	Secretary (HCM)
44	Shri A.K. Shukla	APCCFCFC

45	Shri C.M. Rao	APCCF (CAMPA)
46	Dr. R. Kemp	PCCF (Wl & BD)
47	Shri K. Kholi	Secretary (RWD)
48	Shri Remo Kamki	Joint Secretary (AR)
49	Shri D. Nyodu	CE (RWD)
50	Shri Rinchin Tashi	Secretary (RD & PR)
51	Smt. Mimum Tayeng	Secretary (Horticulture)
52	Smt. Yeshi Wangmo Ringu	Secretary (Finance)
53	Shri P. Aich	Advisor (Budget)
54	Shri Amitava Kundu	Deputy Director (State Plan)
55	Shri A. Katan	CE (HPD)
56	Shri Subu Tabin	Director (SDE)
57	Shri H.R. Bado	SE (Transmission)
58	Shri Marki Loya	Director (APEDA)
59	Shri Batem Pertin	Director (Research)
60	Shri Hage Appa	CE (PWD)
61	Shri M. Ngomdir	CE (WRD)
62	Shri P. Mishra	Director (Project Coordination)
63	Shri Tadar Appa	Director (Sports)
64	Shri Yumlam Kaha	Director (SJETA)
65	Shri J. Rime	I/C Director (HORTI)
66	Shri Hoktum Ori	Controller (Legal Metrology)
67	Smt. T. Pertin Loyi	Director (WCD)
68	Shri N.D. Pubiyang	Soil Conservation Officer (RWD)
69	Shri T. Welly	CE (RWD)
70	Shri Kago Tabiyo	CE (RWD)
71	Shri J. Kamdak	CE (HPD)
72	Shri K. Sera	CE (PWD)
73	Shri Taru Talo	Director (Industries)

74	Shri Atop Lego	CE(PWD)
75	Shri Tage Tado	Director (Transport)
76	Shri M. Lego	Director (Health)
77	Shri R.K. Joshi	CE (HPD)
78	Shri Tassar Talar	Director (Geology & Mining)
79	Shri Jotom Borang	Director (Library)
80	Shri Obang Tayeng	Director (IPR)
81	Shri Tomo Basar	CE (PHED) EZ
82	Shri H. Dutta	Director (SRSAC/S&T)
83	Shri Anong Lego	Director (AGRI)
84	Shri B.J. Duia	Director (SLRD)
85	Shri Toko Jyoti	CE (PHED) WZ
86	Shri Tedi Techi	DAT
87	Shri R. Ronya	Director (PR)
88	Shri B. Megu	Director (Eco & Statistic)
89	Shri C.D. Mungyak	Director (Science & Tech)
90	Shri H. Dodung	Director (Textile & Handi)
91	Shri Gania Leij	Director (Secondary Edn)
92	Shri Tokong Pertin	Director (T&C)
93	Shri Pura Tupe	CE (HPD)
94	Shri Pallab Dey	Director (Planning)
95	Shri T.D. Neckom	DDA (Dev)

Representatives of Local Bodies

1	Smt. Techi Mema	Councilor No.13
2	Shri Gora Talang	Councilor ward (ECS) Member
3	Smt. Ngurang Yache	Councilor Ward No – 7 (ECS)
4	Smt. Ponung Lego	Councilor Ward No – 10 (ECS)
5	Shri Sobo Pertin	Councilor (ESC) Psg

6	Smt. Omem Darang	(ESC) Psg
7	Shri Biri Jugdo	Councilor (IMC)
8	Shri Tatung Tania	Councilor (IMC)
9	Shri Taba Takia	Councilor (IMC)
10	Shri Tarh Nachug	Dy. CC, (IMC)
11	Shri Kaling Darang	Dy. CC. (PMC)
12	Shri Kenbom Muri	Team Leader (SMMU)
13	Smt Siyang Rebe	Assistant Town Planner
14	Shri Terge Sora	Assistant Town Planner
15	Shri Michi Tare	PPP Specialist
16	Shri Tarh Tabin	FAO, TP
17	Shri Aido Putin	Assistant Town Planning STP and ULB
18	Smt Millo mera	Town Planning Assistant, DTP & ULB
19	Shri Tojum Potom	VP, APWWS
20	Shri N.R.Singh	DD UD & H
21	Shri P. Mishra	Director Planning (PC)
22	Shri Tashi Norbu	ZPM Kalaktang
23	Shri Khya Choya	ZPM, Sawa
24	Shri Sangha Tagik	ZPM, Kurung Kumey
25	Shri S. Nalo	President (AAPPP)
26	Shri Kaling Dai	ZPM E/Siang Dist.
27	Shri Sontung Bangria	ZPC, Tirap
28	Shri Hage Kobing	ZPC, Ziro Lower Subansiri
29	Smt Rido Mena	ZPC, Kra dadi
30	Shri Kaling Dorak	Chief Councilor
31	Smt Tana Yayo	ZPC
32	Shri Tana Pikap	ZPM
33	Smt Nabam Eka	ZPM
34	Smt Tarh Menika	ZPM

35	Mrs, O. Jerang	ZPM
36	Smt Tana Yezee Nabam	GPC – 14, Rose
37	Shri Tana Tala	GPC – 17, Lelcha
38	Shri Teri Marin	GPC – 16, Tido
39	Smt Dukum Pera	GPC – 12, Chiputa
40	Shri Tayom Mothu	ZPM
41	Smt Heyomi Tausik	ZPC
42	Shri Kuku Nabam Hina	GPC – 11, Rono
43	Shri Tana Achi	GPC – 9, Emchi
44	Shri Bungba Langdo	RRA (PRI)
45	Shri Charu Jagath	CA(PR)
46	Shri Langbia Tamang	GPM
47	Smt Kholie Jumsi	GPC
48	Mr. Tapang Kopak	Assistant Director (PR)
49	Smt Tok Nimpu Techi	GPC
50	Smt Nabam Yajo	GPC
51	Smt Yumlam Minu	Councilor
52	Shri Tajin Taki	ZPM, Pasighat

Representatives of AITF/CBO/Market Committee/Bankers

1	Smt Kani Nada Maling	Secretary General APWWS
2	Smt Yapi Maling	Registrar (APWWSCCEC)
3	Smt Kenyir Ringu	Chairperson (APSSWB)
4	Smt Jongam Rime	APWWS
5	Smt Tojum Potom	VP (APWWS)
6	Smt Jarjum Ete	Chairman, Arunachal Indigenous Tribes Forum
7	Shri Tage Riba	Entrepreneur
8	Smt Padamashree Jamoh	Vice-President (APSCW)

9	Smt Rosy Taba	Member, APSCW
10	Smt Yane Higio	Member Secretary (APSCW)
11	Shri Pradeep Kumar	Chief Adviser (ACC)
12	Shri Jarh Nachung	General Secretary (ACCI)
13	Shri Toko Tatung	Spokesperson
14	Shri Likha Mej	Progressive Farmer
15	Shri Tana Showen	Professor
16	Shri S.K. Nayak	Professor
17	Shri N.C. Roy	Professor
18	Smt Vandana Upadhyay	Professor
19	Shri Tilak Kumar Dhar	Dy. General Manager, SBI
20	Shri Jogeshwar Swargiary	Regional Manager, SBI
21	Shri Atege Lingri	Asst. Professor
22	Shri Kamtang Khonjuju	V/P Sajolang Elige Society
23	Shri Somnai Wangpan	Legal Adviser (Wancho Cultural Society)
24	Shri Tsering Thongdok	Adviser (SEWA)
25	Shri D.M Thamoung	GS (TBS)
26	Shri Heri Maring	General Secretary (NES)
27	Smt Munta Mossang	General Secretary (AITF)
28	Shri P.F. Tago	Spokesperson (AITF)
29	Shri Khoda Rui	President (TSD)
30	Shri Tapi Tai	General Secretary (TSD)
31	Shri Emi Rumi	Chief Adviser (GWS)
32	Shri Tony Pertin	President (ABK)
33	Shri Tanon Tatak	Secy. Finance (ABK)
34	Shri Tarh Tabin	VP (NES)
35	Shri Adu Khanam	Chairman (ABKS)
36	Dr. Sopai Tawsik	Chairman (MISMI WELFARE SOCIETY)
37	Shri Yuihay Yobin	Jt. Secretary (YWS)

38	Shri Tabu Paktung	President (TAGIN CULTURAL SOCIETY)
39	Shri Nepha Wangsa	Dy. Spokesperson (AAPSU)
40	Shri Hawa Bagang	President (AAPSU)
41	Shri Tobom Dui	General Secretary (AAPSU)
42	Shri Tayuk Sonam	V.P. (AAPSU)
43	Shri John Laojkam	Ex- Secy.

Representatives of Political Parties

1	Shri Nabam Tuki	Ex-CM
2	Shri Y.D. Thongchi	Ex- SCIC
3	Shri Jarpum Gamlin	General Secretary, State BJP
4	Shri Kafa Bengia	President – PPA
5	Shri Gicho Kabak	State President – NPP
6	Shri Nima Sange	Vice President – NPP
7	Shri Konyia Ringu	State Vice President – BJP
8	Shri Ojing Tasing	State Secretary – BJP
9	Smt Mina Toko	APCC, Spokesperson
10	Shri Minkie Lollen	Vice President - APCC

3. Assam (25-28 April, 2018)

Representatives of State Government

1	Shri Sarbananda Sonowal	Chief Minister
2	Dr. Himanta Biswa Sarma	Finance Minister
3	Shri Naba Kr Doley	Minister, P&RD
4	Shri Rihon Daimari	Minister, PHE, Food Civil Supply & Consumer Affairs
5	Shri Ranjit Dutta	Minister, Irrigation, Handloom & Textiles
6	Shri Parimal Sukla Baidya	Minister, PWD, Excise & Fisheries
7	Smt. Pramila Rani Brahma	Minister, Environment & Forest and WPT & BC
8	Shri Chandra Mohan Patowary	Minister, Industry & Commerce, Transport

9	Shri Pallab Lochan Das	Minister of State,
10	Shri Pijush Hazarika	Minister of State,
11	Smt. T. Y. Das	Chief Secretary, Assam,
12	Shri V.B. Pyarelal	Addl. Chief Secretary, Finance, T&D & Cultural Affairs
13	Shri Alok Kumar	Addl. Chief Secretary, Home, Forest and PWD
14	Shri Ravi Kapoor	Addl. Chief Secretary, Industries, Commerce, Mines, Minerals etc.
15	Shri Kumar Sanjay Krishna	Addl. Chief Secretary, Revenue, FCS, PHE
16	Shri A.K. Singh	Additional Chief Secretary, Information & Public Relation, Parliamentary Affairs
17	Shri K. K. Mittal	Additional Chief Secretary, Agriculture
18	Shri Rajiv Bora	Additional Chief Secretary, WPT & BC
19	Shri V.S. Bhaskar	Additional Chief Secretary, Cooperation, IT and S&T
20	Shri M.C. Jauhari	Additional Chief Secretary, Fisheries
21	Shri M.G.V.K. Bhanu	Additional Chief Secretary, P&RD
22	Shri Mukesh Sahay	DGP, Assam,
23	Shri D. Hara Prasad	PCCF & HOFF, Assam, Forest Dept.
24	Shri L.S. Changsan	Principal Secretary, Home & Political , Border etc.
25	Shri Samir Kumar Sinha	Principal Secretary, Finance Department
26	Shri Jishnu Baruah	Principal Secretary, Power, Social welfare etc
27	Shri Hemanta Nazary	Principal Secretary, WR & Irrigation Deptt.
28	Shri N.K Vasu	PCCF CWL, & CWLW, Assam, Forest Deptt.

29	Shri Rajesh Prasad	Commissioner & Secretary, R& DM, Tourism etc.
30	Shri K.K. Dwivedi	Commissioner & Secretary , Press & AR&T
31	Dr. J. B. Ekka	Commissioner & Secretary, P&RD
32	Shri Ahmed Hussain	Commissioner & Secretary, GAD & SAD
33	Shri Satyendra Malla Buzar Baruah	Commissioner & Secretary, Legislative
34	Shri Shyam Jagannatham,	Commissioner & Secretary, Finance Department
35	Dr. A.U.Choudhury	Commissioner & Secretary, Hill Areas and PPG
36	Shri Ashutosh Agnihotri	Commissioner & Secretary, Transport, SEED
37	Smt. Devola Devi Das	Secretary, Animal Husbandry & Vetenary and Handloom, Textiles, Sericulture
38	Shri Keerthi Jalli	Staff Officer to Chief Secretary, Home & Political
39	Shri Kailash Karthik	Joint Secretary, Finance Department
40	Shri D.K. Barua	Secretary, Personnel AR and Training Departments
41	Shri R. Borah	Secretary , GDD & UDD
42	Shri Hitesh Dev Sarma Das	Secretary, UDD
43	Shri L.C Pathak	Secretary , Irrigation
44	Shri Siddharth Singh	Secretary, Public Health Engineering
45	Ms. Neera Godoi Sonowal	Director, Printing & Stationery Department
46	Smt. Monalisa Goswami	Commissioner, GDD, GMC
47	Shri Mukta Nath Saikia	Director, Sericulture, Handloom, Textiles & Sericulture

48	Shri Bhogeswar Shyam	Addl. Secretary, Handloom, Textiles & Sericulture, Govt. of Assam
49	Shri Pankaj Kumar Gogoi	Statistical Officer , Directorate of Sericulture, Assam, Handloom, Textiles & Sericulture Department
50	Shri Kamakhya Dowarh	Deputy Director of Sericulture, Assam, Handloom, Textiles & Sericulture Department
51	Smt. Barnali Sharma	Director, Cultural Affairs , Assam & MD, AFFDCL, Cultural Affairs
52	Ms. Nazreen Ahmed	Director, Municipal Administration, Assam, Urban Development Department
53	Smt. Ranjana Baruah	Secretary, Tea Tribes of Excise Deptt., Tea Tribes of Excise Deptt.
54	Shri Sanjib Gohain Boruah	Secretary to the Governor, Governor Secretariat
55	Shri S.K. Sharma	LR & C&S, Judicial
56	Shri Tapan Ch Sarma	Secretary, Personnel, Administrative Reforms & Training, Labour
57	Shri K.J. Hilaly	Managing Director, ATDC, Tourism
58	Shri Raj Chakrabarty	Commissioner & Spl. Secretary, PWD (Building & NH)
59	Shri Rakesh Kumar	Commissioner, Excise
60	Shri Borsing Rongpi	Chief Engineer, Water Resource
61	Ms. Anjali Daimary	Financial Adviser, BTC Secretariat
62	Shri Arun Kr Basumatary	Deputy Secretary, BTC Secretariat
63	Shri S.K. Bhuyan	Director of Elementary Education, Education (Elementary)
64	Shri Lakshmannan	Advisor, Finance Department

65	Shri Hemanta Kr. Deuri	Director, Finance Department
66	Shri R. Agarwala	Addl. Commissioner of Tax, Assam, Finance (Taxation)
67	Shri Mati Lul Sarkar	Joint Director, Finance (EA) Department
68	Smt. Kabita Rani Das	Addl. RCS & I/C RCS, Assam, Cooperation
69	Shri Utpal Bhatta	System Administrator, D.A.T, Finance
70	Shri B. Dekaraja	Director, A/CS & Treasuries, Finance
71	Shri P.Thaosen	Director, Border Protection & Development, Border
72	Syeda Hasina M. Rahman	Addl. Secretary, Welfare of Minorities & Development Department
73	Shri Anand Prakash Tiwari	MD ASTC & ASDM, Transport & Skill Development
74	Shri Phanindra Jidung	Director of Secondary Education, Assam, Education Department
75	Shri Sanjib Sarma	Sr. F.A.O, Education Department
76	Shri Naresh Ghosh	Principal Secretary NCHAC, HAD
77	Shri Richard Rongpi	Deputy Secretary KAAC Diphu, KAAC
78	Shri R.R.Bora	Director Employment & CT Assam, SEED
79	Shri G.S.Panesar	Director Geology @ Mining, Mines and Minerals
80	Shri B.K.Borah	Director Handloom @ Textiles, Handloom & Textiles & Sericulture
81	Shri Puran Gupta	MD, APDCL, Power
82	Shri S. Choudhury	Director of Soil Conservator, Soil Conservator
83	Shri N. Dew	Director, SCERT, Assam
84	Shri P.K. Khaund	Director, Sports & Youth Welfare

85	Shri M. Rahman	Addl. Director of Handloom & Textile, Handloom & Textile
86	Shri Prafulla Kumar Hazoari	Commissioner & Secretary, WPT & BC/ Mines & Minerals
87	Shri Kamala Kanta Nath	Secretary, T & D Deptt.
88	Shri R. Kemprai	Commissioner & Special Secretary, PWD
89	Shri Udayan Hazarika	Secretary , E & F Deptt.
90	Smt. Krishna Gohain	Secretary Higher Education & Inc. DTE, Higher Education
91	Smt. Gitumani Phukan	Jt. Secretary H.E & Inc. DHE, Higher Education
92	Dr. Runu Dutta	Director, Transformation & Development
93	Shri M.K Yadava	APCCF & MD, Amtron, Forest Deptt & IT Deptt
94	Ms. Mousumi Das	SRO, Transformation & Development
95	Shri P. Bora	Joint Director, Transformation & Development
96	Shri Bhugidhar Baruah	SRO, Transformation & Development
97	Shri Santanu Bharali	Legal Adviser to Hon'ble Chief Minister
98	Shri Hrishikesh Goswami	Media Adviser to Hon'ble Chief Minister

Representatives of Urban Local Bodies

1	Shri Niharendra Narayan Tagore	Chairman, Silchar MB
2	Shri Rajib Roy	Executive Officer, Silchar MB
3	Smt. Pushpo Malo	Chairperson, Dhubri MB
4	Shri Jintu Bora	Executive Officer, Dhubri MB
5	Shri Arunabh Kalita	Chairman, Dergaon MB
6	Shri Homen Gohain	Executive Officer, Dergaon MB
7	Shri Himangshu Roy	Chairman, Pathsala TC
8	Shri Apurba Kumar Nath	Executive Officer, Pathsala TC

9	Shri Rafique Uz Zaman	Chairman, Teok TC
10	Shri Bhaskar Jyoti Rajbongshi	Executive Officer, Teok TC
11	Shri Kapil Deo Pandey	Vice-Chairman, Doomdooma TC
12	Shri Mrigen Sarania	Mayor, Gauhati Municipal Corporation
13	Smt. Monalisa Goswami	Commissioner, Gauhati Municipal Corporation
14	Shri Balendra Bharali	MIC, Member Taxation and Finance, GMC, Gauhati Municipal Corporation
15	Smt. Ruby Borah	Secretary, Govt. Of Assam, GDD & UDD,
16	Shri Nazreen Ahmed	Director, Municipal Administration, ASSAM,

Representatives of Rural Local Bodies

1	Smt. Chapapla Rajbongshi Medhi	President, Nalbari Zilla Parishad
2	Smt. Binapani Das	President, Morigaon Zilla Parishad
3	Smt. Kunjalata Das	President, Kamrup (Metro) Zilla Parishad
4	Shri Jogen Prativ Gogoi	President, Jorhat Anchalik Panchayat
5	Smt. Kalyani Das	Ex-President, Chakchaka Anchalik Panchayat, Barpeta
6	Shri Mainul Ali	President, Barkhetri Anchalik Panchayat, Nalbari
7	Shri Bimal Doley	President, Kartipar Gaon Panchayat, Majuli
8	Smt. Mira Deka	Président, Jagara Gaon Panchayat, Nalbari
9	Shri Hemraj Sharma	President, Kheremia Gaon Panchayat, Dibrugarh
10	Shri N. Islam	Secretary, Panchayat & Rural Development Dept.- Govt. Of Assam
11	Shri K.Pegu	Joint Secretary & Director, SIPRD, Panchayat & Rural Development, Dept.- Govt. Of Assam

12	Shri M. Medhi	Joint Secretary, Panchayat & Rural Development Dept- Govt. Of Assam
13	Shri Arup Kr. Sarma	Joint Director O/O- CPRD, Assam, Panchayat & Rural Development Dept.- Govt. Of Assam
14	Shri Barun Bhuyan	Commissioner & Secretary, Education sector,
15	Shri S.A. Laskar	Joint Director, P& RD. Assam, Panchayat & Rural Development Dept.- Govt. Of Assam

Representatives of Trade & Industry

1	Smt. Indrani Tahbildar	General Secretary, Assam Chambers of Commerce
2	Shri Purabi Kakoty	Secretary, Assam Chambers of Commerce
3	Smt. Shanta B. Sarma	Head, Confederation of Indian Industry (CII)
4	Shri Biswajit Chakraborty	Director, Federation of Indian Chambers of Commerce and Industries (FICCI)
5	Shri Kaustav Bhagawaty	Assistant Director, Federation of Indian Chambers of Commerce and Industries (FICCI)
6	Shri Sandeep Khaitan	Director, Federation of Industries of North East Region (FINER)
7	Shri Bihit Todi	Member, Federation of Industries of North East Region (FINER)
8	Shri Pranom Dutta Majumdar	Deputy Director, Indian Chamber of Commerce (ICC)
9	Shri Abhijit Sarma	Secretary, Assam Branch of Indian Tea Association (ABITA)
10	Shri Rajkamal Gohain	General Secretary, All Assam Small Scale Industries Association (AASSIA)

11	Shri Pankaj Sarma	Director, All Assam Small Scale Industries Association (AASSIA)
12	Shri Anupam Bora	Secretary, Hotel & Restaurants Associations of Assam
13	Shri Vishwanath Goenka	Adviser, Hotel & Restaurants Associations of Assam
14	Shri Vinod Lohia	Chairman Taxation Committee, Laghu Udyog Bharti
15	Shri Ashish Bajaj	Treasurer, Laghu Udyog Bharti
16	Shri Bidyananda Barkakoty	Adviser, North Eastern Tea Association
17	Shri L R Thakuria	Chairman, North East Plastic Manufacturer's Association
18	Shri Gautam Saha	Vice-Chairman, North East Plastic Manufacturer's Association
19	Smt. Indu Singh	Vice President, North East Women Entrepreneurs Association
20	Smt. Anita Chetia	President, North East Women Entrepreneurs Association
21	Shri Arijit Purkayastha	CEO, IATO- North East States Chapter

Representatives of Sixth Schedule Areas and Autonomous Councils

1	Shri Daneswar Goyari	Executive Member, Bodoland Territorial Council (BTC)
2	Shri Biren Chandra Phukan	Principal Secretary, Bodoland Territorial Council (BTC)
3	Shri Robinson Muchahari	Additional Financial Secretary, Bodoland Territorial Council (BTC)
4	Shri Bolen Boro	Sr. Financial Adviser, Bodoland Territorial Council (BTC)
5	Shri H.P.K Singh	OSD (Planning), Bodoland Territorial Council (BTC)

6	Dr. Numal Momin	MLA, Bokajan, Karbi-Anglong Autonomous Council
7	Shri Amarsing Tisso	Executive Member, Karbi-Anglong Autonomous Council
8	Shri Dorsing Ronghang	Member of Autonomous Council, Phuloni, Karbi-Anglong Autonomous Council
9	Shri Mahadananda Hazarika	Principal Secretary, Karbi-Anglong Autonomous Council
10	Shri Si-im Taro	Secretary, Karbi-Anglong Autonomous Council
11	Shri Richard Rongpi	Deputy Secretary, Karbi-Anglong Autonomous Council
12	Shri Reuben Ronghang	Deputy Director, Town & Country Planning, Karbi-Anglong Autonomous Council
13	Shri Debolal Gorlosa	Chief Executive Member, North Cachar Hills Autonomous Council
14	Shri Samuel Changsan	Executive Member, North Cachar Hills Autonomous Council
15	Shri Naresh Ghosh	Principal Secretary, North Cachar Hills Autonomous Council
16	Shri Mukut Kemprai	Principal Secretary (N), North Cachar Hills Autonomous Council
17	Shri Ramesh Thaosen	Adviser to the CEM, North Cachar Hills Autonomous Council
18	Shri Debanon Daulagupu	Secretary, North Cachar Hills Autonomous Council
19	Shri Sarat Teron	Sr. FAO, North Cachar Hills Autonomous Council
20	Shri Paramananda Chayengia	Chief Executive Member, Mising Autonomous Council
21	Shri Pradip Doley	Principal Secretary, Mising Autonomous Council
22	Shri Ranjan Borah	Deputy Secretary (F), Mising Autonomous Council

23	Shri Paban Manta	Chief Executive Member, Tiwa Autonomous Council
24	Smt. Juri Gogoi	Principal Secretary, Tiwa Autonomous Council
25	Shri Bhaskar Deori	Deputy Chief, Deori Autonomous Council
26	Shri Madhav Deori	Chief Executive Member, Deori Autonomous Council
27	Shri Debashish Baishya	Principal Secretary, Deori Autonomous Council
28	Shri Kumud Chandra Kachari	Chief Executive Member, Thengal Kachari Autonomous Council
29	Smt. Geetanjali Dutta	Principal Secretary, Thengal Kachari Autonomous Council
30	Shri Dipu Ranjan Makrari	Chief Executive Member, Sonowal Kachari Autonomous Council
31	Shri D. Saikia	Principal Secretary, Sonowal Kachari Autonomous Council
32	Shri Tankeswar Rabha	Chief Executive Member, Rabha Hasang Autonomous Council
33	Shri Deba Kumar Kalita	Principal Secretary, Rabha Hasong Autonomous Council
34	Shri A. N. Hazarika	Joint Secretary, WPT & BC
35	Smt. P. Saharia	Joint Secretary, WPT & BC
36	Shri Ranjeet Kumar Pegu	Planning Officer, WPT & BC
37	Shri Matilal Sarkar	Joint Director, Finance (EA)
38	Shri Prasanta Phukan	Joint Director, Finance (EA)

Representatives of Political Parties

1	Shri Shonarul Shah Mustafa	General Secretary (Admn.), All India Trinmool Congress (State Unit)
2	Shri Girindra Saikia	Chairman, Media Cell, All India Trinmool Congress (State Unit)
3	Shri Awal Mazid	Secretary, All India United Democratic Front

4	Shri Harun Ahmed	General Secretary, All India United Democratic Youth Front
5	Shri Dilip Bora	Vice-President, Asom Gana Parishad
6	Shri Dilip Patgiri	Spokesperson, Asom Gana Parishad
7	Shri Lanki Phangcho	Vice-President, Bharatiya Janata Party (State Unit)
8	Shri Swapnanil Barua	Convenor, Good Governance Department, Bharatiya Janata Party (State Unit)
9	Shri Dilip Saikia	General Secretary, Bharatiya Janata Party (State Unit)
10	Shri Emmanuel Moshahary	General Secretary, Bodoland Peoples Front
11	Shri Maheswar Boro	Member, Bodoland Peoples Front
12	Shri Charan Boro	Member, Bodoland Peoples Front
13	Shri Kamalsing Narzary	Assistant Secretary, Bodoland Peoples Front
14	Shri Thaneswar Basumatary	Member, PMB, Bodoland Peoples Front
15	Shri Uddhab Barman	State Secretariat Member, Communist Party of India (Marxist) (State Unit)
16	Shri Suprakash Talukdar	State Secretariat Member, Communist Party of India (Marxist) (State Unit)
17	Shri Dambaru Bora	State Executive Member, Communist Party of India (State Unit)
18	Shri Ramen Das	State Executive Member, Communist Party of India (State Unit)
19	Shri Ranjan Bora	General Secretary, Indian National Congress (State Unit)
20	Shri Victor Carpenter	Chairman, RTI Department , Indian National Congress (State Unit)
21	Shri D. D. Adhikari	President, Nationalist Congress Party (State Unit)

22	Shri Paresh Barua	Treasurer, Nationalist Congress Party (State Unit)
23	Shri Ratul Kumar Choudhury	President, Samajwadi Party (State Unit)
24	Shri Kishore Medhi	General Secretary, Samajwadi Party (State Unit)

4. Bihar (01-04 October 2018)

Representatives of State Government

1	Shri Nitish Kumar	Chief Minister
2	Shri Sushil Kumar Modi	Deputy Chief Minister
3	Shri Bijendra Prasad Yadav	Minister Power, Parliamentary Affairs, Registration & Prohibition.
4	Shri Prem Kumar	Minister, Agriculture Department
5	Shri Nand Kishor Yadav	Minister, Road Construction Department
6	Shri Shravan Kumar	Minister, Rural Development, Parliamentary Affairs Department
7	Shri Ramnarayan Mandal	Minister, Revenue & Land Reforms Department
8	Shri Jai Kumar Singh	Minister, Industries Dept., Science & Technology Department
9	Shri Mangal Pandey	Minister, Health Department
10	Shri Pramod Kumar	Minister, Tourism Department
11	Shri Krishna Nandan Prasad Verma	Minister, Education Department
12	Shri Vinod Narayan Jha	Minister, P.H.E.D. Department
13	Shri Shailesh Kumar	Minister, Rural Work Department
14	Shri Suresh Kumar Sharma	Minister, Housing & Urban Development
15	Shri Vijay Kumar Sinha	Minister, Labour Resources Department
16	Shri Rana Randhir	Minister, Co-Operative Department
17	Shri khurshid alias Feroz Ahmad	Minister, Minority Welfare, Sugarcane Industry Department

18	Shri Vinod Kumar Singh	Minister, Mines & Geology Department
19	Shri Krishna Kumar Rishi	Minister, Art, Culture & Youth Affairs
20	Shri Kapil Deo Kamat	Minister, Panchayati Raj Department
21	Shri Dinesh Chandra Yadav	Minister, Minor Irrigation & Disaster Management Department
22	Shri Brij Kishor Bind	Minister, Backward & Extremely Backward Class Welfare Department
23	Shri Pashupati Kumar Paras	Minister, Animal & Fish Resources Development
24	Shri Deepak Kumar	Chief Secretary, Bihar
25	Shri Arun Kumar Singh	Principal Secretary, Bihar
26	Shri Amir Subhani	Principal Secretary, Home Department
27	Shri Atul Prasad	Principal Secretary, Social Welfare Department
28	Shri Sudhir Kumar	Principal Secretary, Agriculture & water Resources Department
29	Smt. Sujata Chaturvedi	Principal Secretary, Financial & Commercial Tax Department
30	Shri Brajesh Mehrotra	Principal Secretary, Revenue & Land Reforms Department
31	Shri Amrit Lal Meena	Principal Secretary, Road Construction Department & PRI
32	Smt. Anshuli Arya	Principal Secretary, Building Construction Department
33	Shri Sanjay Kumar	Principal Secretary, Health Department
34	Shri Chaitanya Prasad	Principal Secretary, Urban Development Department
35	Shri Pratyaya Amrit	Principal Secretary, Electricity Department Building Roads & Bridges

36	Shri S. Siddharth	Principal Secretary, Industries Department Sugarcane industry
37	Shri Deepak Kumar Singh	Principal Secretary, Labour Resources Department
38	Shri Chanchal Kumar	Principal Secretary, Building Construction Department
39	Smt. Harjot Kaur Bamhrah	Principal Secretary, Science & Technology Department
40	Shri Ravi Manubhai Parmar	Principal Secretary, Tourism Department
41	Shri Arvind Kumar Chaudhary	Secretary, Rural Development Department
42	Smt. N. Vijayalakshmi	Secretary, Animal & Fisheries Department
43	Shri Rahul Singh	Secretary, Finance & Technology Department
44	Shri Pankaj Kumar	Secretary, Food & Civil Supplies Department
45	Shri Vinay Kumar	Secretary, Rural Development Department
46	Shri Jitendra Srivastava	Secretary, Public Health Engineering Department
47	Shri Prem Singh Meena	Secretary, SC & St Welfare Department
48	Shri Manish Kumar Verma	Secretary, Planning &Development Department
49	Shri Sanjay Kumar Agarwal	Secretary, Transport Department
50	Dr. Pratima	Secretary, Commercial Tax Department

Representatives of Local Bodies

1	Smt. Sita Sahu	Mayor, Municipal Corporation
2	Shri Vinay Kumar Pappu	Deputy Mayor, Municipal Corporation
3	Shri Upendra Prasad Singh	Mayor, Municipal Corporation
4	Shri Rajeev Ranjan	Deputy Mayor, Municipal Corporation
5	Shri Vijay Singh	Mayor, Municipal Corporation

6	Shri Mohd. Manjoor Khan	Deputy Mayor, Municipal Corporation
7	Shri Tarkeshwar Nath Gupta	Chairman, Municipal council
8	Shri Uday Kumar	Chairman, Municipal council
9	Smt. Seeta Kumar	Chairman, Municipal council
10	Smt. Janki Devi	Chairman, Municipal council
11	Smt. Belmanti Devi	Chairperson, Nagar Panchayat
12	Shri Kailash Paswan	Chairperson, Nagar Panchayat
13	Smt. Savitri Devi	Chairperson, Nagar Panchayat
14	Shri Naveen Kumar	Chairperson, Nagar Panchayat
15	Shri Shailendra Kumar Garhwal	Chairman, District Council, Western Champaran
16	Shri Anant Kumar	Chairman, District Council,
17	Smt. Sangeeta Devi	Chairman, District Council,
18	Smt. Kranti Devi	Chairman, District Council,
19	Smt. Premlata	Chairman, District Council
20	Shri Rampreet Mandal	Pramukh, Ratutouna
21	Smt. Lalita Devi	Pramukh, Sonbarsha
22	Shri Manoj Kumar	Pramukh, Nimchak Bthani
23	Shri Ramakant Ranjan Kishore	Pramukh, Mashoudhi
24	Smt. Manorama Devi	Pramukh, Angrsaray
25	Shri Indra Bhushan Singh Alok	Mukhiya, Bharthipur
26	Shri Ajay Singh Yadav	Mukhiya, Dharnai
27	Shri Sanjay Kumar	Mukhiya, Ghatrain
28	Smt. Ritu Jaiswal	Mukhiya, Singhwahini
29	Smt. Kiran Devi	Mukhiya, Kesaru Dhrampur

Representatives of Trade & Industry

1	Shri P.K. Agrawal	Chairman, Bihar Chamber of Commerce and Industries

2	Shri Mukesh Kumar Jain	Deputy Chairman, Bihar Chamber of Commerce and Industries
3	Shri Amit Mukharjee	General Secretary, Bihar Chamber of Commerce and Industries
4	Shri Rajesh Kumar Khetan	Bihar Chamber of Commerce and Industries
5	Shri Sunil Sarraf	Bihar Chamber of Commerce and Industries
6	Shri S.K. Patwari	Bihar Chamber of Commerce and Industries
7	Shri Balram Prasad	General Secretary, Food Industry Committee
8	Shri Bhavesh Kumar	Chairman, Builders association of India
9	Shri P.K. Singh	Chairman, Bihar commits and Druggist association
10	Shri Vinod Kumar	Chairman, Patliputra Sarafa Committee
11	Shri K.P.S. Keshri	Chairman, Bihar Industries Association
12	Shri Purshottam Agrawal	Chairman, Sub Committee of Taxation, Bihar Industries Association
13	Shri Arun Agrawal	Ex- Deputy Secretary, Hazipur Industries Association
14	Shri P.K. Sinha	Chairman, Indian Industries confederation
15	Shri Alok Poddar	GST, Committee BCCI
16	Shri Sunil Singh	BIA, Ex-Vice President
17	Shri Kailash Prasad	Chairman, Technical Division, BIA
18	Shri Sanjay Goenka	Chairman, Policy Initiation, BIA
19	Shri Manikant	Vice Chairman, CII

Representatives of Political Parties

1	Shri Bijender Prasad Yadav	Power Minister, Janta Dal (United)
2	Shri Amrendra Pratap Singh	Bharatiya janta Party.
3	Shri Mithlesh Tiwari	MLA, Bharatiya janta Party
4	Shri Nitish Mishra	Vice President, Bharatiya janta Party

5	Shri Anil Kishore Jha	Rashtrawadi Congress Party
6	Shri Nawal Kishore Shahi	Rashtrawadi Congress Party
7	Shri Ramchandra Purve	Rashtrawadi Janta Dal
8	Shri Shivanand Tiwari	Rashtrawadi Janta Dal
9	Shri Abdul Bari Siddiqi	Rashtrawadi Janta Dal
10	Shri Abhyanand Suman	National Secretary General, Rashtriya lok Samta Party
11	Shri Bhramcharya Prasad Dangi	Pradesh Pradhan, General Secretary
12	Dr Sameer Kumar Singh	Executive Chairman, Bharatiya rashtriya Congress
13	Shri Jaya Mishra	Indian National Congress
14	Shri Keshav Singh	State general Secretary, Lok Jan Shakti Party
15	Shri Satyanand Sharma	National Secretary General, Lok Jan Shakti Party
16	Shri Arun Kumar Mishra	Bharatiya Communist Party, (M)
17	Shri Rambabu Kumar	State Executive , Bharatiya Communist Party
18	Shri K.D. Yadav	State Secretary, Bharatiya Communist Party
19	Shri Vrashan Patel	Hindustani Awam Morcha
20	Shri Rash Bihari PD.Singh	Vice Chancellor, Patna University
21	Dr. Manoj Mishra	Chankaya National Law University
22	Shri P.K. Agrawal	President, Bihar chamber of Commerce and Industries
23	Shri R.P.S. Keshri	President, Bihar Industries Association
24	Shri Satya Singh	Chairman P.H.D. chamber of Commerce

5. Chhattisgarh(23-25 July 2019)

Representatives of State Government

1	Shri Bhupesh Baghel	Chief Minister General Administration, Finance, Electronics & Information Technology, Public Relations, Mining, Energy and other departments which are not allotted to any Minister.
2	Shri Tamradhwaj Sahu	Minister, Public Works Department, Home, Jail, dharmik Nyas and Dharmasv, Tourism
3	Dr. Premsai Singh Tekam	Minister, School Education, Tribal and Scheduled Caste, Backward Class and Minority Development, Cooperation
4	Shri Mohammad Akbar	Minister, Transport, Housing and Environment, Forest, Law,
5	Dr. Shiv Kumar Dahariya	Minister, Urban Administration, Labour
6	Smt. Anila Bhediya	Minister, Women & Child Development and Social Welfare
7	Shri Umesh Patel	Minister, Higher Education, Technical Education and Employment, Skill Development, Science and Technology Departments, Manpower Planning, Sports and Youth Welfare
8	Shri Amarjeet Bhagat	Minister, Food, Civil Supply and Consumer Protection, Planning Economic and Statistics, Culture
9	Shri Sunil Kumar Kujur	Chief Secretary
10	Shri C.K. Khaitan	ACS Home
11	Shri R.P. Mandal	ACS , P&RD
12	Shri K.D.P. Rao	ACS / APVC

13	Shri Amitabh Jain	ACS , Finance
14	Shri Gaurav Dwivedi	P.S. to HCM
15	Smt. Shahla Nigar	Secretary, Finance
16	Dr. Kamal Preet Singh	Secretary, Food
17	Shri Prabhat Malik	DIF, Finance
18	Smt. Renu G. Pillay	P.S., Skill Development & Technical Education
19	Shri Manoj Kumar Pingua	P.S., Commerce & Industries, Transport
20	Smt. Maninder Kaur Dwivedi	P.S., Gramudyog
21	Smt. Niharika Barik Singh	Secretary, Health & Family Welfare
22	Shri Devi Dayal Singh	Secretary, Public Health Engineering
23	Smt. Reeta Shandilya	Secretary, GAD & Cooperative
24	Smt. Reena Baba Saheb Kangale	Secretary, Commercial Taxes
25	Smt. Sangeeta P.	Special Secretary, Housing & Environment
26	Smt. Alarmelmangai D.	Special Secretary, Urban Administration Dpt.
27	Shri Anbalgan P.	Special Secretary, Mineral Resources Dpt.
28	Shri B. Anand Babu	CCF, Forest Dpt.
29	Shri Siddharth Komal Singh Pardesi	Secretary, Sports and Youth Welfare, Women and Child Development Welfare
30	Shri Avinash Champawat	Secretary, Water Resource Dpt., Religious Trust Endosment, Culture and Tourism
31	Shri N.N. Ekka	CEO, NRANVP
32	Smt. Sharda Verma	Director, Budget
33	Shri Ayyaj Tamboli	Collector, Bastar
34	Shri Chandan Kumar	Collector, Sukma
35	Shri Ajeet Vasant	Director, Mines
36	Shri B.K. Pandey	Adjunct Professor, NIFM, Faridabad
37	Shri A.K. Singh	Joint Secretary, Finance Dpt.

Representatives of Urban Local Bodies

1	Shri Pramod Dubey	Mayor, Raipur
2	Shri Kishor Rai	Mayor, Bilaspur
3	Shri Jatin Jaisawal	Mayor, Jagdalpur
4	Smt. Sumiya Nagraj	Chairman, Nagar Panchayat
5	Shri Amildas	Chairman, Nagar Panchayat, Lormi
6	Shri Swapnil Upadhyay	Chairman, Kumhari
7	Smt. Alarmelmangai D.	Special Secretary, Urban Administration and Development Dpt.
8	Shri Sunil Chaubey	Additional Director, Urban Administration and Development Dpt.
9	Shri S. Beohar	OSD (T), UAD
10	Shri U.K. Dhalendra	OSD, SUAD
11	Shri Nitesh Sharma	Advisor, UAD
12	Shri Bhuwan Sharma	Mission Manager SUDA
13	Shri Parvesh Gudil	PMC/CA
14	Shri Abhishek Jain	SUDA, FO, SBM
15	Shri Parth Shah	SUDA, MH, SBM

Representatives of Rural Local Bodies

1	Shri R.P. Mandal	Additional Chief Secretary
2	Shri T.C. Mahawar	Secretary
3	Shri Jitendra Shukla	Director, Panchayat
4	Smt. Sharda Devi Verma	Chairman, Zila Panchayat Raipur
5	Smt. Kalawati Markam	Chairman, Zila Panchayat Korea
6	Smt. Savita Chandrakar	Member, Zila Panchayat Raipur
7	Smt. Dwarika Sahu	Member, Zila Panchayat Raipur
8	Shri Basant Adil	Member, Zila Panchayat
9	Shri Surya Pratap Singh Netam	Chairman, Janpad Panchayat
10	Shri Surya Prakash Singh	Member, Janpad Panchayat

11	Smt. Archana Yadav	Sarpanch, Durg
12	Smt. Domeshwari	Sarpanch, Tekari
13	Smt. Keshar Gour	Sarpanch, Gram Panchayat Nandkathi
14	Smt. Himanshi Yadav	Sarpanch, Parsadih, Mahasamund
15	Smt. Savita Beck	Sarpanch, Shivpur, Ambikapur
16	Shri Suraj Netam	Sarpanch, Chipkhand
17	Smt. Kamleshwari Nag	Sarpanch, Khodgaon

Representatives of Trade & Industry

1	Shri Manoj Kumar Pingua	Principal Secretary, Commerce & Industries
2	Shri Ashwin Garg	Urla Industries Association
3	Shri Manish Gupta	BSBK Grout
4	Shri Jitendra Jain Barlota	Chhattisgarh Chamber of Commerce & Industries
5	Shri Bharat Bajaj	Chhattisgarh Chamber of Commerce & Industries/ Media sales
6	Shri Satyanarayan Agrawal	Laghu Udyog Bharti
7	Shri Indrajeet Jotwani	Laghu Udyog Bharti
8	Shri Abhitab Jain	Sunpack Industries
9	Shri Sushil Bakliwal	Bakliwal Furnitures
10	Shri Pankaj Sarda	Sarda Group
11	Shri Dinesh Agrawal	Hira Group
12	Shri Ramesh Agrawal	GR Mines & Minerals/ CG Steel Chamber
13	Shri Narendra Goel	Confederation of Indian Industries/ Goel TMT
14	Shri Shashank Rastogi	PHD Chamber/ Steel Cast Aid Ltd.
15	Shri Bahadur Ali	IB Group
16	Shri Vijay Jhanwar	Chhattisgarh Sponge Iron Manufactures Association

17	Shri Ramesh Gandhi	Chairman Chhattisgarh Chamber of Commerce
18	Shri Vikram Jain	Urla Industries Association
19	Shri Lal Chand	CGI Chamber
20	Shri Prakash Agrawal	Chhattisgarh Chamber
21	Shri Jagdish Patel	Laghu Udyog Bharti
22	Shri Naveen	CIAW Raipur
23	Shri Malay Sai	BHINDAS Fabrication Association
24	Shri Sumit Dubey	PHD Chamber of Commerce
25	Shri Satish Pandey	CII Chhattisgarh
26	Shri Purushottam Pate	Gen. Secretary, Laghu Udyog Bharti
27	Shri Ishwar Patel	LUB Raipur
28	Shri Daya Patel	LUB Raipur
29	Shri Kishor Patel	CIAW Raipur

Representatives of Political Parties

1	Shri Paresh Baghari	Vice President, Janta Congress, C.G.
2	Shri Sanyal	State Secretariat Member, CPI(M)
3	Shri M.K. Naydu	State Secretariat Member, CPI(M)
4	Shri D. Mahapatra	State Secretariat Member, CPI(M)
5	Shri S.N. Kamlesh	Assistant Secretary CPI- C.G.
6	Shri R.D.C.P. Rao	Secretary CPI State Council
7	Shri Santosh Kumar Markndey	Zone Incharge, Raipur, BSP
8	Shri Hemant Poyam	State President, C.G., BSP
9	Shri Naresh Chandra Gupta	BJP, Legal Deptt.
10	Shri C.S. Sahu	BJP, Ex Minister & Ex M.P.
11	Shri Satyanarayan Sharma	Ex Minister Cong MLA
12	Smt. Kiran Mayee Nayak	Ex Mayor, Raipur, Congress
13	Shri Ramesh Warlyani	Ex MLA & G. Secretary, C.G. Congress Party

6. Goa (23-24 January 2020)

Representatives of State Government

1	Dr. Pramod Sawant	Hon'ble Chief Minister
2	Shri Chandrakant (Babu) Kavelakar	Hon'ble Dy. Chief Minister for Town & Country Planning
3	Shri. Govind Gaude	Hon'ble Minister for Art & Culture
4	Shri Filipe Neri Rodrigues	Hon'ble Minister for Water Resources
5	Shri Mauvin Godinho	Hon'ble Minister for Transport & Panchayat
6	Shri Nilesh Cabra	Hon'ble minister for Power
7	Shri Deepak C. Prabhu Pauskar	Hon'ble Minister for Public works
8	Shri parimal Rai	Chief Secretary
9	Shri Puneet kumar Goel	Principal Secretary (Power)
10	Shri Daulat A. Hawladar	Commissioner & Secretary (Finance & Planning)
11	Shri Rupesh Kumar Thakur	Secretary to Governor
12	Shri J. Ashok Kumar	Secretary to Chief Minister
13	Smt. Nila Mohanan	Secretary (Education)
14	Shri Chokha Ram Garg	Secretary (Women & Child)
15	Shri Sanjay Gihar	Secretary (Water Resources)
16	Shri Kuldeep Singh Gangar	Secretary (Agriculture)
17	Shri Ravi Jha	Secretary (Information Technology)
18	Ms. Isha Khosla	Secretary (General Administration)
19	Shri Venancio Furtado	Kadamba Transport Corporation Limited
20	Shri Rajan Satardekar	Transport
21	Shri N.M. Goel	Panchayat
22	Shri Dr. Jose O.A.D 'Sa	Health Services
23	Shri Ashutosh R. Apte	Mines & Geology
24	Shri Prasad Lolayekar	Higher Education
25	Shri Menino D'Souza	Dir. Tourism

26	Shri Tariq Thomas	DMA
27	Shri Santosh Kumar	APCCF, Forest
28	Shri Amit Satija	Commissioner of Excise
29	Shri S.D. Patil	WRD
30	Shri R.B. Ghanti	WRD
31	Shri P.B. Seldarkar	SIDCGL
32	Shri Anil S. Ringane	CE P.W.D
33	Shri Dominic Fernandes	WMC & DST
34	Shri Dilip Dhavalikar	SIDCGL
35	Shri V.P. Dessi	DITC
36	Smt. Ankita Anand	Dir. IT Information Tech
37	Smt. Vandana Rao	Dir (Edu)
38	Shri Arvind Khutkar	Collectorate South Goa
39	Shri Sanjeev Joglekar	Member GEDA
40	Shri Asha Saurbary	S.o OLTC
41	Shri Prasiddh P. Navu	BDO (HQ) DOP
42	Shri Deepesh Priolker	Dy. Director, Municipal Administration
43	Shri Abhijit S. Nerurkal	GSIDl Ltd.
44	Shri U.P.Paresekar	PCE PWD

Representatives of Urban Local Bodies

1	Shri Uday V. Madkaikar	Mayor, Corporation of City of Panaji
2	Smt. Sweta S. Kambli	Chairperson Pernem Municipal Council
3	Shri Rayn Braganza	Mapusa Municipal council
4	Shri Rajaram A. Gaonkar	Bicholim Municipal Council
5	Shri Akhtar Ali Shah	Chairperson, valpoi Municipal Council
6	Smt. Nitu Sameer Dessai	Canacona Municipal Council
7	Smt. Panzy Coutinho	Chairperson, Cuncolim Municipal Council
8	Shri Nandadeep M. Raut	Chairperson, Mormugao Municipal Council

9	Shri Balkrishna U.S. Hodarkar	Chairperson, Cacora – Curchorem Municipal Council
10	Shri Romldo J.A. Fernandes	Chairperson, Sanguem Municipal Council
Representatives of Rural Local Bodies		
1	Smt. Ankita Navelkar	North Goa ZP President (Adhyaksha)
2	Shri Navnath Naik	South Goa ZP President (Adhyaksha)
3	Shri Mohan Verekar	ZP Member Ponda
4	Smt. Suvarna Tendulkar	ZP Member Sanvordem
5	Shri Rupesh Naik	ZP Member Saligao
6	Shri Arun Bankar	ZP Member Mandrem
7	Shri Pramod Faldassai	Canacona - Agonda Sarpanch
8	Shri Agnelo Da Cunha	Taleigao Sarpanch
9	Shri Ratnakar Harji	Mandrem – Keri - Terekhol Sarpanch
10	Smt. Sneha Latha Naik	Sanvordem - Mollem Sarpanch
11	Smt. Prashila Gaude	Sankhili Papi Sarpanch
12	Shri Santosh Bandodkar	Saligao, Pilerne Sarpanch
13	Shri Arjun Naik	Sanguem Village Panchayat Uguem
14	Shri Allului Afonso	Avede Cotmi, Quepem
15	Shri Namdev Volvoikar	Diwar Panchayat Kumbharjua
Representatives of Trade & Industry		
1	Shri Nilesh Salkar	President CREDAI- Goa
2	Shri Avez Shaik	Jt. Secretary CREDAI- Goa
3	Shri Joao P Sousa	Deputy General Manager (Finance), Economic Development Corporation Ltd
4	Shri Vishwas Dhume	Dy. Manager, Economic Development Corporation Ltd
5	Shri S.V. Naik	Goa Industrial Development Corporation
6	Shri Parvez Gomes	Goa Industrial Development Corporation
7	Shri Manoj Caculo	President, Goa Chamber of Commerce & Industry

8	Shri Sandip Bhandare	Immediate Past President, Goa Chamber of Commerce & Industry
9	Shri Yeshwant Kamat	Chartered Accountant Association of Goa
10	Shri Harit Maganlal	Confederation of Indian industry (CII)
11	Shri Srinivas Naik	Casino – Hotel "Neo Majestic"
12	Shri William D' Costa	President, Goa Barge Owners Association
13	Shri Chandrakant Gawas	Senior Manager, Goa Barge Owners Association
14	Shri Nathan Chowgule	Vice President, Goa Mineral Ore Exporters Association
15	Shri Sauvick Majumdar	Secretary, Goa Mineral Ore Exporters Association
16	Shri Glenn Kalavampara	Secretary, Goa Mineral Ore Exporters Association

Representatives of Political Parties

1	Shri Sadanand Tanavade	Bharatiya Janata Party
2	Shri Girish Chodankar	President ,Indian National Congress
3	Shri Digambar Kamat	Indian National Congress, Former Chief Minister
4	Shri Churchill Alemao	Nationalist Congress Party
5	Shri Jose Philip D'Souza	Nationalist Congress Party
6	Shri Christopher Fonseca	Communist Party of India
7	Shri R.D. Mangueskar Secretary	Secretary, Communist Party of India
8	Shri Suhaas Naik, Dy. Secretary	Dy. Secretary Communist Party of India
9	Adv. Narayan Sawant	Working President , Maharashtrawadi Gomantak Party
10	Shri Rahul Mhambre	Aam Aadmi Party
11	Shri Errol Pires	Aam Aadmi Party
12	Shri Vijay Sardesai	Goa Forward Party

7. Gujarat (23-25 July 2018)

Representatives of State Government

1	Shri Vijaybhai Rupani	Hon'ble CM
2	Shri Nitinbhai Patel	Hon'ble Dy. CM (Finance)
3	Dr. J N Singh	Chief Secretary
4	Shri K Kailashnathan	Chief Principal Secretary to Chief Minister
5	Shri M K Das	Principal Secretary to CM and Principal Secretary (IMD)
6	Shri Arvind Agrawal	Additional Chief Secretary (Finance)
7	Shri P K Parmar	Additional Chief Secretary (Medical Services & Medical Education)
8	Smt. Sangeeta Singh	Additional Chief Secretary (Personnel)
9	Shri Sanjay Prasad	Additional Chief Secretary
10	Shri Pankaj Kumar	Additional Chief Secretary
11	Dr. Rajeev Kumar Gupta	Additional Chief Secretary
12	Dr. P D Vaghela	Commissioner
13	Shri Raj Gopal	Principal Secretary
14	Shri Mukesh Puri	Principal Secretary
15	Shri A K Rakesh	Principal Secretary
16	Smt. Sunaina Tomar	Principal Secretary
17	Shri Manoj Agrawal	Principal Secretary
18	Shri J P Gupta	Principal Secretary (Water Supply)
19	Shri Vinod Rao	Secretary
20	Ms. Mona K. Khandhar	Secretary (Rural Development)
21	Shri R C Meena	Secretary
22	Shri Sanjeev Kumar	Secretary (Economic Affairs)
23	Shri M K Jadav	Secretary (Water Resources)
24	Shri S B Vasava	Secretary
25	Shri G K Sinha	PCCF

26	Dr. Prakash Vaghela	Additional Director (FW)
27	Smt. P Bharathi	State Project Director
28	Shri C J Mecwan	Joint Secretary
29	Shri Mahesh Joshi	Director (Primary Education)
30	Ms. Manisha Chandra	Director (ICDS)
31	Shri Ajay Kumar	Sp. Commissioner
32	Shri Supreet Singh Gulati	Additional Commissioner
33	Shri S K Hudda	Director
34	Shri M P Raval	Chief Engineer
35	Shri Manish Pandya	Joint Director
36	Shri M H Dholakia	Deputy Director
37	Shri R D Modi	Under Secretary
38	Shri V K Advani	Dy. Commissioner
39	Shri Samir Joshi	Under Secretary
40	Shri R D Bhavsar	Accounts Officer
41	Shri P M Nair	Dy. Section Officer

Representatives of Urban Local Bodies

1	Smt. Bijalben Patel	Mayor, Ahmedabad Municipal Corporation
2	Shri Jagdishbhai Patel	Mayor, Surat Municipal Corporation
3	Ms. Jigishaben Sheth	Mayor, Vadodara Municipal Corporation
4	Smt. Binaben Acharya	Mayor, Rajkot Municipal Corporation
5	Shri Hasmukhbhai Jethva	Mayor, Jamnagar Municipal Corporation
6	Shri Manharbhai Mori	Mayor, Bhavanagar Municipal Corporation
7	Shri Pravin Patel	Mayor, Gandhinagar Municipal Corporation
8	Shri M. Thennasran	Commissioner, Surat Municipal Corporation
9	Shri Ajay Bhadu	Commissioner, Vadodara Municipal Corporation
10	Shri R.B. Barad	Commissioner, Jamnagar Municipal Corporation

11	Shri K B Thakkar	Dy. Commissioner, Ahmedabad Municipal Corporation
12	Shri Mukesh Puri	Principal Secretary, UD&UHD
13	Shri Locahn Shehra	Secretary (Housing and Nirmal Gujarat), UD&UHD
14	Shri M.S. Patel	Commissioner, Municipalities Administration, Gujarat State
15	Shri B.C.Patni	CEO, Gujarat Municipal Finance Board
16	Shri L.R.Damor	Deputy Commissioner, Municipalities Administration, Gujarat State
17	Ms. Dipikaben Patel	President, Nadiad Municipality, Nadiad
18	Shri Aniruddhbhai Patel	President, Himmatnagar Municipality, Himmatnagar
19	Shri Pankajbhai Ahir	President, Valsad Municipality, Vadodara
20	Shri Vipinbhai Todiya	President, Surendra Municipality, Surendranagar
21	Shri S.K.Garwal	Chief Officer , Nadiad Municipality, Nadiad
22	Shri P V Mali	Chief Officer, Himmatnagar Municipality, Himmatnagar
23	Shri Jagatsinh Vasava	Chief Officer , Valsad Municipality, Vadodara
24	Shri Amitbhai Pandhya	Chief Officer , Surendranagar Municipality, Surendranagar

Representatives of Rural Local Bodies

1	Shri J H Chauhan	President, Ahmedabad
2	Shri H K Vansiya	Vice President, Surat
3	Shri R M Jadav	President, Panchmahal
4	Shri N R Mori	President, Porbandar

5	Ms R P Mohaniya	President, Taluka : Dhanpur, District : Dahod
6	Shri J P Gor	Member, Taluka : dhansura, District : Arvalli
7	Ms G P Parmar	President, Taluka : Talod, District : Sabarkantha
8	Ms. K D Rathwa	President, Taluka : Naswadi, District : Chhotaudepur
9	Shri D S Jesar	Sarpanch, Vi. Mundra, Ta. Mundra, Dis. Kachchh
10	Ms. S N Chaudhari	Sarpanch, Vi. Chhiri, Ta. Vapi, Dis. Valsad
11	Ms. C R Patel	Sarpanch, Vi. Naradipur, Ta. Kalol, Dis. Gandhinagar
12	Ms. R S Patel	Sarpanch, Vi. Poglu, Ta. Prantij, Dis. Sabarkantha
13	Shri B J Patel	Sarpanch, Vi. Govindpura, Ta. Vijapur, Dis. Mehsana
14	Shri Arun Mahesh Babu	DDO, Ahmedabad
15	Shri Bijal Shah	DDO, Banaskantha
16	Shri Devang Desai	DDO, Valsad
17	Shri Baranwal Varunkumar	DDO, Bhavnagar
18	Ms. Jahanvee Patel	TDO, Gandhinagar
19	Shri Pankaj Vaghani	TDO, Surat
20	Shri Dilip Vaghela	TDO, Navsari
21	Shri Rajesh Patel	TDO, Mehsana
22	Shri N P Thakar	Commissioner, Commissioner of Devp. Commi. Office
23	Shri H C Patel	Chief Accounts Officer, Commissioner of Devp. Commi. Office
24	Ms. Samiksha Dalasaniya	Accounts Officer, Commissioner of Devp. Commi. Office

Representatives of Trade & Industry

1	Dr. Jaimin Vasa	President GCCI
2	Shri Nilesh Shukla	Secretary, GCCI
3	Shri Mukesh Shah	Ex. Committee member, GCCI
4	Shri Sunil Parekh	Ex. Committee member, GCCI
5	Shri Jagdish Shah	Secretary, General, GCCI
6	Shri PiruZ Khabhatta	Chairman, CII - Western Region
7	Shri Rajubhai Shah	Member, CII - Gujarat
8	Shri Naishad Parikh	Member CII
9	Shri Vimal Ambani	Member CII
10	Shri Saikat Roy Chaudhari	CII
11	Shri Premal Dave	CII
12	Shri Rajiv Vastupal	Member FICCI
13	Shri Pankaj Tibak	FICCI
14	Ms. Bhagyesh Soneji	Chairperson, ASSOCHAM Gujarat Council
15	Shri Madhu Menon	Chairman, BFSI Committee, ASSOCHAM Gujarat Council
16	CA. Amish Khandhar	Chairman, Taxation Committee, ASSOCHAM Gujarat Council
17	Shri Anil Mattoo	Member ASSOCHAM
18	Shri Vipul Gajingwar	Regional Head, ASSOCHAM Gujarat Council
19	Ms. Mamta Verma	Industry Commissioner
20	Shri G J Desai	Joint Industry Commissioner

Representatives of Political Parties

1	Shri I.K.Jadeja	Vice President ,Chairman Garib Kalyan Varsh Samitee, Gujarat State, BJP

2	Shri Narharibhai Amin	Executive Member, Vice Chairman, Gujarat State Planning Commission, BJP
3	Shri Dhansukhbhai Bhanderi	Jilla Sangthan Prabhari Chairman Gujarat Municipal finance Board, BJP
4	Shri Dr.Anil Joshiyara	MLA, INC
5	Shri P.K.Valera	Vice President, INC
6	Shri Kailashdan Gadhavi	Spokesperson, INC
7	Shri Babulal Meghji Shah	Ex Finance Minister Gujarat, NCP
8	Shri sharad Patel	Vice President Gujarat, NCP
9	Shri Hemang Shah	Vice President Gujarat, NCP
10	Shri Ashok Chavda	President Gujarat Pradesh, BSP
11	Shri Niranjan Ghosh	Mahamantri Gujarat Pradesh, BSP
12	Shri Roopwant Singh	Commisiner Geology and Mining
13	Shri Dipak M Shukla	Additional Director G&M Commi. Office
14	Shri S B Joshi	G&M Commi. Office
15	Shri M D Vyas	G&M Commi. Office
16	Shri Keyur Pandya	G&M Commi. Office

8. Haryana (03-04 May 2018)

Representative of State Government

1	Shri Manohar Lal Khattar	Chief Minister
2	Capt. Abhimanyu	Finance Minister
3	Shri Om Prakash Dhankar	Development and Panchayats Minister
4	Smt. Kavita Jain	Urban Local Bodies Minister
5	Shri Vipul Goel	Industries & Commerce Minister
6	Shri Depinder Singh Dhesi	Chief Secretary, Haryana
7	Shri Rajesh Khullar	Principal Secretary to Chief Minister
8	Shri T.V.S.N. Prasad	Principal Secretary, Finance Department
9	Shri Keshni Anand Arora	Addl. Chief Secretary&FC, Revenue & Disaster Management

10	Shri Devender Singh	Industries & Commerce
11	Smt Jyoti Arora	Addl. Chief Secretary Higher Education & Technical Education
12	Shri Rajeev Arora	Addl. Chief Secretary, Public Health Engineering
13	Shri V.S. Kundu	Addl. Chief Secretary, Science & Technology
14	Shri R.R.Jowel	Addl. Chief Secretary, Health & Family Welfare
15	Shri P.K. Das	Addl. Chief Secretary, Power
16	Shri Dheera Khandelwal	Addl. Chief Secretary, School Education
17	Shri Sanjeev Kaushal	Addl. Chief Secretary, Excise & Taxation
18	Shri Dhanpat Singh	Addl. Chief Secretary, Transport
19	Shri S.S. Prasad	Addl. Chief Secretary, Home
20	Shri Sunil Kumar Gulati	Addl. Chief Secretary, Animal Husbandry and Dairying
21	Shri Ram Niwas	Addl. Chief Secretary, Food, Civil Supply & Consumer Affairs
22	Shri Vivek Joshi	Principal Secretary, Monitoring & Coordination
23	Dr. Mahavir Singh	Principal Secretary, Labour
24	Shri Arun Gupta	Principal Secretary, Town & Country Planning
25	Shri Shrikant Walgad	Principal Secretary, Housing
26	Shri Ashok Khemka	Principal Secretary, Sports & Youth Affairs
27	Shri Ankur Gupta	Principal Secretary, Information Technology Electronics & Communication
28	Shri Abhilaksh Likhi	Principal Secretary, Agriculture & Farmers Welfare

29	Shri Anurag Rastogi	Principal Secretary, Irrigation & Water Resources
30	Shri Anand Mohan Sharan	Principal Secretary, Urban Local Bodies
31	Shri Sudhir Rajpal	Principal Secretary, Development & Panchayats
32	Shri Shatrujeet Kapoor	Chief Managing Director, Discoms. (UHBVN & DHBVN)
33	Shri Sunil Saran	Secretary, Finance-cum-Advisor
34	Smt Renu S. Phulia	Special Secretary, Fisheries
35	Shri Nitin Yadav	Director, Urban Local Bodies
36	Shri Sameer Pal Srow	Director General, Information & Public Relation and Director, Tourism
37	Shri Ravi Prakash Gupta	Secretary, Home
38	Shri Dusmanta Kumar Behera	Director, Agriculture & Farmers Welfare
39	Dr. Shaleen,	Additional Secretary, Finance
40	Shri Vivek Padam Singh	Joint Secretary, Finance
41	Smt. Hema Sharma	Director, Woman & Child Development
42	Shri Vikas Verma	Head of State Office, UNDP
43	Shri Kavita Dhankhar	Joint Registrar, Cooperation

Representatives of Local Bodies

1	Smt. Kavita Jain	Urban Local Bodies Minister
2	Shri T.V.S.N. Prasad	Principal Secretary, Finance Department
3	Shri Anand Mohan Sharan	Principal Secretary, Urban Local Bodies Department
4	Shri Sunil Saran	Secretary, Finance-cum-Advisor
5	Smt. Suman Bala	Mayor, Muncipal Corporation, Faridabad
6	Shri Pawan Kumar	Senior Deputy Mayor, Muncipal Corporation, Yamuna Nagar

7	Smt. Shakuntala Rajliwala	Mayor, Muncipal Corporation, Hisar
8	Smt. Reenu Bala Gupta	Mayor, Muncipal Corporation, Karnal
9	Smt. Poonam Kiloi	Councilor, Muncipal Corporation, Rohtak
10	Smt. Uma Sudha	Chairperson, Muncipal Corporation, Thanesar (Kurukshetra)
11	Shri Pawan Thareja	Chairman, Muncipal Corporation, Kaithal
12	Smt. Sheela Rathi	Chairperson, Muncipal Corporation, Bahadurgarh (Jhajjar)
13	Shri Baldev Raj Chawla	Chairman, Muncipal Corporation Shahbad (Kurukshetra)
14	Shri Ashok Kumar	Chairman, Muncipal Corporation ,Pehowa (Kurukshetra)
15	Shri Subhash Chander Gupta	Chairman, Muncipal Corporation , Gharaunda (Karnal)
16	Smt. Kavita	Chairperson, Muncipal Corporation, Jhajjar
17	Shri Ishwar Kashyap	Chairman, Muncipal Corporation, Gannaur (Sonepat)
18	Shri Om Prakash Dhankar	Development and Panchayats Minister
19	Shri Sudhir Rajpal	Principal Secretary, Development and Panchayats Department
20	Shri Surinder Singh	Chairman , Zila Parishad Ambala
21	Shri Nand Lal Matani	Chairman, Panchayat Samiti Loharu (Bhiwani)
22	Shri Rakesh	Sarpanch, Badhra (Charkhi Dadri)
23	Shri Somesh	Sarpanch, Gram Panchayat Ghikara (Charkhi Dadari)
24	Shri Mahipal Arya	Sarpanch Mirzapur, Block Ballabgarh, Faridabad

25	Smt Neelam Kamboj	Chairperson, Panchayat Samiti Ratia (Fatehabad)
26	Shri Sanjeev Kumar	Vice-President , Zila Parishad Gurugram
27	Shri Manoj Kumar	Sarpanch, Bir, Block Hisar (Hisar)
28	Shri Paramjeet	Chairman , Zila Parishad Jhajjar
29	Shri Surender Rana	Sarpanch Singhana, Block Safidon (Jind)
30	Shri Narveer Nehra	Sarpanch Dilluwala, Block Alewa (Jind)
31	Shri Gajjan Singh	Sarpanch, Gobind Pura, Block Siwan (Kaithal)
32	Smt. Seema Devi	Chairperson, Panchayat Samiti Assandh (Karnal)
33	Smt. Renu Sharma	Chairperson, Panchayat Samiti Ladwa (Kurukshetra)
34	Shri Hanif Khan	Sarpanch, Ferozepur Namak, (Nuh)
35	Shri Prem Chand	Chairman, Block Samiti Palwal
36	Smt. Ritu Singla	Chairperson, Zila Parishad Panchkula
37	Shri Khushdil Kadyan	Sarpanch, Siwah (Panipat)
38	Shri Virender Singh	Chairman, Block Samiti Bawal (Rewari)
39	Shri Amit Kumar Kadyan	Sarpanch, Kahnaur (Rohtak)
40	Shri Atma Ram	Sarpanch, Handi Khera (Sirsa)
41	Smt. Meena Rani	Chairperson , Zila Parishad Sonipat
42	Shri Yuvraj Sharma	Sarpanch, Khurdban, (Yamunanagar)
43	Shri Ram Lal	Sarpanch, Potli (Yamunanagar)
Representatives of Trade & Industry		
1	Shri Vipul Goel	Industries & Commerce Minister
2	Shri Devender Singh	Additional Chief Secretary, Industries & Commerce Department
3	Shri T.V.S.N. Prasad	Principal Secretary, Finance Department
4	Shri Sunil Saran	Secretary, Finance-cum-Advisor

5	Shri Gopal Sharan Garg	Chairman, Haryana Traders Welfare Board
6	Shri C. B. Goel	Ex. President, HCCI
7	Shri Rajneesh Garg	Vice President, HCCI, Panchkula
8	Shri M. K. Gupta	Chairman, PHD Chamber of Commerce & Industry, Haryana Committee, Chandigarh
9	Shri Apurv	Joint Director (Admin.), Industry & Commerce Department, Haryana
10	Shri O.P. Nagi	Sr. A.O., Industry & Commerce Department, Haryana
11	Shri Hardeep Banga	Victora Auto(P), Faridabad
12	Shri Navdeep Chawla	Psychotropic India Ltd Faridabad
13	Shri A.L. Aggarwal	Vice President, HCCI
14	Shri Wazir Singh Goyat	Director General, Industry & Commerce Department, Haryana
15	Shri Bhagwan Gupta	President, Manufacturers Association, Sonepat
16	Shri Brig. HPS Bedi	Director, PHD Chamber, Chandigarh
17	Shri Ramesh Verma	President, Handloom Exports Manufactures Association, Panipat
18	Shri Pritam Singh	President, HCCI Panipat Chapter
19	Shri Rakesh Garg	HCCI, Panipat
20	Shri Dev Jyoti	Director, CII
21	Shri Rajesh Kapoor	Director, CII
22	Smt. Deepti Sharma	Executive Officer, CII
23	Shri Sandeep	CMD, Nasscom, Gurugram
24	Smt. Lanika	Nasscom, Gurugram

Representatives of Political Parties

1	Shri R.S. Chaudhary	National Secretary General, Indian National Lokdal
2	Shri B.D. Dhalia	Member of Political Affairs Committee, Indian National Lokdal
3	Prof. Harbans Singh	Chief Media Coordinator, Indian National Lokdal
4	Shri Praveen Attrey	Spokesman, Indian National Lokdal
5	Shri Subhash Barala	MLA, State President, Bharatiya Janta Party
6	Capt. Abhimanyu	MLA, Finance Minister, Bharatiya Janta Party
7	Shri Om Prakash Dhankar	MLA, Development & Panchayats Minister, Bharatiya Janta Party
8	Shri Gian Chand Gupta	MLA, Chief Whip, Bharatiya Janta Party
9	Shri Neeraj Daftuar	Principal OSD to Chief Minister, Bharatiya Janta Party

9. Himachal Pradesh (25-28 September 2018)

Representatives of State Government

1	Shri Jai Ram Thakur	Hon'ble Chief Minister
2	Shri Mahender Singh Thakur	Hon'ble IPH & Horticulture Minister
3	Shri Kishan Kapoor	Hon'ble Food, Civil Supplies & CA Minister
4	Shri Suresh Bhardwaj	Hon'ble Education Minister
5	Shri Anil Sharma	Hon'ble MPP & Power
6	Shri Sarveen Chaudhary	Hon'ble Housing, UD & TCP Minister
7	Shri Vipin Singh Parmar	Hon'ble Health and Family Welfare Minister
8	Shri Virender Kanwar	Hon'ble RD & Panchayati Raj Minister
9	Shri Vikram Singh	Hon'ble Industry & TE Minister

10	Shri Rajiv Saizal	Hon'ble SJE & Cooperation Minister
11	Shri Vineet Chawdhry	Chief Secretary
12	Shri B.K. Agarwal	Addl. Chief Secy. (Home, Vigilance, Health & Family Welfare), Financial Commissioner (Appeals)
13	Shri Shrikant Baldi	Addl. Chief Secy. Cum Principal Secy. To the Chief Minister
14	Smt. Manisha Nanda	Addl. Chief Secy. (Public Works)
15	Shri Anil Kumar Khachi	Addl. Chief Secy. (Finance, Planning, Economics & Statistics, Twenty Point Programme), Financial Commissioner (Appeals)
16	Shri Ram Subhag Singh	Addl. Chief Secy. (Tourism & Civil Aviation, Urban Development)
17	Shri Tarun Kapoor	Addl. Chief Secy. (MPP & Power, NCES, Forest, Env., Sci. & Technology)
18	Shri Sanjay Gupta	Principal Secy. (Ayurveda, Cooperation, RPG)
19	Shri R.D. Dhiman	Principal Secy. (Industries, Technical Education, Horticulture)
20	Shri Prabodh Saxena	Principal Secy. (Town & Country Planning, Housing, Personnel, Trg., FA)
21	Shri Jagdish Chander	Principal Secy. (Excise & Taxation, Transport, information Technology)
22	Shri Onkar Chand Sharma	Principal Secy. (Tribal Development, Food Civil Supplies & Consumer Affairs, Agriculture)
23	Shri Devesh Kumar	Secretary (Irrigation & Public Health)
24	Shri Arun Kumar Sharma	Secretary (Education)

25	Shri Ravinder Nath Batta	Secretary (Rural Development, Panchayati Raj, Proj. Mon. to Chief Minister, General Administration, Parl. Affairs, Secretariat Administration, Sainik Welfare)
26	Dr. Purnima Chauhan	Secretary (Administrative Reforms, Language Art & Culture)
27	Shri Akshay Sood	Secretary (Finance)
28	Shri Dinesh Malhotra	Secretary (Youth Services & Sports), Commissioner Departmental
29	Shri Rajeev Sharma	ETC HP
30	Shri Abhay Pant	OSD 15th FC
31	Shri D.C. Rana	Special Secy.
32	Shri Deshraj Sharma	Director, Department of Agriculture
33	Shri Ashok Verma	Vegetable specialist, Dte. of Agriculture
34	Shri R.P. Verma	Engineer-in-Chief, PWD
35	Shri H.K. Gupta	CGM HRTC
36	Shri Abid Hussain	Special Secy. Finance
37	Dr. Nipun Jindal	Special Secy. Health
38	Shri Sanjay Bhardwaj	Additional Commissioner, Excise & Taxation
39	Shri Pradeep Sharma	Dy. Commissioner State Tax & Excise
40	Dr. Basu Sood	Advisor, Planning
41	Shri Pradeep Chauhan	Economic Advisor

Representatives of Urban Local Bodies

1	Smt. Kusum Sadrate	Mayor, Municipal Corporation Shimla
2	Smt. Rajni Vyas	Mayor, Municipal Corporation Dharamshala
3	Smt. Soma Devi	President, M.C. Bilaspur
4	Shri Amarjot Singh Bedi	President, M.C. Una
5	Shri Devender Thakur	President, M.C. Solan

6	Smt. Salochana Devi	President, M.C. Hamirpur
7	Shri Thakur Dass Sharma	President, M.C. Parwanoo
8	Smt. Radha Sood	President, M.C. Palampur
9	Shri Labh Singh Thakur	President, N.P. Rewalsar
10	Shri Chander Mohan Thakur	President, N.P. Chopal
11	Ms. Veena	President, M.C. Hamirpur

Representatives of Rural Local Bodies

1	Smt. Neelam Saraik	Member, Zila Parishad Shimla
2	Shri Madan Verma	Chairman, Panchayat Samiti Theog
3	Shri Puran Chand Thakur	Vice Chairoerson , Zila Parishad, Mandi
4	Ms. Prajwal	Chairperson, Panchayat Samiti ubbal - Kotkhai
5	Shri Digvijay Singh Negi	Pradhan, Gram Panchayat Kaafnoo, Distt.Kinnaur
6	Shri Om Prakash	Pradhan, Gram Panchayat Dharmpur, Block Dharmpur
7	Shri Sanjeev Kumar Rana	Pradhan, Gram Panchayat Aimaa Block Lambagaon
8	Smt. Sarla Thakur	Chairperson, Zila Parishad, Mandi
9	Shri Dina Nath	Pradhan, Gram Panchayat Pakhrair Block Seraj
10	Smt. Banti Devi	Pradhan, Gram Panchayat Karad Block Anni
11	Shri Rakesh Thakur	Chairman, Zila Parishad, Hamirpur
12	Shri Pyare Lal	Pradhan, Gram Panchayat Raghunathpura Block Sadar, Distt.Bilaspur
13	Ms. Asha Kashyap	Pradhan, G.P. Thari,

Representatives of Trade & Industry

1	Shri Satish Gupta	Beopar Mandal
2	Shri Mohinder Seth	Tourism Industry, Stake Holders Association
3	Shri Jagdish Chander Sharma	Pr. Secretary (Excise and Taxation)
4	Shri Vikas Kapoor	Vice President-Operations Radisson
5	Shri Gagandeep Singh	Cluster Head Himachal
6	Shri Anil Walia	MD, Hotel & Restaurant Association
7	Shri Ankush Mahajan	GM, Wild Flower
8	Shri Ramesh	Sr. VP, HP Beopar Mandal
9	Shri O.P. Saini	President, HP Beopar Mandal
10	Shri Sushil Soni	Executive Member, Himachal Pradesh Beopar Mandal
11	Shri Shailesh Aggarwal	BBNIA
12	Shri I.M.J.S. Sidhu	CII HP
13	Shri Sanjay Khurana	CII

Representatives of Political Parties

1	Col Dhani Ram Shandil	Former Minister and MLA Solan
2	Shri Mukesh Agnihotri	MLA & Leader of Opposition, VPO Gondpur, Tehlsil Haroli, District Una, H.P.
3	Shri Ram Lal Thakur	MLA, Vill Ghaial, PO Namhol, District Bilaspur, H.P.
4	Shri Harshvardhan Chauhan	MLA, Rain Basera Building, The Mall, Nahan, District Sirmour, H.P.
5	Dr. Onkar Shad	State Secretary, CPI(M), State Headquarter CPI(M), Bawa Market, Near A.G. Office, The Mall, Shimla
6	Shri Rakesh Singha	MLA & State Secretariat Member, State Headquarter CPI(M), Bawa Market, Near A.G. Office, The Mall, Shimla

7	Dr. Kuldeep Singh Tanwar	State Secretariat Member CPI(M), State Headquarter CPI(M), Bawa Market, Near A.G. Office, The Mall, Shimla
8	Shri Sanjay Chauhan	State Secretariat Member, CPI(M), State Headquarter CPI(M), Bawa Market, Near A.G. Office, The Mall, Shimla
9	Shri Satpal Singh Satti	President BJP, BJP Headquarter, Deep Kamal, Chakkar, Shimla
10	Shri Narender Bragta	MLA & Chief Whip, Bragta Niwas, Stokes Place, Shimla-2
11	Shri Randhir Sharma	Ex MLA, & Chief Spokesperson, State BJP, Vill. Guru-ka-Lahore, P.O. Bassi, Tehsil Shri Naina Devi Ji, Distt.Bilaspur
12	Shri Chander Mohan Thakur	General Secretary, State BJP, Vill. Kawga, P.O. & Tehsil Rajgarh, Distt. Sirmour

10. Jharkhand (01-03 August, 2018)

Representatives of State Government

1	Shri Raghubar Das	Hon'ble Chief Minister
2	Shri Saryu Rai	Hon'ble Minister, Food & Civil Supplies
3	Shri Ramchandra Chandarvanshi	Hon'ble Minister, Health Family Welfare & Medical Education
4	Shri Raj Paliwar	Hon'ble Minister, Labour
5	Smt. Neera Yadav	Hon'ble Minister, School Education, Higher Education
6	Dr. D.K. Tiwari	Development Commissioner
7	Shri I.S. Chaturvedi	Addl. Chief Secretary, Forest & Environement
8	Shri Sukhdev Singh	Addl. Chief Secretary, Planning-Cum-Finance
9	Shri Arun Kumar Singh	Addl. Chief Secretary, Water Resources

10	Shri. K.K. Khandelwal	Addl. Chief Secretary, Commercial Taxes
11	Shri AP Singh	Principal Secretary, School Education
12	Smt. Nidhi Khare	Principal Secretary, Health Family Welfare & Medical Education
13	Shri Avinas Kumar	Principal Secretary, Rural Development
14	Shri SKG Rahate	Principal Secretary, Home
15	Shri Satendra Singh	Secretary, Finance (Expenditure)
16	Shri Ajay Kumar Singh	Secretary, Urban Development
17	Shri Nitin Madan Kulkarni	Secretary, Energy Department
18	Shri Sanjay Kumar	Principal Chief Conservator of Forest
19	Shri Rahul Sharma	Secretary, Transport & Excise
20	Shri K.K. Soan	Secretary, RCD
21	Smt. Himani Pandey	Secretary, Welfare
22	Smt. Aradhana Patnayak	Secretary, PHED
23	Shri Vinay Kumar Choubey	Secretary, Industries
24	Shri Amitabh Kaushal	Secretary, Food & Civil Supplies
25	Shri Sunil kumar	Secretary, Building
26	Smt. Puja Singhal	Secretary, Agriculture
27	Shri Manish Ranjan	Secretary, Tourism, Sports, Art & Culture
28	Shri Aboo Bakker Siddiqui	Secretary, Mines
29	Shri Rajesh Sharma	Secretary, Higher Education
30	Shri Praveen Toppo	Secretary, Panchayati Raj
31	Dr. Harishawar Dayal	Director-in-chief, CFS

Representatives of Urban Local Bodies

1	Shri Chandra Shekhar Agarwal	Mayor, Dhanbad Nagar Nigam
2	Shri Bholu Paswan	Mayor, Chas Nagar Nigam
3	Smt. Asha Lakra	Mayor, Ranchi Nagar Nigam
4	Shri Prakash Ram	Dy. Mayor, Giridih Nagar Nigam

5	Smt. Sitamani Tirkey	President, Latehar Nagar Panchayat
6	Shri Mithilesh Kr. Thakur	President, Chaibasa Nagar Parishad
7	Shri Om Prakash Sahu	Vice President, Simdega Nagar Parishad
8	Shri Sunil Sinha	Vice President, Pakur Nagar Parishad
9	Shri Vinod Kr. Tiwari	Ward Parshad, Ramgarh Nagar Parishad
10	Shri Sandeep Anand	Ward Parshad, Khunti Nagar Panchayat

Representatives of Rural Local Bodies

1	Smt. Shalini Gupta	ZP President, Koderma
2	Smt. Renuka Murmu	ZP President, Sahibganj
3	Shri Sanjay Singh	Vice ZP Chairperson, Palamu
4	Shri Shyam Sunder Kachhap	Vice ZP Chairperson, Koderma, Khunti
5	Shri Vikash Mahto	Mukhiya, Dhanbad
6	Shri Ajay Singh	Mukhiya, Petarwaar, Bokaro
7	Ms. Deepantri Sardar	Mukhiya, Tetal Panchayat, Potka, East Singhbhum
8	Ms. Misfiqua	Mukhiya, Illami, Pakur
9	Shri Amukh Priyadarshi	Pramukh, Tarhasi Block, Palamu
10	Shri Timuthius Khakha	Pramukh, Sadar Block, Simdega
11	Smt. Rukmila Devi	Pramukh, Kunti Sadar

Representatives of Trade & Industry

1	Shri Sunil Bhaskaran	VP - Corporate Services, Tata Steel
2	Shri Amritanshu Prasad	Vice President, Corporate Affairs, Adani Group
3	Shri Debasish Mazumdar	President and In charge of UASD Division, Jamshedpur, Usha Martin
4	Shri Gunwant Singh Saluja	Chairman, Mongia Steel
5	Shri Avijit Ghosh	CMD, HEC

6	Shri Ranjeet Kr. Garodia	President, Federation of Jharkhand Chamber of Commerce & Industries
7	Shri Hansraj Jain	General Secretary – Jharkhand, Laghu Udyog Bharti
8	Shri Bal Krishna Singh	State Head, Indian Chamber of Commerce
9	Shri Madhukar Sinha	MD, AP&VPL & Member, CII Jharkhand
10	Shri Inder Agarwal	President, Adityapur Small Industries Association
11	Shri Bharat Jaisawal	State Coordinator, Federation of Indian Chambers of Commerce & Industry
12	Shri Amitava Bakshi	Vice Chairman, CII Jharkhand
13	Shri Sanjay Sabherwal	Regional Chairperson (Eastern Region), Automotive Component Manufacturers Association of India

Representatives of Political Parties

1	Shri Deepak Prakash	BJP
2	Dr. Ajay Kumar,	State President, Jharkhand INC
3	Shri Ajay Singh	TMC
4	Shri Dayanand Prasad Singh	TMC
5	Shri Bhubneshwar Mehta	CPI
6	Shri Krishna Murari Gupta	NCP
7	Shri Pradeep Yadav	JVM
9	Shri Devsharan Bhagat	AJSU
10	Shri Jayant Ghosh	AJSU
11	Shri Hemant Soren (Ex-CM)	JMM
12	Shri Abid Ali	RJD
13	Shri Gopi Kant Baksi	CPI(M)

11. Karnataka (23-26 June 2019)

Representatives of State Government

1	Shri H.D. Kumaraswamy	Chief Minister
2	Dr. G. Parameshwara	Deputy Chief Minister
3	Shri M.B. Patil	Minister for Home
4	Shri K.J. George	Minister for Large and Medium Scale Industries
5	Shri C.S. Puttaraju	Minister for Minor Irrigation
6	Shri G.T. Devegowda	Minister for Higher Education
7	Shri Krishna Byregowda	Minister for Rural Development and Panchayat Raj
8	Shri U.T. Abdul Khader	Minister for Urban Development
9	Shri Sathish L. Jarakiholi	Minister for Forest, Ecology and Environment
10	Shri Konareddy	Political Advisor to Hon'ble Chief Minister
11	Dr. S. Subramanya	Financial Advisor to Hon'ble Chief Minister
12	Shri T.M. Vijay Bhaskar	Chief Secretary to GoK
13	Shri P. Ravi Kumar	Additional Chief Secretary to GoK
14	Smt Vandita Sharma	Additional Chief Secretary to Government-cum-Development Commissioner, GOK.
15	Shri Mahendra Jain	Additional Chief Secretary to Government (Higher Education) / Energy Department
16	Shri I.S.N. Prasad	Additional Chief Secretary to Government, Finance Department.
17	Smt V. Manjula	Additional Chief Secretary to Government, Department of Personnel and Administrative Reforms.
18	Shri Ajay Seth	Managing Director, BMRCL

19	Dr. E.V. Ramana Reddy	Additional Chief Secretary to Hon'ble Chief Minister, GOK.
20	Dr. Rajkumar Khatri	Principal Secretary to Government (Disaster Management), Revenue Department.
21	Dr. N. Nagambika Devi	Principal Secretary to Government, Co-operation Department.
22	Shri L.K. Atheeq	Principal Secretary to Government, Rural Development and Panchayat Raj Department.
23	Shri S.R. Umashankar	Principal Secretary to Government, Education Department (Primary &
24	Shri Anjum Parwez	Secondary Education).
25	Shri R.K. Kataria	Principal Secretary to Government (M&U), Urban Development Department.
26	Dr. S. Selvakumar	Secretary to Government, Agriculture Department.
		Secretary to Hon'ble Chief Minister, GOK.
27	Shri M.S. Shrikar	Commissioner for Commercial Taxes
28	Dr. Ekroop Caur	Department
29	Shri V. Yashavantha	Secretary to Government (B&R/ Expenditure) Finance Department.
		Commissioner for Excise Department
30	Shri A.B. Ibrahim	Managing Director, Karnataka Urban Infrastructure Development & Finance Corporation (KUIDFC).
31	Shri Punati Shridhar	Principal Chief Conservator of Forests.

Representatives of Urban Local Bodies

1	Smt Gangambike Mallikarjun	Mayor, BBMP
2	Shri Padmanabha Reddy	Corporator, BBMP ward No- 29, Leader of opposition in BBMP
3	Shri B.S. Sathyanarayana	Corporator, BBMP Ward No-154, Basavanagudi, Bengaluru.
4	Smt Roopashree B.S.	Deputy Mayor, Tumakuru City Corporation
5	Shri Channabasappa S.N.	Deputy Mayor, Shivamogga City Corporation
6	Shri B.A. Ramesh Hegde	Corporator , Shivamogga City Corporation
7	Shri H.Vishnunayak	President, Mariyammanahalli, Taluk Panchayat
8	Shri G. Raghavendra	Councillor and Member Standing Committee, Kudligi, Taluk Panchayat
9	Shri B.H. Anil Kumar,	Additional Chief Secretary to Government, Urban Development Department
10	Shri N. Manjunatha Prasad	Commissioner, BBMP
11	Shri Anjum Parwez	Principal Secretary to Government (M&U), Urban Development Department

Representatives of Rural Local Bodies

1	Shri C. Narayanaswamy	Member, Panchayat Raj Parishat
2	Shri V.Y. Ghorpade	Vice-Chairman, Karnataka State Decentralised planning & Development Committee
3	Shri Manjunath	President, Chikkaballapur Zilla Panchayat
4	Smt Jayamma	President, Bengaluru Rural Zilla Panchayat
5	Shri Neelakantappa. M Kusagura	President, Ranibennur Taluk Panchayat
6	Smt Pushpa Rajesh	President, Somvarpete Taluk Panchayat

7	Shri Satish K.S.	Member, Kadaba Grama Panchayat, Gubbli Taluk & President, Karanataka State Grama Panchayat Member Federation
8	Shri P.P. Bopanna	President, Pollebettu Grama Panchayat, Virajpete Taluk
9	Shri Mahesh Kumar N.K.	President, Doddajala Grama Panchayat, Bengaluru (North)
10	Shri L.K. Atheeq,	Principal Secretary to Government, Rural Development and Panchayat Raj Department.
11	Shri S.M. Zulfiquarulla	Director (Panchayat Raj), Rural Development and Panchayat Raj Department.
12	Shri M.K. Kempegowda	Advisor (Panchayat Raj), Rural Development and Panchayat Raj Department.

Representatives of Trade & Industry

1	Shri T.V. Mohandas Pai	Chairman, AARIN Capital Partners
2	Shri Ullas Kamath	Chairman-FICCI (Karnataka)
3	Shri S. Sampathraman	Past President, FKCCI
4	Shri CA N Nityananda	Chairman, Corporate Law, Central Taxes and GST Committee, FKCCI and Managing Committee Member
5	Shri Devesh Agarwal	Sr. Vice-President, Bengaluru Chamber of Industry and Commerce (BCIC)
6	Shri Anand Padmanabhan	President, Shahi Exports
7	Shri Anil Haridass	Managing Director, Bill Forge Private Limited
8	Shri Basavaraj Javali	President, KASSIA

9	Shri Satya Gupta	Vice-Chairman, IESA
10	Shri Sayed Ahmed	CEO, NASSCOM
11	Shri Krishnan G.S.	Vice-President, ABLE & Regional President, India Novozymes South Asia Private Limited
12	Shri Biren Ghose	President, ABAI
13	Shri Ganesh Shenoy	Convenor, CII, Karnataka Economic Affairs, Finance & Taxation Panel and CFO MTR Foods
14	Shri Aman Choudari	Chairman, CII, Karnataka
15	Shri M. Maheshwar Rao	Secretary to Government, Commerce & Industries Department
16	Smt Gunjan Krishna	Commissioner, Industries Department

Representatives of Political Parties

1	Shri Hariram	Bahujan Samaj party
2	Shri K.C. Nagaraj	Bahujan Samaj party
3	Shri Raj Shekhar	Bahujan Samaj party
4	Shri Saathi Sundaresh	State Secretary ,Communist Party of India
5	Shri M. Satyanand	Assistant Secretary Bengaluru, Communist Party of India
6	Shri Krishna Byregowda	Indian National Congress
7	Shri Ramesh Babu	Janata Dal (Secular)
8	Shri Bandeppa Khashampur	Janata Dal (Secular)
9	Shri Syed Shafi Ulla Saheb	Senior Vice-President, Janata Dal (Secular)

12. Kerala (28 -31 May 2018)

Representative of State Government

1	Shri. Pinarayi Vijayan	Chief Minister
2	Dr. T.M. Thomas Isaac	Minister for Finance and Coir
3	Shri. A.K. Balan	Minister for Welfare of Scheduled Castes, Scheduled Tribes and Backward Classes, Law, Culture and Parliamentary Affairs
4	Shri. E. Chandrasekharan	Minister for Revenue and Housing
5	Shri. K.T. Jaleel	Minister for Local Self Governments, Welfare of Minorities, Wakf and Haj Pilgrimage
6	Shri. Kadakampally Surendran	Minister for Co-operation, Tourism and Devaswoms
7	Shri. M.M. Mani	Minister for Electricity
8	Adv. Mathew T. Thomas	Minister for Water Resources
9	Smt. J. Mercykutty Amma	Minister for Fisheries, Harbour Engineering and Cashew Industry
10	Shri. A.C. Moideen	Minister for Industries, Sports and Youth Affairs
11	Adv. K. Raju	Minister for Forests, Animal Husbandry and Zoos
12	Shri. Ramachandran Kadannappally	Minister for Ports, Museums, Archaeology and Archives
13	Prof. C. Raveendranath	Minister for Education
14	Smt. K.K. Shailaja Teacher	Minister for Health and Social Justice
15	Shri. G. Sudhakaran	Minister for Public Works and Registration
16	Adv. V.S. Sunil Kumar	Minister for Agriculture
17	Shri. P. Thilothaman	Minister for Food and Civil Supplies
18	Shri. Paul Antony	Chief Secretary

19	Shri. Tom Jose	Addl. Chief Secretary, Labour & Skills
20	Shri. Rajeev Sadanandan	Addl. Chief Secretary, Health & Family welfare, Ayush
21	Shri. Subrata Biswas	Addl. Chief Secretary, Home & Vigilance
22	Dr. Vishwas Mehta	Addl. Chief Secretary, Planning & Economic Affairs
23	Shri. P. H. Kurian	Addl. Chief Secretary, Revenue, Housing, Environment
24	Shri. T. K. Jose	Addl. Chief Secretary, LSGD
25	Dr. V. Venu	Principal Secretary, SC/ST Development, Forest & Wild Life, Cultural Affairs
26	Shri. Manoj Joshi	Principal Secretary, Finance
27	Shri. Bishwanath Sinha	Principal Secretary, GAD, P&ARD, Power, Transport (Aviation), Ports
28	Shri. Sanjeev Kaushik	Principal Secretary, Finance Resources
29	Dr. Usha Titus	Principal Secretary, Higher Education
30	Shri. A. Ajith Kumar	Secretary, LSG (Rural)
31	Shri. X. Anil	Secretary, Animal Husbandry & Dairy Development, Cultural Affairs (Zoos), Agriculture
32	Shri. M. Sivasankar	Secretary to CM, E&IT
33	Smt. Rani George	Secretary, Cultural Affairs, Tourism
34	Smt. Sumana N. Menon	Secretary, Sainik Welfare, Printing & Stationery
35	Dr. Sharmila Mary Joseph	Secretary, Finance (Exp.), Planning & Economic Affairs
36	Smt. Tinku Biswal	Secretary, Water Resources
37	Shri. A Shajahan	Secretary, General Education, Minority Welfare, Revenue (Wakf)

38	Shri. Sanjay M Kaul	Secretary, Industries Dept., Taxes (except Excise)
39	Smt. Mini Antony	Special Secretary, Food &Civil Supplies & Consumer Affairs, Industries (Coir)
40	Shri. P. Venugopal	Special Secretary, Co-operation, I&PRD

Representatives of Local Bodies

1	Shri. T.K. Jose	Additional Chief Secretary, LSGD
2	Adv. V.K. Prasanth	Secretary Mayors' Council & Mayor Thrivananthapuram Corporation
3	Smt. Meera Darshak,	Deputy Mayor, Kozhikode Corporation
4	Smt. Soumini Jain	Vice President Mayors' Council & Mayor, Kochi Corporation
5	Smt. W.R. Heebha	Vice Chairperson, Chamber of Municipal Chairmen
6	Adv. K.Thulasibhai Padmanabhan	President , Kerala Grama Panchayat Association, Panchayat Bhavan, Thrivananthapuram
7	Shri. R.Subhash	President, Kerala Block Panchayat Association, Swaraj Bhavan, Nanthancod, Thrivananthapuram
8	Shri. V.K. Madhu	President, District Panchayat President's Chamber, Kerala District Panchayat Office, Pattom,Thrivananthapuram

Representatives of Trade & Industry

1	Shri. P.K.Mayan	Western India Pvt Ltd
2	Smt. Kathrenamma Sebastian	Deputy Director, MSME Development Institute,
3	Shri. S Ramesh Kumar	Institute of Chartered Accountants of India
4	Shri. N.K. Krishnan Kutty	DGM, Canara Bank

Representatives of Political Parties

1	Shri. J. Sudhakaran	Bahujan Samaj Party
2	Adv. Padmakumar	Bharathiya Janatha Party
3	Dr. Radhakrishna Pilla	Bharathiya Janatha Party
4	Shri. K. Prekash Babu	Assistant Secretary, Communist Party of India
5	Shri. A. Vijayaraghavan	Central Committee Member, Communist Party of India (Marxist)
6	Shri. Ramesh Chennithala	Indian National Congress
7	Shri. Thampanur Ravi	Indian National Congress
8	Shri. Suku S. Kadampally	Nationalist Congress Party
9	Shri. C.K. Nanu	Janata Dal (Secular)
10	Shri. George Thomas	Janata Dal (Secular)
11	Shri. Joseph M. Puthussery	Ex. MLA, Kerala Congress (M)
12	Shri. Mohd. Shah	Muslim League

13. Madhya Pradesh (03-05 July 2019)

Representatives of State Government

1	Shri Kamal Nath	Chief Minister
2	Dr. Vijay Laxmi Sadho	Minister
3	Shri Hukum Singh Karada	Minister
4	Shri Bala Bachhan	Minister
5	Shri Arif Aqueel	Minister
6	Shri Brajendra Singh Rathore	Minister
7	Shri Pradeep Jaiswal	Minister
8	Shri Lakhan Singh Yadav	Minister
9	Shri Tulsiram Silawat	Minister
10	Shri Govind Singh Rajput	Minister
11	Dr. Prabhuram Choudhary	Minister
12	Shri Harsh Yadav	Minister
13	Shri Jaivardhan Singh	Minister
14	Shri Kamleshwar Patel	Minister

15	Shri Lakhan Ghanghoria	Minister
16	Shri Mahendra Singh Sisodiya	Minister
17	Shri P.C. Sharma	Minister
18	Shri Pradhumn Singh Tomar	Minister
19	Shri Sachin Subhash Yadav	Minister
20	Shri Surendra Singh Baghel	Minister
21	Shri Sudhi Ranjan Mohanty	Chief Secretary
22	Shri Prabhanshu Kamal	APC/ Addl.Chief Secretary
23	Shri P.C. Meena	Addl.Chief Secretary
24	Shri M. Gopal Reddy	Addl.Chief Secretary
25	Shri K.K. Singh	Addl.Chief Secretary
26	Smt. Salina Singh	Addl.Chief Secretary
27	Shri Manojshrivastava	Addl.Chief Secretary
28	Smt. Shikha Dubey	Addl.Chief Secretary
29	Smt. Gauri Singh	Addl.Chief Secretary
30	Smt. Veera Rana	Addl.Chief Secretary
31	Shri Anurag Jain	Addl.Chief Secretary
32	Shri Mohammad Suleman	Addl.Chief Secretary
33	Shri J.N. Kansotiya	Principal Secretary
34	Dr. Rajesh Rajora	Principal Secretary
35	Shri Pankaj Rag	Principal Secretary
36	Shri Shivnarayan Mishra	Principal Secretary
37	Shri Ashvini Kumar Rai	Principal Secretary
38	Shri Malayshrivastava	Principal Secretary
39	Shri Ajeet Kesari	Principal Secretary
40	Shri Ashok Kumar Shah	Principal Secretary
41	Shri Ashok Varnwal	Principal Secretary
42	Dr. Manoj Govil	Principal Secretary
43	Shri Pramod Agrawal	Principal Secretary

44	Shri Manushrivastava	Principal Secretary
45	Shri Satish Chandra Mishra	Principal Secretary
46	Shri Pankaj Agrawal	Principal Secretary
47	Shri K.C. Gupta	Principal Secretary
48	Smt. Neelam Shami Rao	Principal Secretary
49	Shri Satyendra Kumar Singh	Principal Secretary
50	Smt. Deepti Gour Mukherjee	Principal Secretary
51	Shri Neeraj Mandloi	Principal Secretary
52	Shri Sanjay Dubey	Principal Secretary
53	Shri Anupam Rajan	Principal Secretary
54	Shri Aniruddhe Mukherjee	Principal Secretary
55	Shri Sanjay Kumar Shukla	Principal Secretary
56	Smt. Rashmi Arun Shami	Principal Secretary
57	Shri Hariranjan Rao	Principal Secretary
58	Smt. Deepali Rastogi	Principal Secretary
59	Dr. Pallavi Jain Govil	Principal Secretary
60	Shri Manish Rastogi	Principal Secretary
61	Shri Shivshekhar Shukla	Principal Secretary
62	Shri Vinod Kumar	Principal Secretary
63	Smt Harshika Singh	Dy. Secretary
64	Shri Neeraj Kumar Singh	Dy. Secretary
65	Shri P.K. Roy	Dy. Secretary
66	Shri Ashok Kumar Dhanopya	Research Analyst
67	Shri Rajendra Singh Jadam	Statistical Officer

Representatives of Urban Local Bodies

1	Shri Ahsanul Haq, Councillor	Municipal Corporation Rewa
2	Shri Ajay Shukla, President	Nagar Parishad Semariya
3	Dr. Sunita Yarde, Mayor	Municipal Corporation Ratlam

4	Shri Rajendra Vashishta, Leader of opposition	Municipal Corporation Ujjain
5	Smt Shakuntala Jayaswal, President	Municipal Council Aagar
6	Smt Chhaya Sachin Patni, President	Nagar Parishad Unhel
7	Shri Rajveer Singh Baghel, President	Nagar Parishad Sonkach
8	Shri Krishna Kumar Dikshit, Councillor	Municipal Corporation Gwalior
9	Shri Khalak Singh Rajpoot,	Councillor (Member of MIC) Municipal Corporation Morena
10	Shri Munnalal Kushwaha, President	Municipal Council Shivpuri
11	Shri Alkesh Arya, President	Municipal Council Betul
12	Shri Lokesh Gogle, Councillor	Municipal Council Hoshangabad
13	Shri Ajay Ratnani, Councillor (Member of PIC)	Municipal Council Hoshangabad
14	Shri Suresh Jain, President	Municipal Council Harda
15	Shri Alok Sharma, Mayor	Municipal Corporation Bhopal
16	Shri Rajesh Nema, Councillor	Municipal Council Vidisha
17	Smt Malini Laxman Singh Gour, Mayor	Municipal Corporation Indore
18	Shri Chandrajeet Yadav, President	Nagar Parishad Depalpur
19	Shri Laxman Singh Chouhan, President	Municipal Council Badwani
20	Shri Rajesh Soni, Councillor	Nagar Parishad Maheshwar
21	Smt Sushila Vishnu Chourasiya, President	Municipal Council Sehora
22	Shri Hemant Rai, President	Nagar Parishad Newtanchkhli
23	Shri Ajay Parmar, Leader of Opposition	Municipal Corporation Sagar

24	Smt Aruna Tantwal, President	Municipal Council Hata
25	Smt Krishna Laxman Singh, President	Nagar Parishad Pathariya

Representatives of Rural Local Bodies

1	Shri Manmohan Nagarm	Zila Panchayat, Bhopal
2	Smt. Rajni Prajapati	Zila Panchayat, Datia
3	Smt. Chandrakalan Paraste, Member	Zila Panchayat, Dindori
4	Shri Chandraveer Singh Rathore, Co. Chairman	Zila Panchayat, Jhabua
5	Shri Sanjay Mavaskar	Block Panchayat, Bhainsdehi, Betul
6	Ms. Aarti Yadav	Block Panchayat, Phanda, Bhopal
7	Shri Gendalal Damor	Block Panchayat, Thandla, Jhabua
8	Smt. Anuradha Joshi, Sarpanch	Gram Panchayat, Kodariya
9	Shri Rajesh Jangde, Sarpanch	Gram Panchayat, Bilkisganj
10	Shri Dilip Dehriya, Sarpanch	Gram Panchayat, Rohnakala
11	Ms. Mona Kaurav, Sarpanch	Gram Panchayat, Sadoomar
12	Shri Gajraj Singh, Sarpanch	Gram Panchayat, Nipanya Jat
13	shri Pawan Thakur, Sarpanch	Gram Panchayat, Pandri
14	Sh Lakhan Kumhare, Sarpanch	Gram Panchayat, Pipaldhana
15	Shri Rajendra Tekam, Sarpanch	Gram Panchayat, Karanjiya
16	Shri Delan Tekam, Sarpanch	Gram Panchayat, Pipariya
17	Shri Dinesh Baraskar, Sarpanch	Gram Panchayat, Bothia
18	Shri Dilip Damor, Sarpanch	Gram Panchayat, Sehore Chikliya
19	Shri Ramji Kirar, Sarpanch	Gram Panchayat, Kumarhar

Representatives of Trade & Industry

1	Shri Anuragshrivastava, Vice Chairman	CII
2	Shri Pradeep Karambelkar, Co Chairman	PHD Chamber of Commerce

3	Shri Rajeev Agrawal, President	MandideepInd Association
4	Shri Amarjeet singh, President	Govindpura Ind. Asso. (GIA)
5	Shri K S Nanda, Vice-President	Govindpura Ind. Asso. (GIA)
6	Shri Nitin Agrawal, President Bhopal	CREDAI
7	Shri Manoj Singh Meek, Vice President	CREDAI
8	Shri Wasik Hussain, President CREDAI MP	CREDAI
9	Shri P.S. Bindra, Vice President	CREDAI
10	Shri Ajay Sharma, Treasurer	CREDAI
11	Shri NeerajMacker, Vice President	CREDAI
12	Shri Akhilesh Rathi, Director/President	Bhaskar Industries/MP Textile Association
13	Shri S Pal, Resident Director	Vardhman Yarns
14	Shri Siddharth Agrawal, Director	Sagar Manufacturing
15	Shri Sudhir Agrawal, Chairman	Sagar Manufacturing
16	Shri D K Mittal	Maral Overseas Limited
17	Shri Shreyaskar Chaudhary, MD	PratibhaSyntex Ltd.
18	Shri Mrityunjay Kumar, Plant Head	Alkem Laborotaries
19	Shri Rakesh Goyal	Alkem Laborotaries
20	Shri Vikas Garg, Sr Director Operation	Teva API India
21	Shri Manoj Mishra, CGM Administration	Teva API India
22	Dr. Anamika Gulati	LT Foods
23	Shri Gaurav Baheti, Director	Ariba Foods Pvt Ltd.
24	Shri R N Maloo, CFO	Surya Roshni
25	Shri Vasumitra Pandey, CGM Finance	Surya Roshni
26	Shri Saurabh Sangla, Director	Adroit Industries (India) Ltd.
27	Shri Rakesh Chaudhary, Plant Head	LAPP India
28	Shri Manoj Modi	Industrial Packaging
29	Shri Mayur Patel, Managing Director	Makson Healthcare Pvt Ltd.
30	Shri T S Dhermendher	Tenneco Automotive I Pvt Ltd.

Representatives of Political Parties

1	Shri Rajendra Kumar Singh	Indian National Congress
2	Shri J.P. Dhanopia	Indian National Congress
3	Shri Bhupendra Gupta	Indian National Congress
4	Shri Prakash Jain	Indian National Congress
5	Shri Gaurav Raghuvanshi	Indian National Congress
6	Shri Vijesh Lunawat	Bharatiya Janata Party
7	Shri Hemand Khandelwal	Bharatiya Janata Party
8	Shri Yash Pal Singh Sisodia	Bharatiya Janata Party
9	Shri Akhilesh Jain	Bharatiya Janata Party
10	Shri Yogesh Mehta	Bharatiya Janata Party
11	Shri Ram Kumar Gautam	Bahujan Samaj Party
12	Shri C.L.Gautam	Bahujan Samaj Party
13	Shri Kamal Singh Raghuvanshi	Samajwadi Party
14	Shri Arun Dube	Samakwadi Party
15	Shri Vikram Singh Rana	Independent

14. Maharashtra (17-19 September 2018)

Representatives of State Government

1	Shri. Devendra Fadnavis	Chief Minister
2	Shri.Chandrakant Patil	Minister ,Revenue, Relief and Rehabilition
3	Shri. Sudhir Sachchidanand Mungantiwar	Minister ,Finance and Planning, Forests
4	Prof. Ram Shankar Shinde	Minister, Water Conservation, Protocol.
5	Shri. Sambhaji Diliprao Patil-Nilangekar	Minister, Labour, Earthquake Rehabilitation, Skill Development, Ex-servicemen Welfare.
6	Shri. Deepak Kesarkar	State Minister, Home (Rural), Finance and Planning
7	Shri. V.Giriraj	Chairman, 15th Finance commission Memorandum Committee.

8	Shri. U.P.S. Madan	Additional Chief Secretary, Finance Department
9	Smt. Medha Gadgil	Additional Chief Secretary, (Relief and Rehabilition), Revenue & Forest Department
10	Shri. Debashish Chakravarti	Additional Chief Secretary, Planning Department
11	Shri Manu Kumar Shrivastava	Additional Chief Secretary(Revenue Registration and Stamp), Revenue and Forest Department
12	Shri. Rajiv Jalota	Commissioner, State Tax, Maharashtra
13	Shri Rajagopal Devara	Principal Secretary, Finance Department
14	Dr. Pradeep Vyas	Principal Secretary, Public Health Department
15	Shri Iqbal Singh Chahal	Principal Secretary, Water Resources Department
16	Shri. B.A.Gagarani	Principal Secretary, Chief Minister Office.
17	Shri Aseem Gupta	Secretary, Rural Development Department
18	Shri Eknath Dawale	Secretary, Agriculture and Soil and Water Conservation Department
19	Shri Vikas Kharge	Secretary (Forest), Revenue & Forest Department.
20	Shri. Rajivkumar Mittal	Secretary (Expenditure), Finance Department
21	Shri M.Sankarnarayanan	Director, Directorate of Municipal Administration
22	Dr. Amit Saini	Joint Commissioner, State Tax

Representatives of Local Bodies

1	Smt. Alka Swami	President, Municipal Council, Ichalkaranji
2	Shri Atul Tarale	President, Municipal Council, Wardha
3	Smt. Laxmi Karadkar	Municipal Council, Pachgani
4	Smt. Anuradha Adik	President, Municipal Council,shrirampur
5	Smt. Anjalitai Ghotekar	Mayor, Municipal Corporation, Chandrapur
6	Shri Harish Sharma	President, Municipal Council, Ballarpur
7	Smt. Meena Patil	Dashama Self help Group, Dist. Nandurbar
8	Smt. Manisha Ratnakar Pawar	Chairman, Panchayat Samiti, Nashik
9	Smt. Chitra Aswad Patil	Member, Zilla Parishad, Raigad
10	Shri. Prashant Ranwade	Sarpanch, Gram panchayat, Nande, Taluka mulshi, District pune
11	Shri. Devrao Bhongle	President, Zilpa Parishad, Chandrapur
12	Smt. Supriya pawar	Sarpanch, Gram Panchayat, Belwandi, Taluka Shrigonda, Dist. Ahmednagar
13	Smt. Lata Sanjay Jadhav	Tulja Bhavani Self-help Group, Sakhari, Dist. Dhule

Representatives of Trade & Industry

1	Shri. Deepak Mukhi	Head, FICCI
2	Shri. Rajesh Shah	Federation of Indian Chambers & Commerce & Industries (FICCI)
3	Shri. Santosh Mandlecha	President of Maharashtra Chamber of Commerce, Industries & Agriculture
4	Shri. Jibak Dasgupta	Director, Confederation of Indian Industries
5	Smt. Nayana Narayanan	Dy. Director, Confederation of Indian Industries

Representatives of Political Parties

1	Shri. Ratnakar Mahajan	Vice President, Indian National Congress
2	Shri. Kishor Gajbhiye	Indian National Congress
3	Shri. Bhai Jagtap	MLC, Indian National Congress
4	Shri. Makarand Herwadkar	Shiv Sena
5	Shri. Arvind Sawant	MP, Shiv Sena
6	Shri. Anil Desai	Shiv Sena
7	Shri. Sachin Paras Naik	Admin Officer, Shiv Sena
8	Shri Anil Shidhore	Maharashtra Navnirman Sena
9	Shri. Harshal Deshpande	Secretary, Maharashtra Navnirman Sena
10	Shri. Atul Bhatkhalkar	General Secretary, MLA, BJP
11	Shri. Ajit Abhyankar	Communist Party of India (Marxist)
12	Shri. Jayant Patil	MLA, NCP
13	Shri. Prakash Narvekar	Communist Party of India
14	Shri. Ashok Suryawanshi	Executive Member, Communist Party of India,
15	Shri. Milind Rande	Communist Party of India,
16	Shri. Prashant Ingle	General Secretary, Bahujan Samaj Party,

15. Manipur (29-30 November, 2018)

Representatives of State Government

1	Shri N.Biren Singh	Hon'ble Chief Minister, Manipur
2	Shri Y Joykumar Singh	Dy. Chief Minister, Manipur
3	Shri Karam Shyam	Minister(CAF&PD/Revenue)
4	Shri Letpao Haokip	Minister(WRD/YAS)
5	Shri N. Kayisii	Minister(TA&H/Fisheries)
6	Shri Th Shyamkumar	Minister(Forest/MAHUD)
7	Shri V Hangkhalian	Minister(Agriculture & Vety)
8	Smt Nemcha Kipgen	Minister(Social Welfare/Cooperation)
9	Dr. J Suresh Babu	Chief Secretary
10	Shri Rakesh Ranjan	Principal Secretary(Finance)

11	Dr Suhel Akhtar	Addl. Chief Secretary(Forest)
12	Dr Pramod Asthana	ADGP(Law & Order)
13	Shri MH Khan	Addl. CS(RD/Fisheries)
14	Shri Letkhogen Haokip	Addl. CS(TA&H)
15	Shri Th.Gopen Meitei	Commissioner(AE)
16	Shri K Angami	Principal Chief Conservator of Forests
17	Shri C Arthur W	Director
18	Shri M Lakshmikumar	Commissioner(Transport)
19	Shri Th Harikumar	Director(MAHUD)
20	Shri N Geoffrey	Secretary to Chief Minister
21	Shri H Deleep Singh	Commissioner(Education)
22	Shri M Joy Singh	Secy. (MAHUD)
23	Shri P Vaiphei	Principal Secretary (Textiles, Commerce and Industries)
24	Shri V Vumlunmang	Principal Secretary (Health/Social Welfare/ GAD/ Sericulture)
25	Smt A.Nungshitombi	Secretary(law)
26	Shri T Guite	ADGP
27	Smt Peijonna Kamei	Director(Eco and Stat)
28	Shri K Brojen	Joint Director(Horticulture)
29	Smt Nidhi Kesarwani	Secretary(PHED/Tourism)
30	Smt Jacintha Lazarus	Secretary(MI/WRD)
31	Shri RK Dinesh	Commissioner(Works/Power)
32	Shri I.K. Muivah	IGP(Admn)
33	Shri Athem Muivah	Secretary(DIPR)
34	Shri Y Joykumar	Project Director(EAP), PWD
35	Shri H Balkrishna	Director(RD/IPR)

Representatives of Urban Local Bodies

1	Shri L Maniyaima	Chairperson, Bishnupur Municipal Council
2	Shri Th.Amitabh Singh	Councillor, Wangjing Municipal Council
3	Smt. Aribam Thaja Devi	Chairperson, Lamsang Nagar Panchayat
4	Smt L. Babita	Chairperson, Wangjing Municipal Council
5	Shri Th.Shyamo Singh	Chairperson, Thounal Municipal Council
6	Shri Lokeshwor Singh	Mayor, Imphal Municipal Corporation
7	Shri L. Lukhoi Khuman	Councillor, Andro Nagar Panchayat
8	Shri M Sarat Singh	Chairperson, Sugnu Municipal Council

Representatives of Rural Local Bodies and ADCs

1	Shri Md Abdul Latif	Member, Thoubal Zila Parishad
2	Shri Sinam Marjit	Member, Imphal West ZP
3	Smt P Bimola Devi	Adhyaksha, Imphal East Zilla Parishad
4	Shri H. Leo	ADC, Senapati District
5	Shri Th. Hopeson Chote	Advisor to Chairman, ADC, Chandel
6	Shri M Isaac	Vice Chairman, ADC, Ukhrul
7	Shri Micah Pamei	Member, ADC, Tamenglong
8	Shri N.Wungreiyo	Member, ADC, Ukhrul
9	Shri H.Hangshing	Chairman, ADC, Kangpokpi
10	Shri John Hingba	Vice Chairman, ADC, Senapati
11	Shri T.Paukhanlian	Chairman, ADC, Churachandpur
12	Smt Rombai L.	Adhyaksha, ZP,Bishnupur District
13	Shri L Letkhogen Haokip	Addl. Chief Secretary, TA & Hills
14	Shri H Balkrishna	Director, Rural Development and Panchayati Raj
15	Shri MH Khan	Addl. Chief Secretary, Rural Development and Panchayati Raj

Representatives of Trade & Industry

1	Shri S.Tekendrajit Singh	President, Indo Myanmar Border Trade Union
2	Shri Y Kapur Singh	Vice President, Indo Myanmar Border Trade Union
3	Shri Th.Joykumar Singh	All Manipur Entrepreneur Association
4	Shri Th.Ibochouba Singh	General Secy, All Manipur Entrepreneur Association
5	Shri V Shekhar	President, Border Trade Chamber of Commerce
6	Shri Ch Ranjit Singh	General Secy., Indo Myanmar EXIM association
7	Shri Rajmani Sharma	President, Federation of Manipur Importer Exporter Chamber of Commerce and Industries
8	Shri P Vaiphei	Principal Secretary(Textiles, Commerce and Industries)
9	Shri C Arthur W	Director, Trade, Commerce and Industries, Govt. of Manipur
10	Dr Radheshyam Oinam	Manipur Chamber of Commerce
11	Shri R Jaganathan	Border Trade Chamber of Commerce
12	Shri K B Subrahmaniam	Border Trade Chamber of Commerce

Representatives of Political Parties

1	Shri Sushil Huidrom	Vice President, NPP
2	Shri Kh.Loken Singh	Secy General, NPP
3	Smt. Y Romola Devi	President Shiv Sena Women Front, Shiv Sena
4	Shri Ch. Bijoy Singh	Spokesperson BJP Manipur, BJP
5	Shri M. Bhorot Singh	Ex-President BJP Manipur, BJP

6	Shri Kh.Devabratta Singh	Congress
7	Shri BD Behring	PDA
8	Shri Kshri Santa	Secretary, CPI(Marxist)
9	Shri Ito Meitei	CPI
10	Shri L. Sotinkumar	State Secretary, CPI
11	Shri Kh. Surchand	Asst. State Secretary, CPI(M)
12	Dr. G.T. Sharma	President, MDPF

16. Meghalaya (03-05 June, 2019)

Representatives of State Government

1	Shri Conrad Sangma	Hon'ble Chief Minister
2	Shri Prestone Tynsong	Deputy Chief Minister, i/c Public Works Department (Roads), A.H & Vety etc.,
3	Shri Alexander Laloo Hek	Cabinet Minister, i/c Arts & Culture, Health & Family Welfare etc.,
4	Shri Comingone Ymbon	Cabinet Minister, i/c Public Works Department (Buildings), Fisheries etc.,
5	Shri Sniawbhalang Dhar	Cabinet Minister, i/c Commerce & Industries, C & RD etc.,
6	Shri Mehtab Lyndoh	Cabinet Minister, i/c Excise Registration Taxation Stamps, Tourism etc.,
7	Shri Lahkmen Rymbui	Cabinet Minister, i/c Border Areas, Forest & Environment etc.,
8	Shri Kyrmen Shylla	Cabinet Minister, i/c Social Welfare, Revenue & Disaster Management etc.,
9	Shri Benteidor Lyngdoh	Cabinet Minister, i/c Horticulture, Agriculture etc.,
10	Shri Hamletson Lyngdoh	Cabinet Minister, i/c Urban Affairs, Municipal Administration etc.,

11	Shri Samlin Malngiang	Cabinet Minister, i/c Public Health Engineering and Secretariat Administration Department
12	Shri P.S. Thangkhiew	Chief Secretary, Meghalaya
13	Shri Hector Marwein	Additional Chief Secretary, i/c Arts Culture, Social Welfare etc.,
14	Shri R.V. Suchiang	Additional Chief Secretary, i/c Finance, Planning etc.,
15	Shri D.P. Wahlang	Additional Chief Secretary, i/c Sports & Youth Affairs, Urban Affairs etc.
16	Shri Sampath Kumar	Commissioner & Secretary, i/c Agriculture, Sericulture etc.
17	Shri T. Dkhar	Commissioner & Secretary, i/c Social Welfare, Border Areas etc.
18	Shri Frederick Roy	Commissioner & Secretary i/c Election
19	Shri M.R. Synrem	Commissioner & Secretary i/c State Planning Board, Tourism etc.
20	Shri S. Kharlyngdoh	Commissioner & Secretary i/c Home(Police) and Political Department
21	Shri Aldous Mawlong	Commissioner & Secretary, i/c Forest and Environment
22	Shri Peter S. Dkhar	Commissioner & Secretary, i/c Sports & Youth Affairs and Arts & Culture
23	Dr. D. Vijay Kumar	Commissioner & Secretary, i/c Finance, Planning
24	Shri I.R. Sangma	Secretary, i/c C&RD, Fisheries
25	Shri M.N. Nampui	Secretary, i/c Agriculture, Information & Public Relation etc.,

26	Shri Pravin Bakshi	Secretary, i/c Health & Family Welfare, Arts & Culture
27	Smt. Wanchwa Shallam	Director of Accounts & Treasuries
28	Smt. B.M. Lyndew	SEPHE
29	Shri A. Lyngkhr	State Co-ordinator SBM (a)
30	Shri B.S. Sohliya	Director, IPR CEO, Shillong Municipal Board
31	Shri C. Kharkrang	Director, MEPTCL
32	Shri K.N. War	Director, (Distribution), MEPDCL
33	Shri M. Shangpliang	Director (Generation), MEPCCL
34	Shri A.CH. Marak	Director, DSEL & DHTE- Education
35	Shri K.D. Talecudar	C.E., PHE, Department
36	Shri E. Kharmalki	Secretary, Urban Development Department
37	Shri Rohming Thiek	Planning Officer (Forest)
38	Shri J.R. Sangma	Secy., C.R.D. Department
39	Shri A.M. Laloo	Director, Economic & Statistic
40	Shri R. Sumer	Deputy Director, Economic & Statistic
41	Shri Robert Lyndoh	Jt. Secy. Planning
42	Shri Randal Rangad	Sr. R.O. Inavel (EA)
43	Shri E.Y. Chen	Joint Secretary Finance (EA), Department
44	Shri Cyril Diengdoh	Director of Tourism
45	Shri L. Khmgsit	Jt. Commissioner Taxes
46	Shri W.A.M. Booth	Director SYA
47	Shri J.L. Mawlong	Director C&I
48	Shri G.S. Mukharjee	Company Secretary, MeECL & Subsidiaris
49	Shri B.P. Singh	Chief Accounts Officer, i/c, MeECL
50	Shri M.N. Nampui	Secretary, Agriculture ER Deptt.
51	Shri A.L. Mawlong	Director Land Records & Survey
52	Shri V.R. Syleai	Director, Border Areas Development

53	Shri P.S. Dkhar	Commissioner & Secretary, Sports and Youth Affairs
54	Dr. Manjunatha.C	Secretary, Vety & Mining
55	Dr. Shilla	Director A.H & Vety
56	Shri W. Nongsiej	Director, Arts & Culture
57	Shri B. Hajong	Director, DECT
58	Shri P.R. Marwein	Secretary PWD (R&B)
59	Shri L.D. Suchiang	CE, PWD (Roads)
60	Shri P.K. Agrahari	Secretary, Finance Deptt.
61	Shri Arun Kumar Kembhavi	Director, CHRD

Representatives of Urban Local Bodies

1	Shri B.S. Sohliya	Chief Executive Officer, Shillong Municipal Board
2	Smt. Rimaya S. Manners	Chief Executive Officer, Jowai Municipal Board
3	Shri Aloysius Ch. Marak	Chief Executive Officer, Williamnagar Municipal Board
4	Smt. Julia Bilchame Marak	Assistant Engineer, Resubelpara Municipal Board
5	Shri S. Amse	E.O, Jowai Municipal Board
6	Shri B.S. Sohliya	CEO, SMB

Representatives of Rural Local Bodies

1	Shri T. Dkhar	Chief Executive Member, KHADC
2	Shri Pyniaid S. Syiem	Deputy Chief Executive Member, KHADC
3	Shri T.W. Chyne	Executive Member, KHADC
4	Shri P. Lyngdoh	Executive Member, KHADC
5	Shri T. Shiwat	Chief Executive Member, JHADC
6	Shri L. Rymbai	Deputy Chief Executive Member, JHADC
7	Shri R. Syngkon	Executive Member, JHADC

8	Shri Winning G. Sungoh	Executive Member, JHADC
9	Shri H.B. Dkhar	Planning Adviser, JHADC
10	Shri L.C. Ryngkhlem	Finance & Account Officer, JHADC
11	Smt. J. Pde	Chief Engineer, JHADC
12	Smt. K. Syngkon	Planning Officer, JHADC
13	Shri Augustine R. Marak	Chairman, High Power Committee, GHADC
14	Shri Sengnal N. Sangma	Executive Member, Finance, GHADC
15	Smt. Rikse R. Marak, MCS	Secretary to the EC, GHADC
16	Shri Rangku Orasis N. Sangma	Chief Forest Officer, GHADC
17	Smt. S. Saiborne	IT Secretary, KHADC
18	Shri C. Pohlong	Dy. Secretary, KHADC

Representatives of Trade & Industry

1	Smt. Silda Thabah	M/S Delicacies Food Processing Centre, Nongrah, Shillong
2	Shri James Dkhar	M/S Nela Handloom Training Centre Cum Production Unit, Mawkasiang
3	Smt. D. Majaw (Speaker)	M/S Smoky Falls Tribe Coffee, Nongthymmai
4	Shri Paila Marbaniang	Majai Exporter, East Khasi Hills District
5	Shri Satish Urion	Majai Exporter, East Khasi Hills District
6	Shri Fieldstar Japang	Majai Exporter, East Khasi Hills District
7	Shri R. Lyngdon	Riwar Mihngi Exporter & Importer Association, East Khasi Hills District
8	Shri N. Khongkhlad (Speaker)	Riwar Mihngi Exporter & Importer Association, East Khasi Hills District
9	Shri Ericstone Laso	Nongjri Elaka Importer & Exporter Association, East Khasi Hills District
10	Shri Emlin Nomi	Nongjri Elaka Importer & Exporter Association, East Khasi Hills District

11	Shri Nathanael P. Anderson Newmai	M/S Anderson Tea Estate, Umran Dairy, Ri Bhoi District
12	Shri R.K. Pareek (Speaker)	Meghalaya Cements Ltd, Thangskai23, East Jaintia Hills District
13	Shri Devendra Bansal	Cement Manufacturing Co. Ltd, Lumshnong, East Jaintia Hills District
14	Shri L.N. Mishra	Dalmia Cements Ltd, Thangskai, East Jaintia Hills District
15	Shri Pawan Joshi	Green Valley Cements Ltd, Nongsning, East Jaintia Hills District
16	Shri Pawan Yadav	M/S Amrit Cements Ltd, Umlaper, East Jaintia Hills District
17	Shri Vikram Singhania	M/S Print Xpress, Police Bazar, Shillong
18	Shri A.B. Rajan	Hills Cement Co. Ltd.
19	Shri A. Kejriwal	Meghalaya Cements Ltd.
20	Shri R.C. Tripathi	Amrit Cement Ltd.
21	Shri Eric Stone Laso	Nongjri Elaka Exporter & Importer Association

Representatives of Political Parties

1	Shri Auspicious L. Mawphlang	General Secretary, Peoples' Democratic Front
2	Shri Vijay Raj	Working President, Nationalist Congress Party
3	Shri H.M. Shangpliang	MLA, Congress
4	Shri Don Kupar War	Working President , National People's Party
5	Shri David Kharsati	State Vice President, Bharatiya Janata Party
6	Shri K. Basaiawmoit	State Executive Member, Bharatiya Janata Party
7	Shri K.P. Pangniang	President, Hill State People's Democratic Party

8	Shri Adelbert Nongrum	President, Khun Hynniewtrep National Awakening Movement
9	Shri Thomas Passah	Vice President, Khun Hynniewtrep National Awakening Movement
10	Shri Metbah Lyngdoh	Working President, United Democratic Party
11	Shri Lahkmen Rymbui	MLA, United Democratic Party
12	Shri S.P. Jhapr	General Secretary, NCP
13	Shri S. Kharlyngdoh	Commissioner, Home Police

17. Mizoram (25-26 March, 2019)

Representatives of State Government

1	Shri Lalnunmawia Chuaungo	Chief Secretary
2	Shri Vanlal Chhuanga	Commissioner, Finance
3	Shri Lalmalsawma	Finance Secretary (FC)
4	Shri Sawihlira	Finance Secretary
5	Dr. Ch. Muralidhar Rao	Principal Secretary & PCCF,Environment, Forests & Climate Change.
6	Shri Lalhmingthanga	Commissioner & Secretary, Agriculture, Rural Development.
7	Shri Biaktluanga	Commissioner & Secretary, General Administration Department, Higher & Technical Education.
8	Shri Lalthangpuia Sailo	Disaster Management & Rehabilitation, Animal Husbandry & Veterinary
9	Shri H.L. Rochungnunga	Commissioner & Secretary,Food Civil Supplies & Consumer Affairs, Public Works Department
10	Shri Zothan Khuma	Commissioner & Secretary, Commerce & Industries, Labour Employment Skill Development & Entrepreneurship

11	Smt. Esther Lalruatkimi	Commissioner & Secretary, School Education, Tourism
12	Shri Rodney L. Ralte	Secretary,Horticulture, District Council & Minority Affairs
13	Shri H. Lalengmawia	Secretary, Health & Family Welfare, Sports & Youth Services
14	Dr.C. Vanlalramsanga	Secretary, Urban Development & Poverty Alleviation, Planning & Programme Implementation
15	Shri B. Lalhmingthanga	Secretary,Art & Culture, Power & Electricity
16	Smt. Zoramthangi Hauhnar	Secretary,Local Administration Department
17	Smt. Marli Vankung	Secretary, Law & Judicial Department
18	Shri Wg.Com. J. Lalhmingliana	Principal Consultant, Civil Aviation
19	Shri Lalrikhuma Sailo	Adviser, Planning & Programme Implementation
20	Er. K. Lalsawmvela	Engineer-in-Chief, Public Works Department
21	Er. Lalmanzova	Engineer-in-Chief, Public Health Engineering
22	Shri C. Lianlunga	C.E (RE) for Engineer-in-Chief Power & Electricity
23	Smt. Ramdinliani	Joint Secretary, Disaster Management & Rehabilitation
24	Shri Joseph H. Lalramsanga	Director, Urban Development & Poverty Alleviation
25	Dr. T. Lalhmangaihi	Director, Hospital & Medical Education
26	Dr. Lalnuntluangi	Director, Medical Officer (Planning) Health Services

27	Dr. H. Salthaoltluanga	Director, Agriculture (R & E)
28	Shri R.S. Lalzamliana	Director, Local Administration Department
29	Dr. Elizabeth Saipari	Director, Horticulture
30	Shri Lalchhuanawma Hrahsel	Director, Economics & Statistics
31	Dr. H. Lalthlangliana	Commissioner, Aizawl Municipal Corporation
32	Shri Ramchuana	Additional Secretary, Finance Department (Economic Affairs/Budget)
33	Shri Lalhmingmawia Sailo	Addl.Secretary, Finance Department (FC & MC)
34	Shri C. Lungmuanpuia	Under Secretary, Finance Deptt. (FC & MC)

18. Nagaland (27-28 November, 2018)

Representatives of State Government

1	Shri Neiphui Rio	Chief Minister
2	Shri Y. Patton	Deputy Chief Minister, Home
3	Shri G. Kaito Aye	Minister, Agriculture
4	Shri Paiwang Konyak	Minister, Transport
5	Shri Metsubu	Minister, Municipal Affairs
6	Shri R. Binchilo Thong	Chief Secretary
7	Shri Temjen Toy	Addl. Chief Secretary, Finance
8	Shri Sentiyanger Imchen	Pr. Secretary & Development Commissioner
9	Shri Lhoubeilatuo Kire	Principal Secretary to CM, EF&CC, DUDA & Works and Housing
10	Shri Menukhol John	Principal Secretary, School Education
11	Shri Abhishek Singh	Commissioner & Secretary to CM, Urban Development and P& AR
12	Shri Y. Kikheto Sema	Secretary, Finance & Land Resources
13	Smt. Kevileno Angami	OSD, Planning & Coordination and School Education

Representatives of Urban Local Bodies

1	Shri John Lohe	Treasurer, Chakhesang Public Organisation
2	Shri David Sangtam	Eastern Naga Public Organisation
3	Smt. Tsachola Rothrong	Advisor, Eastern Naga Women Organisation
4	Shri Kovi Meyase	Administrator, Kohima Municipal Council
5	Shri Pakon Phom	Administrator, Tuensang Town Council
6	Shri C.T. Jamir	Ao Senden Representative
7	Shri K.T. Villie	Angami Public Organisation
8	Shri Vihoshe Muru	Vice President, Sumi Hoho
9	Dr. Phyobemo Ngullie	Vice Chairman, Lotha Hoho
10	Shri Apong Janger	Speaker, Eastern Naga Student Federation
11	Shri Moatemsu Sangtam	Administrator, Dimapur Municipal Council
12	Shri Manpai Phom	Administrator, Mokochung Municipal Council
13	Shri Ramnikant	Administrator, Mon Town Council
14	Shri Abhishek Singh	Commissioner and Secretary, Urban Development
15	Shri Y. Kikheto Sema	Secretary, Finance & Land Resources

Representatives of Rural Local Bodies
(Village Council Member & Village Development Boards)

1	Shri Aoanen Pongen	Chairman, Chuchuyimlang Village Council, Mokokchung
2	Shri Tohoshe Awomi	President, Nagaland State VDB Association
3	Shri K. Tsalimong	Chairman, Kohima Village Council
4	Dr. Neiphi Kire	Chairman, Kohima Village Council
5	Shri Yamying Konyak	VDB Secretary, Lapa Village, Mon District
6	Smt. Rita V. Chaya	VDB (Women), Khuzama Village, Kohima District
7	Smt. Kenei-u Sachu	VDB (Women), Kohima Village, Kohima District

8	Shri Thejas Sekhose	Kohima Village
9	Shri Bendangkokba	Commissioner & Secretary, Rural Development
10	Shri Y. Kikheto Sema	Secretary, Finance & Land Resources
11	Shri Rovilatuo Mor	Secretary, Home

Representatives of Trade & Industry

1	Shri Temjen Toy	Addl. Chief Secretary (Finance)
2	Smt. Lithrongla G. Chishi	Commissioner & Secretary Industries & Commerce
3	Smt. Kekhrienuo Meyase	General Secretary KCCI
4	Shri Tsukti Longkumer	President, MCCI
5	Smt. Hekani Jakhalu	Chair, Governing Council, YouthNet
6	Shri Richard Belho	Chairman, Zynorique
7	Shri Neichute Doulo	CEO, Entrepreneurs Associates
8	Shri Oka Sumi	Member, DCCI
9	Shri Limalenden Longkumer	Secretary, MCCI
10	Shri Ruokuoneilie Kesiezie	Vice President, KCCI

Representatives of Political Parties

1	Shri Alemtemshi Jamir	Working President, NDPP
2	Shri Andrew Yhome	Youth President, NDPP
3	Shri Hushka Yepthomi	Working President, NPF
4	Shri Tsunvongo	Vice President, NPF
5	Dr. Sukhato A. Sema	Vice President, BJP
6	Shri Kewekhape Therie	President, NPCC
7	Shri Kitoho Rotokha	General Secretary, JD(U)
8	Shri Ato Yepthomi	President, NPP
9	Shri Chaluba	Vice President, NPP
10	Shri Zuchamo Patton	General Secretary (Y.W), NCP
11	Shri Vanthungo Odyuo	NCP President

12	Shri Imsu Ozukum	Vice President, LJP
13	Shri Kewekhro Kapfo	Working President, LJP
14	Shri Temjen Toy,	Addl. Chief Secretary (Finance)
15	Shri Menukhol John	Principal Secretary, School Education

19. Odisha (08-11 January, 2019)

Representatives of State Government

1	Shri Naveen Patnaik	Hon'ble Chief Minister, Odisha
2	Shri Shashi Bhusan Behera	Hon'ble Minister, Finance, Excise , Agriculture & Farmers' Empowerment and Fisheries & A.R.D
3	Shri Bikram Keshari Arukha	Hon'ble Minister, Rural Development, Parliamentary Affairs and Public Enterprises
4	Shri Pratap Jena	Hon'ble Minister, Health & Family Welfare, Law, Information & Public Relations
5	Shri Aditya Prasad Padhi	Chief Secretary
6	Shri Asit Kumar Tripathy	D.C.-cum-Additional Chief Secretary
7	Shri Gagan Kumar Dhal	APC – cum - A.C.S
8	Shri Suresh Chandra Mahapatra	Additional Chief Secretary, Forest and Environment Department
9	Shri R. K. Sharma	Additional Chief Secretary, Steel & Mines Department
10	Shri L.N. Gupta	Additional Chief Secretary, Micro, Small & Medium Enterprise Department
11	Shri Ashok K.K Meena	Principal Secretary, Finance Department
12	Dr. Saurav Garg	Principal Secretary, Agriculture & Farmer's Empowerment Department
13	Shri G. Shrinivas	Principal Secretary, Commerce and Transport Department

14	Shri C. J. Venugopal	Principal Secretary, Electronics & Information Technology Department
15	Shri Nikunja Bihari Dhal	Principal Secretary, R&DM and Excise, Department
16	Shri G. Mathi Vathanan	Principal Secretary, Housing & Urban Development and Parliamentary Affairs Department
17	Shri Sanjeev Chopra	Principal Secretary, Industries Department
18	Smt Anu Garg	Principal Secretary, Labour & E.S.I, W & CD & Mission Shakti Department
19	Shri D.K.Singh	Principal Secretary, Panchayati Raj & Drinking Water Department
20	Shri Manoranjan Panigrahy	Principal Secretary, Odia Language Literature & Culture Department
21	Dr. Mona Sharma	Principal Secretary, Rural Development Department
22	Shri P.K Mohapatra	Principal Secretary, School & Mass Education Department
23	Shri Niten Chandra	Principal Secretary, Social Security & Empowerment of Persons with Disabilities Department
24	Shri Pradeep Kumar Jena	Principal Secretary, Water Resources Department
25	Shri Hemant Sharma	Commissioner –cum-Secretary, Energy Department
26	Shri. Vir Vikram Yadav	Commissioner-cum-Secretary, F. S. & C W Department
27	Smt.Shubha Sarma	Commissioner-cum-Secretary, Handlooms, Textiles & Handicrafts Department

28	Shri Bhaskar Jyoti Sarma	Commissioner-cum-Secretary, Science & Technology Department
29	Dr.Pramod Kumar Meherda	Commissioner-cum-Secretary, Health & Family Welfare Department
30	Shri Bishnupada Sethi	Commissioner cum Secretary, Higher Education Department and Special Relief Commissioner
31	Shri Sanjay Kumar Singh	Commissioner-cum-Secretary ,I & P R and S D & T E Department
32	Shri Vishal Kumar Dev	Commissioner-Cum-Secretary, Tourism and Sports & Y.S Department
33	Shri R. Raghu Prasad	Commissioner-cum-Secretary, ST & SC Dev, Minorities & B C Welfare Department
34	Shri V. Karthikeyan Pandian	Private Secretary to Chief Minister
35	Shri Nalinikanta Pradhan	EIC-cum-Secretary, Works Department
36	Shri R.P. Sharma	D.G.& IG of Police, Odisha
37	Shri B.K.Sharma	DG of Police, F.S, Home Guards & Director, Civil Defence, Odisha, Cuttack
38	Dr. Debasis Panigrahi	Additional DG of Police, Vigilance
39	Ms. Madhumita Basu	Principal AG, (A&E) Odisha
40	Ms. Chithra Arumugam	Special Secretary, P&C Department
41	Smt. Santosh Bala	Special Secretary, Home Department
42	Shri Sangramjit Nayak	Director, Municipal Administration
43	Shri Pratap Chandra Das	Director, Panchayati Raj
44	Shri R. Vineel Krishna	Chief Executive Officer, Bhubaneswar Smart City Ltd., Bhubaneswar
45	Shri Smruti Ranjan Pradhan	Director, NRLM
46	Shri P. C. Majhi	Special Secretary, Finance Department
47	Shri P K.Biswal	Special Secretary, Finance Department

48	Shri C. P. Mohanty	Special Secretary, Finance Department
49	Shri Bivas Kanungo	Special Secretary, Finance Department
50	Shri P. K. Rout	Director, Small Savings, Finance Department
51	Shri N. K. Rautray	Additional Secretary., Finance Department
52	Shri Pradipta Ku. Nanda	Additional Secretary., Finance Department
53	Shri Gadadhar Nandi	Additional Secretary., Finance Department
54	Shri Rupa Narayan Das	Joint Secretary, Finance Department
55	Shri Devipriya Biswal	Joint Secretary, Finance Department
56	Shri Satya Priya Rath	Joint Secretary, Finance Department
57	Shri Satyabrata Rout	Joint Secretary, Finance Department
58	Shri Santanu Kumar Sahoo	Joint Secretary, Finance Department
59	Smt. Smita Rout	Joint Secretary, Finance Department
60	Ms. Jayashree Tripathy	Joint Secretary, Finance Department
61	Smt. Ellora Mohanty	Joint Secretary, Finance Department
62	Smt Sarmistha Sethy	Deputy Secretary, Finance Department
63	Shri Saumyajit Rout	Deputy Secretary, Finance Department
64	Shri Anil Kumar Purohit	Deputy Secretary, Finance Department
65	Shri Prasanta Kumar Mishra	Deputy Secretary, Finance Department
66	Shri Rajani Kanta Mishra	Deputy Secretary, Finance Department
67	Shri Malaya Kumar Mohanty	Under Secretary, Finance Department
68	Shri Nihar Ranjan Panda	Under Secretary, Finance Department
69	Shri C.R. Hota	Under Secretary, Finance Department
70	Shri P.K. Behera	Under Secretary, Finance Department

Representatives of Local Bodies

1	Smt K. Santi	Deputy Mayor, Bhubaneswar Municipal Corporation
2	Shri B.K Behera	Corporator and Chairman License Standing Committee, Cuttack Municipal Corporation

3	Smt. Subhashree Mallick	Chairperson, Sunabeda Municipality
4	Smt. Deepanjali Bhorasagar	Chairperson, Attabira NAC
5	Smt. Hira Bag	Chairperson, Dharmagarh NAC
6	Shri Sunil Parida	Vice-President, Zilla Parishad, Cuttack
7	Smt. Emma Ekka	President, Zilla Parishad, Sundargarh
8	Ms. Puspalata Samanta	Chairperson, Panchayat Samiti, Banki
9	Shri Manoj Barua	Chairperson, Panchayat Samiti, Subdega
10	Smt. Annapurna Dehuri	Sarpanch, Mukundapur Patna GP
11	Shri Jasash Sahoo	Sarpanch, Saptasajya GP
12	Smt. Malati Pradhan	Sarpanch, Minia GP
13	Shri Basant Kumar Naik	Sarpanch, Banaigarh GP

Representatives of Trade & Industry

1	Shri Himanshu Sekhar Mishra	Vice President, Orissa Small Scale Industries Association
2	Shri Sanjay Kumar Mahapatra	E.C. Member, Orissa Small Scale Industries Association
3	Shri Ashok Chinchela	Honorary Treasurer, Utkal Chamber of Commerce & Industry
4	Shri Sanjeev Mahapatra	Honorary Joint Secretary, Utkal Chamber of Commerce & Industry
5	Shri Biranchi Narayan Mishra	President, Odisha Young Entrepreneurs Association
6	Shri Sudhakar Panda	General Secretary, Odisha Byabasayee Mahasangha
7	Shri Subhrakanta Panda	Managing Director and CEO, IMFA and Chair, FICCI-Odisha State Council
8	Er. Satwik Swain	Secretary General Honorary, Odisha Assembly of Small and Medium Enterprises

Representatives of Political Parties

1	Shri Subrat Samal	State Co-ordinator, Bahujan Samaj Party(BSP)
2	Prof. Kshitibhusan Das	Senior member, BJP intellectual Cell
3	Shri Sudarsan Nayak	State Convenor, BJP Intellectual Cell
4	Dr. Amar Pattnaik	Spokes Person, BJD
5	Dr. Susmit Patra	Spokes Person, BJD
6	Shri Dibakar Nayak	CPI National Executive Committee Member,
7	Shri Ashis Kanungo	CPI State Secretary
8	Shri Santosh Das	State Secretariat Member CPI (Marxist)
9	Shri Ganeswar Behera	Vice-President, Odisha Pradesh Congress Committee, Indian National Congress (INC)
10	Shri Bikram Swain	General Secretary, Nationalist Congress Party (NCP)
11	Shri Sujit G Dastidar	State Convenor, Odisha Pradesh Trinamool Congress (TMC)
12	Shri Subrhanshu Sekhar Padhi	Secretary, Odisha Pradesh Trina Mool Congress (TMC)

20. Punjab (29 January -01 Feburay 2019)

Representatives of State Government

1.	Captain Amarinder Singh	Chief Minister
2.	Shri Brahm Mohindra	Health & Family Welfare Minister
3.	Shri Manpreet Singh Badal	Finance Minister
4.	Shri Tript Rajinder Singh Bajwa	Rural Development & Panchayats Minister
5.	Shri Charanjit Singh Channi	Technical Education & Industrial Training Minister
6.	Shri Om Parkash Soni	School Education and Freedom Fighters Minister
7.	Shri Suresh Kumar	Chief Principal Secretary to Chief Minister,
8.	Shri Karan Avtar Singh	Chief Secretary,

9.	Shri Nirmaljit Singh Kalsi	Additional Chief Secretary Home Affairs & Justice
10.	Shri Satish Chandra	Additional Chief Secretary, Department of Health & Family Welfare.
11.	Smt. Kalpana Mittal Baruah	Additional Chief Secretary-cum-Financial Commissioner Revenue & Rehabilitation
12.	Shri M.P.Singh	Additional Chief Secretary-cum-Financial Commissioner Taxation,
13.	Smt. Vini Mahajan	Additional Chief Secretary, Department of Industries & Commerce.
14.	Shri Viswajeet Khanna	Additional Chief Secretary-cum-Financial Commissioner Development
15.	Shri Roshan Sunkaria	Additional Chief Secretary-cum-Financial Commissioner Forests and Wild Life and Social Justice Empowerment
16.	Shri Anirudh Tewari	Principal Secretary Finance.
17.	Shri A. Venu Prasad	Principal Secretary Department of Local Government & Power.
18.	Shri Sarvjit Singh	Principal Secretary, Department of Water Resources.
19.	Smt. Raji P. Shrivastava	Principal Secretary Department of Social Security & Dev. of Women and Children.
20.	Shri K. A. P Sinha	Principal Secretary Department of Food, Civil Supplies and Consumer Affairs.
21.	Shri Jaspal Singh	Principal Secretary Department of Planning.
22.	Shri Anurag Verma	Principal Secretary & Financial Commissioner Rural Development & Panchayats

23.	Shri Rakesh Kumar Verma	Principal Secretary, Department of Science Technology & Environment.
24.	Shri Vikas Pratap	Principal Secretary, Department of Tourism and Cultural Affairs.
25.	Shri D.K.Tiwari	Principal Secretary, Department of Technical Education & Industrial Training
26.	Shri Tejveer Singh	Principal Secretary to Chief Minister
27.	Shri Gurkirat Kirpal Singh	Special Principal Secretary to Chief Minister.
28.	Shri V.N.Zade	Secretary Expenditure,
29.	Smt. Jaspreet Talwar	Secretary, Department of Water Supply and Sanitation.
30.	Shri Hussan Lal	Secretary, Department of PWD (B&R).
31.	Shri Vivek Pratap Singh	Excise & Taxation Commissioner.
32.	Shri Krishan Kumar	Secretary, Department of School Education.
33.	Shri Ajoy Sharma	Chief Executive Officer, Water Supply and Sewerage Board.
34.	Shri Abhinav Trikha	Special Secretary Expenditure
35.	Shri Ajay Bir Jakhar	Chairman, Farmers' & Farm Workers' Commission.
36.	Shri V.K. Garg	Adviser (FR) to Chief Minister.
37.	Shri Baldev Singh Dhillon	Vice Chancellor, Agricultural University.
38.	Professor Amarjit Singh Nanda	Vice Chancellor, Guru Angad Dev Veterinary and Animal Sciences University.

Representatives of Local Bodies

1	Shri A. Venue Prasad	Principal Secretary, Local Government & Power, Punjab
2	Shri Karnesh Sharma	Director, Local Government, Punjab
3	Shri Gurpreet Singh Khehra	Secretary, Local Government, Punjab

4	Shri Ajoy Sharma	Chief Executive Officer, Punjab State Water Supply and Sewerage Board
5	Shri Mohinder Pal	Special Secretary, Local Government, Punjab
6	Shri Sanjeev Kumar Sharma	Mayor, Municipal Corporation, Patiala
7	Shri Karamjit Singh Rintu	Mayor, Municipal Corporation, Amritsar
8	Shri Balkar Singh Sandhu	Mayor, Municipal Corporation, Ludhiana
9	Shri Lalit Mohan Pathak	President, Municipal Council, Nawanshahar
10	Shri Narinder Shastri	President, Municipal Council, Rajpura
11	Ms. Kiran Sood	President, Municipal Council, Amloh
12	Shri Iqbal Singh Saini	Councilor, Municipal Council, Naya Gaon
13	Shri Surinder kumar	Councilor, Municipal Council, Naya Gaon
14	Shri Surmukh singh	Councilor, Municipal Council, Kharar
15	Shri Sunil Kumar	Vice President, Municipal Council, Kharar
16	Shri Jagtar Singh	Councilor, Municipal Council, Lalru
17	Shri Tejinder Singh Sidhu	Councilor, Municipal Council, Zirakpur
18	Shri Jagdish Raj Raja	Mayor, Municipal Corporation, Jalandhar
19	Shri Jagtar Singh	Councilor, Municipal Council, Zirakpur
20	Mukesh Rana	Councilor, Municipal Council, Lalru
21	Shri Anurag Verma	Financial Commissioner, Rural Development and Panchayats, Punjab
22	Shri Vijay Zade	Secretary Expenditure, Punjab
23	Shri Jaskiran Singh	Director, Rural Development and Panchayats, Punjab
24	Ms. Tannu Kashyap	Joint Development Commission, Rural Development and Panchayats, Punjab
25	Shri Jasvir Singh	Member Zila Parishad, Fatehgarh Sahib
26	Smt. Gurwinder Kaur	Member, Zila Parishad, Patiala

27	Shri Jasvir Singh	Member, Zila Parishad, Pathankot
28	Shri Sarvjit Singh	Member, Panchayat Samiti Rajpura, District Patiala.
29	Shri Buta Singh	Sarpanch, Philakhni, District Patiala
30	Smt. Sita Rani	Sarpanch, Haripur, District Jalandhar
31	Shri Kulwinder Kumar	Panch, Haripur, District Jalandhar
32	Shri Sadhu Singh	Sarpanch, Singhpura, District Roop Nagar
33	Shri Lakhwinder Kumar	Panch, Sukhanand, District Moga

Representatives of Trade & Industry

1	Smt. Vini Mahajan	Additional Chief Secretary, Department of Industries and Commerce, Punjab
2	Shri Anirudh Tewari	Principal Secretary, Department of Finance, Punjab
3	Shri Devinder Pal Singh Kharbanda	Director, Department of Industries and Commerce, Punjab
4	Shri Sarvjit Singh Sarma	CII, Punjab State Council
5	Shri Gunbir Singh	CII, Punjab State Council
6	Shri SC Ralhan	Hand Tools Association, Ludhiana
7	Shri RS Sachdeva	PHDCCI
8	Shri Opinder Singh	EEPC
9	Shri KK Garg	Induction Furance Association, Ludhiana
10	Shri Onkar Singh Pahwa	Avon Cycles Ludhiana.
11	Shri S.K. Rai	Hero Cycles Ltd.
12	Shri Upkar Singh Ahuja	CICU
13	Shri KK Seth	Neelam Cycles
14	Shri Rajinder Parsad Mahanjan	Association of Indian Sports Goods.
15	Shri Yogesh Sagar	Mohali Industries Association
16	Shri Sanjeev Vashisht	Mohali Industries Association.
17	ShriKamal Dalmia	Focal Point Industries Association.

18	Shri Sanjay Mehra	Punjab Warp Knitting Industries.
19	Shri Amit Khanna	Khanna Overseas, Blanket and Shawls Industry
20	Shri Pardip Sehgal	Indian Importer Chamber of Commerce and Industries.
21	Shri Mohit Khanna	ICP, Chamber of Commerce
22	Shri Sachid Madaan	ITC
23	Shri Arwinder Pal Singh	Pb. Rice Exporter Association
24	Shri Ajay Arora	Kwality Pharmaceuticals
25	Shri R.K. Arora	OCM Pvt Ltd.
26	Shri Ramneek Singh	Supple Tek Industries.
27	Shri Amit Sharma	ITC Ltd.
28	Shri Arvinder Pal Singh	Lal Quila Rice Amritsar.

Representatives of Political Parties

1	Shri Kuljit Singh Nagra	MLA Punjab Pradesh Congress Committee
2	Shri Amit Vij	MLA Punjab Pradesh Congress Committee
3	Shri Sunil Jakhar	Punjab Pradesh Congress Committee
4	Shri Aman Arora	MLA, Sunam, Aam Aadmi Party ,
5	Shri Jastej Singh	President, Legal Cell, Aam Aadmi Party,
6	Shri Parminder Singh Dhindsa	MLA Shiromani Akali Dal
7	Dr. Daljit Singh Cheema	Senior Vice President, Shiromani Akali Dal
8	Shri Anil Sareen	State Spokesperson, Shiromani Akali Dal
9	Shri Jiwn Gupta	State Vice President National, Shiromani Akali Dal
10	Dr. Subhash Sharma	State Secretary, Bharatiya janta Party
11	Shri Manjit Singh	Convener, All India Trinamool Congress,
12	Shri Roshan Lal Goel	Member Executive Committee, All India Trinamool Congress,
13	Shri Pal Singh Rattu	Zone Incharge , Buhujan Samaj Party,

14	Shri Harnek Singh	District President, Buhujan Samaj Party,
15	Shri Bant Singh Brar	Secretary, Punjab State Communist Party Of India
16	Dr. Joginder Singh Deyal	National Councilor, Punjab State Communist Party Of India
17	Shri Sukhwinder Singh Sekhon	Secretary, Communist Party Of India.
18	Shri Raghunath Singh	Communist Party Of India.
19	Shri Swaran Singh	President, Nationalist Congress Party,
20	Shri Guinder Singh	Senior Vice President, Nationalist Congress Party,

21. Rajasthan (06-09 September, 2019)

Representatives of State Government

1	Shri Ashok Gehlot	Chief Minister
2	Shri Sachin Pilot	Dy. Chief Minister, PWD., RD & PR Dept., Science & Technology Dept., Statistics Dept.
3	Shri Bulaki Das Kalla	Minister, Energy., PHED., Ground Water Dept., Art, Literature, Culture & Archeology Dept.
4	Shri Shanti Kumar Dhariwal	Minister, LSG, UDH Dept., Law & Legal Affairs and Legal Consultancy Office, Parliamentary Affairs Dept.
5	Shri Parsadi Lal	Minister, Industry, State Enterprise Dept.
6	Master Bhanwarlal Meghwal	Minister, Social Justice and Empowerment Dept., Disaster Management & Relief Dept.
7	Shri Lalchand Katariya	Minister, Agriculture Dept., Animal Husbandry Dept., Fisheries Dept.

8	Shri Raghu Sharma	Minister, Medical & Health Dept., Ayurved & Indian Medical Dept., Medical & Health Services (ESI) Dept., Information & Public Relation Dept.
9	Shri Pramod Bhaya	Minister, Mines Dept., Gopalan Dept.
10	Shri Vishvendra Singh	Minister, Tourism Dept., Devasthan Dept.
11	Shri Harish Choudhary	Minister, Revenue Dept., Colonization Dept., Command Area Development & Water Utilization Dept.
12	Shri Ramesh Chand Meena	Minister, Food and Civil Supplies Dept., Consumer Affairs Dept.
13	Shri Anjana Udaylal	Minister, Co-operative Dept., Indira Gandhi Nahar Pariyojana (IGNP) Dept.
14	Shri Pratap Singh Khachariyawas	Minister, Transport Dept., Soldier Welfare Dept.
15	Shri Shale Mohammad	Minister, Minority Affairs, Waqf and Public Grievances Redressal Dept.
16	Shri Govind Singh Dotasara	State Minister, Education (Primary and Secondary Education) Dept. (Independent Charge), Tourism Dept., Devasthan Dept.
17	Smt. Mamta Bhupesh	State Minister, Women and Child Development Dept. (Independent Charge), Public Grievances Redressal Dept., Minority Affairs Dept., Waqf Dept.
18	Shri Arjun Singh Bamniya	State Minister, Tribal Area Dept. (Independent Charge), Industries Dept., State Enterprises Dept.

19	Shri Bhanwar Singh Bhati	State Minister, Higher Education Dept. (Independent Charge), Revenue Dept., Colonization Dept., Command Area Development & Water Utilization Dept.
20	Shri Sukhram Vishnoi	State Minister, Forest Dept. (Independent Charge), Environment Dept. (Independent Charge), Food & Civil Supplies Dept., Consumer Affairs Dept.
21	Shri Ashok	State Minister, Youth Affairs & Sports Dept. (Independent Charge), Skill, Employment & Entrepreneurship Dept. (Independent Charge), Transport Dept., Soldier Welfare Dept.
22	Shri Tikaram Jully	State Minister, Labour Dept. (Independent Charge), Factories & Boilers Investigation Dept. (Independent Charge), Co-operative Dept., Indira Gandhi Nahar Pariyojana (IGNP) Dept.
23	Shri Bhajanlal Jatav	State Minister, Home Guards and Civil Defense Dept. (Independent Charge), Stamps & Stationary Dept. (Independent Charge), Agriculture Dept., Animal Husbandry Dept., Fisheries Dept.
24	Shri Rajendra Singh Yadav	State Minister, Planning (Manpower) Dept. (Independent Charge), State Motor Garage Dept. (Independent Charge), Language Dept. (Independent Charge), Social Justice & Empowerment Dept., Disaster Management & Relief Dept.

25	Dr. Subhash Garg	State Minister, Technical Education Dept. (Independent Charge), Sanskrit Education Dept. (Independent Charge), Medical & Health Dept., Ayurved and Indian Medical Dept., Medical & Health Services (ESI) Dept., Information & Public Relation Dept.
26	Shri Arvind Mayaram	Economic Advisor to the Chief Minister
27	Shri Govind Sharma	Advisor to the Chief Minister
28	Shri D. B. Gupta	Chief Secretary, Government of Rajasthan
29	Shri Rajeeva Swarup	Additional Chief Secretary, Home and Transport Department
30	Smt. Veenu Gupta	Additional Chief Secretary, Public Works Department
31	Shri Pawan Kumar Goyal	Additional Chief Secretary, Agriculture Department
32	Shri Rajeshwar Singh	Additional Chief Secretary, Rural Development and Panchayati Raj
33	Shri Niranjan Kumar Arya	Additional Chief Secretary, Finance
34	Shri Rohit Kumar Singh	Additional Chief Secretary, Medical & Health
35	Shri R. Venkateswaran	Principal Secretary, School Education Department
36	Shri Abhay Kumar	Principal Secretary, Cooperative Department
37	Shri Akhil Arora	Principal Secretary, Social Justice & Empowerment Department
38	Shri Sandeep Verma	Principal Secretary, Public Health & Engineering Department
39	Shri Kuldeep Ranka	Principal Secretary to the Chief Minister

40	Smt. Sreya Guha	Principal Secretary, Forest and Tourism Department
41	Shri Naresh Pal Gangwar	Principal Secretary, Energy Department
42	Shri Bhaskar A. Sawant	Principal Secretary, Urban Development & Housing Department
43	Shri Ajitabh Sharma	Secretary to the Chief Minister
44	Shri Naveen Mahajan	Secretary, Water Resources Department
45	Smt. Gayatri A. Rathore	Secretary, Women & Child Development Department
46	Shri Bhawani Singh Detha	Secretary, Local Self Government
47	Smt. Manju Rajpal, Secretary	Finance (Budget) Department
48	Shri Ashutosh A. T. Pednekar	Secretary & Commissioner, Panchayati Raj and Disaster Management
49	Dr. Prithvi Raj	Secretary, Finance (Revenue) Department
50	Shri Sudhir Kumar Sharma	Special Secretary, Finance (Expenditure)

Representatives of Local Bodies

1	Smt. Sushila Sevar	Zila Pramukh, Bikaner
2	Shri Surendra Kumar	Zila Pramukh, Kota
3	Smt. Geeta Khatana	Zila Pramukh, Dausa
4	Shri Mool Chand Meena	Zila Pramukh, Jaipur
5	Smt. Bharti Dixit	CEO, Zila Parishad, Jaipur
6	Shri Jagdish Prasad Bunkar	CEO, Zila Parishad, Dausa
7	Shri Mukesh Chand Meena	Pradhan, Panchayat Samiti, Todabheem, Karauli
8	Smt. Savita Yadav	Pradhan, Panchayat Samiti, Neemrana, Alwar
9	Shri Nand Lal Gothwal	Pradhan, Panchayat Samiti, Shahpura, Jaipur

10	Smt. Pinki Meena	Pradhan, Panchayat Samiti, Chaksu, Jaipur
11	Shri Vijendra Kumar Sharma	BDO, Panchayat Samiti, Javaja, Ajmer
12	Shri Murari Lal Sharma	BDO, Panchayat Samiti, Sanganer, Jaipur
13	Shri Rajesh Bhakar	Sarpanch, Gram Panchayat, Tarpura, Panchayat Samiti, Piprali, Sikar
14	Ms. Chhavi Rajawat	Sarpanch, Gram Panchayat, Soda, Panchayat Samiti, Malpura, Tonk
15	Shri Om Prakash Jatawat	Sarpanch, Gram Panchayat, Nangal Tulsidas, Panchayat Samiti, Jamwa Ramgarh, Jaipur
16	Smt. Sangeeta Dhoot	VDO, Gram Panchayat, Akera, Panchayat Samiti, Amer, Jaipur
17	Shri Vishal Vaishnav	VDO, Gram Panchayat, Sevdariya, Panchayat Samiti,shrinagar, Ajmer
18	Shri Narayan Chopra	Mayor, Municipal Corporation, Bikaner
19	Shri Vishnu Lata	Mayor, Municipal Corporation, Jaipur
20	Smt. Sangeeta Bohra	Chairman, Municipal Council, Gangapur city
21	Shri Sikanda Ali Khilji	Chairman, Municipal Council, Sujangarh
22	Smt. Rajkumari Sharma	President, Municipality, Niwai
23	Smt. Asha Nama	President, Municipality, Malpura
24	Shri Kamlesh Dosi	Chairman, Municipal Council, Prataphgarh
25	Shri Sukhdev Sandhu	President, Municipality, Keshavraypatan
26	Smt. Rajni Devi Pareek	President, Municipality, Shahpura, Jaipur
27	Shri Vinod Kumar Sanbhariya	President, Municipality, Sanbhar
28	Shri Suresh Kumar Ola	Commissioner, Municipal Corporation, Jodhpur
29	Shri Sarwan Bishnoi	Commissioner, Municipal Council, Sikar
30	Shri Shashikant Sharma	Executive Officer, Municipality, Kumher

Representatives of Trade & Industry

1	Dr. K.L. Jain,	Honorary, Secretary General , RCCI
2	Shri D.S. Bhandari	Vice President, RCCI
3	Shri Vijay Goel	Exect. Member, FORTI
4	Shri Rahul Sharma	General Manager, FORTI
5	Shri Anand Mishra	Chairman, CII Rajasthan
6	Shri Nitin Gupta	Director and Head, CII Rajasthan
7	Shri Atul Sharma	Head-Rajasthan State Council, FICCI
8	Shri Ajay Singha	FICCI
9	Shri Anil Baxi	Federation of Rajasthan exporters
10	Shri Sanjay Singh	Regional Director, Gem & Jewellery Export Promotion Council
11	Shri Sharad Kankariya	Secretary, United Council of Rajasthan Ind.
12	Shri Anil Upadhyaya	United Council of Rajasthan Ind.
13	Shri Arpit Mittal	Consultant Advisor, Lagu Udyog Bharti
14	Ms. Rachna Singh	Regional Director, PHDCCI
15	Smt. Sreya Guha	Principal Secretary, Tourism
16	Dr. Bhanwar Lal	Director, Tourism
17	Shri Bhim Singh	Rajasthan tours
18	Shri Ajay Agarwal	LBM
19	Shri Pratap Diggi	Hotel Diggi House
20	Shri Randheer Vikram Singh	Indian Heritage Hotel Association

Representatives of Political Parties

1	Prof. J.P. Yadav	Principal, Commerce College, Jaipur, Congress
2	Shri L.D. Sharma	C.A., Congress
3	Shri Sushil Kumar Asopa	Secretary, Congress
4	Shri Vijay Garg	President, CA Cell, Congress
5	Shri Rajpal singh Shekhawat	Ex. Minister, Rajasthan Govt., BJP
6	Shri Ramlal Sharma	MLA, Chomu (Jaipur), BJP

7	Shri Satish Sarin	Pradesh sanyojak Economic Cell, BJP
8	Shri R.P. Vijay	C.A., BJP
9	Shri Narendra Acharya	State Secretary, Rajasthan Communist Party of India
10	Shri Tara Singh Siddhu	Member, State Secretariat, Communist Party of India
11	Shri Gurucharan Singh	CPI(M)
12	Shri Ravindra Shukla	Member Secretariat, CPI(M)
13	Shri Rajesh Kumar Sharma	NCP
14	Shri Mhd. Zubir Khan	State President, NCP Youth

22. Sikkim (23-26 September, 2019)

Representatives of State Government

1	Shri P.S. Tamag	Chief Minister,
2	Shri Mingma Norbu Sherpa	Minister, Power and Labour
3	Shri Samdup Lepcha	Minister, Sikkim Public Works (Roads & Bridges) and Cultural Affairs
4	Shri Kunga Nima Lepcha	Minister, Education and Parliamentary Affair and Land Revenue & Disaster Management
5	Shri Sonam Lama	Minister, Rural Development, Co-operation and Ecclesiastical Affairs
6	Shri Sanjit Kharel	Minister, Sikkim Public Works (Buildings & Housing) and Transport
7	Shri Loknath Sharma	Minister, Agriculture and Horticulture, Animal Husbandry & Veterinary Service, IPR and Printing & Stationery
8	Shri Bedu Singh Panth	Minister, Tourism & Civil Aviation and Commerce & Industries
9	Shri Arun Upreti	Minister, Urban Development & Housing and Food & Civil Supplies

10	Shri Bhim Hang Limboo	Minister, Public Health Engineering and Water Resources
11	Shri Karma Loday Bhutia	Minister, Forest & Environment, Mines & Geology and Science & Technology
12	Dr. Mani Kumar Sharma	Minister, Healthcare & Family Welfare and Social Justice & Welfare
13	Shri Mahendra P Lama	Chief Economic Advisor, Government of Sikkim
14	Shri. C.L. Denzongpa	Economic and Financial Advisor to the Chief Minister, Government of Sikkim
15	Shri A.K. Shrivastava	Chief Secretary, Government of Sikkim
16	Shri Suresh Chandra Gupta	Addl. Chief Secretary, Home and Finance
17	Shri G.P. Upadhyaya	Addl. Chief Secretary, Education
18	Dr. Jayakumar	Addl. Chief Secretary, Tourism & Civil Aviation
19	Shri V.B. Pathak	Addl. Chief Secretary-cum-Development Commissioner, Planning & Development
20	Shri Thomas chandy	Addl. Chief Secretary, Commerce & Industries
21	Shri A.Shankar Rao	Director General of Police, Police
22	Shri M.L. Srivastava	Pr. Secretary-cum-PCCF, Forest
23	Shri. K. Srinivasulu	Principal Secretary, Health & F.W
24	Shri D.K. Bhandri	Secretary, Horticulture
25	Ms. Namrata Thapa	Secretary, IPR
26	Shri L.B. Chettri	Secretary, Urban Dev. & Housing
27	Shri C.S. Rao	Secretary, Rural Development
28	Shri T.P. Sangardapa	PCE-cum-Secretary, Road & Bridges
29	Shri Raju Basnet	Secretary, Transport
30	Smt. Dhanjoti Mukhia	Secretary, Social Justice & Welfare

31	Shri S.B. Subba	Secretary, Animal Husbandry & V.S
32	Shri Khorlo Bhutia	Secretary, Agriculture
33	Shri K.C. Lepcha	Secretary, Science & Technology
34	Smt. Ambika Pradhan	Secretary, Land Revenue
35	Shri K.B. Kunwar	PCE-cum-Secretary, Power
36	Smt Vidhya Subha	Secretary, Culture
37	Shri Shital Pradhan	Secretary, Water Resources
38	Smt. Sherap Shenga	Secretary, Information Technology
39	Shri T.T. Bhutia	Secretary, Tourism
40	Shri. R.K. Pariyar	PCE-cum-Secretary, Public Health Engineering
41	Shri M.K. Sharma	Secretary-cum-Controller of Accounts, Finance
42	Shri G.P. Kaushik	Secretary(Revenue), Finance
43	Shri. Aruni Chakravarty	Principal Director-cum-Secretary (Expenditure), Finance
44	Shri. Benu K. Mukhia	Principal Director (FCD), Finance
45	Shri Manoj Rai	Additional Commissioner, Finance
46	Shri. Raj K. Sharma	SIA, IPR
47	Smt. Sunita Thapa	SW, IPR

Representatives of Urban Local Bodies

1	Shri Shakti Singh Choudhary	Mayor, Gangtok, Municipal Corportaiton,Gangtok,East Sikkim
2	Ms. Lashey Doma Bhutia	Deputy Mayor, Gangtok, Municipal Corportaiton,Gangtok,East Sikkim
3	Shri Tika Gurung	Chairman, Naya Bazar Jorethang Municipal Council, Jorethang, South Sikkim

4	Ms. Pema Tamang	Vice Chairman, Naya Bazar Jorethang Municipal Council, Jorethang, South Sikkim
5	Ms. Zangmoo Bhutia	President, Mangan Nagar Panchayat, Singtam, North Sikkim
6	Ms. Bishnu Maya Sherpa	Vice President, Singtam Nagar Panchayat, Singtam, East Sikkim
7	Ms Niramala Hingmang	Councillor, Gyalzing Municipal Council
8	Shri L. B. Chettri	Secretary, Urban Development Deptt.
Representatives of Rural Local Bodies		
1	Shri Samsher Rai	Hon'ble Adhyaksha, East District Zilla Panchayat
2	Ms Namday Lepcha	Hon'ble Adhyaksha, North District Zilla Panchayat
3	Shri Ashok Gurung	Hon'ble Adhyaksha, West District Zilla Panchayat
4	Shri Bhim Bdr. Lakhey	Hon'ble Adhyaksha, South District Zilla Panchayat
5	Shri Tirtha Bahadur Chettri	Zila Panchayat, Luing Ranka TC
6	Shri Hari Gurung	Zila Panchayat, Rameng Perbing Phong TC
7	Smt Devi Khatiwara	Zila Panchayat , Lingdok Namphong TC
8	Shri Ongdila Bhutia	Zila Panchayat , Darap Chumbong TC
9	Smt Kala Subedi	Panchayat Sabhapati, Yangthang GPU
10	Shri Chabi Lal Chettri	Panchayat Sabhapati, Martam GPU
11	Ms Sarita sharma	Panchayat Sabhapati, Premlakha Subhaneydara GPU
12	Ms Bandana Chettri	Panchayat Sabhapati, Martam Nazitam GPU
13	Ms Tashi Doma Bhutia	Panchayat Sabhapati, Navey Sothaak GPU
14	Shri Chungchung Lepcha	Panchayat Sabhapati, Chungthang GPU
15	Smt Savitri Chettri	Panchayat Sabhapati, Kitam Manpur GPU

16	Shri Bikash Sharma	Panchayat Sabhapati, Namphing GPU
17	Shri C. S. Rao	Secretary, Rural Development Deptt.

Representatives of Trade & Industry

1	Shri Ashok Sarda	President, Sikkim Chamber of Commerce
2	Shri Kailash Agarwal	General Secretary, Sikkim Chamber Commerce
3	Shri Atul Sant	Plant Head, Cipla Pharmaceutical Industry
4	Shri. Deepak Verma	General Manager, Zuventus Pharmaceutical Industry
5	Shri Umesh Mishra	Sr. Vice President, Intas Pharmaceutial Industry
6	Shri. Yash Marda	Plant Head, Marchak Manufacturing Pvt. Ltd-Corrugated Boxes
7	Shri. Ajeet Singh	Plant Head, Sikkim Distilleries Ltd.
8	Shri Ranjit Mohapatra	Plant Head, Sun Pharmaceutical Industry
9	Ms. Reena Rai	Enterpreneur, Mato-Pottery-Entrepreneur
10	Ms. Smita Rai	Enterpreneur, Designer Candles
11	Smt. Mrinalini Srivastava	Managing Director, Temi Tea Estate
12	Shri Anup Zimba	Entrepreneur, Tea Bag & Flavoured Tea
13	Shri Sagar Subba	Entrepreneur, Bamboo Handicrafts
14	Shri Pawan Awasthy	General Manager, Govt. Fruit Preservation Factory
15	Ms. Aparjita Gurung	Entrepreneur, Simsar Bakery
16	Shri Thomas Chandy	ACS, Commerce & Industries

Representatives of Political Parties

1	Shri G.D. Agarwal	Treasurer, Bharatiya Janta Party
2	Shri Bimal Jain	Member, Bharatiya Janta Party
3	Shri Jagat Singh Singhi	Vice President, Bharatiya Janta Party

4	Shri Karma Tashi Bhutia	Treasurer, Sikkim Pradesh Congress Committee
5	Shri Tanka Nath Adhikari	State Member, Sikkim Pradesh Congress Committee
6	Shri Sonam Tshering Bhutia	State Member, Sikkim Pradesh Congress Committee
7	Shri Dev Gurung	General Secretary/Adm, Sikkim Democratic Front
8	Shri Amos R. Lepcha	Secretary/Adm, Sikkim Democratic Front
9	Shri Damber Dahal	General Secretary/East, Sikkim Democratic Front
10	Shri Uttam Lepcha	Vice President HQ/Administration, Sikkim Krantikari Morcha
11	Shri Pawan Kr. Gurung	General Secretary HQ/Administration, Sikkim Krantikari Morcha
12	Shri Dup Pintso Kaleon	Vice President Finance,Sikkim Krantikari Morcha
13	Smt. Namrata Thapa	Secretary, Information & Public Relation Deptt.

23. Tamil Nadu (04-08 September, 2018)

Representatives of State Government

1	Shri Edappadi K. Palaniswami	Chief Minister
2	Shri O.Panneerselvam	Deputy Chief Minister
3	Shri Dindigul C. Sreenivasan	Minister for Forests
4	Shri K.A. Sengottaiyan	Minister for School Education
5	Shri Sellur K. Raju	Minister for Co-operation
6	Shri P. Thangamani	Minister for Electricity, Prohibition and Excise

7	Shri S.P. Velumani	Minister for Municipal Administration, Rural Development and Implementation of Special Programme
8	Shri D. Jayakumar	Minister for Fisheries and Personnel and Administrative Reforms
9	Shri C.Ve. Shanmugam	Minister for Law, Courts and Prisons
10	Shri K.P. Anbalagan	Minister for Higher Education
11	Dr. V. Saroja	Minister for Social Welfare and Nutritious Noon Meal Programme
12	Shri M.C. Sampath	Minister for Industries
13	Shri K.C.Karuppannan	Minister for Environment
14	Shri R. Kamaraj	Minister for Food and Civil Supplies
15	Shri O. S.Manian	Minister for Handlooms and Textiles
16	Shri Udumalai K Radhakrishnan	Minister for Animal Husbandry
17	Dr. C. Vijaya Baskar	Minister for Health and Family Welfare
18	Shri R. Doraikkannu	Minister for Agriculture
19	Shri Kadambur Raju	Minister for Information and Publicity
20	Shri R.B. Udhayakumar	Minister for Revenue and Disaster Management
21	Shri Vellamandi N. Natarajan	Minister for Tourism
22	Shri K. C. Veeramani	Minister for Commercial Taxes
23	Shri K. T. Rajenthra Bhalaji	Minister for Milk and Dairy Development
24	Shri P. Benjamin	Minister for Rural Industries
25	Shri M.R.Vijayabhaskar	Minister for Transport
26	Dr Nilofer kafeel	Minister for Labour
27	Dr. M. Manikandan	Minister for Information Technology
28	Smt.V. M. Rajalakshmi	Minister for Adi Dravidar and Tribal Welfare
29	Shri K. Pandiarajan	Minister for Tamil Official Language and Tamil Culture

30	Shri G. Baskaran	Minister for Khadi and Village Industries Board
31	Shri Sevvoor S.Ramachandran	Minister for Hindu Religious and Charitable Endowments
32	Smt S.Valarmathi	Minister for Backward Classes and Minorities Welfare
33	Shri P. Balakrishna Reddy	Minister for Youth Welfare and Sports Development
34	Dr (Tmt) Girija Vaidyanathan,	Chief Secretary to Government, Secretariat,
35	Shri K. Shanmugam	Additional Chief Secretary to Government, Finance Department, Secretariat,
36	Dr. T.V. Somanathan	Additional Chief Secretary to Government (Special Initiatives Department & Officer on Special Duty, 15th Finance Commission), Secretariat,
37	Dr. M. Saikumar	Principal Secretary/ Secretary I to CM, CM Office,
38	Shri S. Vijayakumar	Principal Secretary - II to Chief Minister CM, CM Office
39	Dr. P. Senthil Kumar	Secretary-III to Chief Minister CM Office
40	Smt Jayashree Muralidharan	Secretary - IV to CM, CM Office
41	Shri K. Gnanadesikan	Additional Chief Secretary to Government, Industries Department, Secretariat
42	Shri Hans Raj Verma	Additional Chief Secretary to Government, Rural Development & Panchayat Raj Department, Secretariat
43	Shri Rajeev Ranjan	Additional Chief Secretary to Government, Highways and Minor Ports Department, Secretariat,

44	Shri Otem Dai	Additional Chief Secretary to Government, Adi Dravidar and Tribal Welfare Department, Secretariat
45	Shri Apurva Varma	Additional Chief Secretary to Government, Tourism, Culture and Religious Endowments Department, Secretariat
46	Shri P.W.C. Davidar	Additional Chief Secretary to Government, Transport Department, Secretariat
47	Dr. Niranjan Mardi	Additional Chief Secretary to Government, Home, Prohibition and Excise Department, Secretariat,
48	Shri Harmander Singh	Principal Secretary to Government, Municipal Administration & Water Supply Department, Secretariat
49	Shri Gagandeep Singh Bedi	Agriculture Production Commissioner & Principal Secretary to Government, Agriculture Department, Secretariat
50	Dr. K. Gopal	Principal Secretary to Government, Animal Husbandry, Dairying and Fisheries Department, Secretariat,
51	Shri Ka. Balachandran	Principal Secretary to Government Commercial Taxes and Registration Department, Secretariat
52	Shri Dayanand Kataria	Principal Secretary to Government, Co-operation, Food and Consumer Protection Department, Secretariat
53	Shri Pradeep Yadav	Principal Secretary to Government, School Education Department, Secretariat

54	Shri Md. Nasimuddin	Principal Secretary to Government, Energy Department, Secretariat
55	Shri Shambu Kallolikar	Principal Secretary to Government, Environment and Forests Department, Secretariat,
56	Shri Kumar Jayant	Principal Secretary to Government, Handlooms, Handicrafts, Textiles and Khadi Department Secretariat
57	Dr. J. Radhakrishnan	Principal Secretary to Government, Health and Family Welfare Department, Secretariat
58	Shri Mangat Ram Sharma	Principal Secretary to Government, Higher Education Department, Secretariat
59	Shri Dheeraj Kumar	Principal Secretary to Government, Youth Welfare and Sports Development Department, Secretariat
60	Shri S. Krishnan	Principal Secretary to Government, Housing and Urban Development Department, Secretariat
61	Shri Sunil Paliwal	Principal Secretary to Government, Labour and Employment Department, Secretariat
62	Dr. P. Senthilkumar	Principal Secretary to Government (Incharge), Public & Rehabilitation Department, Secretariat
63	Shri S.K. Prabakar	Principal Secretary to Government, Public Works Department, Secretariat
64	Shri A. Karthik	Secretary to Government, BC, MBC & Minorities Welfare Department, Secretariat

65	Shri R.Venkatesan	Secretary to Government, Tamil Development & Information Department Secretariat
66	Shri C. Vijayaraj Kumar	Secretary to Government, Department for Welfare of Differently Abled Persons, Secretariat,
67	Shri Dharmendra Pratap Yadav	Secretary to Government, Micro, Small and Medium Enterprises Department, Secretariat
68	Dr. Santhosh Babu	Secretary to Government, Information Technology Department, Secretariat,
69	Shri M.A. Siddique	Secretary to Government (Expenditure), Finance Department, Secretariat, Secretariat
70	Dr. R. Anandakumar	Additional Secretary to Government, Finance Department, Secretariat, Secretariat,
71	Smt. Pooja Kulkarni	Additional Secretary to Government, Finance Department, Secretariat, Secretariat
72	Shri M. Arvind	Deputy Secretary to Government, Finance Department, Secretariat, Secretariat
73	Shri H. Krishnanunni	Deputy Secretary to Government (Budget), Finance Department, Secretariat, Secretariat
74	Shri Mohan Pyrae	Additional Chief Secretary to Government/ Vigilance Commissioner and Commissioner for Administrative Reforms
75	Dr Jagmohan Singh Raju	Additional Chief Secretary / Chairman & Managing Director, Tamil Nadu Energy Development Agency,
76	Shri V. K. Jeyakodi	Additional Chief Secretary to Government / Commissioner, Land Administration Department

77	Dr. K. Satyagopal	Additional Chief Secretary / Commissioner of Revenue Administration, Revenue Administration and Disaster Management Department
78	Shri Ashok Dongre	Additional Chief Secretary to Government / Managing Director, Chennai Metropolitan Water Supply and Sewerage Board and Commissioner for Economics and Statistics Department (Addl. Charge),
79	Shri Vikram Kapoor	Principal Secretary/Chairman & Managing Director, TNEB & TANGEDCO,
80	Shri T. K. Ramachandran	Principal Secretary / Commissioner, Hindu Religious and Charitable Endowments Department
81	Dr. D. Karthikeyan	Commissioner, Greater Chennai Corporation,
82	Shri G. Prakash	Commissioner, Muncipal Administration Department
83	Shri Anil Meshram	Member-Secretary, State Planning Commission
84	Shri P. Umanath	Managing Director, Tamil Nadu Medical Services Corporation
85	Shri Rajendra Ratnoo	Commissioner of Disaster Management, Revenue Administration and Disaster Management Department
86	Shri M.S. Shanmugam	Managing Director, Slum Clearance Board
87	Dr. A.K. Viswanathan	Commissioner of Police,
88	Shri R.K. Upadhyay	Principal Chief Conservator of Forests (HOFF), Forests Department

89	Shri M. Saisaravanan	Assitional Registrar-I (Vigilance), High Court of Madras
90	Dr. A. Edwin Joe	Director, Medical Education Department
91	Dr. N. Rukmani	Director, Medical and Rural Health Services
92	Smt. N. Shanthy	Chief Engineer (C&M), Highways Department

Representatives of Local Bodies

1	Shri Harmander Singh	Principal Secretary to Government, Municipal Administration & Water Supply Department, Secretariat
2	Dr. D. Karthikeyan	Commissioner,
3	Shri G.Prakash	Commissioner, Municipal Administration Department
4	Shri S. Palanisamy	Director, Town Panchayats.
5	Smt. R.Lalitha	Deputy Commissioner (R&F),
6	Smt. Janaki Ravindran	Regional Director, Municipal
7	Shri V. Murugesan	Administration,
8	Shri K. Saravanakumar	Regional Executive Engineer,
9	Shri S.M. Malayaman Shrimudikari	Municipal Commissioner
10	Shri B. Ibrahimsha	Joint Director, Town Panchayat
11	Shri Hans Raj Verma	Executive Officer (Admin) O/o the Assistant Director of Town Panchayat
12	Shri K. Baskaran	Additional Chief Secretary to Government, Rural Development & Panchayat Raj Department, Secretariat
		Director, Rural Development and Panchayat Raj Department.
13	Shri S.S. Kumar	Project Director, DRDA, District Panchayat

14	Shri N. Arul Jothi Arasan	Project Director, DRDA, District Panchayat,
15	Shri R.Kasinathan	Assistant Director (Panchayat) Block Panchayat
16	Shri S. Gangatharani	Assistant Director (Panchayat) Block Panchayat
17	Smt. K. Meera	Block Development Officer Village Panchayat
18	Shri G. Gnanavel	Block Development Officer Village Panchayat

Representatives of Trade & Industry

1	Shri K. Gnanadesikan	Additional Chief Secretary to Government, Industries Department, Secretariat
2	Shri V. Arun Roy	Additional Secretary to Government, Industries Department
3	Shri M.Ponnuswami	Chairman Confederation of Indian Industries
4	Shri B.Santhanam	Managing Director, Saint-Gobin India Private Limited, (Glass Business).
5	Shri C.K.Ranganathan	Founder, Chief Executive Officer, Cavin Care
6	Shri Josh Foulger	Managing Director, FIH India Developer Private Limited
7	Shri Rinji Kawashima	Deputy Managing Director India Yamaha Motor Private Limited.
8	Shri Elanchelian	Managing Director, Sanmina.
9	Shri Velmurugan	Executive Vice Chairperson, Industrial Guidance Bureau

Representatives of Political Parties

1	Shri Americai Narayanan	Indian National Congress (INC)
2	Shri D. Bharathidasan	Bahujan Samaj Party (BSP)
3	Shri A. Muthukrishnan	Bahujan Samaj Party (BSP)
4	Shri T.K. Rangarajan	Communist Party of India (CPI-M)
5	Shri N. Gunasekaran	Communist Party of India (CPI-M)
6	Shri G.P.Sarathy	National Congress Party (NCP)
7	Shri M. Abubacker	National Congress Party (NCP)
8	Shri C. Ponnaiyan	All India Anna Dravida Munnetra Kazhagam (AIADMK)
9	Shri Pollachi Jayaraman	All India Anna Dravida Munnetra Kazhagam (AIADMK)
10	Shri T.K.S. Elangovan	Dravida Munnetra Kazhagam (DMK)
11	Dr. Palanivel Thiagarajan	Dravida Munnetra Kazhagam (DMK)
12	Shri Azhagapuram R. Mohanraj	Desiya Murpoku Dravida Kazhagam (DMDK)
13	Dr.V. Elangovan	Desiya Murpoku Dravida Kazhagam (DMDK)

24. Telangana (18-20 February 2019)

Representatives of State Government

1	Shri K. Chandrashekar Rao	Hon'ble Chief Minister of Telangana State
2	Shri Md. Mohamood Ali	Hon'ble Minister for Home
3	Shri A. Indrakaran Reddy	Hon'ble Minister for Forest
4	Shri T. Shrinivas Yadav	Hon'ble Minister for Animal Husbandry, Fisheries, Dairy Development & Cinematography
5	Shri G. Jagadish Reddy	Hon'ble Minister for Education
6	Shri Etela Rajendra	Hon'ble Minister for Medical & Health & Family Welfare

7	Shri S. Niranjan Reddy	Hon'ble Minister for Agriculture, Co-operation, Marketing, Food & Civil Supplies and Consumer Affairs
8	Shri Koppula Eshwar	Hon'ble Minister for Scheduled Castes Development, Tribal Welfare, BC Welfare, Minority Welfare, Disabled Welfare and Senior Citizens Welfare
9	Shri Errabelli Dayakar Rao	Hon'ble Minister for Panchayat Raj & Rural Development and RWS
10	Shri V. Shrinivas Goud	Hon'ble Minister for Prohibition & Excise, Sports & Youth Services, Tourism & Culture and Archaeology
11	Shri Vemula Prashanth Reddy	Hon'ble Minister for Transport, Roads & Buildings, Legislative Affairs and Housing
12	Shri Chamakura Malla Reddy	Hon'ble Minister for Labour & Employment, Factories, Women & Child Welfare and Skill Development
13	Dr. Rajeev Sharma	Chief Adviser to Government
14	Dr.G.R.Reddy	Advisor to Government (Finance)
15	Smt Smita Sabarwal	Secretary to Hon'ble Chief Minister
16	Shri Sandeep Kumar Sultania	Secretary to Hon'ble Chief Minister & Secretary to Government, AHDD&F Department (FAC)
17	Shri P. Raja Sekhar Reddy	Special Secretary to Hon'ble Chief Minister
18	Shri Jwala Narasimha Rao Vanam	Chief Public Relation Office to Hon'ble Chief Minister
19	Shri G. Vijay Kumar	Public Relation Office to Hon'ble Chief Minister

20	Shri Shailendra Kumar Josh	Chief Secretary to Government, Telangana State
21	Shri Ajay Mishra	Special Chief Secretary to Government, Energy Department
22	Smt. Chitra Ramachandran	Special Chief Secretary to Government, Housing Department
23	Shri Rajeshwar Tiwari	Special Chief Secretary to Government, Revenue (Registration & Stamps) Department
24	Shri K. Ramakrishna Rao	Principal Secretary to Government, Finance Department
25	Shri C. Parthasarathi	APC and Principal Secretary to Government, Agriculture & Cooperation Department
26	Shri Adhar Sinha	Principal Secretary to Government (Political), GAD
27	Smt. Shalini Mishra	Principal Secretary to Government (GPM&AR), GAD
28	Smt. Santi Kumari	Principal Secretary to Government, HM&FW Department
29	Shri Arvind Kumar	Principal Secretary to Government, MA&UD Department
30	Shri Vikas Raj	Principal Secretary to Government, PR&RD Department
31	Dr. Shashank Goel	Principal Secretary to Government, Labour, Employment, Training and Factories Department
32	Shri Somesh Kumar	Principal Secretary to Government,
33	Shri Sunil Sharma	Principal Secretary to Government, TR&B Department

34	Shri Rajiv Trivedi	Principal Secretary to Government,Home Department
35	Shri B. Venkatesham	Secretary to Government, YAT&C (Tourism) Department
36	Shri Benhur Mahesh Dutt Ekka	Secretary to Government, Minorities Welfare Department
37	Shri M. Jagadeeshwar	Secretary to Government, WDCW, DW & SC Department
38	Shri Sabyasachi Ghosh	Secretary to Government, YAT&C (Youth Service) Department
39	Shri M. Danakrishore	Commissioner, GHMC, Hyderabad
40	Shri Rahul Bojja	Commissioner of Agriculture
41	Smt. Neetu Kumari Prasad	Commissioner of Panchayat Raj
42	Smt. T.K. Sreedevi	Director of Municipal Administration
43	Shri N. Sivasankar	Senior Consultant, Finance Department
44	Shri M. Mahender Reddy	Director General of Police
45	Shri P.K. Jha	PCCF&HOFF, Telangana Forest Department
46	Shri C. Muralidhar	Engineer-in-Chief, I&CAD Department
47	Shri Hariram	Engineer-in-Chief, Kaleswaram Project
48	Shri Krupakar	Engineer-in-Chief, RWS&S
49	Shri D. Prabhakar Rao	Chairman & Managing Director, T.S. GENCO

Representatives of Urban Local Bodies

1	Shri Arvind Kumar	Prl.Secretary to Government
2	Shri Dana Kishore	Commissioner, GHMC
3	Dr. T.K. Sreedevi	Commissioner & Director, Municipal Administration (CDMA)
4	Shri G. Laxmi Narayana	Deputy Secretary to Government
5	Smt. Anuradha	Additional Director O/o DMA

6	Shri Jayaraj Kennady	Additional Commissioner, GHMC
7	Shri Bhaskara Puranam	EA to Principal Secretary to Government
8	Shri Phalgun Kumar	Deputy Director, O/o DMA & Nodal Officer
9	Shri Bonthu Ram Mohan	Mayor, GHMC, Hyderabad
10	Shri Sardar Ravinder Singh	Mayor, Karimnagar
11	Smt. Chutturi Rajamani	Mayor, Ramgundam
12	Shri Guguloth Papalal	Mayor, Khammam
13	Smt. Kashyap Swathi Singh	Chairperson, Armoor
14	Smt. Rangineni Maneesha	Chairperson, Adilabad
15	Shri Vishwanatham Satyanarayana	Chairperson, Vikarabad
16	Shri Gadipally Bhaskar	Chairperson, Gajwel
17	Shri Thatiparthi Vijalaxmi	Chairperson, Jagityal
18	Shri V. Devender	Chairperson, Devarkonda

Representatives of Rural Local Bodies

1	Shri Vikar Raj	Principal Secretary to Government
2	Smt. Neetu Kumari Prasad	Commissioner
3	Shri Satyanarayana Reddy	Engineer-in-Chief
4	Shri G. Rajesham Goud	Chairman, Telangana State Finance Commission
5	Shri Suresh Chanda	Special Chief Secretary and Secretary, Member Secretary, Telangana State Finance Commission
6	Shri Channaiah	Member, Telangana State Finance Commission
7	Smt. Tula Uma	ZP Chaiperson, Karimnagar
8	Shri P. Monohar Goud	ZPTC, Sangareddy, Medak
9	Shri K. Hanmanth Reddy	MPP, Itikyal, Nahabubnagar
10	Shri U. Shrinivas	MPTC, Gundlapochampally, RR Dist.

11	Shri K.Vijayabhaskar	Sarpanch, Peddavoora GP, Nalgonda
12	Shri Ade Gajanand Naik	Sarpanch Narnoor GP, Adilabad
13	Shri N, Venkateswara Rao	Sarpanch, GP, Gollagudam, Khammam
14	Shri M. Madhu	Sarpanch, Jilela, Rajanna Sircilla
15	Smt. Citti Madhiri	Sarpanch, Kondapur, Siddipet
16	Shri Kyatham Ravi	Sarpanch GP, Mugpal, Nizamabad

Representatives of Trade & Industry

1	Shri Jayesh Ranjan	Principal Secretary to Government
2	Shri Ahmad Nadeem	Commissioner of Industries
3	Shri S. Suresh	Joint Director, Industries
4	Ms. Vanitha Datla	Past Chairperson, CII
5	Shri M. K. Patodia	CMD, GTN, Engg. India Ltd.
6	Shri M. Simachal Mohanty	Director, Taxation, Dr. Reddy Laboratories Ltd.
7	Shri K. Sudhir Reddy	President, TIF
8	Shri S.V. Raghu	General Secretary, TIF
9	Shri V. Anand Reddy	Sr. Vice President, TIF
10	Shri M. Gopal Rao	Joint Secretary, TIF
11	Shri T. Muralidharan	Chairman, FICCI
12	Shri A. Murali Krishna Reddy	Co-Chairman, FICCI
13	Shri Akhuilesh Mahurkar	Director, FICCI
14	Shri Meela Jayadev	MC Member, FTAPCCI
15	Shri Gowra Shrinivas	Immediate Past President, FTAPCCI

Representatives of Political Parties

1	Shri Palla Venkat Reddy	Ex-MLA & Party State Assistant Secretary, Communist Party of India
2	Shri T. Narasimhan	Member, National Council, Communist Party of India

3	Shri Bhatti Vikramarka Mallu	Leader of Opposition in TLA, Indian National Congress
4	Shri D. Shridhar Babu	MLA, Indian National Congress
5	Shri Shyam Mohan	Chairman, Intellectual Cell Executive Member & Official Spokesperson, TPCC, Indian National Congress
6	Shri Ravula Chandra Sekhar Reddy	Leader of TDP, Telugu Desam Party
7	Shri Gandam Gurumurthy	State Party Legal Cell President, Telugu Desam Party
8	Shri N. Ramachender Rao	MLC, Bharatiya Janatha Party
9	Dr. S. Malla Reddy	State Vice President, Bharatiya Janatha Party
10	Shri Anugula Rakesh Reddy	State Official Spokesperson, Bharatiya Janatha Party
11	Shri Mohd. Touseef	AIMIM
12	Shri Syed Amin UL Hasan Jafree	MLC, AIMIM

25. Tripura (16-18 January 2019)

Representatives of State Government

1	Shri Biplab Kumar Deb	Hon'ble Chief Minister
2	Shri Jishnu Dev Varma	Hon'ble Dy Chief Minister, Finance etc Department
3	Shri N.C. Debbarma	Hon'ble Minister, Revenue etc Department
4	Shri Ratan Lal Nath	Hon'ble Minister, Education etc Department
5	Shri Sudip Roy Barman	Hon'ble Minister, Health etc Department
6	Shri Pranajit Singha Roy	Hon'ble Minister, Agriculture etc Department
7	Shri Manoj Kanti Deb	Hon'ble Minister, Youth Affairs & Sports etc Department
8	Shri Mevar Kr Jamatia	Hon'ble Minister, Tribal Welfare etc Department

9	Smt Santana Chakma	Hon'ble Minister, Social Welfare & Social Education etc Department
10	Shri Lalit Kumar Gupta	Chief Secretary, Government of Tripura
11	Shri A.K. Sukla	Director General of Police, Home Department
12	Dr Alind Rastogi	Principal Chief Conservator of Forest, Forest Department
13	Shri Kumar Alok	Principal Secretary, Home etc Department
14	Shri Barun Kumar Sahu	Principal Secretary, RD (Panchayat) etc Department
15	Shri Laihlia Darlong	Principal Secretary, Industries & Commerce etc Department
16	Shri Shantanu	Secretary, Tribal Welfare Department
17	Shri Samarjit Bhowmik	Secretary, Health & Family Welfare Department, Education (School) Department
18	Shri Tushar Kanti Chakma	Secretary, General Administration (Political) Department
19	Shri Manik Lal Dey	Secretary, Agriculture Department, SC Welfare Department and ICA Department
20	Shri Rameshwar Das	Secretary, Fisharies and Animal Resource Development Department
21	Shri. D. M. Jamatia	Secretary, Law Department
22	Shri Sahadeb Das	Secretary, Minorities Welfare Department and OBC Welfare Department
23	Shri N. Darlong	Secretary, Finance etc Department
24	Shri Debasish Basu	Secretary, Food, Civil Supplies & Consumer Affairs
25	Shri C. Murti	Special Secretary, Social Welfare & Social Education Department and Labour Department

26	Shri Shailendra Singh	Special Secretary, Science, Technology & Environment Department and Co-operation Department
27	Shri. Apurba Roy	Special Secretary, Planning (P&C) Department
28	Shri. P.R. Bhattacharjee	Special Secretary, Finance Department
29	Shri Amit Shukla	Special Secretary, Education (Higher) Department
30	Shri. C.K. Jamatia	Special Secretary, Tribal Welfare Department
31	Shri. L.T. Darlong	Additional Secretary, Revenue Department
32	Shri Md. Zubair Ali Hashmi	Additional Secretary, Rural Development Department
33	Shri. R.K. Noatia	Director, RD (Panchayat) Department
34	Dr Sandeep R. Rathod	Director, Industries & Commerce
35	Dr Milind Ramteke	Director, Urban Development Department
36	Shri. Shalil Das	Director, Information Technology
37	Shri Balin Debbarma	Chief Executive Officer, Tripura Tribal Area Autonomous District Council
38	Smti Sanchayita Das	Chief Engineer, PWD (Building)
39	Shri Bishnu Kr Debbarma	Chief Engineer, PWD (Water Resource)
40	Shri. Somesh Ch Das	Chief Engineer, PWD (Drinking Water & Sanitation)
41	Shri R. Debbarma	Chief Engineer, PWD (National Highway)
42	Shri S. Chakraborty	Superintending Engineer, PWD (PMGSY)
43	Shri Prabir Kr Sarkar	Superintending Engineer, PWD (PMGSY)
44	Shri. M. Debbarma	Director (Technical), Tripura State Electricity Corporation Ltd.
45	Shri. Nagesh Kumar B.	Commissioner of Taxes & Excise, Finance Department

46	Shri. Akinchan Sarkar	Joint Secretary, Finance Department
47	Shri Susanta Datta	Deputy Secretary, PWD (Roads & Bridges)
48	Shri A.K Chanda	Joint Director, Economics & Statistics
49	Shri. Bidyut Datta	Joint Director, Information Technology
50	Dr. Sarat Kumar Das	SPO, Disaster Management, Revenue Department

Representatives of Urban Local Bodies

1	Dr. Prafullajit Sinha	Mayor, Agartala Municipal Corporation
2	Smt. Anamika Malakar	Chairperson, Kumarghat Municipal Council
3	Shri Matilal Das	Chairperson, Mohanpur Municipal Council
4	Shri Chandan Bhowmik	Chairperson, Ambassa Municipal Council
5	Shri Sankar Saha	Chairperson-in-Charge, Rani Bazar Municipal Council
6	Shri Maniklal Nath	Vice-Chairperson, Dharmanagar Municipal Council
7	Shri Tarun Chakraborty	Chairperson, Amarpur Nagar Panchayat
8	Smt Kamala Majumder	Chairperson, Sonamura Nagar Panchayat
9	Shri Manoj Kumar	Principal Secretary, Urban Development
10	Dr. Shailesh Kr Yadav	Municipal Commissioner, Agartala Municipal Corporation
11	Dr Milind Ramteke	Director, Urban Development
12	Shri Nripendra Ch. Sharma	Additional Director, Urban Development

Representatives of Rural Local Bodies & TTAADC

1	Shri Dilip Kumar Das	Sabhadhipati, Paschim Tripura Zilla Parishad
2	Smt. Pratima Das	Sabhadhipati, Uttar Tripura Zilla Parishad
3	Smt. Namita Parshi	Chairperson, Jirania Panchayat Samiti
4	Shri Pintu Aich	Chairman, Kathalia Panchayat Samiti
5	Shri Diba Chandra Hrangkhawl	Chairman, Manu BAC

6	Shri Prasanta Debbarma	Chairman, Padmabil BAC
7	Smt. Chhaya Natta (Bhowmik)	Pradhan, Dalura Gram Panchayat
8	Shri Tamal Baidya	Pradhan, Paschim Pilak Gram Panchayat
9	Shri Barun Kumar Sahu	Principal Secretary, RD (Panchayats)
10	Shri Rajendra Kumar Noatia	Director, RD (Panchayats)
11	Shri Dhananjoy Debbarma	Additional Director , RD (Panchayats)
12	Shri Ratan Nama	Assistant Director, RD (Panchayats)
13	Shri Subhayan Chakraborty	Panchayat Resource Development Officer, Finance., RD (Panchayats)
14	Shri Dulal Majumder	UDC, RD (Panchayats)
15	Shri Radha Charan Debbarma	Chief Executive Member, TTAADC
16	Shri Santanu Jamatia	Executive Member, TTAADC
17	Shri Rajendra Reang	Executive Member, TTAADC
18	Smt. Sandhya Rani Chakma	Executive Member, TTAADC
19	Shri Paresh Ch. Sarkar	Executive Member, TTAADC
20	Shri Patiram Tripura	Executive Member, TTAADC
21	Shri Santanu	Secretary, Tribal Welfare
22	Shri C.K. Jamatia	Director, Tribal Welfare
23	Shri Balin Debbarma	Chief Executive Officer, TTAADC.
24	Shri Ramkrishna Debbarma	Executive Officer (Finance), TTAADC.
25	Shri. Subrata Chakraborty	OSD, TTAADC.
26	Shri Pranab Debnath	OSD, Finance, TTAADC.

Representatives of Trade & Industry

1	Smt. Rupa Das	State Head, Confederation of Indian Industries, Tripura Chapter, Agartala
2	Shri Banshi Raj Saha	Resident Officer, Federation of Indian Chambers of Commerce & Industry (FICCI) (North East Regional Advisory Council)

3	Shri Kanak Jain	Director, Federation of Association of Cottage & Small Industries (FI)
4	Shri. Ajay Kumar Saha	Executive Member, Tripura Industrial Entrepreneur (TIE)
5	Shri Subrata Ranjan Roy	President, Tripura Industrial Entrepreneurs
6	Shri M. L. Debnath	President, Tripura Chamber of Commerce
7	Shri Anup Kr. Roy	Hon. Secretary, Tripura Chamber of Commerce & Industry
8	Shri Rabin Bose	Vice President, MIPL, Tripura Industries Owners Association
9	Shri Sajib Saha	Secretary, Association of Industries and Commerce, Agartala
10	Shri Laihlia Darlong	Principal Secretary, Industries & Commerce
11	Shri Sandeep R. Rathod	Director, Industries & Commerce
12	Smt. Sapna Debnath	Additional Director, Industries & Commerce

Representatives of Political Parties

1	Dr. Ashok Sinha	Office Bearer, State BJP, Bharatiya Janata Party(BJP), Agartala
2	Shri Subrata Chakraborty	Spokesperson, Tripura Pradesh, Bharatiya Janata Party (BJP), Agartala
3	Shri Victor Shome	State Media In-Charge, Bharatiya Janata Party, (BJP), Agartala
4	Shri Ramendra Datta Gupta	Central Committee Member, Communist Party of India (Cp1), Agartala
5	Shri Milan Baidya	State Member, Communist Party of India (Cp1), Agartala
6	Shri Goutam Das	Secretary, Tripura State Committee, Communist Party of India (Marxist) (CPIM), Agartala

7	Shri Bhanulal Saha	State Committee Member, Communist Party of India (Marxist) (CPIM), Agartala
8	Shri Mangal Debbarma	AGS, Indegenous People's Front of Tripua (IPFT), Agartala
9	Shri Amit Debbarma	Member, Central Committee, Indegenous People's Front of Tripua (IPFT), Agartala
10	Shri Tapas Dey	V.P., Indian National Congress,(INC), Agartala
11	Shri Amrit Lal Saha	Chairman, Vichar Vibhag Committee, TPCC, Indian National Congress (INC), Agartala

26. Uttar Pradesh (19 -22 October 2019)

Representatives of State Government

1	Shri Yogi Adityanath	Chief Minister
2	Shri Keshav Prasad Maurya	Deputy Chief Minister, Lok Construction, Food Entertainment tax and Public sector.
3	Shri Dinesh Sharma	Deputy Chief Minister, Secondary and High Education, Science and Technological, Electronics and Information
4	Shri Surya Pratap Shahi	Minister, Agriculture Minister and Agricultural Investigation
5	Shri Suresh Khanna	Minister, Finance, Parliamentary Affairs and Medical Education
6	Shri Jai Pratap Singh	Minister, Medical and Health, Family Welfare, Mother and Child Welfare
7	Shri Shrikant Sharma	Minister, Power and Additional Power Source
8	Shri Rajendra Pratap Singh (Moti Singh)	Minister, Overall Village Development

9	Shri Aashutosh Tandon	Minister, Overall Urban Development, Urban Employment and Poverty Alleviation
10	Shri Bhupendra Singh Chaudhary	Minister, Panchayati Raj
11	Shri Mahendra Singh	Minister, Jal Shakti
12	Shri Rajendra Kumar Tiwari	Chief Secretary and Agricultural Production Commissioner
13	Shri Alok Tandon	Establishment and Industries Development Commissioner
14	Shri Sanjeev Mittal	Additional Chief Secretary, Finance
15	Shri Alok Shina	Additional Chief Secretary, Commercial Tax, Electronics, IIT
16	Shri Kumar Kamlesh	Additional Chief Secretary, Planning
17	Smt. Renuka Kumar	Additional Chief Secretary, Basic Education and Revenue Department
18	Shri Shashi Prakash Goyal	Principal Secretary, Chief Minister
19	Dr. Rajneesh Dubey	Principal Secretary, Medical education
20	Shri Manoj Kumar Singh	Principal Secretary,Urban Development
21	Shri Navneet Kumar Sehgal	Principal Secretary, Minor and Medium Industry
22	Shri Devesh Chaturvedi	Principal Secretary, Medical and Health Department
23	Shri Anurag Srivastava	Principal Secretary, Panchayati raj and Rural Development
24	Shri T. Venkatesh	Principal Secretary, Irrigation
25	Shri Alok Kumar	Principal Secretary, Energy Department
26	Shri Rajan Shukla	Principal Secretary, Civil Defence and Political Pension Department

27	Shri Nitin Ramesh Gokarn	Principal Secretary, Public Work Department
28	Shri Rajesh Kumar Singh	Principal Secretary, Public Sector Establishment and Industries Development
29	Smt. Monika S. Garg	Principal Secretary, Child Development Nutrition, Woman Welfare
30	Shri Sanjay Bhoosreddy	Principal Secretary, Excise and Sugar Department
31	Smt. Veena Kumari	Principal Secretary, Stamp and Registration
32	Shri Jitendra Kumar	Principal Secretary, General Administration
33	Shri Dinesh Kumar Singh	Principal Secretary, Justice
34	Shri Suresh Chandra	Principal Secretary, Labour and Employment Department
35	Smt. Kalpana Awasthi	Principal Secretary, Forest and Environment Department
36	Shri Manoj Singh	Principal Secretary, Social Welfare
37	Shri Sudhir Garg	Principal Secretary, Horticulture
38	Shri Sanjay Prasad	Secretary, Chief Minister
39	Shri Pankaj Kumar	Secretary, Medical and Health Department
40	Smt. Alaknanda Dayal	Secretary, Finance
41	Shri Subhrant Shukla	Special Secretary, Chief Minister
42	Shri Neel Ratan	Special Secretary, Finance
43	Shri Alok Dixit	Special Secretary, Finance
44	Smt. Neeru Tiwari	Director, D.F.P.R, Finance
45	Shri Vivek Tripathi	Combined Secretary, D.F.P.R, Finance

46	Shri Siddharth Srivastav	Additional Director, D.F.P.R, Finance
47	Dr. Virendra Singh	Combined Director, D.F.P.R, Finance
48	Shri Ashok Kumar	Combined Director, D.F.P.R, Finance

Representatives of Local Bodies

1	Shri Kulvinder Singh	Secretary, Zila Panchayat, Meerut
2	Smt. Sarita Dwivedi	Secretary, Zila Panchayat, Banda
3	Smt. Uttama Devi	Block Principal, Rural Panchayat Bhathat, Gorakhpur
4	Shri Rajesh Rawat Urf Chandradeep Rawat	Block Principal, Rural Panchayat Madavara Janpad-Lalitpur
5	Smt. Sweta Singh	Village Major, Latifpur, Lucknow
6	Shri Rameshwar Singh	Village Major, Khoradeeh, Mirzapur
7	Shri Maheep Kumar Singh	Member, Zila Panchayat , Lucknow
8	Shri Virendra Pratap Singh	Member, Zila Panchayat, Jhansi
9	Shri Subash Chandra Bharti	Member, Zila Panchayat, Gorakhpur
10	Shri Anup Singh	Member, Rural Panchayat Budhgaura, Barabanki
11	Shri Raj Kumar Chaudhary	Member, Rural Panchayat, Sidharth Nagar
12	Shri Mithilesh	Member, Rural Panchayat Karwi, Chitrakoot
13	Shri Shyam Sundar	Member, Gram Panchayat Sarva, Sitapur
14	Shri Ram Jeevan Shukla	Member, Gram Panchayat Palra, Jhansi
15	Shri Naveen Kumar Jain	Mayor, Municipal Corporation, Agra
16	Shri Vinod Agarwal	Mayor, Municipal Corporation, Moradabad
17	Smt Ruksana	Secretary, Municipal Council Parishad, Bijnour

18	Smt Ruksana	Nagar Panchayat, Madiyahu, Janpad Jaunpur
19	Shri Shyamsundar Verma	Secretary, Municipal Council Parishad, Khalilabad Janpad-Santkabir Nagar
20	Smt. Gur Pyari Mehra	Secretary, Municipal Corporation, DayalBagh, Janpad –Agra
21	Shri Arun Singh	Secretary, Municipal Corporation, Pound of Bakshi, Janpad-Lucknow
22	Smt. Shaifali Kunwar	Secretary, Municipal Panchayat, Sarila, Janpad-Hamirpur
23	Smt. Mamta Chaudhary	Councilor Municipal Corporation, Lucknow
24	Shri Arun Tiwari	Councilor Municipal Corporation, Lucknow
25	Shri Rajiv Sharma	Councilor, Municipal Corporation, Ghaziabad
26	Shri Angad Vishwakarma	Member, Municipal Council, Khalilabad, Janpad-Santkabir Nagar
27	Shri Vinod Jaishwal	Municipal Council, Khalilabad, Janpad-Santkabir Nagar
28	Shri Mohan Lal Chaurasia	Member, Nagar Panchayat, Madiyahu, Janpad-Jahnpur

Representatives of Trade & Industry

1	Shri Vijay Acharya	Secretary, Associated Chambers of Commerce and Industries of U.P
2	Shri D.P Singh	Co-Secretary, Assocham, Associated Chamber of Commerce and Industries of U.P
3	Shri Manish Agarwal	Co-Secretary, Assocham, Associated Chamber of Commerce and Industries of U.P

4	Shri Sachin Agarwal	confederation of Indian Industries
5	Smt. Kiran Chopda	confederation of Indian Industries
6	Shri Alok Shukla	confederation of Indian Industries
7	Shri V.K Agarwal	Indian Industries Association
8	Shri Manish Goyal	Indian Industries Association
9	Shri Surya Haveliya	Indian Industries Association
10	Shri Amit Gupta	U.P Head, Federation of Indian Commerce and Chambers of Industry
11	Smt. Rita Mittal	General Secretary, Minor Industries Bharti

Representatives of Political Parties

1	Shri Ravi Prakash Verma	Parliament Rajya Sabha, Samajwadi Party
2	Shri Udayveer Singh	Member, Vidhhan Parishad, Samajwadi Party
3	Shri K.K.Sharma	Pradesh Secretary, Nationalist Congress Party
4	Shri Umashankar Yadav	National Congress Party
5	Shri J.P.S. Rathor	Pradesh Deputy Secretary, Bharatiya Janta Party
6	Shri Y.P. Singh	Pradesh Minister, Bharatiya Janta Party
7	Shri Manish kapoor	Pradesh Co-treasurer, Bharatiya Janta Party
8	Shri Salman Khurshid	Past Abroad Minister, Bharat Sarkar, Indian National Congress
9	Shri Anoop Patel	Spokesman, Indian National Congress
10	Shri Surendra nath Trivedi	Pradesh Spokesman, National Lok Dal
11	Shri Javed Ahmed	Pradesh Media Handler, National Lok Dal
12	Dr. Girish	Secretary, Indian Communist Party
13	Shri Arvind Raj Savroop	State Conducive Secretary, Indian Communist Party

14	Shri Vinay Pathak	Indian Communist Party
15	Shri Premnath Rai	Member State Secretary, Markswadi Communist
16	Shri Ravishankr Mishra	C.P.I, Markswadi Communist

27. Uttarakhand (15-18 October 2018)

Representatives of State Government

1	Shri Trivendra Singh Rawat	Chief Minister
2	Shri Prakash Pant	Finance Minister
3	Shri Utpal Kumar Singh	Chief Secretary
4	Dr. Ranbir Singh	Additional Chief Secretary
5	Shri Om Prakash	Additional Chief Secretary
6	Smt. Radha Raturi	Additional Chief Secretary
7	Shri Jai Raj	Principal Chief Conservator Forest
8	Smt. Manisha Panwar	Principal Secretary
9	Shri Anand Bardhan	Principal Secretary
10	Dr. Bhupinder Kaur Aulakh	Secretary
11	Shri Ramesh Kumar Sudhanshu	Secretary
12	Shri Amit Singh Negi	Secretary
13	Shri R. Meenakshi Sundaram	Secretary
14	Shri Shailesh Bagauli	Secretary
15	Shri Arvind Singh Hyanki	Secretary
16	Shri Dilip Jawalkar	Secretary, In-Charge
17	Smt. Sowjanya	Secretary, In-Charge
18	Dr. Ranjit Kumar Sinha	Secretary, In-Charge
19	Shri L.N. Pant	Additional Secretary, Finance
20	Shri A.K. Tyagi	CPO, UREDA
21	Shri B.C.K Mishra	MD, UPCL
22	Shri Sandeep Singhal	MD, PTCUl
23	Shri S.N. Verma	MD, UJVNL

24	Shri Manoj Pant	JD, DES
25	Shri K.C. Pant	Sr. Research Officer, Planning
26	Shri Amit Verma	Sr. Research Officer, Finance
27	Shri Tejpal Singh	Sr. Research Officer, Finance
28	Shri B.C. Sanwal	Research Officer, Finance
29	Shri Dinesh	Research Officer, Finance

Representatives of Urban Local Bodies

1	Smt. Usha Chaudhari	Former Mayor, Kashipur
2	Shri Manoj Garg	Former Mayor, Hardwar
3	Smt. Rohani Rawat	Former Chairman, Joshimath
4	Shri Deepak Badola	Former Chairman, Dugadda
5	Shri Manmohan Singh Mall	Former Chairman, Mussoorie
6	Shri Umesh Charan Singh	Retiring Chairman, Tehri
7	Shri Pyarelal Himani	Former Chairman, Purola
8	Shri Subhash Gairola	Former Chairman, NPP Karnprage.
9	Smt. Usha Chaudhari	Former Mayor, Kashipur
10	Mrs. Radha Raturi	Additional Chief Secretary, Govt. of Uttarakhand
11	Shri Ramesh Kumar Sudhanshu	Secretary, Urban Development, Govt. of Uttarakhand.
12	Shri. Amit Singh Negi	Secretary, Finance, Govt. of Uttarakhand
13	Smt. Sojanya	In-Charge Secretary, Election, Govt. of Uttarakhand
14	Shri B.S. Manral	Additional Secretary/ Director URD, Govt. Of Uttarakhand.
15	Shri Uday Singh Rana	Additional Director URD, Uttarakhand.

Representatives of Rural Local Bodies

1	Shri Chaman Singh Chauhan	Chairman, Zila Panchayat Dehradun
2	Shri Akhilesh Uniyal	Member Zila Panchayat, Tehri Dobe Nagar, Haridwar
3	Smt. Beena Bahuguna	Block Pramukh, Raipur, Dehradun
4	Shri Ravindra Singh	Gram Pradhan, Baimaru, Chamoli
5	Shri Imaran Khan	Gram Pradhan, Kedarwala, Dehradun
6	Smt. Poonam Ramola	Gram Pradhan, Badimani, Uttarkashi
7	Shri Devi Dutt Pathak	Gram Pradhan, Takla, Bageshwar
8	Shri Prakesh Joshi	Chairman, Zila Panchayat Pithoragarh
9	Smt. Radha Raturi	Additional Chief Secretary, Govt. of Uttarakhand
10	Shri Amit Singh Negi	Secretary, Finance, Govt. of Uttarakhand
11	Smt Sojanya	In-Charge Secretary, Election, Govt. of Uttarakhand
12	Shri Ranjit Sinha	In-charge Secretary Panchayati Raj,Govt. of Uttarakhand
13	Shri H.C. Semwal	Additional Secretary/ Director, Panchayati Raj, Govt. of Uttarakhand
14	Smt. Pratima Painauli	Finance Controller, Department of Panchayati Raj
15	Shri Jitendra Kumar	DPRO, Panchayati Raj
16	Shri A.R. Kumethi	Assistant Account Officer, Panchayati Raj

Representatives of Trade & Industry

1	Shri Sudhir Chandra Nautiyal	Director, Industry
2	Shri Anupam Dwivedi	Deputy Director Industry
3	Shri Pankaj Gupta	President, Industries Association of Uttarakhand
4	Shri Anil Goyal	Industries Association of Uttarakhand

5	Shri Rakesh Oberai	Former Chairman, Confederation of Indian Industries
6	Shri Sanjay Gupta	General Secretary, Confederation of Indian Industries
7	Shri Manmohan Jain	General Secretary, SIIDCUL Manufactures Association Uttarakhand
8	Shri N. P. Shukla	Vice President, Bhagwanpur Industries Association
9	Shri. Virendra Kalra	P.H.D. Chamber of Commerce
10	Shri. Ashok Bansal	President, Kumaon-Garhwal Chamber of Commerce and Industry.
11	Shri. R.K. Gupta	General Secretary, Kumaon-Garhwal Chamber of Commerce and Industry.
12	Shri Anil Marwah	State General Secretary Prantiya Industries Association, Uttarakhand
13	Shri Rakesh Bhatiya	President, Indian Industries Association,
14	Shri Sumanpreet Singh	Director, CII
15	Smt. Manisha Panwar	Principal Secretary
16	Smt. Sowjanya	Secretary, In-Charge

Representatives of Political Parties

1	Shri Munna Singh Chauhan	MLA, Bharatiya Janata Party
2	Shri Punit Mittal	Coordinator, Bharatiya Janata Party
3	Shri Samar Bhandari	State Secretary, Communist Party of India
4	Shri Ashok Sharma	Member State Council, Communist Party of India
5	Shri Suryakant Dhasmana	Senior Vice-President, Indian National Congress
6	Shri Rajesh Chamoli	Member, Indian National Congress
7	Shri Satyapal Singh	District President, Bahujan Samaj Party

8	Shri Bachchi Ram Kanswal	Member State Committee, Communist Party of India (M)
9	Shri Anant Akash	Member State Committee, Communist Party of India (M)
10	Shri Surendra Prasad Nautiyal	State General Secretary Nationalist Congress Party
11	Shri Vibhuti Bhusan Narang	District In-charge, Bahujan Samaj Party
12	Smt Radha Raturi	Additional Chief Secretary, Govt Of Uttarakhand.
13	Shri. Amit Singh Negi	Secretary Finance, Govt. Of Uttarakhand
14	Smt. Sojanya	In-Charge-Secretary, Election, Govt. Of Uttarakhand.

28. West Bengal (16-18 July 2018)

Representatives of State Government

1	Ms. Mamta Banerjee	Chief Minister
2	Dr. Amit Mitra	Finance Minister
3	Shri Malay Kumar De	Chief Secretary
4	Shri Hari Krishna Dwivedi	Additional Chief Secretary, Finance Department
5	Shri Gautam Sanyal	Principal Secretary, to the Chief Minister
6	Shri Saurabh Kumar Das	OSD in the rank of Additional Chief Secretary, Panchayat & Rural Development Department
7	Shri Debashis Sen	Additional Chief Secretary, Information Technology & Electronics Department
8	Shri Rajiva Sinha	Additional Chief Secretary, Micro Small & Medium Enterprise & Textile Department

9	Dr. R. S. Shukla	Additional Chief Secretary, Higher Education Science & Technology Department and Bio-Technology Department
10	Shri Alapan Bandopadhyay	Additional Chief Secretary, Transport Department
11	Shri Naveen Prakash	Additional Chief Secretary, Irrigation & Waterways Department
12	Shri Sunil Kumar Gupta	Additional Chief Secretary, Power & NES Department
13	Shri Indevar Pandey	Additional Chief Secretary, Forest Department
14	Shri M Venkateswara Rao	Additional Chief Secretary, Cooperation Department
15	Shri Anil Verma	Principal Secretary, Health & Family Welfare Department
16	Shri Atri Bhattacharya	Principal Secretary, Home & Hill Affairs Department
17	Shri Ajit Ranjan Bardhan	Principal Secretary, Panchayat & Rural Development Department
18	Shri S.K. Thade	Principal Secretary, Backward Classes Welfare Department and Tribal Development
19	Shri Subrata Gupta	Principal Secretary, Urban Development & Municipal Affairs Department
20	Shri Vivek Kumar	Principal Secretary, Minority Affairs & Madrasah Education Department
21	Shri Manoj Kumar Agarwal	Principal Secretary, Food & Supplies Department

22	Shri Arnab Roy	Principal Secretary, Public Works Department
23	Shri Manoj Pant	Principal Secretary, Public Health Engineering Department
24	Smt. Roshni Sen	Principal Secretary, Technical Education and Training Department
25	Shri Dushyant Nariala	Principal Secretary, Disaster Management and Civil Defence Department
26	Shri Manish Jain	Secretary, School Education Department
27	Smt. Nandini Chakravorty	Secretary, Agriculture Department
28	Smt. Sanghamitra Ghosh	Secretary, Women & Child Development and Social Welfare Department

Representatives of Local Bodies

1	Shri Sovan Chatterjee	Mayor, Kolkata Muncipal Corporation
2	Shri Sabyasachi Dutta	Mayor, Bidhannagar Muncipal Corportion
3	Shri Dilip Kumar Agasty	Mayor, Durgapur Muncipal Corprotion
4	Shri Dilip Yadav	Chairman, Uttarpara-kotung Municipality
5	Shri Asim Saha	Chairman, Krishnanagar Municipality
6	Shri Dulal Chandra Das	Chairman, Mahestala Municipality
7	Shri Rathin Ghosh	Chairman, Madhyam Gram Municipality
8	Shri Shakti Roy Chowdhury	Chairman, Baruipur Municipality
9	Shri Kanailal Agarwal	Chairman, Islampur Municipality
10	Shri Apurba Sarkar	Chairman, Kandi Municipality
11	Shri Mozaharul Islam	Chairman, Jangipur Municipality
12	Smt. Mousumi Saha	Councillor, Beldanga Municipality
13	Shri Bikash Roy chowdhury	Sabhadhipati, Birbhum ZP
14	Ms Rehana Khatun	Sabhadhipati, North-24 Parganas ZP
15	Shri Mohan Sharma	Sabhadhipati, Alipurdar ZP
16	Ms Uttara Singha (Hazra)	Sabhadhipati, Pashchim Mehinipur ZP

17	Shri Nepal Singha	Sabhadhipati, Salboni Panchayat Samity
18	Shri Somnath Sadhu	Sabhadhipati, Sainthia Panchayat Samity
19	Shri Abani Bhusan Singha	Sabhadhipati, Baghmundi Panchayat Samity
20	Shri Abdul Sadek	Prodhan, Panchkuri II Gram Panchayat
21	Ms Sajeda Bibi	Prodhan, Rajarhat Bishnupur II Gram Panchayat
22	Shri Rabindranath Bera	Prodhan, Digambarpur Gram Panchayat
23	Shri Kalipada Bauri	Prodhan, Shanka Gram Panchayat
24	Ms Rita Majhi	Prodhan, Kuchakola Gram Panchayat
25	Smt. Tarulata Lohar	Prodhan, Simlapal Gram Panchayat
26	Shri Siman Tudu	Member, Sankrail Panchayat Samity
27	Shri Jiten Mallick	Member, Jamboni Panchayat Samity

Representatives of Trade & Industry

1	Shri Mayank Jalan	Chairman, FICCI West Bengal State Council
2	Shri Sitaram Sharma	President, Bharat Chamber of Commerce
3	Shri Sajahan Biswas	President, The Oriental Chamber of Commerce
4	Shri Chandra Shekhar Ghosh	President, BCC&I
5	Shri Ramesh Agarwal	President, Merchant's Chamber of Commerce & Industry
6	Shri Atul Prakash Agarwal	Chairman, NASSCOMERC
7	Shri Hitangshu Kumar Guha	President Federation of Association of Cottage and Small Industries (FI)
8	Shri Subhas C Agarwal	President, Federation of South Bengal Chamber of Commerce & Industry
9	Shri Debashis Sen	Chairman, American Chamber of Commerce in India, Eastern Region

Representatives of Political Parties

1	Shri Partha Chatterjee	All India Trinamool Congress
2	Shri Firhad Hakim	All India Trinamool Congress
3	Shri Pramathesh Mukherjee	Revolutionary Socialist Party
4	Shri Subhas Naskar	Revolutionary Socialist Party
5	Dr.Barun Mukherji	All India Forward Bloc
6	Shri Hafiz Alam Sairani	All India Forward Bloc
7	Shri Prabod Chand Sinha	Nationalist Congress Party
8	Shri Krishan Kumar Sharma	Nationalist Congress Party
9	Dr. Ashim Dasgupta	Communist Party of India (Marxist)
10	Shri Ashok Bhattacharya	Communist Party of India (Marxist)
11	Shri Asok Roy	Communist Party of India
12	Shri Manoj Chatterjee	Communist Party of India
13	Dr. Pankaj Kr. Roy	Bharatiya Janata Party
14	Shri Kumud Biswas	Bahujan Samaj Party
15	Shri Sanjib Kirttania	Bahujan Samaj Party
16	Shri Nepal Mahata	Indian National Congress
17	Shri Soumyo Aich Roy	Indian National Congress

Annex 1.40
(para 1.19)

EXPLANATORY MEMORANDUM AS TO THE ACTION TAKEN ON THE RECOMMENDATIONS MADE BY THE FIFTEENTH FINANCE COMMISSION IN ITS REPORT FOR FINANCIAL YEAR 2020-21 SUBMITTED TO THE PRESIDENT ON DECEMBER 5, 2019.

1. The Fifteenth Finance Commission (XV-FC) [Commission, henceforth] was constituted on 27th November 2017 by the President, vide Order number S.O. 3755(E) dated 27th November 2017. The Commission, vide S.O. No.4308 (E) dated 29th November, 2019, has been mandated to submit two reports i.e. a first report for financial year 2020-21 and a final report for the period 2021-22 to 2025-26. The date of submission of the final report is 30th October, 2020. The Commission submitted its first report covering the financial year 2020-21 to the President on 5th December 2019.
2. The Report of the Commission covering the financial year 2020-21 commencing from April 1, 2020, together with this Explanatory Memorandum on the action taken on the recommendations of the Commission, is being laid on the Table of the House, in pursuance of Article 281 of the Constitution. Summary of the main recommendations related to sharing of the Net proceeds of Union taxes between the Centre and the States, grants-in-aid of revenue of States under Art 275(1) of the Constitution, financing of relief expenditure, grants to local bodies and other recommendations are contained in this Memorandum. This Memorandum also contains the recommendations related to Sectoral Grants and Performance based indicators provided by the Commission in its report submitted on December 5th 2019.

Sharing of Union Taxes

3. The Commission has recommended that 41 per cent of the net proceeds of Union taxes should be shared with the States as against the present 42%. The Commission felt that, financial resources equivalent to 1% of the net proceeds of Union taxes should be retained with the Central Government for financing the requirements of the newly formed Union Territories of Jammu & Kashmir and Ladakh.

The Government has accepted the above recommendation of the Commission.

Grants-in-aid of Revenues of States under Article 275 of the Constitution

4. The Commission has recommended Grants-in-aid of revenues of States for revenue

deficit, special grants, nutrition grants, local bodies and disaster management under Art 275 of the Constitution.

Revenue Deficit Grants

5. The Commission has recommended Post-Devolution Revenue Deficit Grants amounting to ₹74,340 crore for fourteen States in 2020-21. Of the total revenue deficit grants of ₹74,340 crore, ₹37,917 crore have been assigned to General States namely, Andhra Pradesh, Kerala, Punjab, Tamil Nadu, and West Bengal while ₹36,423 crore are assigned to North-Eastern and Hilly States namely Assam, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, and Uttarakhand. The details of the revenue deficit grants are contained in Chapter 4 of the Report.

The Government has accepted the above recommendations of the Commission

Special Grants

6. The Commission has recommended Special Grants aggregating to ₹6,764 cr in 2020-21. These grants have been provided to ensure that in FY 2020-21, no state receives in absolute terms less than what it received in FY 2019-20 on account of tax devolution and revenue deficit grants. The details of the revenue deficit grants are contained in Chapter 4 of the Report.

The Commission may be requested to reconsider the recommendation as it introduces a new principle.

Nutrition Grants

7. The Commission has recommended additional grants of ₹7,735 crores to States for nutrition in 2020-21. The Commission has recommended that the Nutrition grants should not be substituted for either the State share or Union share and are an additionality. The details of the revenue deficit grants and the manner of providing them are contained in Chapter 4 of the Report.

The Commission may review this recommendation as a part of its overall proposal of measurable performance-based incentives for States as per the ToR, in the main report

Local Bodies

8. The Commission has recommended grant for local bodies of all States amounting to ₹90,000 crore. The recommended allocation for rural local bodies (RLBs) and urban local bodies (ULBs) in 2020-21 are ₹60,750 crore and ₹29,250 crore respectively.

9. The Commission has recommended that the rural local body grants be given to all three tiers in the panchayats, i.e. village, block and district. The Commission has recommended that rural local body grants, totalling ₹60,750 crore shall have two components-basic and tied. The ratio of basic grants to tied grants shall be 50:50. The Commission has recommended that the basic grants are untied and can be used by the local bodies for location-specific felt needs, except for salary or other establishment expenditure.

10. The Commission has recommended that State Governments should make allotment of grants for both Fifth and Sixth Schedule areas falling within their jurisdiction. The inter-se allocation should be determined based on the population to area in the ratio of 90:10. The bifurcation into basic and tied grants shall be applicable to the fifth and sixth schedule areas.

11. The Commission has recommended that urban local bodies be provided total grants of ₹29,250 cr. The Commission has recommended providing ₹9,229 crore for the Million-Plus cities and ₹20,021 crore for the other category of cities/towns. The Commission has recommended that States should make allotment of grants on population basis for the Cantonment Boards within their territories. The details of the composition and manner of providing these grants are contained in Chapter 5 of the Report.

The Government has accepted these recommendations of the Commission

Disaster-related Grants

12. The Commission has recommended that the total amount allocated to the States for SDRMF shall be ₹28,983 crore in 2020-21, of which the Union share is ₹22,184 crore. The Commission has recommended that the allocation for National Disaster Risk Management Fund (NDRMF) be ₹12,390 crore in 2020-21 based on the expenditure-based methodology. The recommendations of the Commission in respect of Disaster Risk Management, including the composition and the earmarked allocations within the

SDRMF and the NDRMF, the details and conditionalities regarding release of these grants are contained in Chapter 6 of the Report.

The Government has accepted these recommendations of the Commission.

Sectoral Grants

13. The Report discusses the broad contours of sectoral grants and preparatory work to be undertaken by the State Government and different Ministries/Departments of the Union Government in regard to sectoral grants. The Commission has recommended that preparations be undertaken by the State Governments and the Ministries/Departments of the Central Government in respect of seven (7) different sectors. Contingent on their preparations, the Commission intends to provide sector-specific grants for health, pre-primary education, judiciary, rural connectivity, railways, statistics and police training and housing. The recommendations of the Commission on the sectoral grants are contained in Chapter 4 of the Report.

The Government has accepted these recommendations of the Commission in-principle.

Performance-based incentives

14. The Commission in its report has advised the States to undertake preparatory action by establishing a credible implementation and monitoring system in 2020-21, after developing robust, monitorable outcome indicators for releasing the grants to eligible States in subsequent years. The concerned Ministries/Departments are required to define the State-wise baseline indices/score/data using the indices to monitor annual incremental changes and issue guidelines before May/June 2020. These recommendations on the preparatory work to be undertaken by the States and the Ministries / Departments are contained in Chapter 4 of the Report.

The Government has accepted these recommendations of the Commission in-principle.

Other recommendations

15. In addition to the above, the Commission has made other recommendations related to revenue and expenditure reforms, at the Central and the State levels, accounting and budgeting reforms, additional disclosures by the Central Government and the State and local bodies.

The Government will examine these recommendations of the Commission in due course.

Implementation

16. Orders on the recommendations under Art 270 and 275(1) of the Constitution relating to share in Union Taxes and duties and Grants-in-aid respectively will be issued after obtaining the approval of the President. Other recommendations of the Commission will be acted upon in due course.

Sd/-

New Delhi **NIRMALA SITHARAMAN**

January 30, 2020 **Minister of Finance**

Annex 3.1
(para: 3.108)

Revenue Deficit of States

per cent of GSDP
Revenue Deficit [Surplus (-)]

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Andhra Pradesh	-0.4	-0.1	0.0	2.3	1.2	2.5	2.0	1.6	2.7	1.8
Arunachal Pradesh	-9.8	-7.8	-0.6	-11.0	-11.8	-12.0	-12.8	-15.3	-12.8	-21.3
Assam	-0.6	-1.0	-0.1	0.5	-2.4	0.1	0.5	-2.1	-0.2	-2.2
Bihar	-2.0	-1.8	-2.0	-1.7	-3.4	-2.6	-3.2	-1.3	3.0	-2.8
Chhattisgarh	-2.0	-1.5	0.4	0.7	-1.1	-2.2	-1.2	-0.2	2.9	-0.7
Goa	-0.7	0.6	1.0	-0.6	-0.2	-1.1	-0.7	-0.5	-0.3	-0.4
Gujarat	-0.5	-0.8	-0.6	-0.6	-0.2	-0.5	-0.4	-0.2	-0.1	0.0
Haryana	0.5	1.3	1.0	1.9	2.4	2.8	1.6	1.5	1.8	1.6
Himachal Pradesh	-0.9	0.7	1.7	1.9	-1.0	-0.7	-0.2	-1.0	2.4	0.4
Jammu & Kashmir	-2.7	-1.3	-0.1	0.4	0.5	-1.7	-5.5	3.1	--	--
Jharkhand	-0.9	-0.8	-1.4	0.1	-2.0	-0.8	-0.7	-1.9	-2.0	-0.5
Karnataka	-0.8	-0.3	0.0	-0.1	-0.2	-0.1	-0.3	0.0	0.0	0.0
Kerala	2.2	2.3	2.4	2.7	1.7	2.4	2.4	2.2	2.0	1.6
Madhya Pradesh	-3.1	-2.0	-1.3	-1.3	-1.1	-0.6	-0.6	-1.1	0.3	1.8
Maharashtra	0.2	-0.3	0.3	0.7	0.3	0.4	-0.1	-0.5	1.1	0.3
Manipur	-5.0	-10.9	-9.7	-4.0	-4.6	-4.4	-4.2	-2.9	-0.9	-5.9
Meghalaya	0.9	-2.5	-3.1	-0.8	-2.8	-2.2	-2.9	1.6	-2.0	-2.1
Mizoram	-1.8	-0.3	1.5	1.0	-7.3	-6.8	-9.1	-7.9	2.6	-2.4
Nagaland	-5.8	-4.3	-4.5	-4.8	-2.4	-3.6	-3.4	-1.9	2.1	-3.3
Odisha	-2.4	-2.2	-1.1	-1.9	-3.1	-2.4	-3.0	-2.9	-1.2	-1.5
Punjab	2.6	2.5	2.0	2.1	2.2	1.7	2.0	2.5	2.2	1.2
Rajasthan	-0.8	-0.7	0.2	0.5	0.9	2.4	2.2	3.1	2.7	1.1
Sikkim	-4.0	-6.3	-6.3	-4.7	-0.8	-4.0	-4.1	-2.4	-0.2	-1.8
Tamil Nadu	-0.2	-0.2	0.2	0.6	1.0	1.0	1.5	1.4	1.4	1.0
Telangana	--	--	--	--	0.0	-0.2	-0.5	-0.5	0.0	-0.4
Tripura	-8.7	-8.5	-6.6	-6.1	-4.3	-2.0	0.7	-0.3	3.8	0.4
Uttar Pradesh	-1.0	-0.6	-1.1	-2.2	-1.3	-1.6	-0.9	-1.7	-1.5	-1.5
Uttarakhand	-0.6	-1.4	-0.7	0.6	1.0	0.2	0.9	0.4	0.0	0.0
West Bengal	2.8	2.3	2.8	2.4	1.1	1.8	1.0	1.0	0.5	0.0
All States	**-0.3**	**-0.2**	**0.1**	**0.4**	**0.0**	**0.3**	**0.1**	**0.1**	**0.8**	**0.1**

Source:Finance Accounts and State Budgets 2020-21
GDP: CSO (2011-12 series) from 2011-12 to 2019-20 and 2020-21 (budget estimates)
GSDP: CSO (2011-12 series) from 2011-12 to 2018-19, 2019-20 (CSO/State's estimates) and 2020-21 (State's estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.
Note 2:All States' figure is a percentage of GDP.
Note 3:Non-comparable estimates of GSDP have been used.

Annex 3.2
(para: 3.108)

Gross Fiscal Deficit of States

per cent of GSDP
Revenue Deficit [Surplus (-)]

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Andhra Pradesh	2.1	2.2	2.0	4.0	3.7	4.5	4.1	4.1	4.2	4.8
Arunachal Pradesh	9.0	1.8	11.0	-2.9	-1.0	-4.2	1.4	8.0	3.1	2.4
Assam	1.1	1.0	2.1	2.8	-1.3	2.4	3.3	1.5	5.9	2.3
Bihar	2.4	2.3	2.6	3.3	3.2	3.9	3.1	2.6	9.5	3.0
Chhattisgarh	0.5	1.5	2.4	3.6	2.4	1.6	2.5	2.7	6.4	3.2
Goa	2.1	3.0	3.8	2.0	2.7	1.5	2.3	2.5	4.7	5.0
Gujarat	1.8	2.3	2.3	2.0	2.2	1.4	1.6	1.8	1.6	1.8
Haryana	2.4	3.0	2.1	2.9	6.4	4.7	2.9	3.0	2.8	2.7
Himachal Pradesh	2.2	3.6	4.2	4.0	1.9	4.6	2.8	2.3	6.4	4.0
Jammu & Kashmir	4.7	4.8	4.8	5.7	6.9	4.9	2.0	8.6	--	--
Jharkhand	1.3	1.9	1.2	3.0	5.6	4.3	4.4	2.2	2.4	2.1
Karnataka	2.0	2.1	2.1	2.1	1.8	2.4	2.3	2.5	2.3	2.6
Kerala	3.5	3.6	3.6	3.6	3.2	4.2	3.8	3.4	3.0	3.0
Madhya Pradesh	1.8	2.5	2.2	2.4	2.6	4.3	3.1	2.7	3.6	5.0
Maharashtra	1.6	0.9	1.6	1.8	1.4	1.8	1.0	0.9	2.7	1.7
Manipur	8.1	0.0	-1.7	3.3	1.7	2.6	1.3	3.3	8.9	4.1
Meghalaya	5.3	1.8	1.7	4.2	2.2	2.5	0.5	6.1	3.6	3.5
Mizoram	6.6	6.9	7.3	7.7	-2.7	-1.5	1.7	1.8	9.8	1.7
Nagaland	4.4	4.6	2.8	0.7	3.1	1.3	1.8	4.0	9.0	4.3
Odisha	-0.3	0.0	1.6	1.7	2.1	2.4	2.1	2.1	3.4	2.7
Punjab	3.2	3.1	2.6	3.1	4.5	12.4	2.7	3.1	3.0	2.9
Rajasthan	0.8	1.7	2.8	3.1	9.3	6.1	3.0	3.7	3.2	3.0
Sikkim	1.6	0.5	0.4	1.8	2.9	-0.4	1.8	2.2	3.7	3.0
Tamil Nadu	2.3	1.9	2.1	2.5	2.8	4.3	2.7	2.9	3.0	2.8
Telangana	--	--	--	--	3.3	5.4	3.5	3.1	2.3	3.0
Tripura	-1.3	-1.6	-0.2	3.6	4.6	6.4	4.7	2.7	6.5	3.5
Uttar Pradesh	2.1	2.3	2.5	3.2	5.1	4.3	1.9	2.1	2.8	3.0
Uttarakhand	1.5	1.2	1.8	3.6	3.5	2.8	3.6	3.0	2.5	2.6
West Bengal	3.4	3.2	3.7	3.8	2.6	2.9	3.0	3.1	2.7	2.2
All States	**1.9**	**2.0**	**2.2**	**2.6**	**3.1**	**3.5**	**2.4**	**2.5**	**3.1**	**2.7**

Source:Finance Accounts and State Budgets 2020-21
GDP: CSO (2011-12 series) from 2011-12 to 2019-20 and 2020-21 (budget estimates)
GSDP: CSO (2011-12 series) from 2011-12 to 2018-19, 2019-20 (CSO/State's estimates) and 2020-21 (State's estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.
Note 2:All States' figure is a percentage of GDP.
Note 3:Non-comparable estimates of GSDP have been used.

Annex 3.3
(para: 3.108)

Outstanding Debt and Liabilities of States

per cent of GSDP

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Andhra Pradesh	20.4	20.8	20.7	22.2	28.0	28.5	26.6	29.8	31.1	34.7
Arunachal Pradesh	36.5	35.4	33.8	34.1	31.8	28.3	32.1	34.9	44.0	43.5
Assam	22.0	19.5	17.9	18.1	17.1	17.3	17.4	18.8	20.4	22.5
Bihar	27.4	27.1	27.4	28.9	31.4	32.9	33.4	31.9	30.7	30.3
Chhattisgarh	10.8	10.9	12.0	14.0	16.8	17.6	19.3	22.0	25.4	26.2
Goa	22.6	29.5	35.3	29.0	28.3	26.7	26.8	27.9	25.8	25.8
Gujarat	24.5	23.0	22.7	21.9	21.5	20.8	19.3	19.0	18.9	18.1
Haryana	18.3	18.7	19.1	20.2	24.4	26.1	25.3	25.1	24.8	24.5
Himachal Pradesh	38.8	36.8	35.8	36.8	36.1	37.6	36.9	35.3	35.8	36.0
Jammu & Kashmir	46.3	46.2	46.7	49.1	47.2	49.8	49.0	50.7	--	--
Jharkhand	20.3	20.0	19.9	19.9	27.4	28.3	28.6	28.2	29.0	27.0
Karnataka	17.0	16.8	16.6	17.3	16.8	17.5	17.2	17.5	18.3	19.6
Kerala	25.6	26.3	26.7	27.7	28.6	29.9	30.6	30.9	30.8	30.5
Madhya Pradesh	25.9	23.6	22.0	22.6	23.5	23.7	23.8	23.9	24.9	28.8
Maharashtra	19.2	18.4	17.8	18.0	17.9	18.0	18.1	16.6	17.2	17.1
Manipur	49.4	49.5	43.6	40.6	41.6	41.4	37.1	37.5	37.9	36.0
Meghalaya	25.6	22.7	27.3	29.1	28.5	32.7	32.1	31.7	30.5	29.1
Mizoram	62.7	61.2	54.5	48.5	42.3	39.1	39.0	37.5	34.3	28.0
Nagaland	55.5	52.8	50.3	43.2	45.7	44.0	42.5	42.7	43.9	42.3
Odisha	18.4	16.6	15.1	16.1	18.2	18.2	22.1	22.0	23.3	22.0
Punjab	31.2	31.0	30.8	31.6	33.0	42.7	41.4	40.3	39.8	38.5
Rajasthan	24.5	23.9	23.6	24.0	30.7	33.5	33.7	33.0	33.4	33.1
Sikkim	22.9	22.4	22.1	22.6	22.0	22.6	21.0	22.1	23.2	24.6
Tamil Nadu	16.9	17.2	17.2	17.9	19.0	21.8	22.3	22.6	22.8	22.9
Telangana	--	--	--	--	17.0	20.5	22.0	22.9	22.7	22.9
Tripura	35.7	35.4	34.0	31.6	27.5	28.5	29.5	29.7	30.7	30.3
Uttar Pradesh	33.6	31.6	30.0	30.4	32.3	32.8	32.0	31.1	30.5	33.5
Uttarakhand	20.5	19.4	19.3	20.7	22.1	22.8	23.3	23.6	24.1	24.3
West Bengal	39.9	38.8	37.2	38.7	38.4	38.7	37.0	36.1	34.4	32.9
All States	**22.6**	**22.0**	**21.6**	**21.9**	**23.0**	**24.3**	**24.4**	**24.5**	**25.5**	**25.4**

Source:Finance Accounts and State Budgets 2020-21
GDP: CSO (2011-12 series) from 2011-12 to 2019-20 and 2020-21 (budget estimates)
GSDP: CSO (2011-12 series) from 2011-12 to 2018-19, 2019-20 (CSO/State's Estimates) and 2020-21 (State's estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.
Note 2:All States' figure is a percentage of GDP.
Note 3:Non-comparable estimates of GSDP have been used.

Annex 3.4
(para: 3.108)

Own Tax Revenues of States

per cent of GSDP

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Andhra Pradesh	7.2	7.4	7.0	7.0	6.6	6.5	6.2	6.7	5.9	7.0
Arunachal Pradesh	2.9	2.5	3.0	2.6	2.9	3.6	3.6	4.3	4.5	4.4
Assam	5.3	5.3	5.1	4.8	4.4	4.7	4.7	5.0	5.9	5.7
Bihar	5.1	5.8	6.3	6.1	6.8	5.6	4.9	5.5	5.6	5.1
Chhattisgarh	6.8	7.3	6.9	7.1	7.6	7.6	7.3	7.0	7.7	7.2
Goa	6.0	7.7	10.0	8.1	7.2	6.8	6.8	6.7	6.1	6.3
Gujarat	7.2	7.4	7.0	6.7	6.1	5.5	5.4	5.3	5.5	5.8
Haryana	6.9	6.8	6.4	6.3	6.2	6.1	6.3	5.8	5.8	5.5
Himachal Pradesh	5.6	5.6	5.4	5.7	5.9	5.6	5.1	4.9	4.8	6.0
Jammu & Kashmir	6.1	6.7	6.6	6.4	6.3	6.3	6.8	6.3	--	--
Jharkhand	4.6	4.7	5.0	4.7	5.6	5.6	4.6	5.0	6.2	5.7
Karnataka	7.7	7.7	7.7	7.7	7.2	6.9	6.4	6.3	6.0	6.2
Kerala	7.1	7.3	6.9	6.9	6.9	6.6	6.6	6.5	6.4	6.9
Madhya Pradesh	8.5	8.0	7.6	7.6	7.4	6.8	6.2	6.3	6.0	5.1
Maharashtra	6.8	7.1	6.6	6.5	6.4	6.2	7.0	7.1	6.9	7.0
Manipur	2.9	2.4	2.9	2.9	2.8	2.8	3.1	3.8	4.1	3.9
Meghalaya	3.5	3.9	4.1	4.0	4.2	4.3	4.9	5.4	5.7	5.5
Mizoram	2.5	2.7	2.2	2.0	2.4	2.6	2.9	3.7	2.5	2.1
Nagaland	2.5	2.4	2.0	2.1	2.2	2.4	2.6	3.1	3.5	3.2
Odisha	5.8	5.7	5.7	6.3	6.9	5.8	6.3	6.2	6.3	5.9
Punjab	7.1	7.6	7.2	7.2	6.8	6.5	6.5	6.0	5.9	5.6
Rajasthan	5.8	6.2	6.1	6.3	6.3	5.8	6.1	6.1	6.9	6.8
Sikkim	2.6	3.5	3.8	3.4	3.1	3.2	2.7	3.1	3.8	3.6
Tamil Nadu	7.9	8.3	7.6	7.3	6.8	6.6	6.4	6.5	6.5	6.4
Telangana	--	--	--	--	6.9	7.4	7.5	7.5	7.4	7.7
Tripura	4.5	4.6	4.2	4.0	3.7	3.6	3.3	3.5	3.9	3.9
Uttar Pradesh	7.3	7.1	7.1	7.3	7.1	6.7	6.7	7.2	7.5	9.3
Uttarakhand	4.9	4.9	4.9	5.2	5.3	5.6	4.6	5.0	4.6	4.7
West Bengal	4.8	5.5	5.3	5.5	5.3	5.2	5.4	5.6	5.2	4.9
All States	**6.4**	**6.6**	**6.3**	**6.2**	**6.2**	**5.9**	**6.0**	**6.1**	**6.3**	**6.4**

Source:Finance Accounts and State Budgets 2020-21
GDP: CSO (2011-12 series) from 2011-12 to 2019-20 and 2020-21 (budget estimates)
GSDP: CSO (2011-12 series) from 2011-12 to 2018-19, 2019-20 (CSO/State's estimates) and 2020-21 (State's estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.
Note 2:All States' figure is a percentage of GDP.
Note 3:Non-comparable estimates of GSDP have been used.

Annex 3.5
(para: 3.108)

Own Non-Tax Revenues of States

per cent of GSDP

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Andhra Pradesh	1.6	2.0	1.7	1.7	0.8	0.8	0.5	0.5	0.3	0.6
Arunachal Pradesh	3.3	2.3	2.8	2.5	2.1	2.7	1.6	2.5	3.1	2.0
Assam	2.0	1.6	1.5	1.2	1.2	1.7	1.4	2.6	2.8	1.8
Bihar	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.8
Chhattisgarh	2.6	2.6	2.5	2.2	2.3	2.3	2.3	2.5	2.8	2.5
Goa	5.5	4.8	4.6	4.9	4.4	4.3	4.4	3.9	3.8	4.2
Gujarat	0.9	0.8	0.9	1.0	1.0	1.1	1.1	0.9	1.0	0.8
Haryana	1.6	1.3	1.2	1.1	1.0	1.1	1.4	1.1	1.2	1.6
Himachal Pradesh	2.6	1.7	1.9	2.0	1.6	1.4	1.7	1.8	1.4	1.3
Jammu & Kashmir	2.6	2.5	3.0	2.0	3.3	3.3	3.1	2.8	--	--
Jharkhand	2.0	2.0	2.0	2.0	2.8	2.3	2.9	2.8	3.6	3.1
Karnataka	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
Kerala	0.7	1.0	1.2	1.4	1.5	1.5	1.6	1.5	1.5	1.5
Madhya Pradesh	2.4	1.8	1.8	2.2	1.6	1.4	1.3	1.6	1.2	0.9
Maharashtra	0.6	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.6
Manipur	2.4	1.7	1.6	1.0	0.8	0.8	0.7	0.6	0.5	0.8
Meghalaya	1.8	2.2	2.6	1.5	0.9	2.5	1.2	1.3	1.6	1.6
Mizoram	2.3	2.5	1.9	1.8	2.0	2.1	2.1	2.3	2.0	1.9
Nagaland	1.9	1.5	1.3	1.5	1.3	1.6	1.6	0.9	1.4	0.9
Odisha	2.8	3.1	2.8	2.6	2.7	2.0	1.9	2.9	2.7	2.7
Punjab	0.5	0.9	1.0	0.8	0.7	1.4	0.9	1.4	1.4	1.2
Rajasthan	2.1	2.5	2.5	2.1	1.6	1.5	1.9	2.0	1.9	1.7
Sikkim	9.4	6.5	5.7	4.5	2.3	2.2	2.5	2.3	2.3	2.0
Tamil Nadu	0.8	0.8	1.0	0.8	0.8	0.8	0.7	0.9	0.8	0.8
Telangana	--	--	--	--	2.5	1.5	1.0	1.2	1.3	2.8
Tripura	1.1	0.8	1.0	0.7	0.7	0.6	1.1	0.7	0.5	0.5
Uttar Pradesh	1.4	1.6	1.7	2.0	2.0	2.2	1.4	1.8	1.7	1.7
Uttarakhand	1.0	1.2	0.9	0.7	0.7	0.7	0.8	1.3	1.8	1.2
West Bengal	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3
All States	**1.1**	**1.2**	**1.2**	**1.2**	**1.1**	**1.1**	**1.0**	**1.1**	**1.1**	**1.2**

Source:Finance Accounts and State Budgets 2020-21
GDP: CSO (2011-12 series) from 2011-12 to 2019-20 and 2020-21 (budget estimates)
GSDP: CSO (2011-12 series) from 2011-12 to 2018-19, 2019-20 (CSO/State's estimates) and 2020-21 (State's estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.
Note 2:All States' figure is a percentage of GDP.
Note 3:Non-comparable estimates of GSDP have been used.

Annex 3.6
(para: 3.108)

Total Transfers from Union (Tax Devolution & Grants) to the States

per cent of GSDP

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Andhra Pradesh	3.9	3.4	3.4	5.1	7.3	7.2	6.5	6.1	5.2	8.5
Arunachal Pradesh	43.6	41.1	34.2	45.7	52.0	53.0	56.1	59.0	51.5	62.3
Assam	11.8	12.7	11.5	13.4	13.0	12.9	13.0	12.5	16.9	15.0
Bihar	15.3	14.9	15.0	16.4	18.4	18.9	19.4	18.5	18.4	21.0
Chhattisgarh	7.0	6.7	6.1	7.8	10.6	11.6	12.2	11.8	12.6	13.4
Goa	2.2	2.8	3.4	3.1	3.9	4.1	4.7	5.0	6.0	5.9
Gujarat	2.2	2.1	2.1	2.3	2.4	2.7	2.8	2.8	2.5	2.0
Haryana	1.8	1.6	1.9	2.0	2.4	2.2	1.9	2.1	2.4	2.4
Himachal Pradesh	11.7	11.6	9.3	9.5	13.0	13.9	12.9	13.4	13.3	14.0
Jammu & Kashmir	23.0	20.9	18.8	21.0	20.9	24.1	24.9	23.8	--	--
Jharkhand	8.2	7.4	6.9	7.7	11.3	12.0	12.1	11.2	12.4	10.9
Karnataka	3.2	2.9	2.8	3.2	3.6	3.7	3.9	4.0	4.0	3.3
Kerala	2.7	2.4	2.5	3.0	3.8	3.7	3.6	3.9	3.5	3.3
Madhya Pradesh	8.9	8.6	7.8	8.7	10.5	10.8	11.2	10.6	9.2	8.3
Maharashtra	2.0	2.0	1.8	2.1	2.3	2.5	2.5	2.9	3.2	3.2
Manipur	38.5	45.5	40.5	40.3	38.8	39.3	36.4	33.5	41.5	49.2
Meghalaya	18.0	19.2	20.6	22.1	22.9	25.8	25.3	22.4	32.1	28.3
Mizoram	47.9	49.0	42.2	37.0	39.8	38.3	40.8	40.3	38.8	27.3
Nagaland	41.5	40.1	35.8	38.0	37.7	39.5	40.8	37.9	39.5	42.6
Odisha	8.8	8.0	8.0	9.3	11.5	11.1	11.1	11.2	12.0	10.5
Punjab	2.2	2.3	2.4	3.0	3.1	3.4	3.9	4.4	5.6	6.8
Rajasthan	5.2	4.9	5.0	6.4	6.8	7.0	7.3	6.6	6.5	6.8
Sikkim	20.9	20.7	21.7	21.0	15.6	16.9	14.9	15.2	15.6	17.3
Tamil Nadu	2.7	2.5	2.6	3.3	3.4	3.4	2.9	3.3	3.1	3.3
Telangana	--	--	--	--	3.8	3.7	3.3	3.1	2.8	2.5
Tripura	28.1	27.1	24.7	26.6	21.8	20.3	18.6	19.8	20.3	23.0
Uttar Pradesh	9.4	9.1	9.1	9.8	10.8	11.0	11.1	10.8	11.4	12.6
Uttarakhand	6.0	5.9	5.8	6.7	6.0	6.5	6.8	6.4	6.8	8.6
West Bengal	6.2	5.7	5.2	6.3	8.2	8.0	7.7	7.5	7.5	7.2
All States	**5.1**	**4.8**	**4.7**	**5.4**	**6.0**	**6.3**	**6.3**	**6.3**	**6.4**	**6.6**

Source:Finance Accounts and State Budgets 2020-21
GDP: CSO (2011-12 series) from 2011-12 to 2019-20 and 2020-21 (budget estimates)
GSDP: CSO (2011-12 series) from 2011-12 to 2018-19, 2019-20 (CSO/State's estimates) and 2020-21 (State's estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.
Note 2:All States' figure is a percentage of GDP.
Note 3:Non-comparable estimates of GSDP have been used.

Annex 3.7
(para: 3.108)

Revenue Expenditure of the States

per cent of GSDP

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Andhra Pradesh	12.2	12.6	12.1	16.1	15.9	17.0	15.3	14.9	14.1	17.9
Arunachal Pradesh	39.9	38.1	39.3	39.8	45.2	47.3	48.6	50.5	46.2	47.4
Assam	18.5	18.6	18.0	20.0	16.2	19.4	19.6	18.0	25.4	20.3
Bihar	18.8	19.3	19.7	21.2	22.5	22.5	21.9	23.5	27.8	24.0
Chhattisgarh	14.3	15.2	15.9	17.9	19.4	19.2	20.5	21.2	25.9	22.5
Goa	12.9	15.9	18.9	15.5	15.3	14.1	15.2	15.1	15.6	16.0
Gujarat	9.7	9.6	9.3	9.4	9.3	8.9	8.9	8.8	8.9	8.6
Haryana	10.8	11.0	10.5	11.2	12.0	12.2	11.3	10.5	11.1	11.2
Himachal Pradesh	19.1	19.5	18.3	19.1	19.5	20.2	19.6	19.1	22.0	21.7
Jammu & Kashmir	29.0	28.8	28.3	29.8	31.1	31.9	29.4	36.0	--	--
Jharkhand	13.9	13.4	12.4	14.5	17.7	19.1	18.9	17.0	20.2	19.1
Karnataka	10.7	11.0	10.9	11.3	11.2	10.9	10.5	10.6	10.4	10.0
Kerala	12.6	13.0	13.0	14.0	14.0	14.3	14.2	14.1	13.4	13.3
Madhya Pradesh	16.7	16.5	15.9	17.2	18.4	18.4	18.0	17.5	16.7	16.2
Maharashtra	9.6	9.5	9.4	10.0	9.7	9.7	10.1	10.1	11.9	11.1
Manipur	38.8	38.7	35.3	40.1	37.8	38.4	36.0	35.0	45.2	47.9
Meghalaya	24.3	22.9	24.2	26.9	25.3	30.4	28.5	30.6	37.5	33.2
Mizoram	50.9	53.9	47.8	41.8	36.8	36.2	36.7	38.5	46.0	28.9
Nagaland	40.0	39.7	34.6	36.8	38.8	39.8	41.6	40.0	46.5	43.4
Odisha	15.0	14.6	15.4	16.3	17.9	16.6	16.3	17.3	19.9	17.6
Punjab	12.4	13.3	12.5	13.1	12.8	13.0	13.3	14.3	15.1	14.9
Rajasthan	12.3	12.9	13.7	15.4	15.6	16.7	17.5	17.7	18.1	16.4
Sikkim	28.9	24.4	24.9	24.2	20.2	18.3	16.0	18.2	21.4	21.1
Tamil Nadu	11.2	11.4	11.3	12.0	12.0	11.8	11.5	12.1	11.8	11.5
Telangana	--	--	--	--	13.1	12.4	11.3	11.3	11.4	12.5
Tripura	25.0	24.1	23.2	25.2	21.9	22.4	23.7	23.9	28.6	27.8
Uttar Pradesh	17.1	17.1	16.8	16.9	18.7	18.3	18.2	18.1	19.2	22.1
Uttarakhand	11.3	10.6	10.9	13.1	13.0	13.0	13.1	13.1	13.2	14.4
West Bengal	14.1	13.9	13.6	14.4	14.9	15.3	14.5	14.3	13.5	12.4
All States	**12.3**	**12.4**	**12.3**	**13.1**	**13.3**	**13.6**	**13.5**	**13.7**	**14.6**	**14.3**

Source:Finance Accounts and State Budgets 2020-21
GDP: CSO (2011-12 series) from 2011-12 to 2019-20 and 2020-21 (budget estimates)
GSDP: CSO (2011-12 series) from 2011-12 to 2018-19, 2019-20 (CSO/State's estimates) and 2020-21 (State's estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.
Note 2:All States' figure is a percentage of GDP.
Note 3:Non-comparable estimates of GSDP have been used.

Annex 3.8
(para: 3.108)

Capital Expenditure of the States

per cent of GSDP

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Andhra Pradesh	2.5	2.3	2.1	2.2	2.5	2.3	2.1	2.5	1.9	3.0
Arunachal Pradesh	18.8	9.6	11.6	8.3	10.8	7.8	14.2	23.4	15.9	23.8
Assam	1.8	2.0	2.3	2.3	1.3	2.4	2.8	3.6	6.4	4.6
Bihar	4.4	4.1	4.7	5.4	6.6	6.5	6.2	4.2	6.6	5.8
Chhattisgarh	3.4	3.8	2.8	3.0	3.6	3.9	3.8	3.0	3.6	3.9
Goa	2.8	2.5	2.8	2.6	3.0	2.6	3.1	3.0	5.1	5.4
Gujarat	2.3	3.1	2.9	2.7	2.4	2.0	2.0	2.0	1.7	1.8
Haryana	2.0	1.8	1.2	1.0	4.1	2.0	2.3	2.2	1.9	1.5
Himachal Pradesh	3.2	2.9	2.5	2.8	2.9	5.4	3.1	3.3	4.0	3.7
Jammu & Kashmir	7.6	6.1	4.8	5.3	6.3	6.7	7.5	5.4	--	--
Jharkhand	2.2	2.8	2.6	2.9	7.6	5.2	5.1	4.1	4.4	2.7
Karnataka	2.9	2.4	2.2	2.2	2.0	2.5	2.6	2.5	2.3	2.6
Kerala	1.3	1.4	1.2	1.0	1.5	1.8	1.5	1.2	1.0	1.5
Madhya Pradesh	7.9	4.4	3.6	5.1	3.7	5.0	4.5	3.8	3.3	3.1
Maharashtra	1.5	1.3	1.3	1.2	1.2	1.4	1.2	1.4	1.7	1.5
Manipur	13.1	10.9	8.0	7.4	6.3	7.0	5.6	6.2	9.8	10.0
Meghalaya	4.6	4.4	4.9	5.1	5.1	4.8	3.4	4.5	5.7	5.7
Mizoram	8.7	7.6	6.1	6.9	4.7	5.5	10.9	9.8	7.3	4.2
Nagaland	10.3	8.9	7.3	5.6	5.4	5.0	5.2	5.9	6.9	7.6
Odisha	2.2	2.2	2.8	3.6	5.3	4.8	5.2	5.0	4.7	4.2
Punjab	0.7	0.7	0.7	1.0	2.3	10.7	0.7	0.7	3.6	1.7
Rajasthan	1.9	2.7	2.6	2.7	8.6	3.9	2.6	2.2	2.0	2.0
Sikkim	6.0	6.9	6.7	6.5	3.7	3.6	5.9	4.7	4.0	4.8
Tamil Nadu	2.9	2.3	2.0	2.1	1.8	3.6	1.8	1.9	1.9	2.1
Telangana	--	--	--	--	3.3	5.6	4.0	3.6	2.3	3.4
Tripura	7.3	6.9	6.5	9.6	8.9	8.4	4.1	3.0	2.7	3.1
Uttar Pradesh	3.1	3.0	3.7	5.5	6.5	5.9	2.8	4.1	4.6	4.6
Uttarakhand	2.2	2.9	2.7	3.2	2.4	2.6	2.7	2.6	2.5	2.6
West Bengal	0.6	0.9	1.1	1.4	1.7	1.4	2.0	2.3	2.3	2.2
All States	**2.4**	**2.2**	**2.2**	**2.4**	**3.1**	**3.3**	**2.5**	**2.5**	**2.7**	**2.7**

Source:Finance Accounts and State Budgets 2020-21
GDP: CSO (2011-12 series) from 2011-12 to 2019-20 and 2020-21 (budget estimates)
GSDP: CSO (2011-12 series) from 2011-12 to 2018-19, 2019-20 (CSO/State's estimates) and 2020-21 (State's estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.
Note 2:All States' figure is a percentage of GDP.
Note 3:Non-comparable estimates of GSDP have been used.

Annex 3.9
(para: 3.108 and 3.109)

Per Capita Revenue Expenditure

in Rs.

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Andhra Pradesh	10642	12047	12903	19286	19020	22903	23748	25042
Arunachal Pradesh	31556	33517	39337	48128	55163	60727	69034	77154
Assam	8438	9149	9916	11959	11181	14722	16433	16668
Bihar	4426	5104	5763	6590	7475	8339	8772	10515
Chhattisgarh	8776	10294	12342	14624	15897	17243	19810	22332
Goa	37430	41096	45813	49567	55944	58483	69043	72154
Gujarat	9809	11287	12036	13676	14919	15972	17720	19658
Haryana	12525	14687	15933	18422	21907	24944	26341	27354
Himachal Pradesh	20139	23232	24708	27932	31206	35151	37402	40442
Jammu & Kashmir	17926	19554	20748	22153	27096	29175	29534	39882
Jharkhand	6303	6913	6823	9093	10286	12483	13904	13618
Karnataka	10591	12275	14196	16315	18228	20327	21718	24774
Kerala	13744	15888	17886	21112	23041	26542	28976	31823
Madhya Pradesh	7184	8443	9215	10690	12744	15041	16157	17317
Maharashtra	10923	12129	13393	15185	16107	17859	20042	21945
Manipur	17310	17985	18930	23539	23400	25388	28152	28961
Meghalaya	16095	16290	17708	19525	19406	24952	24678	29412
Mizoram	33286	39745	42439	48270	46735	51321	58560	63285
Nagaland	24488	27840	28271	32907	36504	41656	49068	52025
Odisha	8231	9031	10716	11947	13666	15044	16547	19579
Punjab	11821	13933	14513	16036	17004	18535	20667	24626
Rajasthan	7762	9050	10615	13102	14513	17121	19360	21823
Sikkim	52608	48508	55151	58941	56947	58548	63484	79191
Tamil Nadu	11574	13309	14956	17426	18944	20469	22325	26103
Telangana	--	--	--	--	20438	21712	22535	25375
Tripura	13019	13961	15763	19515	20416	22740	26334	29925
Uttar Pradesh	6145	6875	7610	8106	9930	10878	12055	13457
Uttarakhand	12765	13551	15531	20000	21528	23251	26400	28839
West Bengal	7987	8855	9802	10958	12438	13879	14476	15887
All States	**8959**	**10143**	**11224**	**13155**	**14589**	**16364**	**17798**	**19842**

Source:Finance Accounts; State Budgets 2020-21 and CSO (population estimates)
Note:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.

Annex 3.10
(para: 3.108)

Interest Payments

per cent of GSDP

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Andhra Pradesh	1.4	1.4	1.4	1.5	1.6	1.7	1.7	1.8	1.7	2.0
Arunachal Pradesh	2.5	2.2	2.1	2.0	2.2	2.0	2.1	2.1	2.3	2.4
Assam	1.4	1.3	1.2	1.2	1.1	1.2	1.1	1.2	1.3	1.4
Bihar	1.7	1.6	1.7	1.8	1.9	1.9	1.9	1.9	1.8	1.9
Chhattisgarh	0.8	0.6	0.7	0.8	1.0	1.1	1.1	1.2	1.5	1.6
Goa	1.7	2.1	2.5	2.1	2.0	1.8	1.8	1.8	1.8	1.9
Gujarat	1.8	1.7	1.7	1.6	1.6	1.5	1.4	1.3	1.4	1.3
Haryana	1.3	1.4	1.5	1.6	1.7	1.9	1.8	1.8	1.9	1.9
Himachal Pradesh	2.9	2.9	2.6	2.7	2.8	2.7	2.7	2.6	2.7	2.7
Jammu & Kashmir	3.0	3.1	3.1	3.6	3.2	3.7	3.3	3.3	--	--
Jharkhand	1.5	1.4	1.4	1.3	1.6	1.8	1.7	1.6	1.6	1.5
Karnataka	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.2
Kerala	1.7	1.7	1.8	1.9	2.0	1.9	2.2	2.1	2.1	2.0
Madhya Pradesh	1.7	1.5	1.5	1.5	1.5	1.4	1.5	1.6	1.5	1.7
Maharashtra	1.4	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.2	1.1
Manipur	3.1	3.2	2.7	2.6	2.6	2.6	2.2	2.1	1.8	1.7
Meghalaya	1.4	1.4	1.6	1.7	1.9	1.9	2.0	2.0	2.0	1.9
Mizoram	3.8	3.4	2.8	2.3	2.4	2.0	1.8	1.9	1.6	1.2
Nagaland	3.4	3.2	3.0	3.0	3.0	2.9	2.8	2.8	3.3	3.1
Odisha	1.1	1.1	1.0	0.9	1.0	1.0	1.1	1.2	1.2	1.1
Punjab	2.4	2.3	2.4	2.5	2.5	2.7	3.3	3.1	3.1	3.0
Rajasthan	1.8	1.7	1.6	1.7	1.8	2.3	2.4	2.3	2.3	2.2
Sikkim	1.7	1.6	1.5	1.6	1.5	1.6	1.4	1.5	1.7	1.6
Tamil Nadu	1.2	1.2	1.3	1.4	1.5	1.6	1.8	1.8	1.7	1.7
Telangana	--	--	--	--	1.3	1.3	1.4	1.5	1.5	1.3
Tripura	2.6	2.5	2.3	2.3	2.0	2.0	2.0	2.0	2.1	2.0
Uttar Pradesh	2.1	2.1	1.9	1.9	1.9	2.1	2.0	1.9	1.9	2.1
Uttarakhand	1.5	1.6	1.4	1.5	1.7	1.9	1.8	1.8	1.9	2.0
West Bengal	3.1	3.0	3.1	3.0	2.9	2.9	2.9	2.7	2.5	2.3
All States	**1.6**	**1.5**	**1.5**	**1.5**	**1.6**	**1.6**	**1.7**	**1.7**	**1.7**	**1.7**

Source:Finance Accounts and State Budgets 2020-21
GDP: CSO (2011-12 series) from 2011-12 to 2019-20 and 2020-21 (budget estimates)
GSDP: CSO (2011-12 series) from 2011-12 to 2018-19, 2019-20 (CSO/State's estimates) and 2020-21 (State's estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.
Note 2:All States' figure is a percentage of GDP.
Note 3:Non-comparable estimates of GSDP have been used.

Annex 3.11
(para: 3.108)

Per Capita Capital Expenditure

in Rs.

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Andhra Pradesh	2202	2236	2218	2618	2982	3096	3188	4255
Arunachal Pradesh	14826	8475	11656	10007	13234	10047	20223	35677
Assam	825	966	1243	1390	892	1790	2354	3328
Bihar	1024	1094	1366	1682	2198	2404	2492	1897
Chhattisgarh	2065	2598	2213	2452	2950	3488	3653	3170
Goa	8145	6415	6818	8274	10797	10832	13936	14082
Gujarat	2367	3583	3723	3868	3870	3510	4044	4411
Haryana	2347	2424	1792	1710	7455	4149	5369	5695
Himachal Pradesh	3337	3481	3399	4160	4656	9416	5887	6939
Jammu & Kashmir	4714	4140	3549	3944	5524	6128	7491	6032
Jharkhand	1014	1424	1437	1821	4401	3376	3767	3281
Karnataka	2817	2668	2808	3180	3329	4636	5451	5903
Kerala	1448	1705	1703	1471	2443	3288	2983	2814
Madhya Pradesh	3383	2272	2096	3168	2554	4055	4027	3732
Maharashtra	1655	1645	1873	1767	2023	2666	2308	3007
Manipur	5862	5091	4276	4317	3929	4634	4346	5142
Meghalaya	3021	3113	3566	3668	3880	3953	2946	4321
Mizoram	5706	5622	5438	7941	6024	7730	17373	16096
Nagaland	6289	6249	5934	4979	5100	5181	6138	7627
Odisha	1215	1379	1931	2671	4050	4331	5294	5655
Punjab	635	746	825	1166	3066	15322	1030	1232
Rajasthan	1190	1868	2035	2329	8003	4032	2915	2715
Sikkim	10830	13647	14710	15913	10328	11395	23299	20271
Tamil Nadu	3012	2651	2644	2992	2865	6247	3553	4075
Telangana	--	--	--	--	5166	9818	7998	8194
Tripura	3820	4023	4389	7467	8329	8528	4536	3730
Uttar Pradesh	1119	1213	1652	2615	3433	3519	1838	3067
Uttarakhand	2522	3703	3821	4810	4010	4710	5439	5704
West Bengal	350	605	810	1098	1390	1299	1984	2497
All States	**1753**	**1838**	**1989**	**2422**	**3366**	**3999**	**3294**	**3677**

Source:Finance Accounts; State Budgets 2020-21 and CSO (population estimates)
Note 1: In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.

Annex 3.12
(para: 3.108)

Per Capita Total Expenditure

in Rs.

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Andhra Pradesh	12844	14284	15121	21904	22002	25998	26936	29297
Arunachal Pradesh	46382	41992	50993	58135	68397	70775	89257	112831
Assam	9263	10115	11160	13349	12073	16512	18787	19996
Bihar	5450	6197	7129	8272	9672	10744	11263	12412
Chhattisgarh	10841	12893	14555	17076	18847	20731	23464	25503
Goa	45575	47511	52631	57841	66741	69315	82979	86236
Gujarat	12176	14870	15759	17544	18789	19482	21765	24069
Haryana	14873	17111	17724	20132	29362	29093	31711	33049
Himachal Pradesh	23476	26713	28107	32092	35862	44567	43290	47381
Jammu & Kashmir	22641	23694	24297	26097	32620	35303	37025	45913
Jharkhand	7317	8337	8260	10914	14686	15859	17671	16898
Karnataka	13408	14943	17004	19495	21557	24962	27168	30677
Kerala	15192	17593	19589	22582	25483	29830	31959	34637
Madhya Pradesh	10567	10715	11311	13858	15297	19097	20184	21049
Maharashtra	12577	13774	15267	16952	18129	20525	22350	24953
Manipur	23172	23076	23207	27856	27329	30021	32498	34103
Meghalaya	19116	19403	21274	23193	23286	28905	27624	33733
Mizoram	38991	45367	47877	56212	52760	59051	75932	79381
Nagaland	30777	34089	34206	37886	41604	46837	55206	59651
Odisha	9446	10410	12647	14618	17715	19375	21841	25234
Punjab	12456	14679	15338	17202	20070	33857	21697	25858
Rajasthan	8952	10918	12650	15430	22516	21153	22274	24539
Sikkim	63438	62155	69861	74854	67275	69944	86783	99461
Tamil Nadu	14586	15960	17600	20418	21809	26717	25879	30178
Telangana	--	--	--	--	25604	31530	30533	33569
Tripura	16839	17983	20152	26982	28745	31269	30870	33655
Uttar Pradesh	7264	8089	9262	10721	13363	14396	13894	16524
Uttarakhand	15287	17254	19353	24810	25538	27961	31839	34543
West Bengal	8337	9460	10612	12056	13828	15178	16460	18384
All States	**10712**	**11981**	**13213**	**15578**	**17955**	**20363**	**21091**	**23519**

Source:Finance Accounts; State Budgets 2020-21 and CSO (population estimates)
Note 1:In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.

Annex 4.1
(para 4.14, 4.40, 4.51,4.55)

Assessment of Union Government Finances for the Award Period of the FC-XV

(Rs. crore)

	2020-21 (BE)	2020-21 (Reassessed)	2021-22	2022-23	2023-24	2024-25	2025-26
Gross Revenue Receipts	**2808037**	**2135156**	**2429405**	**2684206**	**2999062**	**3381073**	**3841641**
Gross Tax Revenue	**2423020**	**1876118**	**2135398**	**2362270**	**2643322**	**2986200**	**3401357**
Corporation Tax	681000	490050	559515	623300	701836	798338	917690
Income Tax	638000	443444	509295	567354	641820	737130	855808
Customs Duties	138000	101893	117024	129253	144182	163214	185737
Union Excise Duties	267000	295639	323577	345095	370459	398984	431103
Service tax	1020	-	-	-	-	-	-
Goods and Services Tax	690500	541310	621694	692567	779831	882768	1004590
Other Taxes	7500	3782	4293	4701	5194	5766	6429
Non-Tax Revenues	**385017**	**259038**	**294007**	**321936**	**355740**	**394873**	**440284**
Interest Receipts	11042	11042	11042	11042	11042	11042	11042
Dividends and Profits	65747	33411	37921	41523	45883	50931	56788
Dividend/Surplus from RBI	89649	89649	101751	111417	123116	136659	152375
Petroleum	14075	11131	12633	13833	15286	16967	18919
Telecommunication	133027	69846	70000	70000	65000	60000	60000
Other Non Tax Revenues	71477	43959	60660	74121	95413	119274	141160
Divisible pool	**1913731**	**1399846**	**1606318**	**1786897**	**2010695**	**2284310**	**2616072**
Tax Share to States	**784181**	**573937**	**658591**	**732628**	**824385**	**936567**	**1072589**
NCCD Transfer to NCCF/NDRF	**2930**	**2930**	**2930**	**2930**	**2930**	**2930**	**2930**
Net Revenues to the Centre	**2020926**	**1558288**	**1767884**	**1948650**	**2171747**	**2441576**	**2766120**
Revenue Expenditure	**2630145**	**2690145**	**2838995**	**3011135**	**3191617**	**3406586**	**3679145**
General services	**1270606**	**1216748**	**1313527**	**1424012**	**1538544**	**1656171**	**1776717**
Interest Payments	708203	678635	760156	838425	917018	995750	1074093
Defence revenue expenditure	209319	209319	220832	235722	252659	271501	292543
Pensions	210682	186392	189188	199593	210571	222152	234371
Police	93597	93597	94346	99252	105008	111099	117542
Fiscal Services	18780	18780	18857	19688	20556	21463	22409
External Affairs	8876	8876	8912	9411	10104	10848	11647
Other general services	21149	21149	21236	21921	22628	23358	24112
Social Services	**125274**	**156214**	**165751**	**182608**	**203825**	**227805**	**254941**
Health	30940	61880	71169	82599	95866	111264	129135
Other Social Services	94334	94334	94582	100009	107959	116541	125806

	2020-21 (BE)	2020-21 (Reassessed)	2021-22	2022-23	2023-24	2024-25	2025-26
Economic Services (excluding subsidy)	**228315**	**287075**	**274904**	**282770**	**300749**	**319337**	**338437**
Transport and Communication	37021	37021	37073	39245	42555	46145	50037
Science, Technology & Environment	30516	30516	30559	32349	35078	38037	41245
Export Promotion	2256	2256	2259	2391	2593	2811	3049
Power	13392	13392	13411	14197	15395	16693	18101
Other economic services	145130	203890	191602	194588	205128	215651	226005
Subsidy	**262109**	**312109**	**314148**	**322093**	**332615**	**343307**	**355340**
Food	115570	165570	187003	194484	202263	210353	218768
Others	146539	146539	127145	127609	130352	132954	136572
Grants-in-Aid to State Governments Recommended by Finance Commission	**149925**	**196449**	**233279**	**227846**	**198012**	**190203**	**183722**
Revenue deficit grants	30000	74340	118452	86201	51673	24483	13705
Disaster relief grants to States	20000	22184	22184	23294	24466	25688	26969
Grants to local government to States	99925	99925	80297	84703	87181	92087	92093
Sector-specific grant	-	-	12346	23729	24773	33062	36077
State-specific grant	-	-	-	9919	9919	14883	14878
Provision for other transfers (expected) to States, of which**	**511500**	**439134**	**444485**	**468941**	**503198**	**541173**	**625050**
GST compensation to States	**127440**	**93480**	**90189**	**100474**	**112623**	**127163**	**186199**
Grants-in-Aid to Union Territories	**47258**	**47258**	**54228**	**60324**	**67879**	**77116**	**88316**
Other revenue expenditure	35158	35158	38673	42541	46795	51474	56622
Capital Expenditure	**412085**	**352085**	**369269**	**357910**	**401577**	**450192**	**485619**
Non-Debt Capital Receipts	224967	68620	138345	113478	108589	103657	98754
Revenue Deficit/Surplus(-)	**609219**	**1131857**	**1071111**	**1062485**	**1019870**	**965011**	**913022**
Fiscal Deficit/Surplus(-)	**796337**	**1415322**	**1302035**	**1306918**	**1312858**	**1311545**	**1299887**
Adjusted Outstanding Debt*	**10676357**	**11400438**	**12673209**	**14026621**	**15406827**	**16777522**	**18105890**
GDP	**22489420**	**19119458**	**21700585**	**23762140**	**26257165**	**29145453**	**32497181**

Note: (*) The adjusted outstanding liabilities presented in the table are equal to the outstanding liabilities, minus the State borrowing from NSSF, minus cash balances minus Central loans to State Government plus extra budgetary resources and finally adjusted for external debt at current exchange rate.

(**) Includes transfers made through functional heads also. The functional heads have been adjusted to this extent.

Annex 4.2
(para 4.51, 4.55)

Assessment of Union Government Finances for the Award Period of the FC-XV

(% of GDP)

	2020-21 (BE)	2020-21 (Reassessed)	2021-22	2022-23	2023-24	2024-25	2025-26
Gross Revenue Receipts	**12.49**	**11.17**	**11.20**	**11.30**	**11.42**	**11.60**	**11.82**
Gross Tax Revenue	**10.77**	**9.81**	**9.84**	**9.94**	**10.07**	**10.25**	**10.47**
Corporation Tax	3.03	2.56	2.58	2.62	2.67	2.74	2.82
Income Tax	2.84	2.32	2.35	2.39	2.44	2.53	2.63
Customs Duties	0.61	0.53	0.54	0.54	0.55	0.56	0.57
Union Excise Duties	1.19	1.55	1.49	1.45	1.41	1.37	1.33
Service tax	0.00	-	-	-	-	-	-
Goods and Services Tax	3.07	2.83	2.86	2.91	2.97	3.03	3.09
Other Taxes	0.03	0.02	0.02	0.02	0.02	0.02	0.02
Non-Tax Revenues	**1.71**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**
Interest Receipts	0.05	0.06	0.05	0.05	0.04	0.04	0.03
Dividends and Profits	0.29	0.17	0.17	0.17	0.17	0.17	0.17
Dividend/Surplus from RBI	0.40	0.47	0.47	0.47	0.47	0.47	0.47
Petroleum	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Telecommunication	0.59	0.37	0.32	0.29	0.25	0.21	0.18
Other Non Tax Revenues	0.32	0.23	0.28	0.31	0.36	0.41	0.43
Divisible Pool	**8.51**	**7.32**	**7.40**	**7.52**	**7.66**	**7.84**	**8.05**
Tax Share to States	**3.49**	**3.00**	**3.03**	**3.08**	**3.14**	**3.21**	**3.30**
NCCD Transfer to NCCF/NDRF	**0.01**	**0.02**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
Net Revenues to the Centre	**8.99**	**8.15**	**8.15**	**8.20**	**8.27**	**8.38**	**8.51**
Revenue Expenditure	**11.70**	**14.07**	**13.08**	**12.67**	**12.16**	**11.69**	**11.32**
General services	**5.65**	**6.36**	**6.05**	**5.99**	**5.86**	**5.68**	**5.47**
Interest Payments	3.15	3.55	3.50	3.53	3.49	3.42	3.31
Defence revenue expenditure	0.93	1.09	1.02	0.99	0.96	0.93	0.90
Pensions	0.94	0.97	0.87	0.84	0.80	0.76	0.72
Police	0.42	0.49	0.43	0.42	0.40	0.38	0.36
Fiscal Services	0.08	0.10	0.09	0.08	0.08	0.07	0.07
External Affairs	0.04	0.05	0.04	0.04	0.04	0.04	0.04
Other general services	0.09	0.11	0.10	0.09	0.09	0.08	0.07
Social Services	**0.56**	**0.82**	**0.76**	**0.77**	**0.78**	**0.78**	**0.78**
Health	0.14	0.32	0.33	0.35	0.37	0.38	0.40
Other Social Services	0.42	0.49	0.44	0.42	0.41	0.40	0.39

	2020-21 (BE)	2020-21 (Reassessed)	2021-22	2022-23	2023-24	2024-25	2025-26
Economic Services (excluding subsidy)	**1.02**	**1.50**	**1.27**	**1.19**	**1.15**	**1.10**	**1.04**
Transport and Communication	0.16	0.19	0.17	0.17	0.16	0.16	0.15
Science, Technology & Environment	0.14	0.16	0.14	0.14	0.13	0.13	0.13
Export Promotion	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Power	0.06	0.07	0.06	0.06	0.06	0.06	0.06
Other economic services	0.65	1.07	0.88	0.82	0.78	0.74	0.70
Subsidy	**1.17**	**1.63**	**1.45**	**1.36**	**1.27**	**1.18**	**1.09**
Food	0.51	0.87	0.86	0.82	0.77	0.72	0.67
Others	0.65	0.77	0.59	0.54	0.50	0.46	0.42
Grants-in-Aid to State Governments Recommended by Finance Commission	**0.67**	**1.03**	**1.07**	**0.96**	**0.75**	**0.65**	**0.57**
Revenue Deficit Grants	0.13	0.39	0.55	0.36	0.20	0.08	0.04
Disaster Relief Grants to States	0.09	0.12	0.10	0.10	0.09	0.09	0.08
Grants to local government to States	0.44	0.52	0.37	0.36	0.33	0.32	0.28
Sector-specific grant	-	-	0.06	0.10	0.09	0.11	0.11
State-specific grant	-	-	-	0.04	0.04	0.05	0.05
Provision for other transfers (expected) to States, of which**	**2.27**	**2.30**	**2.05**	**1.97**	**1.92**	**1.86**	**1.92**
GST compensation to States	**0.57**	**0.49**	**0.42**	**0.42**	**0.43**	**0.44**	**0.57**
Grants-in-Aid to Union Territories	**0.21**	**0.25**	**0.25**	**0.25**	**0.26**	**0.26**	**0.27**
Other revenue expenditure	0.16	0.18	0.18	0.18	0.18	0.18	0.17
Capital Expenditure	**1.83**	**1.84**	**1.70**	**1.51**	**1.53**	**1.54**	**1.49**
Non-Debt Capital Receipts	1.00	0.36	0.64	0.48	0.41	0.36	0.30
Revenue Deficit/Surplus(-)	**2.71**	**5.92**	**4.94**	**4.47**	**3.88**	**3.31**	**2.81**
Fiscal Deficit/Surplus(-)	**3.54**	**7.40**	**6.00**	**5.50**	**5.00**	**4.50**	**4.00**
Adjusted Outstanding Debt*	**47.47**	**59.63**	**58.40**	**59.03**	**58.68**	**57.56**	**55.72**

Note: (*) The adjusted outstanding liabilities presented in the table are equal to the outstanding liabilities minus the State borrowing from NSSF, minus cash balances minus Central loans to State Governments plus extra budgetary resources and finally adjusted for external debt at current exchange rate.

(**) Includes transfers made through functional heads also. The functional heads have been adjusted to this extent.

Totals may not add up due to rounding-off.

Annex 4.3
(para 4.51)

Transfers Recommended by the FC-XV

(Rs. crore)

	2020-21 (BE)	2020-21 (Reassessed)	2021-22	2022-23	2023-24	2024-25	2025-26	Total (2021-26)
1 Tax devolution to States	784181	573937	658591	732628	824385	936567	1072589	4224760
2 Total Grants to States from Finance Commission (A+B+C+D+E)	149925	196449	233279	227846	198012	190203	183722	1033062
A Post Devolution Revenue Deficit Grants to States	30000	74340	118452	86201	51673	24483	13705	294514
B Disaster Relief Grants to States	20000	22184	22184	23294	24466	25688	26969	122601
C Grants to local governments to States	99925	99925	80297	84703	87181	92087	92093	436361
D State specific Grants	-	-	-	9919	9919	14883	14878	49599
E Sector specific Grants	-	-	12346	23729	24773	33062	36077	129987
3 Aggregate Transfers to States from Finance Commission (1+2)	934106	770386	891870	960474	1022397	1126770	1256311	5257822
4 Divisible Pool	1913731	1399846	1606318	1786897	2010695	2284310	2616072	10304292
5 Fiscal Space Available with the Union Government (4-3) of which	979626	629460	714449	826423	988298	1157540	1359760	5046470
6 Provision for other transfers (expected) to States excl GST compensation (7-2)	384060	345654	354296	368467	390575	414010	438851	1966199
7 Total Grants from the Union to States excl GST compensation	533985	542104	587575	596313	588587	604213	622573	2999261
8 Aggregate Transfers to States excl GST compensation (1+7)	1318166	1116040	1246165	1328941	1412972	1540780	1695162	7224021
As a percentage of divisible pool								
1 Tax Devolution to States	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
2 Grants from FC to States	7.8	14.0	14.5	12.8	9.8	8.3	7.0	10.0
3 Tax Devolution and FC Grants to States	48.8	55.0	55.5	53.8	50.8	49.3	48.0	51.0
4 Fiscal Space with the Union of which	51.2	45.0	44.5	46.2	49.2	50.7	52.0	49.0
5 Provision for other transfers (expected) to States excl GST compensation	20.1	24.7	22.1	20.6	19.4	18.1	16.8	19.1
6 Aggregate Transfers to States excl GST compensation	68.9	79.7	77.6	74.4	70.3	67.5	64.8	70.1

Annex 4.4
(para 4.51)

Aggregate Transfers as a Percentage of Gross Tax Revenue, Revenue Receipts and GDP

		2020-21 (BE)	2020-21 (Reassessed)	2021-22	2022-23	2023-24	2024-25	2025-26	Total (2021-26)
1	Gross Tax Revenues of the Union (Rs. crore)	2423020	1876118	2135398	2362270	2643322	2986200	3401357	13528547
2	Gross Revenue Receipts of the Union (Rs. crore)	2808037	2135156	2429405	2684206	2999062	3381073	3841641	15335387
3	GDP (Rs. crore)	22489420	19119458	21700585	23762140	26257165	29145453	32497181	133362524
4	All State GSDP (Rs. crore)		17960017	20385943	22321586	24671305	27391969	30542510	125313313
5	Aggregate Transfers (expected) to States as a Percentage of Gross Tax Revenues of the Union	57.4	62.6	60.9	58.8	55.8	53.9	52.7	55.9
6	Aggregate Transfers (expected) to States as a Percentage of Gross Revenue Receipts of the Union	49.2	54.7	53.3	51.4	49.0	47.4	46.4	49.1
7	Aggregate Transfers (expected) to States as a Percentage of GDP	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.4
8	Aggregate Transfers (expected) to States as a Percentage of All State GSDP		6.2	6.1	6.0	5.7	5.6	5.6	5.8

Note: Aggregate transfers exclude GST Gst compensation to the States

Annex: 4.5
(para 4.60)

Normatively Assessed Annual Growth Rate of Comparable GSDP

(Per cent)

Category	States	Per capita revenue expenditure index to group average	Groups at second stage	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
General States	Goa	387	GS group (a)	-0.5	15.0	12.0	12.5	13.0	13.0
	Kerala	167		-0.5	15.0	12.0	12.5	13.0	13.0
	Haryana	147		-0.5	15.0	12.0	12.5	13.0	13.0
	Andhra Pradesh	134	GS group (b)	-0.5	14.5	11.5	12.0	12.5	12.5
	Tamil Nadu	133		-2.0	14.5	11.5	12.0	12.5	12.5
	Telangana	131		-2.0	14.5	11.5	12.0	12.5	12.5
	Karnataka	128	GS group (c)	-8.8	15.3	10.8	11.9	12.4	13.0
	Punjab	124		-2.8	11.1	7.8	8.6	9.0	9.3
	Chhattisgarh	116		-3.6	11.1	7.8	8.6	9.0	9.3
	Maharashtra	115		-10.3	14.2	8.0	9.7	10.3	11.6
	Rajasthan	113		-4.9	12.7	8.8	9.7	10.3	10.6
	Gujarat	103		-11.8	15.3	9.5	11.9	12.4	13.0
	Odisha	99	GS group (d)	-5.3	11.1	7.8	8.6	9.0	9.3
	Madhya Pradesh	92		-3.6	11.1	7.8	8.6	9.0	9.3
	West Bengal	83		-3.6	11.1	7.8	8.6	9.0	9.3
	Jharkhand	75	GS group (e)	-9.0	12.0	8.0	9.0	9.5	10.0
	Uttar Pradesh	70		-9.0	12.0	8.0	9.0	9.5	10.0
	Bihar	53		-9.0	12.0	8.0	9.0	9.5	10.0
NEH States	Arunachal Pradesh	280	NEH group (a)	-0.5	14.5	11.5	12.0	12.5	12.5
	Sikkim	273		-0.5	14.5	11.5	12.0	12.5	12.5
	Mizoram	233		-0.5	14.5	11.5	12.0	12.5	12.5
	Nagaland	193		-0.5	14.5	11.5	12.0	12.5	12.5
	Himachal Pradesh	149		-0.5	14.5	11.5	12.0	12.5	12.5
	Manipur	109	NEH group (c)	-0.5	12.4	8.6	9.4	10.1	10.4
	Tripura	108		-2.5	15.6	10.4	11.5	12.4	12.9
	Uttarakhand	106		-9.1	12.4	8.6	9.4	10.1	10.4
	Meghalaya	104		-3.6	11.1	8.6	9.4	10.1	10.4
	Assam	63	NEH group (e)	-9.0	12.0	8.0	9.0	9.5	10.0
	All States			**-5.9**	**13.5**	**9.5**	**10.5**	**11.0**	**11.5**
	General States			**-5.9**	**13.5**	**9.5**	**10.5**	**11.0**	**11.5**
	NEH States			**-5.8**	**13.0**	**9.4**	**10.2**	**10.8**	**11.1**
	GDP			**-6.0**	**13.5**	**9.5**	**10.5**	**11.0**	**11.5**

Annex: 4.6
(para 4.68)

Projected Tax to GSDP Ratio

(Per cent)

States	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Andhra Pradesh	6.6	6.7	6.9	7.1	7.3	7.6
Arunachal Pradesh	4.3	4.4	4.6	4.7	4.9	5.1
Assam	4.7	4.8	4.8	4.9	4.9	5.0
Bihar	5.3	5.3	5.4	5.5	5.6	5.6
Chhattisgarh	6.6	6.7	6.8	6.9	7.0	7.2
Goa	6.6	6.8	7.0	7.3	7.7	8.0
Gujarat	5.5	5.6	5.7	5.8	6.0	6.1
Haryana	6.0	6.2	6.5	6.7	7.0	7.3
Himachal Pradesh	4.9	5.0	5.1	5.3	5.5	5.7
Jharkhand	4.7	4.7	4.8	4.9	4.9	5.0
Karnataka	6.1	6.2	6.3	6.4	6.5	6.7
Kerala	6.4	6.6	6.8	7.1	7.4	7.8
Madhya Pradesh	6.4	6.4	6.6	6.7	6.8	7.0
Maharashtra	6.7	6.8	6.9	7.1	7.2	7.3
Manipur	3.7	3.8	3.8	3.9	3.9	4.0
Meghalaya	5.5	5.5	5.6	5.6	5.7	5.8
Mizoram	3.2	3.2	3.3	3.4	3.6	3.7
Nagaland	2.9	3.0	3.1	3.2	3.3	3.5
Odisha	5.9	6.0	6.1	6.2	6.3	6.5
Punjab	5.8	5.9	6.0	6.1	6.2	6.4
Rajasthan	6.0	6.1	6.2	6.4	6.5	6.7
Sikkim	3.0	3.1	3.2	3.3	3.4	3.6
Tamil Nadu	6.4	6.5	6.7	6.9	7.1	7.3
Telangana	7.5	7.6	7.8	8.0	8.1	8.3
Tripura	3.6	3.6	3.7	3.8	3.9	4.0
Uttar Pradesh	7.0	7.1	7.2	7.3	7.4	7.5
Uttarakhand	4.8	4.9	5.0	5.0	5.1	5.2
West Bengal	5.5	5.5	5.6	5.7	5.8	5.9
All States	**6.2**	**6.3**	**6.4**	**6.6**	**6.7**	**6.9**
Genl. States	**6.3**	**6.4**	**6.5**	**6.7**	**6.8**	**7.0**
NE & HS	**4.5**	**4.6**	**4.7**	**4.8**	**4.9**	**5.0**

Annex: 4.7
(para 4.73)

Projected Non Tax Revenue to GSDP Ratio

(Per cent)

States	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Andhra Pradesh	0.5	0.5	0.5	0.5	0.5	0.5
Arunachal Pradesh	1.3	1.3	1.3	1.4	1.4	1.5
Assam	1.6	1.6	1.6	1.6	1.7	1.7
Bihar	0.8	0.8	0.8	0.8	0.8	0.8
Chhattisgarh	2.4	2.4	2.5	2.5	2.5	2.5
Goa	1.3	1.4	1.4	1.5	1.5	1.6
Gujarat	1.0	1.0	1.0	1.0	1.0	1.1
Haryana	0.9	0.9	0.9	1.0	1.0	1.0
Himachal Pradesh	1.8	1.9	2.0	2.0	2.1	2.2
Jharkhand	2.8	2.8	2.8	2.8	2.9	2.9
Karnataka	0.4	0.5	0.5	0.5	0.5	0.5
Kerala	0.3	0.4	0.4	0.4	0.4	0.4
Madhya Pradesh	1.7	1.7	1.7	1.8	1.8	1.8
Maharashtra	0.6	0.6	0.6	0.6	0.6	0.6
Manipur	0.6	0.6	0.6	0.6	0.6	0.6
Meghalaya	1.3	1.3	1.4	1.4	1.4	1.4
Mizoram	0.8	0.8	0.8	0.9	0.9	0.9
Nagaland	0.3	0.3	0.4	0.4	0.4	0.4
Odisha	2.9	2.9	3.0	3.0	3.0	3.0
Punjab	0.8	0.8	0.8	0.8	0.8	0.8
Rajasthan	1.9	1.9	2.0	2.0	2.0	2.0
Sikkim	1.4	1.4	1.5	1.5	1.6	1.6
Tamil Nadu	0.9	0.9	0.9	0.9	0.9	0.9
Telangana	1.2	1.2	1.2	1.2	1.2	1.3
Tripura	0.8	0.8	0.8	0.8	0.8	0.8
Uttar Pradesh	1.8	1.9	1.9	1.9	1.9	1.9
Uttarakhand	1.4	1.4	1.4	1.4	1.4	1.5
West Bengal	0.3	0.3	0.3	0.3	0.3	0.3
All States	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**
Genl. States	**1.0**	**1.0**	**1.1**	**1.1**	**1.1**	**1.1**
NE & HS	**1.4**	**1.5**	**1.5**	**1.5**	**1.5**	**1.6**

Annex 4.8
(para 4.71)

Indicative estimates of GST Compensation

(Rs. crore)

States	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Andhra Pradesh	1,779	1,623	1,808	1,941	2,136	3,009
Arunachal Pradesh	-	-	-	-	-	-
Assam	974	1,332	1,484	1,693	1,930	2,885
Bihar	3,567	3,570	3,977	4,523	5,149	7,601
Chhattisgarh	2,619	2,036	2,268	2,599	2,971	4,377
Goa	517	513	572	630	705	995
Gujarat	9,015	8,753	9,751	10,819	12,146	17,678
Haryana	3,702	3,237	3,606	3,957	4,413	6,214
Himachal Pradesh	1,444	1,168	1,301	1,454	1,639	2,345
Jharkhand	1,477	1,693	1,886	2,147	2,445	3,621
Karnataka	11,136	10,609	11,819	13,098	14,694	21,353
Kerala	4,757	3,408	3,797	4,157	4,631	6,510
Madhya Pradesh	3,931	3,647	4,063	4,675	5,356	7,901
Maharashtra	12,306	14,993	16,703	18,600	20,923	31,148
Manipur	-	-	-	-	-	-
Meghalaya	118	146	162	187	214	318
Mizoram	-	-	-	-	-	-
Nagaland	-	-	-	-	-	-
Odisha	3,120	3,297	3,673	4,203	4,800	7,050
Punjab	6,869	4,922	5,483	6,258	7,136	10,430
Rajasthan	3,991	3,607	4,018	4,545	5,158	7,629
Sikkim	5	13	15	15	15	21
Tamil Nadu	7,600	5,917	6,592	7,264	8,122	11,559
Telangana	1,570	2,136	2,379	2,573	2,846	4,186
Tripura	222	172	192	209	232	337
Uttar Pradesh	6,736	7,655	8,528	9,723	11,083	16,540
Uttarakhand	2,102	1,783	1,986	2,250	2,555	3,711
West Bengal	3,923	3,959	4,411	5,103	5,864	8,781
All states	**93,480**	**90,189**	**1,00,474**	**1,12,623**	**1,27,163**	**1,86,199**

Annex: 4.9
(para 4.82)

Assessed Own Revenue Receipts and Revenue Expenditure

State : Andhra Pradesh

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	1073230	1196651	1340249	1507110	1695499	6812739
B Own Revenue Receipts	77945	89201	102645	118697	137340	525828
1 Own Tax Revenue	72406	82961	95581	110666	128204	489818
2 Own Non-Tax Revenue	5539	6240	7064	8031	9136	36010
C Estimated GST Compensation	1623	1808	1941	2136	3009	10517
D Revenue Expenditure of which	123478	131207	140640	150278	160389	705992
1 Interest Payment	22218	24217	26397	28773	31362	132967
2 Pension	14446	15241	16079	16964	17897	80627
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**43910**	**40198**	**36054**	**29445**	**20040**	

State : Arunachal Pradesh

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	30287	33770	37822	42531	47848	192258
B Own Revenue Receipts	1739	2002	2319	2699	3143	11902
1 Own Tax Revenue	1344	1548	1794	2089	2434	9209
2 Own Non-Tax Revenue	395	454	525	610	709	2693
Estimated GST Compensation	-	-	-	-	-	-
D Revenue Expenditure of which	10728	11363	12150	13039	14124	61404
1 Interest Payment	775	844	920	1000	1089	4628
2 Pension	1210	1277	1347	1421	1499	6754
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**8989**	**9361**	**9831**	**10340**	**10981**	

State : Assam

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	344959	372556	406086	444664	489131	2057396
B Own Revenue Receipts	22036	24005	26421	29226	32493	134181
1 Own Tax Revenue	16440	17917	19730	21836	24290	100213
2 Own Non-Tax Revenue	5596	6088	6691	7390	8203	33968
C Estimated GST Compensation	1332	1484	1693	1930	2885	9324
D Revenue Expenditure of which	50345	53296	56819	60350	64328	285138
1 Interest Payment	6324	6893	7514	8190	8927	37848
2 Pension	8786	9270	9780	10317	10885	49038
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**26977**	**27807**	**28705**	**29194**	**28950**	

State:Bihar

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	567085	612452	667572	730992	804091	3382192
B Own Revenue Receipts	34748	37980	41957	46596	52020	213301
1 Own Tax Revenue	30232	33067	36557	40632	45400	185888
2 Own Non-Tax Revenue	4516	4913	5400	5964	6620	27413
C Estimated GST Compensation	3570	3977	4523	5149	7601	24820
D Revenue Expenditure of which	100641	106668	114211	123189	131605	576314
1 Interest Payment	14088	15356	16724	18109	19628	83905
2 Pension	19352	20416	21539	22724	23974	108005
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**62323**	**64711**	**67731**	**71444**	**71984**	

State : Chhattisgarh

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	362467	390623	424095	462155	505322	2144662
B Own Revenue Receipts	32976	36039	39731	43996	48914	201656
1 Own Tax Revenue	24105	26410	29195	32420	36148	148278
2 Own Non-Tax Revenue	8871	9629	10536	11576	12766	53378
C Estimated GST Compensation	2036	2268	2599	2971	4377	14251
D Revenue Expenditure of which	54218	57560	62051	66912	71618	312359
1 Interest Payment	6366	6939	7564	8245	8987	38101
2 Pension	5983	6312	6659	7025	7412	33391
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**19206**	**19253**	**19721**	**19945**	**18327**	

State : Goa

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	90909	101818	114545	129379	146198	582849
B Own Revenue Receipts	7428	8642	10113	11896	14003	52082
1 Own Tax Revenue	6156	7171	8403	9899	11668	43297
2 Own Non-Tax Revenue	1272	1471	1710	1997	2335	8785
C Estimated GST Compensation	513	572	630	705	995	3415
D Revenue Expenditure of which	9962	10567	11325	12211	13007	57072
1 Interest Payment	1914	2087	2274	2479	2702	11456
2 Pension	1350	1425	1503	1586	1673	7537
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**2021**	**1353**	**582**	**-390**	**-1991**	

State : Gujarat

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	1451704	1589616	1779070	1999513	2259850	9079753
B Own Revenue Receipts	95401	106354	121677	139905	161935	625272
1 Own Tax Revenue	80705	90122	103317	119043	138085	531272
2 Own Non-Tax Revenue	14696	16232	18360	20862	23850	94000
C Estimated GST Compensation	8753	9751	10819	12146	17678	59147
D Revenue Expenditure of which	118435	126284	135454	145624	155925	681722
1 Interest Payment	26020	28361	30914	33696	36729	155720
2 Pension	15236	16074	16958	17891	18874	85033
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**14281**	**10179**	**2958**	**-6427**	**-23688**	

State : Haryana

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	868383	972589	1094163	1235857	1396518	5567510
B Own Revenue Receipts	61892	72055	84382	99340	117018	434687
1 Own Tax Revenue	53965	62892	73730	86894	102469	379950
2 Own Non-Tax Revenue	7927	9163	10652	12446	14549	54737
C Estimated GST Compensation	3237	3606	3957	4413	6214	21427
D Revenue Expenditure of which	72459	77225	83038	89390	96054	418166
1 Interest Payment	19770	21549	23489	25603	27907	118318
2 Pension	8509	8977	9471	9992	10541	47490
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**7330**	**1564**	**-5301**	**-14363**	**-27178**	

State : Himachal Pradesh

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	192362	214484	240222	270130	303896	1221094
B Own Revenue Receipts	13249	15261	17679	20586	23985	90760
1 Own Tax Revenue	9565	11026	12783	14898	17372	65644
2 Own Non-Tax Revenue	3684	4235	4896	5688	6613	25116
C Estimated GST Compensation	1168	1301	1454	1639	2345	7907
D Revenue Expenditure of which	30132	32020	34033	36256	38489	170930
1 Interest Payment	5376	5846	6331	6837	7405	31795
2 Pension	6870	7248	7646	8067	8510	38341
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**15715**	**15458**	**14900**	**14031**	**12159**	

State : Jharkhand

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	319220	344757	375786	411485	452634	1903882
B Own Revenue Receipts	23962	26179	28902	32079	35793	146915
1 Own Tax Revenue	15041	16472	18235	20297	22715	92760
2 Own Non-Tax Revenue	8921	9707	10667	11782	13078	54155
C Estimated GST Compensation	1693	1886	2147	2445	3621	11792
D Revenue Expenditure of which	40343	42843	46076	49873	53212	232347
1 Interest Payment	6154	6707	7311	7969	8686	36827
2 Pension	6675	7042	7430	7838	8269	37254
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**14688**	**14778**	**15027**	**15349**	**13798**	

State : Karnataka

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	1702227	1885750	2110499	2372009	2680845	10751330
B Own Revenue Receipts	112573	126891	144740	165919	191441	741564
1 Own Tax Revenue	104835	118236	134950	154794	178723	691538
2 Own Non-Tax Revenue	7738	8655	9790	11125	12718	50026
C Estimated GST Compensation	10609	11819	13098	14694	21353	71573
D Revenue Expenditure of which	148832	158058	170071	182337	195286	854584
1 Interest Payment	24216	26395	28771	31360	34183	144925
2 Pension	21000	22155	23373	24659	26015	117202
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**25650**	**19348**	**12233**	**1724**	**-17508**	

State : Kerala

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	978206	1095590	1232539	1392153	1573133	6271621
B Own Revenue Receipts	67762	78948	92523	109006	128503	476742
1 Own Tax Revenue	64233	74868	87780	103465	122025	452371
2 Own Non-Tax Revenue	3529	4080	4743	5541	6478	24371
C Estimated GST Compensation	3408	3797	4157	4631	6510	22503
D Revenue Expenditure of which	103739	110022	117298	125281	133475	589815
1 Interest Payment	21637	23584	25706	28020	30542	129489
2 Pension	19827	20917	22068	23282	24562	110656
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**32569**	**27277**	**20618**	**11644**	**-1538**	

State : Madhya Pradesh

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	908401	978966	1062853	1158236	1266420	5374876
B Own Revenue Receipts	74147	81246	89829	99771	111267	456260
1 Own Tax Revenue	58453	64211	71188	79290	88682	361824
2 Own Non-Tax Revenue	15694	17035	18641	20481	22585	94436
C Estimated GST Compensation	3647	4063	4675	5356	7901	25642
D Revenue Expenditure of which	110591	117371	125612	133927	143427	630928
1 Interest Payment	17942	19556	21316	23235	25326	107375
2 Pension	16066	16950	17882	18866	19903	89667
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**32797**	**32062**	**31108**	**28800**	**24259**	

State : Maharashtra

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	2798375	3022845	3316610	3657775	4083534	16879139
B Own Revenue Receipts	208230	227899	253989	284778	323858	1298754
1 Own Tax Revenue	191582	209782	233935	262455	298677	1196431
2 Own Non-Tax Revenue	16648	18117	20054	22323	25181	102323
C Estimated GST Compensation	14993	16703	18600	20923	31148	102367
D Revenue Expenditure of which	247807	262511	279565	299679	317808	1407370
1 Interest Payment	38728	42214	46013	50154	54668	231777
2 Pension	27630	29149	30753	32444	34228	154204
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**24584**	**17909**	**6976**	**-6022**	**-37198**	

State : Manipur

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	33370	36229	39651	43673	48204	201127
B Own Revenue Receipts	1462	1604	1775	1978	2210	9029
1 Own Tax Revenue	1260	1383	1531	1707	1908	7789
2 Own Non-Tax Revenue	202	221	244	271	302	1240
C Estimated GST Compensation	-	-	-	-	-	-
D Revenue Expenditure of which	8702	9160	9782	10385	11047	49076
1 Interest Payment	628	685	747	814	887	3761
2 Pension	1790	1888	1992	2102	2217	9989
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**7240**	**7556**	**8007**	**8407**	**8837**	

State : Meghalaya

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	35941	39021	42706	47038	51919	216625
B Own Revenue Receipts	2471	2708	2995	3336	3724	15234
1 Own Tax Revenue	1988	2180	2412	2688	3002	12270
2 Own Non-Tax Revenue	483	528	583	648	722	2964
C Estimated GST Compensation	146	162	187	214	318	1027
D Revenue Expenditure of which	8947	9522	10220	10843	11570	51102
1 Interest Payment	919	1002	1089	1178	1276	5464
2 Pension	1142	1205	1271	1341	1414	6373
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**6330**	**6652**	**7038**	**7293**	**7528**	

State:Mizoram

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	28382	31646	35444	39857	44839	180168
B Own Revenue Receipts	1139	1312	1519	1768	2059	7797
1 Own Tax Revenue	912	1051	1217	1417	1651	6248
2 Own Non-Tax Revenue	227	261	302	351	408	1549
C Estimated GST Compensation	-	-	-	-	-	-
D Revenue Expenditure of which	6222	6590	7115	7530	8008	35465
1 Interest Payment	403	439	479	522	569	2412
2 Pension	1083	1142	1205	1272	1341	6043
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**5083**	**5278**	**5596**	**5762**	**5949**	

State : Nagaland

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	35366	39433	44165	49664	55871	224499
B Own Revenue Receipts	1189	1369	1586	1847	2152	8143
1 Own Tax Revenue	1065	1227	1422	1656	1930	7300
2 Own Non-Tax Revenue	124	142	164	191	222	843
C Estimated GST Compensation	-	-	-	-	-	-
D Revenue Expenditure of which	9493	10068	10724	11244	11902	53431
1 Interest Payment	1057	1144	1233	1326	1430	6190
2 Pension	2069	2182	2303	2429	2563	11546
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**8304**	**8699**	**9138**	**9397**	**9750**	

State : Odisha

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	553246	596222	647312	705403	771291	3273474
B Own Revenue Receipts	49466	54030	59529	65877	73191	302093
1 Own Tax Revenue	33238	36415	40254	44699	49837	204443
2 Own Non-Tax Revenue	16228	17615	19275	21178	23354	97650
C Estimated GST Compensation	3297	3673	4203	4800	7050	23023
D Revenue Expenditure of which	73377	77630	83066	88351	94132	416556
1 Interest Payment	7804	8507	9272	10107	11017	46707
2 Pension	15033	15860	16732	17652	18623	83900
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**20614**	**19927**	**19334**	**17674**	**13891**	

State : Punjab

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	607594	654792	710901	774699	847059	3595045
B Own Revenue Receipts	40923	44781	49438	54824	61040	251006
1 Own Tax Revenue	35988	39424	43576	48383	53938	221309
2 Own Non-Tax Revenue	4935	5357	5862	6441	7102	29697
C Estimated GST Compensation	4922	5483	6258	7136	10430	34229
D Revenue Expenditure of which	67827	71777	76211	80879	85592	382286
1 Interest Payment	20589	22047	23507	24978	26583	117704
2 Pension	11598	12236	12909	13619	14368	64730
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**21982**	**21513**	**20515**	**18919**	**14122**	

State : Rajasthan

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	1050408	1143069	1254154	1383163	1530329	6361123
B Own Revenue Receipts	84704	93662	104577	117481	132478	532902
1 Own Tax Revenue	64384	71370	79902	90014	101796	407466
2 Own Non-Tax Revenue	20320	22292	24675	27467	30682	125436
C Estimated GST Compensation	3607	4018	4545	5158	7629	24957
D Revenue Expenditure of which	137876	146690	157594	168876	180671	791707
1 Interest Payment	27789	30290	32852	35462	38347	164740
2 Pension	22128	23345	24629	25983	27412	123497
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**49565**	**49010**	**48472**	**46237**	**40564**	

State : Sikkim

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	36390	40575	45444	51102	57489	231000
B Own Revenue Receipts	1645	1895	2195	2556	2978	11269
1 Own Tax Revenue	1127	1299	1506	1756	2047	7735
2 Own Non-Tax Revenue	518	596	689	800	931	3534
C Estimated GST Compensation	13	15	15	15	21	79
D Revenue Expenditure of which	4891	5193	5558	5941	6334	27917
1 Interest Payment	613	668	728	793	865	3667
2 Pension	908	957	1010	1066	1124	5065
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**3233**	**3283**	**3348**	**3370**	**3335**	

State : Tamil Nadu

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	1979856	2207540	2472444	2780264	3127797	12567901
B Own Revenue Receipts	145947	166890	191887	221714	256326	982764
1 Own Tax Revenue	128351	147068	169449	196203	227307	868378
2 Own Non-Tax Revenue	17596	19822	22438	25511	29019	114386
C Estimated GST Compensation	5917	6592	7264	8122	11559	39454
D Revenue Expenditure of which	180932	191773	204758	219524	233698	1030685
1 Interest Payment	39580	43142	47024	51257	55870	236873
2 Pension	33242	35070	36999	39034	41181	185526
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**29068**	**18291**	**5607**	**-10312**	**-34187**	

State : Telangana

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	1028726	1147030	1284674	1444615	1625192	6530237
B Own Revenue Receipts	91053	103433	118114	135517	155574	603691
1 Own Tax Revenue	78653	89464	102301	117538	135123	523079
2 Own Non-Tax Revenue	12400	13969	15813	17979	20451	80612
C Estimated GST Compensation	2136	2379	2573	2846	4186	14120
D Revenue Expenditure of which	91034	96661	104078	110987	118959	521719
1 Interest Payment	15931	17365	18927	20631	22488	95342
2 Pension	9517	10040	10592	11175	11790	53114
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**-2155**	**-9151**	**-16609**	**-27376**	**-40801**	

State : Tripura

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	59524	65703	73246	82292	92918	373683
B Own Revenue Receipts	2640	2969	3381	3883	4488	17361
1 Own Tax Revenue	2169	2445	2790	3212	3722	14338
2 Own Non-Tax Revenue	471	524	591	671	766	3023
C Estimated GST Compensation	172	192	209	232	337	1142
D Revenue Expenditure of which	12021	12771	13601	14534	15378	68305
1 Interest Payment	1370	1493	1628	1774	1934	8199
2 Pension	2591	2734	2884	3042	3210	14461
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**9209**	**9610**	**10011**	**10419**	**10553**	

State : Uttar Pradesh

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	1754477	1894835	2065371	2261581	2487739	10464003
B Own Revenue Receipts	156586	171287	189383	210511	235244	963011
1 Own Tax Revenue	124116	135959	150558	167629	187644	765906
2 Own Non-Tax Revenue	32470	35328	38825	42882	47600	197105
C Estimated GST Compensation	7655	8528	9723	11083	16540	53529
D Revenue Expenditure of which	276981	293324	311702	331538	351822	1565367
1 Interest Payment	41519	45256	49329	53613	58315	248032
2 Pension	58678	61905	65310	68902	72692	327487
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**112740**	**113509**	**112596**	**109944**	**100038**	

State : Uttarakhand

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	256652	278645	304961	335895	370750	1546903
B Own Revenue Receipts	16131	17747	19708	22047	24723	100356
1 Own Tax Revenue	12520	13796	15346	17198	19321	78181
2 Own Non-Tax Revenue	3611	3951	4362	4849	5402	22175
C Estimated GST Compensation	1783	1986	2250	2555	3711	12285
D Revenue Expenditure of which	33049	35061	37398	39989	42525	188022
1 Interest Payment	6423	7001	7624	8259	8958	38265
2 Pension	5961	6289	6635	7000	7385	33270
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**15135**	**15328**	**15440**	**15387**	**14091**	

State : West Bengal

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	1238196	1334379	1448721	1578734	1726194	7326224
B Own Revenue Receipts	71769	78581	86809	96331	107327	440817
1 Own Tax Revenue	68467	74997	82888	92022	102576	420950
2 Own Non-Tax Revenue	3302	3584	3921	4309	4751	19867
C Estimated GST Compensation	**3959**	**4411**	**5103**	**5864**	**8781**	**28118**
D Revenue Expenditure of which	**142881**	**151694**	**162283**	**173221**	**185000**	**815079**
1 Interest Payment	35707	38678	41653	44651	47922	208611
2 Pension	19707	20791	21935	23141	24414	109988
E Pre-Devolution Revenue Deficit (+) / Surplus (-)	**67153**	**68702**	**70371**	**71026**	**68892**	

State:All States

(Rs. crore)

Particulars	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
A GSDP	20385943	22321586	24671305	27391969	30542510	125313313
B Own Revenue Receipts	1501213	1674970	1889803	2144164	2445227	9655377
1 Own Tax Revenue	1283300	1434761	1622330	1844800	2108694	8293885
2 Own Non-Tax Revenue	217913	240209	267473	299364	336533	1361492
C Estimated GST Compensation	90189	100474	112623	127163	186199	616648
D Revenue Expenditure of which	2275943	2414909	2582433	2762188	2945385	12980858
1 Interest Payment	411860	448265	487336	529035	574602	2451098
2 Pension	358387	378097	398894	420834	443976	2000188
E Pre-Devolution Revenue Deficit (+)	**686696**	**648616**	**601917**	**555751**	**498048**	**2991028**
F Pre-Devolution Revenue Surplus (-)	**-2155**	**-9151**	**-21910**	**-64890**	**-184089**	**-282195**

Note: Pre Devolution Revenue Deficit = Revenue Expenditure – Own Revenue receipts – Estimated GST Compensation

Annex: 5.1

(para 5.8)

Need to Establish Consistency Between Databases

It is important that the different macro databases are symmetrically conversant with each other. The lack of such correspondence precludes consistency checks, analysis and cross-fertilisation of databases.

To take an instance, from the corporate income tax return, ITR6, filed by companies for the assessment year 2019-20, it emerges that the total revenue of all companies taken together was about Rs. 219 lakh crore, while the total indirect taxes paid on their outward supplies was only about Rs. 1.75 lakh crore. This, prima facie, suggests (rather simplistically, because there may be some items in total revenue that may not attract indirect taxes) that the average output tax rate is 0.8 per cent. The total GST paid by all companies, as per ITR6, was only Rs. 0.28 lakh crore (Central GST plus State GST). The total taxes on inputs paid were Rs. 1.29 lakh crore, out of which GST paid was Rs. 0.38 lakh crore. As against this, as per the data from GSTR-3B, the gross GST liability on taxable supplies of corporate and non-corporate entities taken together, was Rs. 40 lakh crore and the net tax realisation to the general government was close to Rs. 12 lakh crore in financial year 2018-19 (assessment year 2019-20, in the case corporate tax). Even while discounting the fact that non-corporate entities also contribute significantly to GST, the calculations above indicate that the GST database and income tax database are not totally compatible at present.

What happens is that, in most cases, indirect taxes paid by companies are accounted directly in their balance sheets and not routed through their profit and loss statements. Therefore, indirect tax payment reported in the corporate tax returns do not match with actual collections realised by the general government. Such deficiencies in the tax information system need to be removed.

Annex 5.2

(para 5.17, 5.21)

IT Return Data and National Accounts—Some indications

It is useful to compare the income reported in income tax returns and the incomes estimated from the National Accounts. The two should approximate each other with appropriate adjustments. Because these two datasets approach incomes from different angles, perfect matching is not possible. The table below attempts a broad correspondence between the two datasets.

A	**Gross Total Income reported under IT returns (before loss set-off): 2017-18**	**(Rs. lakh crore)**
1	Salaries	20.0
2	Non-salary income in the household sector (property, business, capital gains)	17.0
3	Business and other income of the corporates	16.4
4	Sum of all incomes reported in income tax returns (A1+A2+A3)	53.4
B	**Income reported in National Accounts (compensation of employees + operating surplus/mixed income) (Rs. lakh crore): 2017-18**	**(Rs. lakh crore)**
1	Total income generated in public sector and private corporate sector	76.3
	Of which,	
1.a	Operating surplus of private corporate sector and public sector	36.7
1.b	Compensation of employees in public sector and private corporate sector	39.6
2	Operating surplus/mixed income of the self-employed in household sector (including all business entities which are not part of corporate sector and excluding income generated from agriculture)	26.4
3	B1+B2	102.7
C	**Comparable Variables: (a) A1 and B.1.b; (b) A2 and B2; (c) A3 and B.1.a**	**In per cent**
	Explanations	
1	(A1/B1.b)*100: (Salaries captured under IT returns, divided by, compensation of employees in organised sector estimated by the national accounts) *Indications and Caveats:* In national accounts, compensation of employees is defined as the sum of payments by resident producers on wages and salaries to their employees and contributions for their employees to social security schemes. Based the ratio above, it is not correct to conclude that about 50 per cent of the salary income is evading taxes, because there are tax thresholds and a complex set of exemptions under personal income tax which makes any conclusion difficult. However, considering that we have accounted for only organised sector incomes in this ratio, it is desirable that the income tax base is widened and deepened through simplification of deductions and exemptions.	50.5

2	(A2/B2)*100: (Non-salary incomes in the household sector reported under IT returns, divided by, operating surplus/mixed income of the self-employed in household sector) *Indications and Caveats:* Mixed income of the self-employed (non-agricultural) is defined as the wage income of own account workers and profits and dividends of unincorporated enterprises. It may be noted that the wages paid to the hired employees in the non-agricultural household sector (Rs. 9.76 lakh crore) are not included in this. Full consistency between the national accounts and IT returns cannot be established in this segment owing to data limitations. However, this ratio should improve considerably, given the bunching of incomes noticed in the tax avoidance bracket.	64.4
3	(A3/B.1.a) *100: (Business and other income of the corporates reported under IT returns, divided by, operating surplus of private corporate sector and public sector) *Indications and Caveats:* Operating Surplus is defined as: gross output at producers' values minus intermediate consumption minus compensation of employees minus consumption of fixed capital minus net indirect taxes. The payment of rentals and interest is part of operating surplus, while this is not part of the gross total income reported by the companies in their IT returns. As per the Ministry of Corporate Affairs (MCA) data for companies for 2017-18, rental and interest payments of companies was around Rs. 6.1 lakh crore. Secondly, the revenue impact of major tax incentives to corporate tax payers in 2017-18 as per the Receipt Budget 2019-20 was Rs. 1.20 lakh crore. Given the effective tax rate of 29.49 per cent in 2017-18, this amounts to a corporate profit of Rs. 4.1 lakh crore. To ensure comparability between the national accounts and the IT returns data, operating surplus of the private corporate sector and public sector of Rs. 36.7 lakh crore from the national accounts has been reduced by rental and interest payments by companies of Rs. 6.1 lakh crore and the gross total income of Rs. 16.4 lakh crore reported by the companies in IT returns has been increased by Rs. 4.1 lakh crore. The recalculated ratio between the two is 67.0 per cent ((16.4+4.1) / (36.7-6.1)), as against 44.7 per cent presented in column 3. There may be missing links in the calculations which can only be reconciled by tax experts and national income experts, but the recalculated ratio points towards a strong case for streamlining exemptions and concessions.	44.7

The table above strengthens one of the important conclusions of Chapter 5 that with improvements in tax information system, administration and policy, the direct tax to GDP ratio can be raised significantly. Over-reliance on consumption-based taxes by the general

government, which reduces the progressivity of the tax system, should be reduced by widening the net of income and asset-based taxation. Different tiers of the Government should review their Constitutional entitlements to income and asset-based taxation and assess the feasibility of each untapped tax power, so that the erosion of the tax base and evasion of tax payments can be halted. Wherever inadequate devolution of taxation powers hinders resource mobilisation at the third tier of Government, especially in asset-based taxes, such devolution should be immediately undertaken and local administrative capacity strengthened.

Annex 5.3
(para 5.35)

Indicative Estimates of House Tax Potential -2019

(Rs. crore)

	Rural Areas	Urban Areas
Andhra Pradesh	1368	852
Arunachal Pradesh	52	14
Assam	1766	326
Bihar	4256	590
Chhattisgarh	1325	350
Goa	72	87
Gujarat	1793	1560
Haryana	1179	683
Himachal Pradesh	582	43
Jharkhand	1159	409
Karnataka	2232	1885
Kerala	2300	2462
Madhya Pradesh	2322	1159
Maharashtra	3067	2465
Manipur	163	71
Meghalaya	134	32
Mizoram	42	50
Nagaland	87	37
Odisha	1146	358
Punjab	1652	1050
Rajasthan	2784	1055
Sikkim	35	10
Tamil Nadu	2114	2382
Telangana	950	950
Tripura	155	50
Uttarakhand	510	275
Uttar Pradesh	6494	2,414
West Bengal	2420	1566
All States	**42160**	**23184**

Note: Differences in the quality and type of houses could not be accounted for in the calculations above; hence estimates are termed indicative

Annex 6.1
(para: 6.44 and 6.54)

Population and Demographic Performance

State	Population		Demographic Performance				
	Population (Census 2011) in million	Inter se share-population 2011(%)	Population (Census 1971) in million	TFR (Census 2011)	Reciprocal of TFR(f)	f*Pop1971	Inter se Share (%)
Andhra Pradesh	49.577103	4.208	27.685000	1.60	0.63	17.303	6.635
Arunachal Pradesh	1.383727	0.117	0.467511	2.24	0.45	0.209	0.080
Assam	31.205576	2.649	14.625152	2.16	0.46	6.771	2.596
Bihar	104.09945	8.836	42.126236	2.93	0.34	14.378	5.513
Chhattisgarh	25.545198	2.168	11.637494	2.43	0.41	4.789	1.836
Goa	1.458545	0.124	0.795120	1.56	0.64	0.510	0.195
Gujarat	60.439692	5.130	26.697475	2.03	0.49	13.151	5.043
Haryana	25.351462	2.152	10.036431	2.32	0.43	4.326	1.659
Himachal Pradesh	6.864602	0.583	3.460434	1.74	0.57	1.989	0.763
Jharkhand	32.988134	2.800	14.227133	2.61	0.38	5.451	2.090
Karnataka	61.095297	5.186	29.299014	1.81	0.55	16.187	6.207
Kerala	33.406061	2.835	21.347375	1.79	0.56	11.926	4.573
Madhya Pradesh	72.626809	6.164	30.016625	2.63	0.38	11.413	4.376
Maharashtra	112.37433	9.538	50.412235	1.91	0.52	26.394	10.120
Manipur	2.855794	0.242	1.072753	1.86	0.54	0.577	0.221
Meghalaya	2.966889	0.252	1.011699	3.63	0.28	0.279	0.107
Mizoram	1.097206	0.093	0.332390	2.56	0.39	0.130	0.050
Nagaland	1.978502	0.168	0.516449	2.08	0.48	0.248	0.095
Odisha	41.974218	3.563	21.944615	1.98	0.51	11.083	4.250
Punjab	27.743338	2.355	13.551060	1.86	0.54	7.286	2.793
Rajasthan	68.548437	5.818	25.765806	2.80	0.36	9.202	3.528
Sikkim	0.610577	0.052	0.209843	1.44	0.69	0.146	0.056
Tamil Nadu	72.147030	6.124	41.199168	1.58	0.63	26.075	9.998
Telangana	35.003674	2.971	15.818000	1.67	0.60	9.472	3.632
Tripura	3.673917	0.312	1.556342	1.73	0.58	0.900	0.345
Uttar Pradesh	199.81234	16.959	83.848797	2.61	0.38	32.126	12.318
Uttrakhand	10.086292	0.856	4.492724	2.13	0.47	2.109	0.809
West Bengal	91.276115	7.747	44.312011	1.68	0.60	26.376	10.113
All States	**1178.1903**	**100**	**538.464892**	**2.17**		**260.805**	**100**

Source: Census 2011, Registrar General of India
Note: numbers shown in the Annex are displayed at certain decimal digits for the ease of reading. However, entire number has been used for calculation purposes.

Area

State	Category	Area('000 Sq Km)	Area - Inter se shares (%)	Adjusted area - Inter se shares (%)
Andhra Pradesh		162.923	5.334	4.572
Arunachal Pradesh		83.743	2.742	2.350
Assam		78.438	2.568	2.201
Bihar		94.163	3.083	2.643
Chhattisgarh		135.192	4.426	3.794
Goa	Small	3.702	0.121	2.000
Gujarat		196.244	6.425	5.508
Haryana	Small	44.212	1.448	2.000
Himachal Pradesh	Small	55.673	1.823	2.000
Jharkhand		79.716	2.610	2.237
Karnataka		191.791	6.279	5.383
Kerala	Small	38.852	1.272	2.000
Madhya Pradesh		308.252	10.093	8.651
Maharashtra		307.713	10.075	8.636
Manipur	Small	22.327	0.731	2.000
Meghalaya	Small	22.429	0.734	2.000
Mizoram	Small	21.081	0.690	2.000
Nagaland	Small	16.579	0.543	2.000
Odisha		155.707	5.098	4.370
Punjab	Small	50.362	1.649	2.000
Rajasthan		342.239	11.205	9.605
Sikkim	Small	7.096	0.232	2.000
Tamil Nadu		130.06	4.258	3.650
Telangana		112.122	3.671	3.147
Tripura	Small	10.486	0.343	2.000
Uttar Pradesh		240.928	7.888	6.762
Uttarakhand	Small	53.483	1.751	2.000
West Bengal		88.752	2.906	2.491
All States		**3054.265**	**100**	**100**

Source: Survey of India

Annex 6.3
(para 6.48)

Forest and Ecology

State	Geographic Area (Sq. Km)	Very Dense Forest (VD)	Moderately Dense Forest (MD)	Open Forest (OF)	Dense Forest (VD+MD)	Forest and Ecology Inter se Share (FCi) (%)
Andhra Pradesh	162923	1994	13938	13205	15932	4.103
Arunachal Pradesh	83743	21095	30557	15036	51652	13.302
Assam	78438	2795	10279	15253	13074	3.367
Bihar	94163	333	3280	3693	3613	0.930
Chhattisgarh	135192	7068	32198	16345	39266	10.112
Goa	3702	538	576	1123	1114	0.287
Gujarat	196244	378	5092	9387	5470	1.409
Haryana	44212	28	451	1123	479	0.123
Himachal Pradesh	55673	3113	7126	5195	10239	2.637
Jharkhand	79716	2603	9687	11321	12290	3.165
Karnataka	191791	4501	21048	13026	25549	6.580
Kerala	38852	1935	9508	9701	11443	2.947
Madhya Pradesh	308252	6676	34341	36465	41017	10.563
Maharashtra	307713	8721	20572	21485	29293	7.544
Manipur	22327	905	6386	9556	7291	1.878
Meghalaya	22429	489	9267	7363	9756	2.513
Mizoram	21081	157	5801	12048	5958	1.534
Nagaland	16579	1273	4534	6679	5807	1.496
Odisha	155707	6970	21552	23097	28522	7.345
Punjab	50362	8	801	1040	809	0.208
Rajasthan	342239	78	4342	12210	4420	1.138
Sikkim	7096	1102	1552	688	2654	0.683
Tamil Nadu	130060	3605	11030	11729	14635	3.769
Telangana	112122	1608	8787	10187	10395	2.677
Tripura	10486	654	5236	1836	5890	1.517
Uttar Pradesh	240928	2617	4080	8109	6697	1.725
Uttarakhand	53483	5047	12805	6451	17852	4.598
West Bengal	88752	3019	4160	9723	7179	1.849
All States	**3054265**	**89310**	**298986**	**293074**	**388296**	**100**

Source: State of Forest Report (2019), Forest Survey of India.

Annex 6.4
(para 6.51)

Income Distance

State	Comparable GSDP (Rs Crore)			Estimated Population			Per Capita GSDP (Rs)					Adjusted Distance (d)	di* POPi 2011	Inter Se Share (%)
	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	Average	Rank			
Andhra Pradesh	686562	779840	868782	50743000	51041000	51341000	135302	152787	169218	152436	14	73111	3624646	3.069
Arunachal Pradesh	19625	22549	24315	1547000	1579000	1611000	126859	142803	150929	140197	15	85350	118101	0.100
Assam	248959	283165	315881	33529000	33762000	34137000	74252	83871	92533	83552	24	141995	4431031	3.752
Bihar	417155	458357	522224	113638000	116996000	118778000	36709	39177	43966	39951	28	185596	19320444	16.361
Chhattisgarh	261006	282329	318573	27933000	28384000	28842000	93440	99468	110455	101121	20	124426	3178491	2.692
Goa	64418	69347	73159	1516000	1527000	1536000	424922	454137	476294	451784	1	20433	29802	0.025
Gujarat	1089874	1216689	1333668	65049000	66624000	67550000	167547	182620	197434	182534	11	43013	2599708	2.201
Haryana	553192	631744	698830	27423000	27811000	28206000	201725	227156	247759	225547	3	20433	518000	0.439
Himachal Pradesh	131803	143859	154430	7210000	7233000	7280000	182806	198893	212129	197943	6	27604	189492	0.160
Jharkhand	236250	269816	297204	36121000	36646000	37180000	65405	73628	79936	72990	26	152557	5032577	4.262
Karnataka	1209146	1326402	1490657	64900000	65606000	66319000	186309	202177	224771	204419	5	21128	1290822	1.093
Kerala	634571	701484	787209	34322100	34493200	34665600	184887	203369	227087	205114	4	20433	682578	0.578
Madhya Pradesh	612729	690973	780099	79472000	80614000	81756000	77100	85714	95418	86077	22	139470	10129238	8.577
Maharashtra	2163633	2319529	2571477	119393000	120535000	121677000	181219	192436	211336	194997	10	30550	3432994	2.907
Manipur	22824	25831	27915	3223900	3294300	3366100	70795	78410	82931	77379	25	148168	423138	0.358
Meghalaya	26473	28214	32167	3341000	3413000	3487000	79235	82667	92248	84717	23	140830	417827	0.354
Mizoram	16595	19568	22786	1214000	1175000	1186000	136697	166539	192121	165119	12	60428	66302	0.056
Nagaland	21708	24331	28392	2077000	2077000	2099000	104518	117145	135265	118976	16	106571	210851	0.179
Odisha	389249	440090	491968	43234000	43415000	43596000	90033	101368	112847	101416	19	124131	5210294	4.412
Punjab	422157	473014	529607	29833500	30224100	30619900	141504	156502	172962	156989	13	68557	1902012	1.611
Rajasthan	751027	822604	916491	74260000	75333000	76420000	101135	109196	119928	110086	17	115461	7914650	6.702
Sikkim	20840	26256	29214	647000	654000	660000	322100	401468	442641	388736	2	20433	12476	0.011
Tamil Nadu	1308573	1473026	1627230	74841000	75195000	75548000	174847	195894	215390	195377	9	30170	2176662	1.843
Telangana	651651	749191	845503	37505000	37881000	38260000	173751	197775	220989	197505	7	28042	981580	0.831
Tripura	38754	42911	48023	3894000	3933000	3973000	99524	109105	120874	109834	18	115713	425119	0.360
Uttar Pradesh	1290777	1435933	1607328	217505000	220836000	224217000	59345	65023	71686	65351	27	160196	32009082	27.105
Uttarakhand	194173	219534	236720	10869000	11016000	11164000	178648	199286	212039	196658	8	28889	291385	0.247
West Bengal	869110	968302	1084348	96491000	97456000	98430000	90072	99358	110164	99865	21	125682	11471792	9.714
All States	**14352836**	**15944888**	**17764200**	**1261731500**	**1278753600**	**1293904600**	**113755**	**124691**	**137291**	**125246**			**118091093**	**100**

Source: Comparable GSDP and estimated population from National Statistical Office, Ministry of Statistics & Program Implementation

Annex 6.5
(para 6.56)

Tax Effort

State	Per Capita Own Tax Revenue (Rs)				Per Capita GSDP (Rs)				Tax/GSDP (t) (%)	t*Pop	Inter Se Share (%)
	2016-17	2017-18	2018-19	Average	2016-17	2017-18	2018-19	Average			
Andhra Pradesh	8707	9695	11303	9902	135302	152787	169218	152436	6.50	3220388	4.336
Arunachal Pradesh	4581	5165	6630	5459	126859	142803	150929	140197	3.89	53877	0.073
Assam	3603	3914	4665	4061	74252	83871	92533	83552	4.86	1516607	2.042
Bihar	2089	1978	2476	2181	36709	39177	43966	39951	5.46	5682760	7.651
Chhattisgarh	6782	7009	7429	7074	93440	99468	110455	101121	7.00	1786928	2.406
Goa	28108	30985	50454	36516	424922	454137	476294	451784	8.08	117887	0.159
Gujarat	9907	10739	11858	10835	167547	182620	197434	182534	5.94	3587565	4.830
Haryana	12408	14778	15097	14094	201725	227156	247759	225547	6.25	1584179	2.133
Himachal Pradesh	9763	9827	10402	9997	182806	198893	212129	197943	5.05	346703	0.467
Jharkhand	3682	3371	3968	3674	65405	73628	79936	72990	5.03	1660277	2.235
Karnataka	12782	13281	14601	13555	186309	202177	224771	204419	6.63	4051084	5.454
Kerala	12288	13469	14609	13456	184887	203369	227087	205114	6.56	2191463	2.950
Madhya Pradesh	5561	5559	6237	5786	77100	85714	95418	86077	6.72	4881533	6.572
Maharashtra	11443	13932	15404	13593	181219	192436	211336	194997	6.97	7833503	10.546
Manipur	1820	2401	3108	2443	70795	78410	82931	77379	3.16	90154	0.121
Meghalaya	3550	4249	5143	4314	79235	82667	92248	84717	5.09	151073	0.203
Mizoram	3639	4646	6127	4804	136697	166539	192121	165119	2.91	31924	0.043
Nagaland	2459	3073	4033	3188	104518	117145	135265	118976	2.68	53019	0.071
Odisha	5286	6430	6954	6223	90033	101368	112847	101416	6.14	2575674	3.468
Punjab	9301	10066	10312	9893	141504	156502	172962	156989	6.30	1748247	2.354
Rajasthan	5975	6718	7509	6734	101135	109196	119928	110086	6.12	4192976	5.645
Sikkim	10086	10525	13529	11380	322100	401468	442641	388736	2.93	17874	0.024
Tamil Nadu	11483	12466	13969	12639	174847	195894	215390	195377	6.47	4667354	6.284
Telangana	12907	14920	16904	14910	173751	197775	220989	197505	7.55	2642564	3.558
Tripura	3652	3616	4445	3904	99524	109105	120874	109834	3.55	130589	0.176
Uttar Pradesh	3952	4410	5357	4573	59345	65023	71686	65351	7.00	13983008	18.825
Uttarakhand	10026	9227	10917	10057	178648	199286	212039	196658	5.11	515805	0.694
West Bengal	4712	5410	6170	5431	90072	99358	110164	99865	5.44	4963550	6.682
All States										**74278565**	**100**

Source: For Own Tax Revenue- Finance Accounts of States for the concerned year, Estimated population from National Statistical Office, MoSPI

Annex 7.1
(para 7.51)

Summary of Property Tax Provisions as per State Acts

Criteria	No. of State Acts that have a relevant provision	Names of the States
Enumeration of Properties: Creation and maintenance of property registers		
Periodic revision of property registers	19	1. Andhra Pradesh (only Municipal Corporations) 2. Chattisgarh 3. Goa 4. Gujarat 5. Haryana (only Municipal Corporations) 6. Himachal Pradesh 7. Jammu and Kashmir 8.Karnataka (only Municipal Corporations) 9. Kerala 10. Madhya Pradesh 11. Odisha 12. Tamil Nadu (only Municipalities) 13. Uttar Pradesh 14. Uttarakhand 15. West Bengal 16. Meghalaya 17. Sikkim 18. Nagaland 19. Manipur
Valuation		
Follow the Capital Value method of valuation	2	1. Karnataka (all urban local bodies, except Bengaluru) 2. Nagaland
Follow Unit Area Value method of valuation	9	1. Gujarat 2. Himachal Pradesh 3. Jammu and Kashmir 4. Kerala, 5. Delhi 6. Odisha 7. Mizoram 8. Tripura 9. Sikkim
Follow Annual Rental Value method of valuation	12	1. Andhra Pradesh 2. Bihar 3. Chhattisgarh 4. Goa 5. Haryana 6. Jharkhand 7. Madhya Pradesh 8. Tamil Nadu 9. Uttar Pradesh 10. Uttarakhand 11. Assam (Guwahati Municipal Corporation Act) 12. Meghalaya
Flat Rate system of valuation	1	1. Punjab
Provide multiple options for valuation methodology	4	1. Maharashtra (Capital Value or Annual Rental Value) 2. Rajasthan (Unit Area based method or by any other method) 3. Telangana (Capital Value or Annual Rental Value or Any such method as prescribed) 4. West Bengal (Annual Rental Value or Capital Value where Annual Rental Value cannot be estimated)

Criteria	No. of State Acts that have a relevant provision	Names of the States
State Acts where valuation methodology is unclear or not mentioned	2	1. Manipur (unclear) 2. Arunachal Pradesh (not mentioned)
Act defines a floor rate of property tax	13	1. Andhra Pradesh (only Municipal Corporations) 2. Bihar 3. Chattisgarh 4. Gujarat (only Municipal Corporations) 5. Haryana 6. Himachal Pradesh 7. Karnataka 8. Kerala 9. Madhya Pradesh 10. Odisha 11. Tamil Nadu (only Chennai) 12.Uttar Pradesh (only Municipal Corporations) 13. Uttarakhand (only Municipal Corporations)
Periodic revision of tax rates	3	1. Jharkhand 2. Karnataka 3. Kerala
Property Tax Boards/Municipal Valuation Committees		
Presence of a property tax board	17	1. Andhra Pradesh (only Municipalities) 2. Bihar, 3. Jammu and Kashmir 4. Jharkhand 5. Karnataka (only Municipal Corporations) 6. Maharashtra (only Municipal Corporations) 7. Delhi 8. Odisha 9. Tamil Nadu 10. Telangana 11. West Bengal 12. Meghalaya 13. Mizoram 14. Tripura 15.Sikkim 16. Nagaland 17. Manipur
Functions of the Property Tax Board are laid out in the State Act	16	Except Telangana, mentioned in all states where a property tax board exists
Assessment of property tax		
Provision for self-assessment	16	1. Bihar 2. Punjab 3. Chattisgarh 4. Haryana 5. Jammu and Kashmir 6. Jharkhand 7. Karnataka (only Municipalities) 8. Madhya Pradesh 9. Delhi 10. Odisha 11. Telangana 12. Uttar Pradesh 13. Uttarakhand 14. West Bengal 15. Mizoram 16. Sikkim
Process for auditing of assessment (either self-assessment or made by the Municipality/ Municipal Corporation)	1	1. Goa (only in Municipalities)

Criteria	No. of State Acts that have a relevant provision	Names of the States
Penalty provisions for late submission of self-assessments	11	1. Bihar 2. Punjab 3. Chattisgarh 4. Haryana 5. Jammu and Kashmir 6. Jharkhand 7. Madhya Pradesh (only Municipalities) 8. Delhi 9. Telangana 10. Uttar Pradesh (only Municipal Corporations) 11. Uttarakhand (only Municipal Corporations)
Provision to calculate property tax potential of exempted properties for assessing the revenue foregone	0	
Billing and Collection		
Provision for public disclosure of property tax collection data or data on defaulters	0	
Penalty provision for non or late payment	19	1. Punjab 2. Gujarat (only Municipal Corporations) 3. Haryana (only Municipal Corporations 4. Himachal Pradesh (only Municipal Corporations) 5. Karnataka 6. Madhya Pradesh (only Municipalities) 7. Delhi 8. Odisha 9. Tamil Nadu (only Chennai Municipal Corporation) 10. Telangana 11. Uttar Pradesh (only Municipal Corporations) 12. Uttarakhand (only Municipal Corporations) 13. West Bengal 14. Meghalaya 15. Guwahati Municipal Corporation 16.Arunachal Pradesh 17. Mizoram 18. Tripura 19. Nagaland

Source: Study done by Janagraha

Annex 7.2
(para 7.62, 7.93)

Detailed Methodology for arriving at the State Wise Grants

	Per year grant for every year of the award period in Rs. crore					
	2021-22	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**Total grants**
STEP-1	67015	69421	71240	75453	74731	357860
STEP-2	**Share of RLB and ULB**					
	2021-22 (RLB:ULB 67:33)	**2022-23 (RLB:ULB 67:33)**	**2023-24 (RLB:ULB 66:34)**	**2024-25 (RLB:ULB 66:34)**	**2025-26 (RLB:ULB 65:35)**	**Total grants**
	RLB ULB	RLB ULB	RLB ULB	RLB ULB	RLB ULB	RLB ULB
	44901 22114	46513 22908	47018 24222	49800 25653	48573 26158	236805 121055
STEP-3	Inter se share of all States based on 90 per cent weightage to population and 10 per cent to area					
STEP-4	Grants to each State for RLB and ULB each year is derived based on the share arrived at STEP 3					
STEP-5	ULB grants within each State is further divided between Million-Plus and other than Million-Plus cities based on their respective population.					

ILLUSTRATION – Uttar Pradesh

	Per year grant for every year of the award period in Rs. crore					
	2021-22	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**Total grants**
STEP-1	67015	69421	71240	75453	74731	357860
STEP-2	**Share of RLB and ULB**					
	2021-22 (RLB:ULB 67:33)	**2022-23 (RLB:ULB 67:33)**	**2023-24 (RLB:ULB 66:34)**	**2024-25 (RLB:ULB 66:34)**	**2025-26 (RLB:ULB 65:35)**	**Total grants**
	RLB ULB	RLB ULB	RLB ULB	RLB ULB	RLB ULB	RLB ULB
	44901 22114	46513 22908	47018 24222	49800 25653	48573 26158	236805 121055
STEP-3	Inter se share of all States based on 90 per cent weightage to population and 10 per cent to area **Uttar Pradesh Share – 16.052**					
STEP-4	Grants to each State for RLB and ULB each year is derived based on the share arrived at STEP 3					
	2021-22 (RLB:ULB 67:33)	**2022-23 (RLB:ULB 67:33)**	**2023-24 (RLB:ULB 66:34)**	**2024-25 (RLB:ULB 66:34)**	**2025-26 (RLB:ULB 65:35)**	**Total grants**
	RLB ULB	RLB ULB	RLB ULB	RLB ULB	RLB ULB	RLB ULB
	7208 3550	7466 3677	7547 3888	7994 4118	7797 4199	38012 19432

STEP-5 ULB grants within each State is further divided between Million-Plus and other than Million-Plus cities based on their respective population.

Population in million		
Million-Plus Cities Population	Other than Million-Plus	Total population
14.03 (A)	32.1(B)	46.1(C)

Grants in Rs. crore

Uttar Pradesh	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Total ULB Grants(D)	3550	3677	3888	4118	4199	19432
Million-Plus #	1080	1119	1183	1253	1278	5913
Other than Million plus##	2470	2558	2705	2865	2921	13519

#A/C*D
B/C*D

Annex 7.3
(para 7.62, 7.93)

Share of States based on Population and Area

States	Population 2011 (in milion)	Area ('000 sq km)	Population share	Area share	State-wise share (RLB)	State-wise share (ULB)
Andhra Pradesh	49.58	162.92	4.21	5.33	4.32	4.32
Arunachal Pradesh	1.38	83.74	0.12	2.74	0.38	0.38
Assam	31.21	78.44	2.65	2.57	2.64	2.64
Bihar	104.10	94.16	8.84	3.08	8.26	8.26
Chhattisgarh	25.55	135.19	2.17	4.43	2.39	2.39
Goa	1.46	3.70	0.12	0.12	0.12	0.12
Gujarat	60.44	196.24	5.13	6.43	5.26	5.26
Haryana	25.35	44.21	2.15	1.45	2.08	2.08
Himachal Pradesh	6.86	55.67	0.58	1.82	0.71	0.71
Jharkhand	32.99	79.72	2.80	2.61	2.78	2.78
Karnataka	61.10	191.79	5.19	6.28	5.29	5.29
Kerala	33.41	38.85	2.84	1.27	2.68	2.68
Madhya Pradesh	72.63	308.25	6.16	10.09	6.56	6.56
Maharashtra	112.37	307.71	9.54	10.07	9.59	9.59
Manipur	2.86	22.33	0.24	0.73	0.29	0.29
Meghalaya	2.97	22.43	0.25	0.73	0.30	0.30
Mizoram	1.10	21.08	0.09	0.69	0.15	0.15
Nagaland	1.98	16.58	0.17	0.54	0.21	0.21
Odisha	41.97	155.71	3.56	5.10	3.72	3.72
Punjab	27.74	50.36	2.35	1.66	2.29	2.29
Rajasthan	68.55	342.24	5.82	11.21	6.36	6.36
Sikkim	0.61	7.10	0.05	0.23	0.07	0.07
Tamil Nadu	72.15	130.06	6.12	4.26	5.94	5.94
Telangana	35.00	112.12	2.97	3.67	3.04	3.04
Tripura	3.67	10.49	0.31	0.34	0.31	0.31
Uttar Pradesh	199.81	240.93	16.96	7.89	16.05	16.05
Uttarakhand	10.09	53.48	0.86	1.75	0.95	0.95
West Bengal	91.28	88.75	7.75	2.91	7.26	7.26
All States	**1178.19**	**3054.27**	**100.00**	**100.00**	**100.00**	**100.00**

Annex 7.4
(para 7.62, 7.93)

Year-Wise Grants to Rural and Urban Local Bodies

(Rs. crore)

	2021-22		2022-23		2023-24		2024-25		2025-26		Total	
	(RLB:ULB 67:33)		(RLB:ULB 67:33)		(RLB:ULB 66:34)		(RLB:ULB 66:34)		(RLB:ULB 65:35)			
States	**Grants RLB**	**Grants ULB**	**Grants RLB**	**Grants ULB**	**Grants RLB**	**Grants ULB**	**Grants RLB**	**Grants ULB**	**Grants RLB**	**Grants ULB**	**Total RLB**	**Total ULB**
Andhra Pradesh	1939	956	2010	990	2031	1046	2152	1109	2099	1130	10231	5231
Arunachal Pradesh	170	84	177	87	179	92	189	97	185	99	900	459
Assam	1186	584	1228	605	1241	640	1315	677	1283	691	6253	3197
Bihar	3709	1827	3842	1892	3884	2001	4114	2119	4012	2160	19561	9999
Chhattisgarh	1075	530	1114	549	1125	580	1192	614	1163	627	5669	2900
Goa	55	27	57	28	58	30	62	32	61	32	293	149
Gujarat	2362	1163	2446	1205	2473	1274	2619	1349	2555	1376	12455	6367
Haryana	935	461	968	477	979	504	1036	534	1011	544	4929	2520
Himachal Pradesh	317	156	329	162	332	171	352	181	343	185	1673	855
Jharkhand	1249	615	1293	637	1307	674	1385	713	1351	728	6585	3367
Karnataka	2377	1171	2463	1213	2490	1282	2637	1358	2572	1385	12539	6409
Kerala	1203	592	1246	613	1260	649	1334	687	1301	701	6344	3242
Madhya Pradesh	2944	1450	3050	1502	3083	1588	3265	1682	3185	1716	15527	7938
Maharashtra	4307	2121	4461	2197	4510	2323	4776	2461	4659	2509	22713	11611
Manipur	131	64	135	67	137	71	145	75	142	76	690	353
Meghalaya	135	66	140	69	141	73	149	77	146	78	711	363
Mizoram	69	34	71	35	72	37	76	39	74	40	362	185
Nagaland	92	45	96	47	97	50	102	53	99	54	486	249
Odisha	1669	822	1728	851	1747	900	1851	953	1805	972	8800	4498
Punjab	1026	505	1062	523	1074	553	1138	586	1110	597	5410	2764
Rajasthan	2854	1406	2957	1456	2989	1540	3166	1631	3087	1663	15053	7696
Sikkim	31	15	33	16	33	17	35	18	33	18	165	84
Tamil Nadu	2666	1313	2761	1360	2791	1438	2957	1523	2884	1553	14059	7187
Telangana	1365	672	1415	697	1430	737	1514	780	1477	796	7201	3682
Tripura	141	70	147	72	148	76	157	81	153	82	746	381
Uttar Pradesh	7208	3550	7466	3677	7547	3888	7994	4118	7797	4199	38012	19432
Uttarakhand	425	209	440	217	445	229	471	243	458	247	2239	1145
West Bengal	3261	1606	3378	1664	3415	1759	3617	1863	3528	1900	17199	8792
All States	**44901**	**22114**	**46513**	**22908**	**47018**	**24222**	**49800**	**25653**	**48573**	**26158**	**236805**	**121055**

Annex 7.5
(para 7.128)

Year Wise Grants to Urban Local Bodies

(Rs. crore)

	Category I						Category II (Other than Million Plus cities)					
States	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**Total Grants**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**Total**
Andhra Pradesh	204	211	223	237	241	1116	752	779	823	872	889	4115
Arunachal Pradesh	0	0	0	0	0	0	84	87	92	97	99	459
Assam	0	0	0	0	0	0	584	605	640	677	691	3197
Bihar	309	320	338	358	365	1690	1518	1572	1663	1761	1795	8309
Chhattisgarh	163	169	178	189	193	892	367	380	402	425	434	2008
Goa	0	0	0	0	0	0	27	28	30	32	32	149
Gujarat	612	634	671	710	724	3351	551	571	603	639	652	3016
Haryana	74	76	81	85	87	403	387	401	423	449	457	2117
Himachal Pradesh	0	0	0	0	0	0	156	162	171	181	185	855
Jharkhand	241	249	264	279	285	1318	374	388	410	434	443	2049
Karnataka	421	436	461	488	498	2304	750	777	821	870	887	4105
Kerala	256	265	281	297	303	1402	336	348	368	390	398	1840
Madhya Pradesh	452	468	495	524	535	2474	998	1034	1093	1158	1181	5464
Maharashtra	1199	1242	1313	1391	1418	6563	922	955	1010	1070	1091	5048
Manipur	0	0	0	0	0	0	64	67	71	75	76	353
Meghalaya	0	0	0	0	0	0	66	69	73	77	78	363
Mizoram	0	0	0	0	0	0	34	35	37	39	40	185
Nagaland	0	0	0	0	0	0	45	47	50	53	54	249
Odisha	0	0	0	0	0	0	822	851	900	953	972	4498
Punjab	135	140	148	157	160	740	370	383	405	429	437	2024
Rajasthan	425	440	466	493	503	2327	981	1016	1074	1138	1160	5369
Sikkim	0	0	0	0	0	0	15	16	17	18	18	84
Tamil Nadu	420	435	460	487	497	2299	893	925	978	1036	1056	4888
Telangana	354	367	388	411	419	1939	318	330	349	369	377	1743
Tripura	0	0	0	0	0	0	70	72	76	81	82	381
Uttar Pradesh	1080	1119	1183	1253	1278	5913	2470	2558	2705	2865	2921	13519
Uttarakhand	0	0	0	0	0	0	209	217	229	243	247	1145
West Bengal	633	656	693	734	749	3465	973	1008	1066	1129	1151	5327
All States	**6978**	**7227**	**7643**	**8093**	**8255**	**38196**	**15136**	**15681**	**16579**	**17560**	**17903**	**82859**

Annex 7.6
(Para 7.106)

Grants to Million Plus Urban Agglomeration

(Rs. crore)

States/ U.A	Population (in Mlns)	Total Grant (in Cr)	SWM and Sanitation	2021-22	2022-23	2023-24	2024-25	2025-26	Air Quality[1]	2021-22	2022-23	2023-24	2024-25	2025-26
Andhra Pradesh	**3.21**	**1116**	**745**	**136**	**141**	**149**	**158**	**161**	**371**	**68**	**70**	**74**	**79**	**80**
Vijayawada U.A	1.48	514	344	63	65	69	73	74	170	31	32	34	36	37
Visakhapatnam	1.73	602	401	73	76	80	85	87	201	37	38	40	43	43
Bihar	**2.05**	**1690**	**1126**	**206**	**213**	**225**	**239**	**243**	**564**	**103**	**107**	**113**	**119**	**122**
Patna U.A.	2.05	1690	1126	206	213	225	239	243	564	103	107	113	119	122
Chhattisgarh	**2.18**	**892**	**595**	**109**	**113**	**118**	**126**	**129**	**297**	**54**	**56**	**60**	**63**	**64**
Durg Bhilainagar U.A.	1.06	433	289	53	55	57	61	63	144	26	27	29	31	31
Raipur U.A.	1.12	459	306	56	58	61	65	66	153	28	29	31	32	33
Gujarat	**14.16**	**3351**	**2235**	**408**	**422**	**448**	**474**	**483**	**1116**	**204**	**212**	**223**	**236**	**241**
Ahmadabad U.A.	6.36	1504	1003	183	189	201	213	217	501	92	95	100	106	108
Rajkot U.A.	1.39	329	219	40	42	44	46	47	110	20	21	22	23	24
Surat U.A.	4.59	1087	725	132	137	145	154	157	362	66	69	72	77	78
Vadodara U.A.	1.82	431	288	53	54	58	61	62	143	26	27	29	30	31
Haryana	**1.41**	**403**	**269**	**49**	**51**	**54**	**57**	**58**	**134**	**25**	**25**	**27**	**28**	**29**
Faridabad	1.41	403	269	49	51	54	57	58	134	25	25	27	28	29
Jharkhand	**3.67**	**1318**	**879**	**161**	**166**	**176**	**186**	**190**	**439**	**80**	**83**	**88**	**93**	**95**
Dhanbad U.A.	1.2	432	289	53	54	58	61	63	143	26	27	29	30	31
Jamshedpur U.A.	1.34	481	321	59	61	64	68	69	160	29	30	32	34	35

[1]According to the MoEF&CC, ambient air quality is not a major problem in eight urban agglomerations with a Million-Plus population, namely, Kannur, Kochi, Kollam, Kozhikode, Malappuram, Thiruvananthapuram, and Thrissur in Kerala and Coimbatore in Tamil Nadu. With these cities way below the NAMP threshold for breaching pollution by particulate matter, their total grants will be linked to service-level benchmarks on solid waste management-star rating, drinking water, water recycling and rainwater harvesting.

Annex 7.6 (contd.)
(Para 7.106)

Grants to Million Plus Urban Agglomeration

States/ U.A	Population (in Mlns)	Total Grant (in Cr)	SWM and Sanitation	2021-22	2022-23	2023-24	2024-25	2025-26	Air Quality[1]	2021-22	2022-23	2023-24	2024-25	2025-26
Ranchi U.A.	1.13	405	269	49	51	54	57	58	136	25	26	27	29	29
Karnataka	**8.52**	**2304**	**1536**	**281**	**291**	**307**	**325**	**332**	**768**	**140**	**145**	**154**	**163**	**166**
Bruhat Bangalore U.A.	8.52	2304	1536	281	291	307	325	332	768	140	145	154	163	166
Madhya Pradesh	**6.43**	**2474**	**1649**	**301**	**311**	**330**	**350**	**357**	**825**	**151**	**157**	**165**	**174**	**178**
Bhopal U.A.	1.89	726	485	88	91	97	103	106	241	44	46	48	51	52
Gwalior U.A.	1.1	425	283	52	53	57	60	61	142	26	27	28	30	31
Indore U.A.	2.17	835	556	102	105	111	118	120	279	51	53	56	59	60
Jabalpur U.A.	1.27	488	325	59	62	65	69	70	163	30	31	33	34	35
Maharashtra	**29.92**	**6563**	**4375**	**799**	**827**	**875**	**928**	**946**	**2188**	**400**	**415**	**438**	**463**	**472**
Aurangabad U.A.	1.19	262	175	32	33	35	37	38	87	16	17	17	18	19
Greater Mumbai U.A.	18.39	4031	2687	490	508	537	571	581	1344	246	254	269	285	290
Nagpur U.A.	2.5	548	365	67	69	73	77	79	183	33	35	37	39	39
Nashik U.A.	1.56	343	228	42	43	46	48	49	115	21	22	23	24	25
Pune U.A.	5.06	1110	740	135	140	148	157	160	370	68	70	74	78	80
Vasai-Virar City	1.22	269	180	33	34	36	38	39	89	16	17	18	19	19
Punjab	**2.8**	**740**	**492**	**90**	**93**	**98**	**105**	**106**	**248**	**45**	**47**	**50**	**52**	**54**
Amritsar U.A.	1.18	312	207	38	39	41	44	45	105	19	20	21	22	23
Ludhiana	1.62	428	285	52	54	57	61	61	143	26	27	29	30	31
Rajasthan	**5.19**	**2327**	**1553**	**284**	**294**	**311**	**328**	**336**	**774**	**141**	**146**	**155**	**165**	**167**
Jodhpur U.A.	1.14	510	340	62	64	68	72	74	170	31	32	34	36	37
Jaipur	3.05	1368	913	167	173	183	193	197	455	83	86	91	97	98
Kota	1	449	300	55	57	60	63	65	149	27	28	30	32	32
Tamil Nadu	**13.27**	**2299**	**1655**	**303**	**313**	**331**	**350**	**358**	**644**	**117**	**122**	**129**	**137**	**139**
Chennai U.A.	8.65	1497	997	183	189	199	211	215	500	91	95	100	106	108
Coimbatore U.A.	2.13	369	369	67	70	74	78	80						
Madurai U.A.	1.47	254	170	31	32	34	36	37	84	15	16	17	18	18
Tiruchirappalli U.A.	1.02	179	119	22	22	24	25	26	60	11	11	12	13	13

Annex 7.6 (contd.)
(Para 7.106)

Grants to Million Plus Urban Agglomeration

States/ U.A	Population (in MIns)	Total Grant (in Cr)	SWM and Sanitation	2021-22	2022-23	2023-24	2024-25	2025-26	Air Quality[1]	2021-22	2022-23	2023-24	2024-25	2025-26
Telangana	**7.68**	**1939**	**1293**	**236**	**245**	**259**	**274**	**279**	**646**	**118**	**122**	**129**	**137**	**140**
Hyderabad U.A.	7.68	1939	1293	236	245	259	274	279	646	118	122	129	137	140
Uttar Pradesh	**14.03**	**5913**	**3943**	**720**	**746**	**788**	**836**	**853**	**1970**	**360**	**373**	**395**	**417**	**425**
Agra U.A.	1.76	742	495	90	94	99	105	107	247	45	47	50	52	53
Allahabad U.A.	1.21	510	340	62	64	68	72	74	170	31	32	34	36	37
Ghaziabad U.A.	2.38	1002	668	122	126	134	142	144	334	61	63	67	71	72
Kanpur U.A.	2.92	1233	822	150	156	164	174	178	411	75	78	82	87	89
Lucknow U.A.	2.9	1223	815	149	154	162	173	177	408	75	77	82	86	88
Meerut U.A.	1.42	599	400	73	76	80	85	86	199	36	38	40	42	43
Varanasi U.A.	1.43	604	403	74	76	81	85	87	201	37	38	40	43	43
West Bengal	**15.3**	**3465**	**2310**	**422**	**437**	**462**	**489**	**500**	**1155**	**211**	**219**	**231**	**245**	**249**
Asansol U.A.	1.24	283	189	34	36	38	40	41	94	17	18	19	20	20
Kolkata U.A.	14.06	3182	2121	388	401	424	449	459	1061	194	201	212	225	229
Kerala	**12.14**	**1402**	**1402**	**256**	**265**	**281**	**297**	**303**						
Kannur U.A.	1.64	189	189	35	36	38	39	41						
Kochi U.A.	2.12	245	245	45	46	49	52	53						
Kollam U.A.	1.11	128	128	23	24	26	27	28						
Kozhikode U.A.	2.03	235	235	43	44	47	50	51						
Malappuram U.A.	1.7	196	196	36	37	39	42	42						
Thiruvananthapuram U.A.	1.68	194	194	35	37	39	41	42						
Thrissur U.A.	1.86	215	215	39	41	43	46	46						
Total	**141.9**	**38196**	**26057**	**4761**	**4928**	**5212**	**5522**	**5634**	**12139**	**2217**	**2299**	**2431**	**2571**	**2621**

Annex 7.7
(para 7.134)

State Wise Cantonment Boards

Sl. No.	Name of State	Name of Cantonment	Population figure as per census 2011
1	Bihar	Danapur	28149
2	Gujarat	Ahmedabad	14345
3	Haryana	Ambala	55370
4	Himachal Pradesh	Bakloh	1805
		Dagshai	2904
		Dalhousie	3549
		Jutogh	2062
		Kasauli	3885
		Khasyol	12028
		Subathu	3685
5	Jharkhand	Ramgarh	88781
6	Karnataka	Belgaum	19411
7	Kerala	Cannanore	4798
8	Madhya	Jabalpur	72257
	Pradesh	Mhow	69281
		Morar	48464
		Pachmarhi	12062
		Saugor	32475
9	Maharashtra	Ahmednagar	28986
		Aurangabad	18051
		Dehu Road	48961
		Deolali	54027
		Kamptee	12457
		Kirkee	70399
		Pune	71831
10	Meghalaya	Shillong	11919
11	Punjab	Amritsar	10410
		Ferozepur	53199
		Jalandhar	47845
12	Rajasthan	Ajmer	3530
		Nasirabad	50804
13	Tamilnadu	St Thomas Mount	43795
		Wellington	19462
14	Telangana	Secunderabad	217910
15	Uttar Pradesh	Agra	53137
		Allahabad	39684
		Babina	27852
		Bareilly	30005
		Faizabad	12391
		Fatehgarh	14786
		Jhansi	28343
		Kanpur	108534
		Lucknow	63003
		Mathura	25603
		Meerut	93684
		Shahjahanpur	18116
		Varanasi	14119

Sl. No.	Name of State	Name of Cantonment	Population figure as per census 2011
16	Uttarakhand	Almora	2231
		Chakrata	5117
		Clement town	22577
		Dehradun	52716
		Landour	3543
		Lansdowne	5667
		Nainital	1398
		Ranikhet	18886
		Roorkee	14356
17	West Bengal	Barrackpore	17322
		Jalapahar	1711
		Lebong	1397
	TOTAL		**1915075**

Annex 7.8
(para 7.114, 7.115, 7.126)

Framework for Monitoring Air Quality Parameters and Funding

A. Strengthening of pollution monitoring mechanism

B. Source-wise cause analysis for air pollution

C. Progress on action plans and compliance of statutory guidelines

D. Quantification of air quality Improvement

Note: Elements of activities for the above parameters are Annex 7.8 A.

Table: 1 Relative Weightage for City Performance Assessment

Parameter	2021-22	2022-23	2023-24	2024-25	2025-26
Strengthening of pollution monitoring mechanism	10	-	-	-	-
Source-wise cause analysis for air pollution	10	-	-	-	-
Progress on action plans and compliance of statutory guidelines.	10	-	-	-	-
Quantification of air quality Improvement	70	100	100	100	100
Total	**100**	**100**	**100**	**100**	**100**

Table 2: Fund Allocation to Cities (Performance based)

Score of the city	Fund allocation in subsequent years (%) 2021-2022 onwards
80-100	100
60-80	75
50-60	50
40-50	25
Below 40	NIL

Annex 7.8 A

Elements of Air Quality Management

A. Strengthening of pollution monitoring mechanism

i. Operationalisation of Air Quality Monitoring (AQM) Cell.

ii. IT-enabled air quality data management system.

iii. Coordination Committee reviews including progress and review of city action plans, including public grievance redressal portal, emergency response and awareness programme.

B. Source-wise cause analysis for air pollution

i. Air quality profiling to identify suitable locations for air quality monitoring stations including hotspot.

ii. Source apportionment study and establishment of a robust emission inventory and tracking system

iii. Development of IT based emission inventory system.

C. Progress on action plans and compliance of statutory guidelines

i. Implementation and updation of Action Plans.

ii. Monitoring of PUC for vehicles.

iii. Infrastructure planning and set up of (CAAQMS/ Manual AQMs).

D. Quantification and evaluation of air quality improvements

i. Reduction in air pollution levels (particulate matter) (Details at Annex 7.8 B).

ii. Frequency of exceedance in AQI levels (Annex 7.8 B).

Mandatory activities/conditions:

i. Third party evaluation by reputed institutes identified by MoEF&CC.

ii. Dedicated link on ULBs website and reporting of physical and financial progress, data and other aspect in public domain.

iii. Data dissemination to public.

Annex 7.8 B

Elements of Air Quality Management

Parameters for assessing the Composite Performance factor for 'D'

I. Particulate Matter

1. Based on international practice 98 percentile value may be considered to represent the basic characteristics of air quality of a city and any reduction in such value defines improvement.
2. Percentage reduction observed in 98 percentile value of maximum PM concentration (PM_{98}) observed on all normal days of the year would be graded as following:

Table A

S.No	Reduction (%) range in (PM_{98})	Improvement
1	15 and above	High
2	< 15	Low

3. Normal days to be defined by each city in consultation with meteorological department based on statistical analysis of critical Meteorological parameters for each season

II. AQI Levels

1. The number of days exceeding AQI (Moderate-200) out of total number of normal days monitored per year would be graded as under:
2. Good days - AQI < 200;

Table B

S.No	Increase in Good Days (%)	Improvement
1	15 and above	High
2	< 15	Low

Monitoring of AQI should include the following with suitable weights arrived at on the basis of source-wise cause analysis for air pollution in specific urban agglomerations:

3. Monitoring of open waste burning and chemical traces from waste burning at landfill sites as well as the development of an app to allow reporting by citizens by sending pictures.
4. Process-tracing of waste management in each city to identify where the breakdown in waste management occurs.

Elements of Air Quality Management

Composite Performance factor for D

S.No	Reduction in (%) range in (PM_{98}) (From Table A)	Increase in good days (%) (From Table B)	Performance factor
1	High	High	100
2	Low	High	75
3	High	Low	50
4	Low	Low	25

Annex 7.9
(para 7.123, 7.127)

Service Level Benchmarks
Water Supply
Households covered with piped water supply
Water supplied in litre per capita per day
Reduction in non-revenue water
Water Conservation Measures
Rainwater harvesting
Reuse/ recycling of water
Rejuvenation of water bodies
Solid Waste Management and Sustaining outcomes of Swachh Bharat Mission
Garbage free star rating of the cities
Coverage of water supply for public/community toilet

Star Rating of Cities[2]

Garbage free star rating certification for cities is done for 1,3,5 and 7 star only. Cities are required to fill all data on the online MIS and city profile, which is then used for all verification including ODF/ODF+/ODF++ certifications, and Swachh Survekshan. The cities are mandated to self-declare against any of the stars based on certain given parameters and marking procedure. Upon getting a formal request from the State mission directorate, a third party certification is carried out by an agency engaged by MoHUA for this purpose. On receipt of the formal request, the first level of evaluation comprises a desktop assessment of the city's claims, along with the supporting documents. A time window is given before rejecting any document/data given in support of a city's claim and the physical verification of city's claim is done on sample basis. All photos of physical verification with geo tagging are uploaded on the portal. Only after the desktop assessment is cleared, does the third party agency go for direct observation and field validation to the city, and conducts randomly sampled checks for every parameter, complemented by feedback from citizens, before certifying a city as a particular star.

There are some mandatory pre-conditions for declaring city a particular star:

- 1-Star: Valid ODF certified

[2]Inputs from Ministry of Housing and Urban Affairs

- 3-Star: Valid ODF+ certified (that is cleanliness and sustainability of community and public toilets to be ensured)
- 5-Star: Valid ODF++ certified (that is, cleanliness and sustainability of community and public toilets, along with safe containment, processing and disposal of faecal sludge and septage to be ensured)
- 7-Star: Valid ODF-SS certified

All the above ODF certifications are again based on rigorous protocols developed by MoHUA to cover all aspects of sanitation in a holistic manner, and certified after verification through independent third party.

The detailed scoring matrix against various components/indicators are shown in the table below. Under each component the marking is done against level 1,2,3 and 4 based on the compliance level under various parameters and a suitable weightage is assigned to work out overall marking by a city. The total marks for mandatory, essential and desirable is 1000, 1000 and 500 respectively. A suitable weightage is given against each component/indicator. The mark scored against a particular component under a certain level of compliance will be suitably weighted and the qualification of city under mandatory, essential and desirable will be judged as mentioned in the table. The indicators for each of the above are given below.

Component/Condition		
MANDATORY		
WARD LEVEL	M1	Door to door collection
	M2	Segregation at ward level
	M3	Sweeping
	M4	Litter bins
	M5	Storage bins
CITY LEVEL	M6	Waste processing - wet waste
	M7	Waste processing capacity-wet waste
	M8	Waste Processing capacity- wet waste
	M9	Waste Processing capacity – dry waste
	M10	Grievance Redressal
ESSENTIAL		
WARD LEVEL	E1	Bulk waste generator
	E2	Penalty/spot fines
CITY LEVEL	E3	Segregation at city Level
	E4	User charges
	E5	Plastic ban
	E6	Construction and demolition (C&D) waste-collection
	E7	Scientific Landfill - availability & use
	E8	Scientific Landfill - waste disposed
	E9 (A)	No visible solid waste in water bodies and storm water drains
	E9 (B)	Screening of nallahs

Component/Condition		
	DESIRABLE	
WARD LEVEL	D1	Sustainability
CITY LEVEL	D2	On-site wet waste processing
	D3	C&D waste-Storage, segregation, processing, recycling
	D4	C&D waste-use of materials
	D5	Dumpsite remediation

Matrix- Star Rating Protocol for Garbage Free Cities				
Indicator	**1 Star (***)**	**3 Star (***)**	**5 Star (***)**	**7 Star (***)**
Mandatory	At least 40% score	At least 60% score	At least 85% score	At least 95% score
Essential	At least 30% score	At least 50% score	At least 80% score	At least 90% score
Desirable	-Not applicable	At least 30% score	At least 60% score	At least 80% score

Annex 7.10
(para 7.140 to 7.147)

Total Health Grants[3]

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Andhra Pradesh	490	490	514	540	567	2601
Arunachal Pradesh	49	49	51	54	56	259
Assam	280	280	293	308	323	1484
Bihar	1133	1133	1190	1249	1312	6017
Chhattisgarh	339	339	356	373	392	1799
Goa	31	31	33	35	37	167
Gujarat	629	629	661	694	728	3341
Haryana	305	305	320	335	352	1617
Himachal Pradesh	98	98	103	108	114	521
Jharkhand	446	446	469	492	517	2370
Karnataka	552	552	579	608	638	2929
Kerala	559	559	587	616	647	2968
Madhya Pradesh	923	923	969	1018	1069	4902
Maharashtra	1331	1331	1397	1467	1541	7067
Manipur	44	44	46	49	51	234
Meghalaya	59	59	61	64	68	311
Mizoram	31	31	33	35	36	166
Nagaland	57	57	60	63	66	303
Odisha	462	462	485	510	535	2454
Punjab	401	401	421	443	465	2131
Rajasthan	833	833	875	918	964	4423
Sikkim	21	21	22	23	24	111
Tamil Nadu	806	806	846	889	933	4280
Telangana	419	419	441	463	486	2228
Tripura	85	85	90	94	99	453
Uttar Pradesh	1830	1830	1921	2017	2118	9716
Uttarakhand	150	150	158	165	174	797
West Bengal	829	829	870	914	960	4402
All States	**13192**	**13192**	**13851**	**14544**	**15272**	**70051**

[3]Totals may not tally due to rounding off

Annex 7.10 A-I
(para 7.140)

Support for diagnostic infrastructure to the primary healthcare facilities -Sub centres

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Andhra Pradesh	54.76	54.76	57.50	60.37	63.39	290.78
Arunachal Pradesh	2.84	2.84	2.98	3.13	3.28	15.07
Assam	46.93	46.93	49.28	51.74	54.33	249.21
Bihar	157.11	157.11	164.96	173.21	182.02	834.41
Chhattisgarh	39.19	39.19	41.15	43.21	45.37	208.11
Goa	1.61	1.61	1.69	1.78	1.92	8.61
Gujarat	67.49	67.49	70.87	74.41	78.13	358.39
Haryana	25.48	25.48	26.75	28.09	29.49	135.29
Himachal Pradesh	15.38	15.38	16.15	16.80	17.81	81.52
Jharkhand	49.83	49.83	52.33	54.94	57.69	264.62
Karnataka	71.85	71.85	75.44	79.22	83.18	381.54
Kerala	39.61	39.61	41.60	43.68	45.86	210.36
Madhya Pradesh	102.61	102.61	107.74	113.13	118.78	544.87
Maharashtra	103.91	103.91	109.11	114.56	120.29	551.78
Manipur	3.95	3.95	4.15	4.36	4.58	20.99
Meghalaya	6.05	6.05	6.23	6.68	7.01	32.02
Mizoram	2.72	2.72	2.86	3.08	3.15	14.53
Nagaland	3.19	3.19	3.35	3.52	3.69	16.94
Odisha	61.72	61.72	64.81	68.05	71.45	327.75
Punjab	26.23	26.23	27.54	29.11	30.36	139.47
Rajasthan	100.45	100.45	105.47	110.75	116.28	533.40
Sikkim	1.30	1.30	1.36	1.43	1.50	6.89
Tamil Nadu	64.16	64.16	67.36	70.73	74.27	340.68
Telangana	34.93	34.93	36.68	38.51	40.44	185.49
Tripura	7.16	7.16	7.61	7.89	8.28	38.10
Uttar Pradesh	255.70	255.70	268.48	281.91	296.00	1357.79
Uttarakhand	13.60	13.60	14.28	14.99	15.74	72.21
West Bengal	97.39	97.39	102.26	107.37	112.74	517.15
All States	**1457.15**	**1457.15**	**1529.99**	**1606.65**	**1687.03**	**7737.97**

Annex 7.10 A-II
(para 7.140)

Support for diagnostic infrastructure to the primary healthcare facilities – PHCs

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Andhra Pradesh	57.61	57.61	60.49	63.55	66.92	306.18
Arunachal Pradesh	6.96	6.96	7.31	7.68	8.06	36.97
Assam	50.65	50.65	53.18	55.84	58.56	268.88
Bihar	172.79	172.79	181.42	190.50	200.22	917.72
Chhattisgarh	41.06	41.06	43.11	45.22	47.53	217.98
Goa	1.17	1.17	1.23	1.29	1.39	6.25
Gujarat	71.88	71.88	75.48	79.25	83.21	381.70
Haryana	28.05	28.05	29.45	30.64	32.40	148.59
Himachal Pradesh	28.54	28.54	29.96	31.46	33.04	151.54
Jharkhand	52.55	52.55	55.17	57.93	60.83	279.03
Karnataka	103.58	103.58	108.76	114.20	119.91	550.03
Kerala	49.58	49.58	52.06	54.66	57.39	263.27
Madhya Pradesh	108.75	108.75	114.18	119.89	125.89	577.46
Maharashtra	111.96	111.96	117.56	123.44	129.61	594.53
Manipur	4.38	4.38	4.60	4.83	5.08	23.27
Meghalaya	6.04	6.04	6.34	6.46	6.99	31.87
Mizoram	2.87	2.87	3.02	3.22	3.22	15.20
Nagaland	6.14	6.14	6.44	6.76	7.10	32.58
Odisha	65.50	65.50	68.78	72.41	75.83	348.02
Punjab	28.88	28.88	30.32	31.84	33.51	153.43
Rajasthan	116.25	116.25	122.06	128.16	134.57	617.29
Sikkim	1.41	1.41	1.48	1.56	1.64	7.50
Tamil Nadu	69.25	69.25	72.71	76.35	80.17	367.73
Telangana	35.60	35.60	37.49	39.48	41.21	189.38
Tripura	5.26	5.26	5.63	5.80	6.09	28.04
Uttar Pradesh	281.53	281.53	295.61	310.39	325.91	1494.97
Uttarakhand	12.52	12.52	13.14	13.80	14.49	66.47
West Bengal	106.02	106.02	111.32	116.88	122.73	562.97
All States	**1626.78**	**1626.78**	**1708.30**	**1793.49**	**1883.50**	**8638.85**

Annex 7.10 A-III
(para 7.140)

Support for diagnostic infrastructure to the primary healthcare facilities – UPHCs

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Andhra Pradesh	14.29	14.29	15.21	15.84	16.63	76.26
Arunachal Pradesh	3.07	3.07	3.30	3.38	3.55	16.37
Assam	12.66	12.66	13.30	13.96	14.66	67.24
Bihar	43.20	43.20	45.36	47.63	50.01	229.40
Chhattisgarh	10.23	10.23	10.74	11.27	11.84	54.31
Goa	0.24	0.24	0.26	0.27	0.28	1.29
Gujarat	17.63	17.63	18.51	19.44	20.41	93.62
Haryana	7.01	7.01	7.36	7.73	8.12	37.23
Himachal Pradesh	4.24	4.24	4.45	4.67	4.91	22.51
Jharkhand	13.10	13.10	13.75	14.44	15.16	69.55
Karnataka	16.02	16.02	16.82	17.66	18.55	85.07
Kerala	11.05	11.05	11.61	12.19	12.80	58.70
Madhya Pradesh	27.17	27.17	28.53	29.96	31.46	144.29
Maharashtra	27.96	27.96	29.35	30.82	32.36	148.45
Manipur	1.12	1.12	1.17	1.23	1.29	5.93
Meghalaya	1.51	1.51	1.59	1.67	1.75	8.03
Mizoram	0.44	0.44	0.46	0.48	0.51	2.33
Nagaland	1.02	1.02	1.08	1.13	1.19	5.44
Odisha	18.36	18.36	19.28	20.24	21.26	97.50
Punjab	7.21	7.21	7.57	7.95	8.35	38.29
Rajasthan	27.81	27.81	29.20	30.66	32.19	147.67
Sikkim	0.15	0.15	0.15	0.16	0.17	0.78
Tamil Nadu	18.75	18.75	19.69	20.67	21.70	99.56
Telangana	8.86	8.86	9.31	9.77	10.26	47.06
Tripura	1.27	1.27	1.33	1.40	1.47	6.74
Uttar Pradesh	70.37	70.37	73.89	77.58	81.46	373.67
Uttarakhand	3.26	3.26	3.42	3.60	3.78	17.32
West Bengal	26.49	26.49	27.82	29.21	30.67	140.68
All States	**394.49**	**394.49**	**414.51**	**435.01**	**456.79**	**2095.29**

Annex 7.10 B
(para 7.141 and 7.142)

Financial Requirement for establishing Block Level Public Health Units

(Rs crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Andhra Pradesh	134.42	134.42	141.14	148.20	155.61	713.79
Arunachal Pradesh	22.94	22.94	24.09	25.29	26.56	121.82
Assam	5.31	5.31	5.58	5.86	6.15	28.21
Bihar	49.47	49.47	51.94	54.54	57.27	262.69
Chhattisgarh	13.56	13.56	14.24	14.95	15.70	72.01
Goa	2.41	2.41	2.53	2.66	2.79	12.80
Gujarat	50.31	50.31	52.82	55.46	58.24	267.14
Haryana	28.58	28.58	30.00	31.50	33.08	151.74
Himachal Pradesh	1.85	1.85	1.95	2.05	2.15	9.85
Jharkhand	24.44	24.44	25.66	26.95	28.29	129.78
Karnataka	38.23	38.23	40.15	42.15	44.26	203.02
Kerala	30.59	30.59	32.12	33.72	35.41	162.43
Madhya Pradesh	28.99	28.99	30.44	31.96	33.56	153.94
Maharashtra	70.83	70.83	74.37	78.09	82.00	376.12
Manipur	14.09	14.09	14.79	15.53	16.31	74.81
Meghalaya	9.25	9.25	9.72	10.20	10.71	49.13
Mizoram	5.23	5.23	5.49	5.77	6.06	27.78
Nagaland	14.89	14.89	15.63	16.42	17.24	79.07
Odisha	29.08	29.08	30.53	32.06	33.66	154.41
Punjab	30.18	30.18	31.69	33.28	34.94	160.27
Rajasthan	27.40	27.40	28.77	30.21	31.72	145.50
Sikkim	6.44	6.44	6.76	7.10	7.45	34.19
Tamil Nadu	77.47	77.47	81.35	85.42	89.69	411.40
Telangana	118.52	118.52	124.45	130.67	137.21	629.37
Tripura	11.67	11.67	12.26	12.87	13.51	61.98
Uttar Pradesh	76.53	76.53	80.36	84.37	88.59	406.38
Uttarakhand	2.22	2.22	2.33	2.44	2.57	11.78
West Bengal	69.22	69.22	72.69	76.32	80.14	367.59
All States	**994.12**	**994.12**	**1043.85**	**1096.04**	**1150.87**	**5279.00**

Annex 7.10 C
(para 7.143 and 7.144)

Grants for Urban Health and Wellness Centres (UHWCs)

(Rs crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Andhra Pradesh	102.88	102.88	108.02	113.48	119.17	546.43
Arunachal Pradesh	5.24	5.24	5.50	5.78	6.07	27.83
Assam	69.93	69.93	73.43	77.10	80.95	371.34
Bihar	185.43	185.43	194.71	204.44	214.66	984.67
Chhattisgarh	133.88	133.88	140.58	147.60	154.99	710.93
Goa	20.48	20.48	21.50	22.58	23.71	108.75
Gujarat	260.73	260.73	273.76	287.45	301.83	1384.50
Haryana	139.33	139.33	146.30	153.62	161.30	739.88
Himachal Pradesh	1.41	1.41	1.48	1.56	1.64	7.50
Jharkhand	119.21	119.21	125.17	131.42	138.00	633.01
Karnataka	122.93	122.93	129.08	135.54	142.31	652.79
Kerala	322.22	322.22	338.34	355.25	373.01	1711.04
Madhya Pradesh	427.83	427.83	449.22	471.68	495.27	2271.83
Maharashtra	774.13	774.13	812.84	853.48	896.16	4110.74
Manipur	9.83	9.83	10.32	10.84	11.38	52.20
Meghalaya	23.30	23.30	24.47	25.69	26.98	123.74
Mizoram	12.01	12.01	12.61	13.24	13.90	63.77
Nagaland	22.61	22.61	23.74	24.93	26.18	120.07
Odisha	89.19	89.19	93.65	98.34	103.25	473.62
Punjab	241.75	241.75	253.83	266.52	279.85	1283.70
Rajasthan	106.49	106.49	111.82	117.41	123.28	565.49
Sikkim	8.19	8.19	8.60	9.03	9.48	43.49
Tamil Nadu	356.48	356.48	374.30	393.01	412.67	1892.94
Telangana	133.60	133.60	140.28	147.29	154.66	709.43
Tripura	41.68	41.68	43.76	45.95	48.25	221.32
Uttar Pradesh	424.55	424.55	445.83	468.07	491.47	2254.47
Uttarakhand	81.57	81.57	85.65	89.93	94.42	433.14
West Bengal	287.92	287.92	302.31	317.43	333.30	1528.88
All States	**4524.80**	**4524.80**	**4751.10**	**4988.66**	**5238.14**	**24027.50**

Annex 7.10 D
(para 7.145)

Grants for Building-less Sub-centres, PHCs, CHCs

(Rs crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Andhra Pradesh	1.17	1.17	1.23	1.29	1.36	6.22
Arunachal Pradesh	1.06	1.06	1.10	1.16	1.22	5.60
Assam	13.32	13.32	13.98	14.69	15.41	70.72
Bihar	329.29	329.29	345.6	363.00	381.10	1748.27
Chhattisgarh	10.75	10.75	11.28	11.85	12.45	57.08
Goa	1.54	1.54	1.61	1.70	1.78	8.18
Gujarat	1.17	1.17	1.24	1.29	1.36	6.23
Haryana	29.51	29.51	30.97	32.53	34.15	156.67
Himachal Pradesh	2.68	2.68	2.81	2.96	3.11	14.24
Jharkhand	118.54	118.54	124.41	130.67	137.19	629.35
Karnataka	10.06	10.06	10.56	11.09	11.64	53.41
Kerala	0.50	0.50	0.52	0.55	0.58	2.64
Madhya Pradesh	30.03	30.03	31.52	33.10	34.75	159.44
Maharashtra	50.07	50.07	52.55	55.21	57.96	265.87
Manipur	2.03	2.03	2.12	2.24	2.35	10.78
Meghalaya	3.21	3.21	3.37	3.54	3.72	17.06
Mizoram	0.56	0.56	0.58	0.61	0.64	2.95
Nagaland	1.03	1.03	1.08	1.13	1.19	5.46
Odisha	72.83	72.83	76.43	80.28	84.29	386.66
Punjab	20.26	20.26	21.26	22.33	23.45	107.57
Rajasthan	191.39	191.39	200.87	210.98	221.51	1016.14
Sikkim	0.53	0.53	0.55	0.58	0.60	2.79
Tamil Nadu	71.21	71.21	74.73	78.50	82.41	378.05
Telangana	2.81	2.81	2.96	3.11	3.26	14.95
Tripura	0.25	0.25	0.26	0.27	0.29	1.32
Uttar Pradesh	333.68	333.68	350.22	367.84	386.18	1771.59
Uttarakhand	1.43	1.43	1.49	1.57	1.65	7.57
West Bengal	49.04	49.04	51.46	54.05	56.75	260.33
All States	**1349.95**	**1349.95**	**1416.76**	**1488.12**	**1562.35**	**7167.14**

Annex 7.10 E
(para 7.146)

Conversion of Rural PHCs and Sub-centres (SC) into Health and Wellness Centre

State-wise Assessed Deficiency[4] for Conversion of Rural PHCs and SCs to HWCs

State	Sub centre	PHCs	approx cost (SC to HWC)- Rs. 9.7 lakh	approx cost (PHC to HWC)- Rs. 5.6 lakh	Total cost
	In Nos		(Rs. crore)		
Andhra Pradesh	6825	0	661.66	0	661.66
Arunachal Pradesh	307	101	29.78	5.65	35.43
Assam	4015	698	389.46	39.08	428.54
Bihar	9865	1480	956.91	82.87	1039.78
Chhattisgarh	4555	657	441.85	36.75	478.61
Goa	219	0	21.24	0	21.24
Gujarat	8353	704	810.24	39.43	849.67
Haryana	2440	193	236.68	10.81	247.49
Himachal Pradesh	2089	566	202.63	31.7	234.33
Jharkhand	3644	203	353.47	11.38	364.85
Karnataka	9187	1995	891.14	111.73	1002.87
Kerala	5380	678	521.86	37.97	559.83
Madhya Pradesh	10226	1039	991.93	58.19	1050.12
Maharashtra	9729	1349	943.72	75.54	1019.26
Manipur	429	85	41.61	4.76	46.37
Meghalaya	445	110	43.17	6.15	49.32
Mizoram	370	57	35.89	3.19	39.08
Nagaland	377	124	36.57	6.93	43.50
Odisha	6595	461	639.72	25.81	665.53
Punjab	2511	79	243.57	4.42	247.99
Rajasthan	13382	1777	1298.05	99.52	1397.57
Sikkim	148	24	14.36	1.34	15.70
Tamil Nadu	7728	706	749.62	39.53	789.15
Telangana	4658	0	451.83	0	451.83
Tripura	932	82	90.40	4.59	94.99
Uttar Pradesh	20056	1990	1945.43	111.44	2056.87
Uttarakhand	1804	243	174.99	13.61	188.60
West Bengal	10195	640	988.92	35.83	1024.75
All States	**146464**	**16041**	**14206.70**	**898.23**	**15104.93**

[4]Rural Health Statistics 2018-19

Note : Approx cost for conversion of SC and PHC to HWC is derived from Ayushman Bharat: Comprehensive Primary Health Care through Health and Wellness Centres.

Annex 7.10 E (Contd.)
(para 7.146)

Financial requirement for Conversion of Rural PHCs and SCs into Health and Wellness Centre

(Rs crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Andhra Pradesh	124.67	124.67	130.55	137.45	144.32	661.66
Arunachal Pradesh	6.67	6.67	7.01	7.36	7.72	35.43
Assam	80.70	80.70	84.74	88.98	93.42	428.54
Bihar	195.81	195.81	205.60	215.88	226.68	1039.78
Chhattisgarh	90.13	90.13	94.64	99.37	104.34	478.61
Goa	4.00	4.00	4.20	4.41	4.63	21.24
Gujarat	160.01	160.01	168.01	176.41	185.23	849.67
Haryana	46.61	46.61	48.94	51.38	53.95	247.49
Himachal Pradesh	44.13	44.13	46.34	48.65	51.08	234.33
Jharkhand	68.71	68.71	72.14	75.75	79.54	364.85
Karnataka	188.86	188.86	198.30	208.22	218.63	1002.87
Kerala	105.43	105.43	110.70	116.23	122.04	559.83
Madhya Pradesh	197.76	197.76	207.64	218.03	228.93	1050.12
Maharashtra	191.95	191.95	201.54	211.62	222.20	1019.26
Manipur	8.73	8.73	9.17	9.63	10.11	46.37
Meghalaya	9.29	9.29	9.75	10.24	10.75	49.32
Mizoram	7.36	7.36	7.73	8.11	8.52	39.08
Nagaland	8.19	8.19	8.60	9.03	9.49	43.50
Odisha	125.33	125.33	131.6	138.18	145.09	665.53
Punjab	46.70	46.70	49.04	51.49	54.06	247.99
Rajasthan	263.19	263.19	276.35	290.17	304.67	1397.57
Sikkim	2.96	2.96	3.10	3.26	3.42	15.70
Tamil Nadu	148.61	148.61	156.04	163.85	172.04	789.15
Telangana	85.09	85.09	89.34	93.81	98.50	451.83
Tripura	17.89	17.89	18.78	19.72	20.71	94.99
Uttar Pradesh	387.35	387.35	406.72	427.05	448.4	2056.87
Uttarakhand	35.52	35.52	37.29	39.16	41.11	188.60
West Bengal	192.98	192.98	202.63	212.76	223.40	1024.75
All States	**2844.63**	**2844.63**	**2986.49**	**3136.20**	**3292.98**	**15104.93**

Annex 8.1

(para 8.21)

Gist of Recommendations of Finance Commissions on Disaster Management from FC-II onwards

1. The financial provision for calamity expenditure started with the Margin Money scheme, which was first recommended by the FC-II (1957-62). It was roughly calculated on the basis of the average annual expenditure on relief over the previous decade. The FC-II also specified the amount for each State, with the total allocation gradually increasing from Rs. 6.15 crore per annum (FC-II) to Rs. 240.75 crore per annum (FC-VIII, 1984-89). In the event of expenditure on disaster management by a State Government exceeding its margin money allocation, Central assistance to the extent of 75 per cent (50 per cent as loan and 25 per cent as grant) was made available.

2. The FC-IX (1989-95) recommended the establishment of a Calamity Relief Fund (CRF) for each State, the size of which was decided on the basis of the average of the actual ceiling of expenditure approved for an individual State over a ten-year period ending 1988-89. The Union would contribute 75 per cent of the CRF, while the States would contribute 25 per cent.

3. The FC-X (1995-2000) recommended the continuation of the CRF with certain modifications in operational arrangements. It also recommended the setting up of a National Fund for Calamity Relief (NFCR) to assist any State affected by a calamity of rare severity. It suggested that such calamities would have to be considered on a case-by-case basis. The FC-X had also recommended that the size of this Fund be Rs. 700 crore, to be built over five years, with an initial corpus of Rs. 200 crore contributed by the Union and States in the proportion of 75:25 respectively. For each of the five years, the Union would contribute Rs. 75 crore and the States Rs. 25 crore.

4. The FC-XI (2000-05) reviewed the functioning of the NFCR and found that not only had the entire corpus of the fund been exhausted in three years, it also failed to make adequate funds readily available for meeting the requirements of calamities of rare severity. The FC-XI dissolved the NFCR and recommended the setting up of a NCCF with an initial corpus of Rs. 500 crore which was to be recouped through the levy of a special surcharge on Central taxes. The NCCF would thus be funded largely through the levy.

5. The FC-XII (2005-10) recommended the continuation of the CRF and NCCF in their existing forms. However, it found considerable justification in widening the list of calamities with the addition of a few events to those covered under the scheme. It provided an additional allocation of 25 per cent of the aggregate size of the CRF to Odisha, West Bengal, the undivided States of Bihar, Madhya Pradesh and Uttar Pradesh and the special category States.

6. When the FC-XIII (2010-15) deliberated on the issue of disaster relief and management, the Disaster Management Act had come into effect, with its provisions for Response and

Mitigation Funds. The FC-XIII reviewed the disaster risk financing arrangements in the light of these statutory provisions and recommended that the CRF be merged into the SDRFs of individual states and that the NCCF be merged into the NDRF. It also suggested that the contribution to the SDRFs be shared between the Union and States in the ratio of 75:25 for general category states and 90:10 for special category states. The FC-XIII worked out the total size of the SDRFs at Rs. 33,581 crore, to be shared in this ratio. It also recommended an additional grant of Rs. 525 crore for capacity building to the States, outside the size of total SDRF allocation.

7. The FC-XIV (2015-20) followed the expenditure-driven approach of previous Finance Commissions to arrive at an aggregate corpus of Rs. 61,219 crore for all States for the award period. At the same time, it recommended a change in the cost-sharing arrangement by which the 90:10 sharing of contribution between the Union and the States was extended to general category States. It also recommended that up to 10 per cent of the funds available under the SDRF could be used by State Governments for natural disasters which are not included in the notified list of disasters of the Ministry of Home Affairs, but are considered to be 'disasters' within the local context. Unlike the FC-XIII, it did not earmark capacity-building grants to the States and left it to the Union and State Governments.

Annex 8.2
(para 8.46 and 8.106)

Indicative List of Mitigation Activities under NDMF/SDMF

Hazards	Sl. No.	Mitigation Measures	Nodal Agency
Floods	1.	Improving flood warning system	State/Union
	2.	Preparation of floodplains management plan	State/Union
	3.	Improving natural flood defences around settlements	State/Union
	4.	Raising the plinth of houses	State/Union
	5.	Improvement of natural drainage	State/Union
	6.	Improvement of local and storm water drainage	State/Union
	7.	Construction of culverts and cross-drainage	State/Union
	8.	Deepening of water tanks, ponds and other storage	panchayati raj institution
	9.	Plantations and afforestation	panchayati raj institution
	10.	Installation of weather and hydrological stations	State/Union
	11.	Construction of flood shelter for the people	panchayati raj institution
	12.	Construction of cattle shelter	panchayati raj institution
	13.	Promotion and incentive for flood insurance	panchayati raj institution
Earthquake	14.	Review of seismic zones in India	State/Union
	15.	Preparation of land use plans at the State, district and city levels	State/Union
	16.	Reviewing and updating building codes, guidelines, manuals and byelaws and their implementation in cities, towns and villages	State/Union
	17.	Improving building permission system for inclusion of seismic safety	State/Union
	18.	Retrofitting of buildings in seismic high-risk areas	State/Union

	19.	Retrofitting of weak structures in highly seismic zones	State/Union
	20.	Training and certification of engineers and masons in earthquake engineering	State/Union
	21.	Evolving educational curricula in architecture and engineering institutions and technical training in polytechnics	State/Union
	22.	Setting up demonstration centres in seismic safety	State/Union
	23.	Education and public awareness of seismic safety	State/Union
	24.	Promotion and incentive for earthquake insurance	panchayati raj institution
Cyclone and Other Local Wind Hazards	25.	Review and enforcement of building rules that include cyclone resilient features in coastal cities, towns and villages	State/Union
	26.	Setting up Coastal Zone Regulatory Authority at the State level covering the coastline for management of marine resources and reserve forests	State/Union
	27.	Developing and enforcing Coastal Regulation Zone norms	State/Union
	28.	Support for shelterbelt plantations, coastal vegetation and green cover State/Union	State/Union
	29.	Support for underground power cable and utility lines at the household and community level	State/Union
	30.	Support for alternative channels of communications including very high frequency/ultra-high frequency (VHF/UHF) sets, satellite phones, radio, community radio, internet and loud speakers for communication during the cyclone	State/Union
	31.	Robust telecom systems wherein coastal mobile towers must be able to bear winds at speeds of 250 km/hour	State/Union
	32.	Last mile connectivity with the villages	State/Union
	33.	Delineation of evacuation routes prior to onset of cyclone season	State/Union
	34.	Development of suitable guidelines for hoardings and similar devices	State/Union
Drought	35.	Comprehensive State insurance cover needs to be provided for persons, their properties and cattle	State/Union

	36.	Setting up drought early warning system	State/Union
	37.	Decision support system for monitoring and managing drought	State/Union
	38.	Community-level plans for drought mitigation	panchayati raj institution
	39.	Improving water harvesting and conservation through artificial recharge of groundwater and traditional methods at the community level	panchayati raj institution
	40.	Alternative crop planning	panchayati raj institution
	41.	Improving percolation tanks	panchayati raj institution
	42.	Improving village ponds/tanks	panchayati raj institution
	43.	Rainwater and roof water harvesting systems	panchayati raj institution
	44.	Drip and sprinkler irrigation system	panchayati raj institution
	45.	Afforestation and plantation	panchayati raj institution
	46.	Monitoring reservoirs and setting up reservoir management system	panchayati raj institution
	47.	Setting up water users association	panchayati raj institution
	48.	Conjunctive use of surface and groundwater	State/Union
Landslide	49.	Geological reconnaissance and mapping of landslide-prone areas	State/Union
	50.	State-level monitoring system for landslides	State/Union
	51.	Site investigations with borings and test pits and slope stability analysis	State/Union
	52.	Slope stabilisation measures through plantations, stone pitching	State/Union
	53.	Improving natural drainage on slopes	State/Union
	54.	Anti-erosion measures	State/Union

	55.	Settlement planning based on landslide susceptibility	State/Union
	56.	Infrastructure planning based on probabilistic estimates of landslides	State/Union
	57.	Setting up warning signs on landslides	State/Union
Lighting	58.	Identify the geographical spread of lightning hazard	State/Union
	59.	Setting up a network of lightning conductors	panchayati raj institution
	60.	Issuing public warning of lightning events institution	panchayati raj
	61.	Public awareness of lightning hazard institution	panchayati raj
Glacier Lake Outburst Flood (GLOF), Avalanche and Other Mountain Hazards	62.	Setting up monitoring and early warning systems	State/Union
	63.	Plantations and Afforestation	panchayati raj institution
	64.	Settlement planning based on hazard susceptibility	State/Union

Annex 8.3

(para 8.51)

Methodology for Determination of State Level Allocations of Disaster Management

1. We have adopted a methodology for allocating resources to the States for disaster management, which could be considered a change with continuity with respect to the methodology adopted by previous Finance Commissions. The revised methodology retains the importance assigned to the **expenditures** incurred by the States on disaster management. In addition, it introduces weightages for **area, population and risk profile** of each individual State to arrive at the final allocation for each State.

2. For calculating the figures related to expenditure on disaster relief, the States' expenditure booked under major head (MH) 2245 for the past seven years (2011-12 to 2017-18) has been considered. Some States debit a part of expenditure on disasters directly from the SDRF maintained in the public account. We have added this expenditure to MH-2245. The NDRF releases for each year have, then, been subtracted from these values. The resultant expenditure data has, thereafter, been adjusted for inflation and an average expenditure has been determined for each state. We have assigned 70 per cent weightage to expenditure, that is, 70 per cent of average expenditure for each state (AE_{70}) has been taken for further calculation.

3. For apportioning expenditure between the reorganised States of Andhra Pradesh and Telangana for the period 2011-12 to 2014-15 (up to June 1), we have adopted the methodology similar to the one suggested by the FC-XIV. The expenditure of erstwhile undivided Andhra Pradesh, along with district-wise expenditure has been obtained for the period 2011-12 to 2014-15 (up to June 1) from the Accountant General, Andhra Pradesh. From the district-wise expenditure, the share of expenditure for the reorganised States of Andhra Pradesh and Telangana has been calculated for each of these years, which has then been utilised to apportion common expenditure booked through transfer entries and under the Pay and Accounts Officer, Hyderabad in the same ratio between these two States. The NDRF releases to erstwhile united Andhra Pradesh during the same period have been apportioned in the same ratio between reorganised States of Andhra Pradesh and Telangana.

4. The State of Maharashtra has been taken as a reference State for arriving at the figures related to the weightage given to population and area of the States on account of several considerations. First, Maharashtra has the highest SDRF allocation in 2019-20 (last year of FC-XIV allocations). Second, as Maharashtra is neither the largest State of India nor the most populous, it provides a good statistical fit for working out the unit value. Third, Maharashtra is a State exposed to multiple hazards in different geographical settings. It has the largest urban sprawl in the country, which is exposed to various hazards. Many of its districts are in rain shadow areas, making them highly drought-prone. Floods, landslides and earthquakes affect the State on a regular basis. The State, has responded to these risk events with considerable efficiency and

resources. Given the State's SDRF allocation, its area, population, and capacity and efficiency, it provides the most appropriate reference.

5. Area and population have been given weightage of 15 per cent each. Using the SDRF allocation of the reference State, Maharashtra, in 2019-20, we have calculated (i) a per-capita allocation based on the reference State's total allocation and (ii) a per-square kilometre allocation based on the reference State's total allocation. The unit value has then been applied to the respective population and area of each of the States, and 15 per cent of both the values has further been calculated to assign a total of 30 per cent weightage to area and population $(A_{15} + P_{15})$.

6. The resulting values in step-2 and step-5 have been added for each State $(W = AE_{70} + A_{15} + P_{15})$. Thereafter, this value (W) has been multiplied by the Disaster Risk Index (DRI) scores (detailed in Annex 3A) for each corresponding State $(Y = W * DRI)$. Finally, the product of these two values (Y) has been added to the sum total of values obtained in step-2 and step-5 $(Z = Y + W = W * DRI + W)$ to arrive at the base value for each of the states. From the base value, the allocation for 2020-21 has been calculated after considering the standard 5 per cent annual inflation.

7. The additional allocation of 11 per cent has been provided for the ten North-Eastern and Himalayan States to pay greater attention to infrastructure resilience in these States in view of continuous disruption of their transport network by flash floods, landslides and other mountain hazards.

Annex 8.3A

Disaster Risk Index (DRI) for States

1. The DRI has been developed through a quantitative exercise assigning scores to the *probability of hazards* striking States and the *extent of vulnerability*. Based on these two parameters, a composite score has been developed for each State, leading to an index which ranks States based on the risk scores.

2. *Hazards* refer to physical events - earthquake, cyclone, floods, drought and other risks events. Hazards, by themselves, do not lead to disasters. When hazards interact with people, their communities and economic activities, it results in a disaster event. The interaction of hazards and society is influenced by the people's socio-economic vulnerability. *Vulnerability* refers to diminished capacity of an individual or group to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard. *Vulnerability* includes both income and non-income dimensions, and could encompass conditions such as poor housing, informal jobs, social isolation, and remote terrains in which the people live. Vulnerability is, therefore, a key factor explaining the severity and impact of a disaster.

3. DRI could also be developed based on actual occurrences of disasters and their socio-economic impacts. However, *due to an absence of disaster database at the national level,* it has been found to be difficult to develop a risk index of greater complexity and accuracy. The national hazard zonation and risk exposure maps have been used to assign scores to the probability of hazards at the State level. Such a categorisation provides a State-level hazard score which could be easily understood.

4. As hazards and vulnerability come together to constitute a disaster, a score of 70, out of a total of 100, has been assigned to hazards, since these are the main drivers of disasters. In addition, any hazard event is likely to have a serious impact, given the population density, the level of infrastructure and economic activities in India. Vulnerability, captured also through area and population, has, thus, been assigned a lower score of 30.

5. There are four major hazards which affect different parts of the country - floods, drought, cyclone, and earthquake. The DRI assigns a maximum score of 15 to each of these four hazards, constituting a total of 60. Depending upon the level of probability of a hazard, States have been assigned the scores of 0, 5, 10 and 15 in an increasing order. In addition, all States have their share of smaller hazards, which affect communities on a local basis. In view of their continuous impacts, all States have been assigned an equal score of 10 for these smaller hazards, bringing the maximum score to 70.

6. The scores for different hazards have been assigned on the basis of the following analysis:

Flood Score

i) The data on floods has been compiled based on the flood-prone areas estimated by Rashtriya Barh Ayog (RBA) and the extent of flood-prone areas reported by the States to the Eleventh Five-Year Plan Working Group. After presenting the data on flood-prone area in lakh hectares in absolute numbers, this area has also been estimated in relation to the total area of the State. States which have more than 20 per cent of the total area affected by floods are assigned a score of 15, while States where between 10 and 20 per cent of the total area is affected are assigned a score of 10. The remaining States with less than 10 per cent of the area affected have been assigned a score of 5[1].

ii) Arunachal Pradesh has been included as a high score flood-prone State, even though the flood-affected areas remain less than 10 per cent of the total land. This exception is made as the river Brahmaputra (which is known as river Siang in Arunachal Pradesh) flows through the State upon its entry into India. When the Brahmaputra is flooded, which happens almost every year, it inundates Arunachal Pradesh before it enters Assam. Tamil Nadu is the other exception, since it has experienced heavy floods in the recent past, and is assigned a score of 10.

iii) Among the bifurcated States, we could not get data on flood-affected areas in Uttarakhand, Jharkhand and Chhattisgarh. However, Uttarakhand is flooded due to a large network of Himalayan rivers. The State experienced massive floods in 2014. Further, when the adjacent country of Nepal is flooded, these floods inundate and affect parts of Uttarakhand as well. Uttarakhand has, therefore, been assigned a high score of 15 for being a flood-prone state. On the other hand, Jharkhand and Chhattisgarh are not known for incidence of heavy floods. These two States have been assigned a lower score of 5.

iv) All the hill States experience incidence of floods, but mostly these are flash floods which affect these States for a small duration. Due to the terrain, the runoff is fast, and these States are not exposed to the risk of riverine flooding, to which the States situated in major river basins are exposed. However, the flash floods cause a lot of damage to infrastructure.

Drought Score

v) According to the map showing frequency of drought occurrence across States during the period 2000-15, which has been produced by the Ministry of Agriculture (http://agricoop.nic.in/sites/default/files/Manual%20Drought%202016.pdf), about 68 per cent of cropped area is classified as "chronically drought-prone", while 35 per cent which receive mean annual rainfall of 750-1125 mm is classified as "drought-prone". The

[1] https://ndma.gov.in/images/guidelines/flood.pdf

drought-prone areas of the country are confined primarily to the arid, semi-arid, and sub-humid regions of peninsular and western India.

vi) States which have a larger share of "chronically drought-prone" areas are assigned a higher score of 15, while those with a significant share of "drought-prone areas" are assigned the middle score of 10. The remaining States, except for the North-eastern States, Uttarakhand and Goa, have been assigned the score of 5. The data on drought has been taken from the Ministry of Agriculture and Farmers Welfare.[2]

vii) Some States such as Andhra Pradesh, Gujarat, Bihar, Odisha and Uttar Pradesh are in the high-risk category for both floods and drought. Such a risk assessment should not be construed as contradictory, and the presence of both the risks can be easily explained. These States are large in geographical area, and while some areas receive good rainfall and have dense river network, other areas are in arid and semi-arid regions.

viii) The critical factor of climate change and variability needs to be considered. Some States which are in arid and semi-arid regions experience heavy rainfall within a short period of time, and cause flooding. Rajasthan has experienced heavy flooding in certain areas in recent times. On the other hand, northern Bihar has been experiencing drought in recent years. Intra-seasonal variation in rainfall has brought a huge change. Bihar has experienced deficient rainfall during eight out of the last ten years. It has brought immense rural distress to the State. Similarly, the Bundelkhand region in Uttar Pradesh has been reeling under drought for years together.

ix) The simultaneous incidence of floods and drought represent a highly dynamic situation, and it should be perceived as part of changing patterns of rainfall within the country. It is important that climate hazard risks be assessed on a continuous basis due to the impact of climate change.

Cyclone Score:

x) Cyclone as a hazard is limited to coastal States. The higher score of 15 is assigned to Andhra Pradesh, Odisha, and West Bengal, which include very high cyclone-prone districts. The States of Tamil Nadu, Kerala and Gujarat, which include high cyclone-prone districts, are assigned a score of 10. Though Kerala does not include any high cyclone prone district, all its fourteen districts are exposed to cyclone risk. Therefore, Kerala has also been assigned a score of 10. The remaining states of Karnataka, Goa and Maharashtra have a moderate score of 5. The data has been taken from the cyclone risk map used by the NDMA.[3,4]

xi) Cyclones on the east and west coast are becoming more frequent due to the impact

[2] http://agricoop.nic.in/sites/default/files/Manual%20Drought%202016.pdf
[3] http://www.rsmcnewdelhi.imd.gov.in/images/pdf/climatalogy/frequency-cyclone/hazard.pdf
[4] https://ncrmp.gov.in/cyclones-their-impact-in-india/

of climate change, which is changing the risk profile of these States. These scores, therefore, need to be reviewed on a periodic basis.

Earthquakes Score:

xii) The Bureau of Indian Standards has developed a seismic map of India. According to this map, Seismic Zones V and IV are high risk areas, while Zones III and II are low seismic risk areas. The seismic map has been prepared based on the plate tectonics as well as the history of seismic events in India. According to this map, all the North-Eastern and Himalayan States and some of the other states such as Bihar, Gujarat and Maharashtra are highly prone to earthquake risks. These States are assigned the highest score of 15. West Bengal and Uttar Pradesh are exposed to moderate seismic risks, and hence they are assigned the score of 10. The remaining States have been assigned low risk score of 5[5] .

xiii) In addition to these four hazards, there is a residual category of other hazards. This category includes State-specific hazards such as landslides, windstorms, hailstorm, cloudbursts, lightning, etc. As all the States have their share of minor hazards which have considerable local impacts, all of them have been assigned a uniform score of 10.

7. The vulnerability score has been assigned based on the below poverty line population of each State in 2011-12 (Tendulkar Methodology). States with a poverty rate of 26 per cent and above have been assigned the highest score of 30, and those having poverty rate below 13 per cent are given a score of 10. The rest of the States having poverty rates between 13 per cent and 26 per cent have been assigned the intermediate score of 20. The reorganised States of Andhra Pradesh and Telangana have been assigned the score by assuming their poverty rates are the same as that of undivided Andhra Pradesh in 2011-12.

8. The scores for hazards and vulnerability have been added to assign the risk score for each State. The final risk score for all the States is presented below. It is the first attempt to include a State-level disaster risk score in resource allocation and address a serious deficiency in the previous State-level allocations for disaster management. As more experience is gained, the disaster risk index may be refined further.

[5] http://pib.nic.in/newsite/mbErel.aspx?relid=168661

Disaster Risk Index Scores

States	Floods	Drought	Cyclone	Earthquake	Others	Total Score (out of 70)	Poverty Points (out of 30)	Total Score (out of 100)	Points
A	B	C	D	E	F	G	H	(G+H)	(G+H)/100
Andhra Pradesh	10.00	15.00	15.00	5.00	10.00	55.00	10	65.00	0.650
Arunachal Pradesh	15.00			15.00	10.00	40.00	30	70.00	0.700
Assam	15.00			15.00	10.00	40.00	30	70.00	0.700
Bihar	15.00	10.00		15.00	10.00	50.00	30	80.00	0.800
Chhattisgarh	5.00	5.00		5.00	10.00	25.00	30	55.00	0.550
Goa	5.00		5.00	5.00	10.00	25.00	10	35.00	0.350
Gujarat	10.00	15.00	10.00	15.00	10.00	60.00	20	80.00	0.800
Haryana	15.00	5.00		5.00	10.00	35.00	10	45.00	0.450
Himachal Pradesh	5.00	5.00		15.00	10.00	35.00	10	45.00	0.450
Jharkhand	5.00	10.00		5.00	10.00	30.00	30	60.00	0.600
Karnataka	5.00	15.00	5.00	5.00	10.00	40.00	20	60.00	0.600
Kerala	15.00	5.00	10.00	5.00	10.00	45.00	10	55.00	0.550
Madhya Pradesh	5.00	10.00		5.00	10.00	30.00	30	60.00	0.600
Maharashtra	5.00	15.00	5.00	15.00	10.00	50.00	20	70.00	0.700
Manipur	5.00			15.00	10.00	30.00	30	60.00	0.600
Meghalaya	5.00			15.00	10.00	30.00	10	40.00	0.400
Mizoram	5.00			15.00	10.00	30.00	20	50.00	0.500
Nagaland	5.00			15.00	10.00	30.00	20	50.00	0.500
Odisha	15.00	15.00	15.00	5.00	10.00	60.00	30	90.00	0.900
Punjab	15.00	5.00		5.00	10.00	35.00	10	45.00	0.450
Rajasthan	5.00	15.00		5.00	10.00	35.00	20	55.00	0.550
Sikkim	5.00			15.00	10.00	30.00	10	40.00	0.400
Tamil Nadu	10.00	10.00	10.00	5.00	10.00	45.00	10	55.00	0.550
Telangana	5.00	15.00		5.00	10.00	35.00	10	45.00	0.450
Tripura	15.00			15.00	10.00	40.00	20	60.00	0.600
Uttar Pradesh	15.00	10.00		10.00	10.00	45.00	30	75.00	0.750
Uttarakhand	15.00			15.00	10.00	40.00	10	50.00	0.500
West Bengal	15.00	5.00	15.00	10.00	10.00	55.00	20	75.00	0.750

Scoring Scheme (Disasters)			
Disasters	**High**	**Medium**	**Low**
Floods	15.00	10.00	5.00
Drought	15.00	10.00	5.00
Cyclone	15.00	10.00	5.00
Earthquake	15.00	10.00	5.00
Others	10.00		

Scoring System	Poverty
Low - 10.00	Below 13%
Medium - 20.00	Between 13% and 26%
High - 30.00	Between 26% and 40%

Annex 8.3B

Methodology for Determination of National Level Allocations of Disaster Management

I) As the provision for the NDRF is linked directly to expenditure, we recommend the total national allocation for disaster management, that is, the NDRMF be determined using the expenditure-based methodology.

ii) We have calculated the total national allocation for disaster management based on the actual expenditure (from 2015-16 to 2017-18) and budgeted expenditure (for 2018-19 and 2019-20) from NDRF for five years (2015-16 to 2019-20) and adjusted it for inflation.

iii) The average of inflation-adjusted expenditure of the five years is then increased by 10 per cent to arrive at the base figure.

iv) Taking this base amount, the national allocation for disaster management for 2020-21 is estimated with an annual inflation of 5 per cent.

v) This methodology has determined the size of funds for NDRMF to be Rs. 12,390 crore for 2020-21.

Annex 8.4

(para 8.55)

Annual State-wise Allocation for Disaster Management based on Area (15 per cent), Population (15 per cent), Average Expenditure (70 per cent), and Disaster Risk Index Method

(Rs. crore)

State/Year	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	Total (2021-26)
Andhra Pradesh	1491	1491	1566	1644	1726	1812	8239
Arunachal Pradesh	278	278	292	307	321	338	1536
Assam	858	858	901	946	994	1043	4742
Bihar	1888	1888	1983	2081	2185	2295	10432
Chhattisgarh	576	576	605	635	667	700	3183
Goa	15	15	16	16	17	19	83
Gujarat	1765	1765	1853	1946	2044	2145	9753
Haryana	655	655	688	722	758	796	3619
Himachal Pradesh	454	454	476	501	525	552	2508
Jharkhand	757	757	794	834	877	920	4182
Karnataka	1054	1054	1107	1162	1220	1281	5824
Kerala	419	419	440	462	485	510	2316
Madhya Pradesh	2427	2427	2548	2676	2810	2950	13411
Maharashtra	4296	4296	4511	4736	4973	5221	23737
Manipur	47	47	49	52	55	57	260
Meghalaya	73	73	76	81	84	89	403
Mizoram	52	52	54	58	60	63	287
Nagaland	46	46	48	51	53	56	254
Odisha	2139	2139	2246	2358	2476	2600	11819
Punjab	660	660	693	728	764	803	3648
Rajasthan	1975	1975	2074	2178	2286	2400	10913
Sikkim	56	56	59	62	65	68	310
Tamil Nadu	1360	1360	1428	1500	1575	1653	7516
Telangana	599	599	629	660	694	728	3310
Tripura	76	76	79	84	88	93	420
Uttar Pradesh	2578	2578	2707	2842	2985	3134	14246
Uttarakhand	1041	1041	1093	1148	1205	1265	5752
West Bengal	1348	1348	1416	1487	1560	1639	7450
All States	**28983**	**28983**	**30431**	**31957**	**33552**	**35230**	**160153**

Annex 8.5
(para 8.53 and 8.55)

Union and State's Share in SDRMF (2021-26)

(Rs. crore)

State/Year	Union's share						State's share					
	2021-22	2022-23	2023-24	2024-25	2025-26	Total (2021-26)	2021-22	2022-23	2023-24	2024-25	2025-26	Total (2021-26)
Andhra Pradesh	1119	1175	1234	1295	1360	**6183**	372	391	410	431	452	**2056**
Arunachal Pradesh	250	263	276	289	304	**1382**	28	29	31	32	34	**154**
Assam	772	811	851	895	939	**4268**	86	90	95	99	104	**474**
Bihar	1416	1487	1561	1639	1721	**7824**	472	496	520	546	574	**2608**
Chhattisgarh	432	454	476	500	525	**2387**	144	151	159	167	175	**796**
Goa	12	12	12	13	14	**63**	3	4	4	4	5	**20**
Gujarat	1324	1390	1460	1533	1609	**7316**	441	463	486	511	536	**2437**
Haryana	491	516	542	569	597	**2715**	164	172	180	189	199	**904**
Himachal Pradesh	409	428	451	473	497	**2258**	45	48	50	52	55	**250**
Jharkhand	568	596	626	658	690	**3138**	189	198	208	219	230	**1044**
Karnataka	791	830	872	915	961	**4369**	263	277	290	305	320	**1455**
Kerala	314	330	347	364	383	**1738**	105	110	115	121	127	**578**
Madhya Pradesh	1820	1911	2007	2108	2213	**10059**	607	637	669	702	737	**3352**
Maharashtra	3222	3383	3552	3730	3916	**17803**	1074	1128	1184	1243	1305	**5934**
Manipur	42	44	47	50	51	**234**	5	5	5	5	6	**26**
Meghalaya	66	68	73	76	80	**363**	7	8	8	8	9	**40**
Mizoram	47	49	52	54	57	**259**	5	5	6	6	6	**28**
Nagaland	41	43	46	48	50	**228**	5	5	5	5	6	**26**
Odisha	1604	1685	1769	1857	1950	**8865**	535	561	589	619	650	**2954**
Punjab	495	520	546	573	602	**2736**	165	173	182	191	201	**912**
Rajasthan	1481	1556	1634	1715	1800	**8186**	494	518	544	571	600	**2727**
Sikkim	50	53	56	59	61	**279**	6	6	6	6	7	**31**
Tamil Nadu	1020	1071	1125	1181	1240	**5637**	340	357	375	394	413	**1879**
Telangana	449	472	495	521	546	**2483**	150	157	165	173	182	**827**
Tripura	68	71	76	79	84	**378**	8	8	8	9	9	**42**
Uttar Pradesh	1933	2030	2132	2239	2351	**10685**	645	677	710	746	783	**3561**
Uttarakhand	937	984	1033	1085	1139	**5178**	104	109	115	120	126	**574**
West Bengal	1011	1062	1115	1170	1229	**5587**	337	354	372	390	410	**1863**
All States	**22184**	**23294**	**24466**	**25688**	**26969**	**122601**	**6799**	**7137**	**7491**	**7864**	**8261**	**37552**

Health and Nutritional Indicators

State	Underweight children (%)	Stunting among children (%)	Anaemia among children (%)	Underweight women (%)	Anaemia among women (%)	Institutional deliveries: % of total deliveries	IMR (per 1000 live births)
Andhra Pradesh	31.9	31.4	58.6	17.6	60.0	91.5	29
Arunachal Pradesh	19.4	29.4	54.2	8.5	43.2	52.2	37
Assam	29.8	36.4	35.7	25.7	46.0	70.6	41
Bihar	43.9	48.3	63.5	30.4	60.3	63.8	32
Chhattisgarh	37.7	37.6	41.6	26.7	47.0	70.2	41
Goa	23.8	20.1	48.3	14.7	31.3	96.9	7
Gujarat	39.3	38.5	62.6	27.2	54.9	88.5	28
Haryana	29.4	34.0	71.7	15.8	62.7	80.4	30
Himachal Pradesh	21.2	26.3	53.7	16.2	53.5	76.4	19
Jammu & Kashmir	16.6	27.4	54.5	12.1	49.4	85.6	22
Jharkhand	47.8	45.3	69.9	31.5	65.2	61.9	30
Karnataka	35.2	36.2	60.9	20.7	44.8	94.0	23
Kerala	16.1	19.7	35.7	9.7	34.3	99.8	7
Madhya Pradesh	42.8	42.0	68.9	28.4	52.5	80.8	48
Maharashtra	36.0	34.4	53.8	23.5	48.0	90.3	19
Manipur	13.8	28.9	23.9	8.8	26.4	69.1	11
Meghalaya	28.9	43.8	48.0	12.1	56.2	51.4	33
Mizoram	12.0	28.1	19.3	8.4	24.8	79.7	5
Nagaland	16.7	28.6	26.4	12.3	27.9	32.8	4
Odisha	34.4	34.1	44.6	26.5	51.0	85.3	40
Punjab	21.6	25.7	56.6	11.7	53.5	90.5	20
Rajasthan	36.7	39.1	60.3	27.0	46.8	84.0	37
Sikkim	14.2	29.6	55.1	6.4	34.9	94.7	7
Tamil Nadu	23.8	27.1	50.7	14.6	55.0	98.9	15
Telangana	28.4	28.0	60.7	22.9	56.6	91.5	27
Tripura	24.1	24.3	48.3	18.9	54.5	79.9	27
Uttar Pradesh	39.5	46.3	63.2	25.3	52.4	67.8	43
Uttarakhand	26.6	33.5	59.8	18.4	45.2	68.6	31
West Bengal	31.6	32.5	54.2	21.3	62.5	75.2	22
India	**35.8**	**38.4**	**58.6**	**22.9**	**53.1**	**78.9**	**32**

Source: National Family Health Survey, 2015-16; Sample Registration System, 2018

Note: The colour scheme represents a range, with dark red representing worst health indictors in each column and dark green the best in each column

Annex 9.2
(para: 9.8)

Life Expectancy of Major States*

(years)

State/Union Territory	2012-16			2013-17		
	Male	Female	Total	Male	Female	Total
Andhra Pradesh	68.0	71.4	69.6	68.3	71.2	69.7
Assam	64.4	66.8	65.5	65.4	67.3	66.2
Bihar	68.9	68.5	68.7	69.2	68.6	68.9
Chhattisgarh	63.6	66.8	65.2	63.8	66.6	65.2
Delhi	72.7	75.9	74.2	73.3	76.3	74.7
Gujarat	67.4	71.8	69.5	67.6	72.0	69.7
Haryana	67.2	72.0	69.4	67.6	72.3	69.7
Himachal Pradesh	69.4	75.5	72.3	69.8	75.6	72.6
Jammu and Kashmir	71.6	76.2	73.5	72.1	76.7	74.1
Jharkhand	67.8	68.0	67.9	68.8	68.4	68.6
Karnataka	67.6	70.7	69.1	67.7	70.8	69.2
Kerala	72.2	77.9	75.1	72.5	77.8	75.2
Madhya Pradesh	63.7	67.2	65.4	64.2	67.9	66.0
Maharashtra	70.8	73.7	72.2	71.2	73.9	72.5
Odisha	66.2	69.1	67.6	67.1	69.9	68.4
Punjab	71.0	74.2	72.5	71.0	74.0	72.4
Rajasthan	66.1	70.7	68.3	66.3	70.9	68.5
Tamil Nadu	69.5	73.4	71.4	69.9	73.7	71.7
Uttar Pradesh	63.9	65.6	64.8	64.3	65.6	65.0
Uttarakhand	68.5	74.8	71.5	68.8	74.2	71.0
West Bengal	69.8	71.9	70.8	70.4	72.2	71.2
All India	**67.4**	**70.9**	**68.7**	**67.8**	**70.4**	**69.0**

*Quinquennial Survey.
Source: Sample Registration System, Bulletin, Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India.

Shortfall in Health Facilities as Per Estimation of Mid-year Population (as on 1 July 2019) in Rural Areas

Annex 9.3
(para: 9.13)

		Sub Centres and HWC-SCs				PHCs and HWC-PHCs				CHCs			
		Required	In position	Shortfall	%	Required	In position	Shortfall	%	Required	In position	Shortfall	%
	State	R	P	S	Shortfall	R	P	S	Shortfall	R	P	S	Shortfall
	Andhra Pradesh	7178	7437	*	*	1183	1145	38	3	295	140	155	53
	Arunachal Pradesh	338	385	*	*	51	143	*	*	12	63	*	*
	Assam	6374	4643	1731	27	1040	946	94	9	260	177	83	32
	Bihar	21337	9949	11388	53	3548	1899	1649	46	887	150	737	83
	Chhattisgarh	5323	5205	118	2	843	792	51	6	210	170	40	19
	Goa	96	219	*	*	15	24	*	*	3	5	*	*
	Gujarat	8055	9166	*	*	1308	1476	*	*	327	362	*	*
	Haryana	3460	2604	856	25	576	379	197	34	144	115	29	20
	Himachal Pradesh	1366	2089	*	*	225	586	*	*	56	87	*	*
	Jammu & Kashmir	2102	3025	*	*	342	622	*	*	85	84	1	1
	Jharkhand	6768	3848	2920	43	1079	298	781	72	269	171	98	36
	Karnataka	8028	9758	*	*	1318	2127	*	*	329	198	131	40
	Kerala	2340	5380	*	*	388	848	*	*	97	227	*	*
	Madhya Pradesh	13935	10226	3709	27	2233	1199	1034	46	558	309	249	45
	Maharashtra	14112	10668	3444	24	2299	1828	471	20	574	364	210	37
	Manipur	537	490	47	9	84	90	*	*	21	23	*	*
	Meghalaya	822	477	345	42	124	118	6	5	31	28	3	10
	Mizoram	179	370	*	*	27	59	*	*	6	9	*	*
	Nagaland	414	433	*	*	62	126	*	*	15	21	*	*
	Odisha	8382	6688	1694	20	1345	1288	57	4	336	377	*	*
	Punjab	3562	2950	612	17	593	416	177	30	148	89	59	40
	Rajasthan	12761	13512	*	*	2073	2082	*	*	518	571	*	*
	Sikkim	96	176	*	*	15	29	*	*	3	2	1	33
	Tamil Nadu	7355	8713	*	*	1222	1422	*	*	305	385	*	*
	Telangana	4479	4744	*	*	731	636	95	13	182	85	97	53
	Tripura	661	972	*	*	104	108	*	*	26	18	8	31
	Uttarakhand	1509	1847	*	*	250	257	*	*	62	67	*	*
	Uttar Pradesh	34726	20782	13944	40	5781	2936	2845	49	1445	679	766	53
	West Bengal	13226	10357	2869	22	2177	908	1269	58	544	348	196	36
	Union Territories	244	298	59^		38	68	*	*	8	11	2^	
	Total	**189765**	**157411**	**43736**	**23**	**31074**	**24855**	**8764**	**28**	**7756**	**5335**	**2865**	**37**

Source: Rural Health Statistics 2018-19

Note: The colour scheme represents a range, with dark red representing worst health indictors in each column and dark green the best in each column, ^ The difference of 'Required' and 'In position' of UTs indicate surplus. However, there is a shortfall of 22 sub centres in Delhi and 37 in Puducherry. Similarly, there is a shortfall of 1CHC in Delhi in 1 in Puducherry

Number of Doctors in India

Annex 9.4
(para: 9.15)

States	Total allopathic doctors*	Government allopathic doctors	AYUSH registered practitioners #	No. of doctors at PHCs ^	Population/ allopathic doctor	Population/ AYUSH practitioner	Population/ government doctor	Population/ PHC doctor
Andhra Pradesh	100587	5114	21993	2045	491	2246	9657	24150
Arunachal Pradesh	973	549	393	125	1422	3522	2521	11072
Assam	23804	6082	2178	1376	1311	14328	5131	22679
Bihar	40649	2792	136470	1786	2561	763	37285	58286
Chhattisgarh	8771	1626	5607	359	2912	4556	15710	71156
Goa	3840	644	1382	56	380	1056	2266	26054
Gujarat	66944	5475	49973	1321	903	1209	11039	45753
Haryana	5717	2618	14121	491	4434	1795	9683	51631
Himachal Pradesh	3054	1517	11620	622	2248	591	4525	11037
Jammu and Kashmir	15038	4058	6129	694	834	2046	3090	18071
Jharkhand	5764	1793	811	340	5723	40676	18398	97024
Karnataka	120261	5046	48326	2136	508	1264	12108	28603
Kerala	59353	5239	41606	1169	563	803	6376	28577
Madhya Pradesh	38180	4588	67063	1112	1902	1083	15830	65312
Maharashtra	173384	6981	153147	2929	648	734	16097	38366
Manipur	NA	1099	NA	194	NA	NA	2338	13247
Meghalaya	NA	585	368	130	NA	8063	5072	22823
Mizoram	74	437	NA	59	14824	NA	2510	18593
Nagaland	116	332	143	118	17060	13839	5961	16771
Odisha	22521	4300	14725	917	1864	2851	9761	45773
Punjab	48351	3331	15996	480	574	1734	8329	57798
Rajasthan	43388	7227	18816	2396	1580	3643	9485	28609
Sikkim	1405	268	NA	24	435	NA	2280	25458
Tamil Nadu	133918	7233	18767	2780	539	3844	9975	25952
Telangana	4942	4123	20926	1066	7121	1682	8536	33015
Tripura	1718	1256	447	119	2139	8219	2925	30874
Uttar Pradesh	77549	10754	85489	1344	2577	2337	18580	148670
Uttarakhand	8309	1344	4073	241	1214	2476	7504	41851
West Bengal	72016	8829	46949	1016	1267	1944	10338	89839
Union territories	21394	11517	12361	122				
Medical Council of India	52666							
Total	**1154686**	**116757**	**799879**	**27567**				

Source: National Health Statistics 2019, Census 2011

* Possessing recognised medical qualifications (under Indian Medical Council Act) registered with State Medical Councils/Medical Council of India from the year up to 2010 to 2018, # (Unani, Ayurveda, Siddha, Naturopathy, Homeopathy Doctors) in India as on 1 January 2018; ^ as on 31 March 2018; NA: not available

Note 1: The colour scheme represents a range, with dark red representing worst health indictors in each column and dark green the best in each column,

Note 2: Allopathic doctors are registered with State Medical Councils/Medical Council of India from the year upto 2010 to 2018 (As on 31 December of concerned year). In Nagaland, the registrations are captured from 2015, in Mizoram from 2014, in Tripura from 2013, in Telangana from 2015, in Haryana captured till 2011, all other States are captured till 2018

Total Number of Nurses and Pharmacists in India

Annex 9.5
(para: 9.15)

State	Total No. of Registered Nurses in India as on 31.12.2017			Total nurses	Pharmacists as on 27.03.2019	Population per Nurse	Population per Pharmacist
	ANM	RN and RM	LHV				
Andhra Pradesh	138435	232621	2480	373536	50247	132	983
Arunachal Pradesh	971	938	15	1924	279	719	4961
Assam	27925	22388	353	50666	15462	616	2018
Bihar	8624	9413	511	18548	24341	5612	4277
Chhattisgarh	13329	13048	1352	27729	9716	921	2629
Goa	NA	NA	NA	NA	3539	NA	412
Gujarat	45908	114284	NA	160192	66237	377	912
Haryana	24675	28356	694	53725	32744	472	774
Himachal Pradesh	11673	20934	500	33107	9369	207	733
Jharkhand	4755	3310	142	8207	2337	4019	14116
Karnataka	54039	231643	6840	292522	57648	209	1060
Kerala	30530	261951	8507	300988	64223	111	520
Madhya Pradesh	39563	118793	1731	160087	54181	454	1340
Maharashtra	65544	128776	594	194914	233322	577	482
Manipur	3621	7835	NA	11456	1273	224	2019
Meghalaya	1715	5540	198	7453	899	398	3300
Mizoram	2157	3634	NA	5791	1313	189	835
Nagaland	NA	NA	NA	NA	1553	NA	1274
Odisha	62159	75575	238	137972	32386	304	1296
Punjab	23029	76680	2584	102293	47570	271	583
Rajasthan	108688	200171	2732	311591	51054	220	1343
Sikkim	39	283	N/A	322	281	1898	2174
Tamil Nadu	57839	277107	11219	346165	72241	208	999
Telangana	2762	9397	NA	12159	64881	2894	542
Tripura	2232	4140	148	6520	4747	563	774
Uttar Pradesh	60258	74777	2763	137798	84300	1450	2370
Uttarakhand	2401	2613	14	5028	16148	2006	625
West Bengal	63731	63197	12854	139782	89630	653	1018
Union Territories	4325	61575	NA	65900	33301		
Total	**860927**	**2048979**	**56469**	**2966375**	**1125222**		

Source: National Health Statistics 2019, Census 2011
Note: ANM – auxiliary nurse midwife; RN/RM – registered nurse/registered midwife; LHV – lady health visitor; NA : not available
The colour scheme represents a range, with dark red representing worst health indictors in each column and dark green the best in each column

Annex 9.6
(para: 9.15)

Shortfall in Human Resource in Government Health Facilities (as per the memorandum received from MoHFW)

State	Shortfall of human resource in existing facilities	Shortfall of human resource in new facilities (if built as per population norms)	Total human resource gap
Andhra Pradesh	7596	14543	22139
Arunachal Pradesh	7866	1204	9070
Assam	12513	11054	23567
Bihar	24078	91688	115766
Chhattisgarh	9356	7329	16685
Goa	93	172	265
Gujarat	15913	9144	25057
Haryana	5214	8066	13280
Himachal Pradesh	4794	1341	6135
Jharkhand	7185	26701	33886
Karnataka	13845	14833	28678
Kerala	12489	4298	16787
Madhya Pradesh	29745	53536	83281
Maharashtra	20728	41169	61897
Manipur	2272	1659	3931
Meghalaya	1726	1913	3639
Mizoram	1306	283	1589
Nagaland	3600	238	3838
Odisha	17410	10660	28070
Punjab	3842	9104	12946
Rajasthan	11784	12492	24276
Sikkim	97	160	257
Tamil Nadu	11954	7256	19210
Telangana	49	14863	19818
Tripura	723	1129	1852
Uttar Pradesh	67821	159286	227107
Uttarakhand	5357	1591	6948
West Bengal	2435	48509	50944
Union territories	16718	2509	19227
Total	**323415**	**556728**	**8880143**

Annex 9.7
(para: 9.33)

Recommendations Received from Various Stakeholders

The recommendations received from all stakeholders over the term of the FC-XV have been divided into three categories: general, health infrastructure and service delivery and health personnel/medical education. These are summarised below.

I. **General**

i. The combined expenditure on health by the MoHFW and States together is 0.96 per cent of GDP in 2018-19. Public health expenditure should be increased to 2.5 per cent of GDP, in a progressive manner by 2025. (Also recommended by the National Health Policy-2017)

ii. States currently spend 5.18 per cent of their total expenditure on health on an average. Health spending by States should be increased to more than 8 per cent of their budget. (Also recommended by National Health Policy-2017)

iii. Primary health care should be the topmost fundamental commitment of each and every State. Expenditure on primary health currently is 53 per cent of total expenditure on health. This should be increased to two-thirds of total health expenditure. Primary care level can potentially deal with 90 per cent of healthcare demands. Investment in primary health care, including prevention and health promotion, provides better health and developmental outcomes at a much lower cost – it helps to reduce the need for costlier, complex care by preventing illness and promoting general health. (Also recommended by National Health Policy-2017)

iv. Given the inter-State disparity in the availability of medical doctors, it is essential to build an All India Medical Service. For this purpose, the UPSC would need to do annual recruitments, based upon the State-wise requisitions from State Government.

v. Public health and hospitals may be brought under the Concurrent list of the Seventh Schedule of the Constitution from the existing assignment under State list.

vi. Right to health may be declared as fundamental right.

vii. To ensure better quality of spending, (a) there is a need for public financial management reforms to improve budget execution; (b) resource allocation formulas from States to districts should reflect population need (mortality/morbidity/equity) rather than historical norms; (c) fragmentation of health protection schemes should be reduced; and (d) there should be a gradual shift to demand-side financing modalities.

viii. There is also need for renewed focus on equity and need. For example, the NHM should be related to per capita spending on health. Similarly, spending per beneficiary must increase in the poorer States. Needs-based transfer formulas for health should be carefully designed. Also, a separate health equalisation pool is needed. Explicit accountability frameworks, including target results, need to be explored.

ix. Greater attention to resource allocation is required within States. Currently, major urban areas are under-equipped to address urban health challenges. Also, within States, there are weak links between needs of districts (mortality, poverty) and allocations to them.

x. Institutions like ICMR, National Centre for Disease Control and National Disaster Management Authority should be strengthened for disease preparedness, diagnostics, investigation, response and population health. Institutional reforms and innovations should be promoted in vertical disease control programmes like TB, HIV, vector-borne disease. Local governments should also be strengthened in terms of resources and capacity building so that they can play an incremental role in health care delivery.

xi. More investment is needed in health research.

II. **Health Infrastructure and service delivery**

I. In the coming five years, 3,000 to 5,000 200-bedded hospitals may be created close to the community. The participation of the private sector is necessary for this. The Government can work out modalities of incentivising private sector investment in order to hospitals may develop this infrastructure in tier II and tier III cities.

ii. Data availability of routine medical activities like collection of blood, blood transfusion, surgeries conducted, dialysis done on daily basis etc., across CHCs should be ensured.

iii. Service delivery innovations need to be encouraged. Some of these could be: (a) introduction of technology solutions; (b) allowing contracted private providers to run PHCs in urban areas; (c) encouraging public-private partnerships in areas of digital technology, data science, bottom of pyramid models; and (d) community mobilisation.

iv. Core public health functions need to be strengthened. Production of global public goods like new vaccines, medicines and diagnostics need to be enhanced. Private sector can be engaged for TB diagnosis and treatment and performance-based incentives offered to States and districts through TB Performance Index.

v. A one-size fits all formula is not feasible in-service delivery. Service delivery should rely on a robust public/private mix.

vi. The Government of India can be an enabler of an 'open source' approach to promote service delivery reforms. For example, financing via CSS that allows flexibility in implementation and course-correction, setting accountability mechanisms with States linked to central schemes and promoting knowledge transfer platforms may be adopted.

vii. Strengthening of surveillance and district level capacity should be done to identify and respond to future epidemics. The following measures may be taken:

a. Roll-out targeted investments to enhance integrated public health laboratory infrastructure and functions in States where capacities are weak.

b. Develop and deploy district surveillance teams with core competencies in integrated disease surveillance across different States and at the Union level to enhance the analytical capacity for early and appropriate response (Epidemic Intelligence Service).

c. Develop and roll-out a real time surveillance and reporting system for human and animal health surveillance as most future outbreaks will be zoonotic.

d. Strengthen inter-agency coordination for disease preparedness and response.

III. Health Personnel/Medical Education

III. A Doctors

i. Various measures should be taken to strengthen human resource for health, namely (a) restructure the MBBS curriculum to make it competency based; (b) a certain degree of specialisation may be included in the MBBS curriculum and (c) MCI/NMC can be asked to develop small courses on wellness clinic, basic surgical procedures, anaesthesia, obstetrics and gynaecology, eye, ENT etc. for MBBS doctors and encourage AYUSH as an elective subject for medicine undergraduates.

ii. Undergraduate medical teaching should only be imparted in medical colleges with residential campuses with amenities for student development. It is also clarified that this is not required for post graduate medical teaching, which can be imparted in public and private sector hospitals not having an attached medical college and residential campus.

iii. Private medical colleges and hospitals having DNB programmes may be given tax incentives under Section 80JJA of the Income Tax Act or any other tax incentives as deemed appropriate, which should be linked to the outcome.

iv. There is need to separate medical training for those who will provide healthcare services from for those who will provide medical teaching. Service providers can also assume the role of medical teachers but in a cadre separate from medical college teachers. Those who desire to acquire academic designations have to demonstrate required research experience and publications as mandated by the MCI. The enabling provisions for this may be explored by MCI/ NMC. Faculty in medical colleges should not be allowed to do private practice as it compromises teaching and research. They should be compensated adequately. Issues like optimum compensation, working conditions, promotional avenues, transfer policies etc. have to be clearly laid out and a high-level committee may be constituted to address these issues.

v. There should be one common exit examination for undergraduate medical students qualifying from both public sector and private sector medical colleges. The performance of these students in the examination will determine affiliation and number of seats for undergraduate medical teaching in the respective medical colleges in the coming years, thereby improving the quality of medical education. Specialty boards may be constituted under the MCI/NMC, which will have representation of eminent professionals from the concerned field and various members from well-established and recognised scientific societies.

vi. Gaps in human resource for health can be filled with multi-layered and multi-skilled human resources in allied healthcare manpower, nursing, and employed community workers. The shortage of MBBS doctors and specialists should be addressed. The government should, by 2025, be able to strengthen medical infrastructure so that each medicine undergraduate can have the option of pursuing post graduate medical education. It is strongly recommended that regulatory bodies namely MCI/NMC/DNB should restore the post graduate diplomas in specific areas such as paediatrics, obstetrics and gynaecology, anaesthesia, orthopaedics, family medicine, ophthalmology etc. and a majority of the seat share should go to in-service candidates. Also, family medicine physicians are required in India. In addition, the Government should enhance the involvement of private practitioners in public sector hospitals for healthcare delivery.

vii. The asymmetric distribution of medical college needs to be corrected as most of these are situated in western and southern part of India. All the public health facilities including district hospitals, private sector facilities and corporate hospitals should be utilised for starting specialists DNB courses which will not only enhance the service provisioning but will also ensure the availability of trained human resource.

III. B Allied Healthcare Professionals

i. The allied healthcare professionals should be accredited with Skill India.

ii. There is need for revamping and reviewing the functioning of the Nursing Council through Indian Nursing Council Act, 1947. It is recommended that nursing college teachers should be involved in hospital services rather than being limited to nursing colleges. There is need for nursing professionals to play a larger role and the concept of nurse practitioner, physician assistant, nurse anaesthetist etc. should be introduced for better utilisation of nursing professionals.

iii. **The Allied and Healthcare Professions Bill, 2018** was introduced in Rajya Sabha and was referred to Standing Committee in 2019. The Bill aims to establish an overarching regulatory system to regulate and standardise the education and practice of allied and healthcare professionals. It specifies certain recognised categories of allied and healthcare professions like life science professionals, surgical and anaesthesia related

technology professionals, trauma and burn care professionals, physiotherapists and nutrition science professionals. To bridge the healthcare gap and give further boost to medical tourism and employment, India needs to start various short-term courses for allied healthcare professionals. There is need for early passage of this Bill to facilitate the growth of allied healthcare.

Annex 9.8
(para: 9.55)

Grants for Critical Care Hospitals

State	100 bedded critical care hospitals (number)	50 bedded critical care hospitals (number)	Grants. in Rs crore					
			2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	8	0	42	85	85	85	127	424
Arunachal Pradesh	1	0	5	11	11	11	16	54
Assam	3	29	97	194	194	194	291	970
Bihar	24	12	161	322	322	322	482	1609
Chhattisgarh	2	4	22	44	44	44	65	219
Goa	0	1	3	6	6	6	8	29
Gujarat	10	0	53	106	106	106	159	530
Haryana	0	9	25	50	50	50	76	251
Himachal Pradesh	1	3	14	27	27	27	41	136
Jharkhand	6	7	51	103	103	103	154	514
Karnataka	10	2	59	117	117	117	176	586
Kerala	5	0	27	53	53	53	80	266
Madhya Pradesh	10	19	106	212	212	212	319	1061
Maharashtra	21	12	145	290	290	290	435	1450
Manipur	1	1	8	16	16	16	24	80
Meghalaya	1	1	8	16	16	16	24	80
Mizoram	1	0	5	11	11	11	16	54
Nagaland	1	0	5	11	11	11	16	54
Odisha	5	6	43	87	87	87	130	434
Punjab	5	4	38	75	75	75	113	376
Rajasthan	11	0	58	117	117	117	175	584
Sikkim	1	0	5	11	11	11	16	54
Tamil Nadu	10	0	53	106	106	106	159	530
Telangana	3	4	27	54	54	54	81	270
Tripura	1	2	11	22	22	22	33	110
Uttar Pradesh	46	27	319	639	639	639	958	3194
Uttarakhand	1	9	31	61	61	61	92	306
West Bengal	17	5	104	208	208	208	312	1040
All States	**205**	**157**	**1525**	**3054**	**3054**	**3054**	**4578**	**15265**

Annex 9.9
(para: 9.57)

Physical Targets and Grants for District Integrated Public Health Laboratories

State	Total labs to be established	Physical targets				Grants in Rs. crore					
		2021-22	2022-23	2023-24	2024-25	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	13	1	4	6	2	1	2	4	3	0	10
Arunachal Pradesh	22	2	6	9	5	0	1	2	2	0	5
Assam	33	4	10	13	6	1	2	2	2	0	7
Bihar	38	4	12	15	7	2	7	11	10	0	30
Chhattisgarh	28	4	9	11	4	2	6	9	7	0	24
Goa	2	0	0	0	2	0	0	0	1	0	1
Gujarat	33	4	10	13	6	2	6	10	9	0	27
Haryana	22	2	6	9	5	1	4	6	6	0	17
Himachal Pradesh	12	1	4	5	2	0	1	1	1	0	3
Jharkhand	24	2	7	10	5	1	3	6	5	0	15
Karnataka	30	4	10	12	4	2	6	9	8	0	25
Kerala	14	2	5	6	1	1	3	5	3	0	12
Madhya Pradesh	55	6	17	23	9	3	10	17	14	0	44
Maharashtra	36	4	11	14	7	2	7	11	10	0	30
Manipur	15	2	5	6	2	0	1	1	1	0	3
Meghalaya	10	1	4	4	1	0	1	1	1	0	3
Mizoram	10	1	4	4	1	0	1	1	1	0	3
Nagaland	11	1	4	4	2	0	1	1	1	0	3
Odisha	30	4	10	12	4	2	6	9	8	0	25
Punjab	22	2	6	9	5	1	4	6	6	0	17
Rajasthan	33	4	10	13	6	2	6	10	9	0	27
Sikkim	3	0	1	1	1	0	0	0	0	0	0
Tamil Nadu	38	4	12	15	7	2	7	11	10	0	30
Telangana	33	4	10	13	6	2	6	10	9	0	27
Tripura	7	0	2	3	2	0	0	1	1	0	2
Uttar Pradesh	75	7	22	31	15	4	13	22	20	0	59
Uttarakhand	13	1	4	6	2	0	1	1	1	0	3
West Bengal	23	2	7	10	4	1	4	7	5	0	17
All States	**685**	**73**	**212**	**277**	**123**	**32**	109	**174**	**154**	**0**	**469**

Assumptions

- Approximately 10 per cent, 30 per cent, 40 per cent and 20 per cent of the total District Integrated Public Health Laboratories shall be made functional in the first, second, third and fourth year respectively.
- Capital cost is worked out at Rs. 1.55 crore per laboratory for 380 laboratories; Rs. 1.25 crore per laboratory for 120 laboratories and Rs. 1 crore per laboratory for 230 laboratories.
- Recurring cost for maintenance of 730 laboratories is budgeted at 0 per cent, 10 per cent, 40 per cent and 80 per cent for the first, second, third and fourth year respectively for support to States for human resources and other operational costs. The 730 laboratories are in both the States and Union Territories. However, the Commission has provided grants for only 685 laboratories in States.

Annex 9.10
(para: 9.60)

Grants for Training of Allied Healthcare Workers

(Rs. crore)

State	No. of facilities	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	26	78	65	65	65	65	338
Arunachal Pradesh	15	45	5	5	5	5	65
Assam	33	99	232	232	232	232	1027
Bihar	43	129	326	326	326	326	1433
Chhattisgarh	33	99	35	35	35	35	239
Goa	3	9	2	2	2	2	17
Gujarat	37	111	81	81	81	81	435
Haryana	28	84	38	38	38	38	236
Himachal Pradesh	15	45	25	25	25	25	145
Jharkhand	23	69	84	84	84	84	405
Karnataka	42	126	92	92	92	92	494
Kerala	54	162	38	38	38	38	314
Madhya Pradesh	51	153	172	172	172	172	841
Maharashtra	72	216	234	234	234	234	1152
Manipur	9	27	18	18	18	18	99
Meghalaya	13	39	14	14	14	14	95
Mizoram	9	27	4	4	4	4	43
Nagaland	11	33	7	7	7	7	61
Odisha	37	111	69	69	69	69	387
Punjab	29	87	59	59	59	59	323
Rajasthan	32	96	89	89	89	89	452
Sikkim	4	12	2	2	2	2	20
Tamil Nadu	32	96	82	82	82	82	424
Telangana	15	45	44	44	44	44	221
Tripura	9	27	20	20	20	20	107
Uttar Pradesh	174	522	521	521	521	521	2606
Uttarakhand	20	60	66	66	66	66	324
West Bengal	55	165	207	207	207	207	993
All States	**924**	**2772**	**2631**	**2631**	**2631**	**2631**	**13296**

Annex 9.11
(para: 9.64)

Grants for DNB Courses

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	18	16	19	26	26	105
Arunachal Pradesh	2	1	2	2	2	9
Assam	23	25	30	40	39	157
Bihar	25	23	28	38	37	151
Chhattisgarh	16	16	20	27	27	106
Goa	2	1	2	2	2	9
Gujarat	12	12	15	20	19	78
Haryana	32	29	35	48	47	191
Himachal Pradesh	12	15	18	24	24	93
Jharkhand	16	12	14	19	19	80
Karnataka	19	20	24	33	32	128
Kerala	2	2	3	4	4	15
Madhya Pradesh	54	62	76	102	100	394
Maharashtra	12	12	15	20	19	78
Manipur	2	1	2	2	2	9
Meghalaya	2	1	2	2	2	9
Mizoram	2	2	3	4	4	15
Nagaland	7	5	6	9	8	35
Odisha	18	18	22	29	29	116
Punjab	34	28	33	46	45	186
Rajasthan	19	19	23	31	31	123
Sikkim	5	4	5	6	6	26
Tamil Nadu	4	3	3	4	4	18
Telangana	16	16	20	27	27	106
Tripura	9	7	8	11	11	46
Uttar Pradesh	50	44	53	73	71	291
Uttarakhand	18	14	17	23	23	95
West Bengal	7	9	11	16	13	56
All States	**438**	**417**	**509**	**688**	**673**	**2725**

Annex 10.1

(para 10.36)

A Subset of Performance Grading Index (PGI): Indicators for Incentivising States on Basis of Education

Indicator No	Question Description	Weight
1	Average Language score in Class 3 - Government and aided schools	10
2	Average Mathematics score in Class 3 - Government and aided schools	10
3	Average Language score in Class 5 - Government and aided schools	10
4	Average Mathematics score in Class 5 - Government and aided schools	10
5	Average Language score in Class 8 - Government and aided schools	10
6	Average Mathematics score in Class 8 - Government and aided schools	10
	Sub-Total: Learning Outcome	**60**
7	Difference between SCs and General Category's Transition Rate from Upper Primary to Secondary level	10
8	Difference between STs and General Category's Transition Rate from Upper Primary to Secondary level	10
9	Difference between girls and boys Transition Rate from Upper Primary to Secondary level	10
10	Difference between Minorities and General Category's Transition Rate from Upper Primary to Secondary level	10
	Sub-Total: Equity Outcome	**40**
	Total	**100**

Note: This index suggested by us is indicative and may be revised and finalised by MoE on basis of broad principles mentioned by us.

Annex 10.2
(para 10.43)

Grants for Higher Education

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	46	48	51	53	52	250
Arunachal Pradesh	9	9	10	10	10	48
Assam	32	33	35	36	35	171
Bihar	88	92	99	103	101	483
Chhattisgarh	27	28	30	31	30	146
Goa	10	10	10	10	10	50
Gujarat	55	57	61	63	62	298
Haryana	27	28	30	31	30	146
Himachal Pradesh	13	14	14	15	14	70
Jharkhand	33	34	37	38	37	179
Karnataka	55	57	61	64	62	299
Kerala	34	35	37	38	37	181
Madhya Pradesh	64	67	72	74	72	349
Maharashtra	95	99	107	111	108	520
Manipur	10	11	11	11	11	54
Meghalaya	10	11	11	11	11	54
Mizoram	9	9	10	10	10	48
Nagaland	10	10	10	11	10	51
Odisha	40	42	45	46	45	218
Punjab	29	30	32	33	32	156
Rajasthan	61	63	68	71	69	332
Sikkim	9	9	9	9	9	45
Tamil Nadu	64	66	71	74	72	347
Telangana	35	36	39	40	39	189
Tripura	11	11	11	11	11	55
Uttar Pradesh	163	170	183	191	186	893
Uttarakhand	16	16	17	17	17	83
West Bengal	78	82	88	91	89	428
All States	**1133**	**1177**	**1259**	**1303**	**1271**	**6143**

Annex 10.3
(para 10.63)

Methodology for Estimating Performance-based Reward

The total amount of performance-based grant allocated for each State is presented in Annex 10.4. Each of the four performance indicators will be allocated equal share (25 per cent) in the total performance grant. The actual grant will be based on compliance and achievements in respect of four parameters presented below.

1. Model agricultural land lease law

If a State enacts and notifies a model agricultural land lease law and undertakes modernisation of land records, it gets 25 per cent of the total performance based grant for agriculture once in the five years of the award period as each of the four parameters is given equal score.

2. Sustainable and efficient use of water

This goal will be based on change in groundwater table in year T as compared to the average of preceding decade. This will capture the effect of power tariff, crop pattern, irrigation technology and water conservation measures. The data on pre monsoon and post monsoon groundwater level in all the States is compiled by the Central Ground Water Board (CGWB) based on the water level in observation wells of the Board and State Governments. The CGWB also compiles and reports data on the distribution of observation wells in each State, according to the change in the water table. States should be given one year's lead time to take the required steps to earn the performance incentive. Thus, the total amount of incentive earmarked for sustainable water use to a State should be distributed over four years of our award period from 2022-23 to 2025-26 in equal amounts. Based on this, the following criterion is used for the distribution of incentive to States:

PISWUt = (1/4th of TPISWU)*(1–Share of wells which showed decline in water table, pre monsoon, in year t compared to mean level of previous decade).

Where: PISWUt is performance incentive for sustainable water use in year t=2022-23 to 2025-26.

TPISWU is total performance incentive for sustainable water use for the State.

3. Promotion of agricultural exports

Export of agricultural commodities is assigned total weight of 25 per cent. This will be linked to doubling of agricultural exports during the five-year award period, taking 2019-20 as the base year.

Incentives for exports in the award period will be based on increase in export measured in US$ over the base year of 2019-20. A 1 per cent increase in exports will result in 1 per cent of export incentive being paid and 100 per cent or more increase will lead to 100 per cent payment of the export incentive. The incentive will be linked to the net increase in year t over the base year. If a State achieves 5 per cent increase in Year 1, 8 per cent increase in Year 2, 20 per cent increase in Year 3, 50 per cent increase in Year 4 and 90 per cent increase in Year 5 over the base year, the State will be eligible for 5 per cent of incentive in the first year, 3 per cent in the second year, 12 per cent in the third year, 30 per cent in the fourth year and 40 per cent in the fifth year. The maximum increase is 100 per cent in five years.

4. Atmanirbhar Bharat

Increase in the production of pulses, oilseeds and forestry/agroforestry for import substitution aimed at improving self-sufficiency in these items are selected as indicators to promote Atmanirbhar Bharat. This is assigned a weight of 25 per cent. This reward can be given on an annual basis, based on growth in the sum of output of the three commodities in value terms at constant prices during the award period compared to the baseline production in 2019-20. A 1 per cent growth in output will get 1 per cent of the incentive and 100 per cent or more increase over the base period will fetch the full amount of the incentive. The annual incentive will be worked out as indicated for exports above.

Annex 10.4

(para 10.64)

Distribution of Agriculture Performance Incentive Grant to States

States	Share of States (in percentage)	Performance based Incentive (Rs. Crore)
Andhra Pradesh	9.35	4209
Arunachal Pradesh	0.24	107
Assam	1.66	748
Bihar	3.82	1720
Chhattisgarh	2.04	917
Goa	0.14	63
Gujarat	6.26	2818
Haryana	3.77	1696
Himachal Pradesh	0.55	247
Jharkhand	1.50	677
Karnataka	5.09	2290
Kerala	2.41	1086
Madhya Pradesh	10.19	4587
Maharashtra	7.30	3285
Manipur	0.22	101
Meghalaya	0.19	86
Mizoram	0.19	86
Nagaland	0.28	124
Odisha	2.82	1271
Punjab	4.37	1966
Rajasthan	7.34	3301
Sikkim	0.09	41
Tamil Nadu	5.85	2632
Telangana	3.70	1665
Tripura	0.51	228
Uttar Pradesh	11.85	5334
Uttarakhand	0.62	277
West Bengal	7.64	3438
All States	**100***	**45000**

Note: 1. Share of States is derived from its share in all States' agriculture GSVA which is average of actuals for 2018-19 and our projections of 2019-20.
2. *Figures may not add up to 100 because of rounding off.

Annexure 10.5

(para 10.72)

Grants for Maintenance of PMGSY Roads

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	58	77	75	60	74	344
Arunachal Pradesh	95	161	322	336	594	1508
Assam	372	406	473	638	1214	3103
Bihar	267	279	413	397	338	1694
Chhattisgarh	174	166	150	197	224	911
Goa	0	0	0	0	0	0
Gujarat	120	62	50	48	50	330
Haryana	28	35	21	22	22	128
Himachal Pradesh	246	284	426	523	743	2222
Jharkhand	118	120	201	272	255	966
Karnataka	69	91	94	70	74	398
Kerala	18	24	23	27	21	113
Madhya Pradesh	359	398	440	481	431	2109
Maharashtra	93	114	160	121	125	613
Manipur	113	146	303	239	392	1193
Meghalaya	34	60	101	90	259	544
Mizoram	44	65	100	107	230	546
Nagaland	60	56	97	66	93	372
Odisha	275	302	404	492	476	1949
Punjab	40	49	48	61	32	230
Rajasthan	293	282	339	372	332	1618
Sikkim	60	93	86	118	127	484
Tamil Nadu	95	73	92	127	119	506
Telangana	37	47	52	53	66	255
Tripura	73	95	110	108	116	502
Uttar Pradesh	250	285	301	361	268	1465
Uttarakhand	187	297	467	510	861	2322
West Bengal	153	182	217	255	307	1114
All States	**3731**	**4249**	**5565**	**6151**	**7843**	**27539**

Annex 10.6

(para 10.76)

Grants for Judiciary

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	59	59	59	59	59	295
Arunachal Pradesh	4	4	4	4	4	20
Assam	122	122	122	122	122	610
Bihar	192	192	192	192	192	960
Chhattisgarh	40	40	40	40	40	200
Goa	3	3	3	3	3	15
Gujarat	62	62	62	62	62	310
Haryana	60	60	60	60	60	300
Himachal Pradesh	10	10	10	10	10	50
Jharkhand	55	55	55	55	55	275
Karnataka	59	59	59	59	59	295
Kerala	81	81	81	81	81	405
Madhya Pradesh	138	138	138	138	138	690
Maharashtra	248	248	248	248	248	1240
Manipur	6	6	6	6	6	30
Meghalaya	6	6	6	6	6	30
Mizoram	3	3	3	3	3	15
Nagaland	2	2	2	2	2	10
Odisha	85	85	85	85	85	425
Punjab	29	29	29	29	29	145
Rajasthan	92	92	92	92	92	460
Sikkim	1	1	1	1	1	5
Tamil Nadu	50	50	50	50	50	250
Telangana	49	49	49	49	49	245
Tripura	17	17	17	17	17	85
Uttar Pradesh	365	365	365	365	365	1825
Uttarakhand	14	14	14	14	14	70
West Bengal	233	233	233	233	233	1165
All States	**2085**	**2085**	**2085**	**2085**	**2085**	**10425**

Annex 10.7

(para 10.79)

Grants Proposed for Statistics - Details of Variable and Fixed Components

Group	S.No	State	No. of districts	Average score	Per district variable allocation based on level of statistical capacity (Rs. crore)	Per district fixed allocation for basic statistical operations (Rs. crore)	Total allocation (Rs. crore)
I	1	Chhattisgarh	27	0.28	1	1	54
	2	Tripura	8	0.31	1	1	17
	3	Arunachal Pradesh	25	0.32	1	1	49
	4	Goa	2	0.33	1	1	5
	5	Punjab	22	0.33	1	1	43
	6	Nagaland	11	0.33	1	1	23
	7	Madhya Pradesh	51	0.38	1	1	102
	8	Uttarakhand	13	0.38	1	1	25
	9	Jharkhand	24	0.42	1	1	48
	10	Meghalaya	11	0.42	1	1	23
	11	Bihar	38	0.47	1	1	77
II	12	Assam	33	0.53	0.75	1	57
	13	Haryana	22	0.58	0.75	1	40
	14	Himachal Pradesh	12	0.58	0.75	1	21
	15	Mizoram	8	0.58	0.75	1	14
	16	Sikkim	4	0.58	0.75	1	7
	17	Manipur	16	0.64	0.75	1	28
	18	Maharashtra	36	0.68	0.75	1	63
	19	Rajasthan	33	0.68	0.75	1	57
III	20	Uttar Pradesh	75	0.73	0.5	1	114
	21	Karnataka	30	0.78	0.5	1	45
	22	West Bengal	23	0.79	0.5	1	35
	23	Odisha	30	0.8	0.5	1	45
	24	Andhra Pradesh	13	0.83	0.5	1	19
	25	Gujarat	33	0.83	0.5	1	51
	26	Tamil Nadu	32	0.85	0.5	1	47
	27	Kerala	14	0.88	0.5	1	20
	28	Telangana	31	0.88	0.5	1	46
		All States	**677**		**21.5**	**28**	**1175**

Note: Total allocations per State approximated to the nearest decimal.

Annex 10.8
(para 10.82)

Grants for Statistics

(Rs. crore)

State	2021-22	2022-23	2023-24	2024-25	2025-26	2021-26
Andhra Pradesh	0	13	2	2	2	19
Arunachal Pradesh	0	25	8	8	8	49
Assam	0	33	8	8	8	57
Bihar	0	38	13	13	13	77
Chhattisgarh	0	27	9	9	9	54
Goa	0	2	1	1	1	5
Gujarat	0	33	6	6	6	51
Haryana	0	22	6	6	6	40
Himachal Pradesh	0	12	3	3	3	21
Jharkhand	0	24	8	8	8	48
Karnataka	0	30	5	5	5	45
Kerala	0	14	2	2	2	20
Madhya Pradesh	0	51	17	17	17	102
Maharashtra	0	36	9	9	9	63
Manipur	0	16	4	4	4	28
Meghalaya	0	11	4	4	4	23
Mizoram	0	8	2	2	2	14
Nagaland	0	11	4	4	4	23
Odisha	0	30	5	5	5	45
Punjab	0	22	7	7	7	43
Rajasthan	0	33	8	8	8	57
Sikkim	0	4	1	1	1	7
Tamil Nadu	0	32	5	5	5	47
Telangana	0	31	5	5	5	46
Tripura	0	8	3	3	3	17
Uttar Pradesh	0	75	13	13	13	114
Uttarakhand	0	13	4	4	4	25
West Bengal	0	23	4	4	4	35
All States	**0**	**677**	**166**	**166**	**166**	**1175**

Annex 10.9
(para 10.118)

Summary of State-specific Grants

(Rs. crore)

S. no.	Purpose	Recommended amount
1)	**Andhra Pradesh**	
1	Development of core infrastructure (roads, water supply, power distribution, underground drainage and essential buildings) in Vishakhapatnam to develop it as economic hub to overcome loss of Hyderabad	1400
2	Water-grid projects for providing safe potable water in silicon, fluorosis and uranium affected areas	900
	Sub-total	**2300**
2)	**Arunachal Pradesh**	
1	Hydro power	355
2	Preservation of Tawang Monastery	45
	Sub-total	**400**
3)	**Assam**	
1	Majuli: Construction of new embankment cum road around the island	1075
2	Comprehensive development of Kamakhya Mandir complex	300
	Sub-total	**1375**
4)	**Bihar**	
1	Protection of archaeological sites	200
2	University of Art in Madhubani	300
3	Setting up a digital university in Bihta (Patna)	175
4	Revamping health infrastructure - upgradation of Patna Medical College	1500
5	District Development Centre at Banka	22
6	Museum of Silk Artisans in Bhagalpur	10
7	Revival of Bhagalpur Silk Industry by rejuvenating skills of artisans	50
8	Support to Centre for Economic Policy and Public Finance under the Asian Development Research Institute, Patna	10
	Sub-total	**2267**
5)	**Chhattisgarh**	
1	Preservation and promotion of traditional crafts - Mati Kala Board	50
2	Aviation: Expansion of Swami Vivekanand Airport, Mana, Raipur	250
3	Dandakaranya circuit (Ram Van Gaman Path)	60
4	New capital development projects - solid waste management, conservation of water bodies, e bus- procurement, charging post, shelters, roads and bridges, tourism, water	1300
	Sub-total	**1660**

S. no.	Purpose	Recommended amount
6)	**Goa**	
1	Tourism (improving communication services; enhancing tourism infrastructure; establish ultra-modern waste treatment plant for beach cleaning purpose; tourist safety)	200
2	Climate change (alternate modes of power generation; solid waste management)	500
	Sub-total	**700**
7)	**Gujarat**	
1	Developmental intervention in border villages	200
2	Salinity ingress prevention schemes in coastal belt of Saurashtra and Kutch region	310
3	Development of desalination plant at various locations of Kutch and Saurashtra	2000
4	Conservation and development of arts, culture, tribal and coastal areas development	100
5	Conservation of Asiatic lion landscape	100
6	Setting up of Birsa Munda Tribal University	150
	Sub-total	**2860**
8)	**Haryana**	
1	Strengthen and upgrade health infrastructure	400
2	Medical education and research	300
3	Improved infrastructure and equipment for police force	100
4	Housing complexes for State employees including police and judicial officers	100
5	Digital and online education	70
6	Irrigation and Water Resources	350
7	Public health engineering	200
8	Public work	250
9	Tourism	
i	*Development of tourism infrastructure and restoration of historical places in the State including restoration of several forts*	*200*
ii	*Conservation and preservation of historical monuments: (a) Shyameshwar Talab – Charkhi Dadri, (b) Bhai ki Baoli, Kaithal, (c) Mukundpura Baori, Mahendergarh, and (d) Takht Baoli/ Mirza Ali Jaan ka Takht*	*30*
iii	*Conservation of Chui Mal Talab*	3
	Sub-total	**2003**

S. no.	Purpose	Recommended amount
9)	**Himachal Pradesh**	
1	Expansion and upgradation of Kangra Airport (Gaggal, Dharmashala)	400
2	Construction of Mandi airport (Nagchalla)	1000
3	Upgradation and development of Jawalamukhi	20
	Sub-total	**1420**
10)	**Jharkhand**	
1	Tourism, sports, arts and culture infrastructure (art and cultural building; tribal museum at Ranchi and Dumka; outdoor stadium at Mandar; big stadium at Kanke; sports university; etc.)	400
2	Energy (rooftop programme; solar pump; small hydro projects; strengthening of urban and rural electricity distribution infrastructure; etc.)	700
3	Development of tourist amenities for Deoghar Baidyanath Jyotirling and surrounding tourist circuit	200
	Sub-total	**1300**
11)	**Karnataka**	
1	Holistic improvement of water bodies	3000
2	Peripheral ring road to decongest Bengaluru	3000
	Sub-total	**6000**
12)	**Kerala**	
1	Waste disposal, cleaning of water bodies	450
2	Replanting of coconut	150
3	Forest conservation	500
	Sub-total	**1100**
13)	**Madhya Pradesh**	
1	Establishment of tourism, hospitality and skill university	55
2	Restoration of ancient heritage gardens	40
3	Basic amenities at heritage buildings, land banks and water sports venues	140
4	Upgradation and development of tourist infrastructure at existing/new places	150
5	Museum (construction and maintenance)	70
6	Conservation and development of monuments	110
7	Construction of archival building and conservation of documentary heritage	50
8	Construction of 33 new girls' education complex	250
9	Solar pump project	500

S. no.	Purpose	Recommended amount
10	Water supply from Chambal river to Gwalior city and Morena city	250
11	Gwalior-Shivpuri-Chanderi tourism and capacity building of traditional textile weavers of Chanderi	75
12	Repair, maintenance and development of Mahakaleshwar temple in Ujjain	75
	Sub-total	**1765**
14)	**Maharashtra**	
1	Preservation of cultural heritage	500
2	Conservation of forest and wildlife management	500
3	Development of Revas Reddy coastal highway	1250
4	Construction of new housing for police	500
	Sub-total	**2750**
15)	**Manipur**	
1	Housing complex for Ministers/MLAs	75
2	Housing complex at Imphal for officers and employees	210
3	Housing complex for officers and employees at district and sub-divisional offices in hill districts	130
4	Completion of Manipur Secretariat Complex	75
5	Setting up of Nursing Institute	15
6	Provision and improvement of sewerage, drainage, solid waste management and internal roads in six hill district headquarters - Churachandpur, Ukhrul, Senapati, Kangpokpi, Chandel and Tamenglong @ Rs. 50 crore each	300
7	Special improvement in Raj Bhavan	15
8	Construction of State guest house	80
	Sub-total	**900**
16)	**Meghalaya**	
1	**Transforming Shillong City in East Khasi Hills District into a world-class city**	
a	*Administrative city in New Shillong Township*	*250*
b	*New Assembly building in New Shillong Township*	*100*
c	*Water supply scheme for New Shillong Township*	*100*
d	*Walkways and covered pathways in Shillong City*	*50*
2	**Infrastructure for National Games, 2022**	
a	*Shillong integrated sports complex*	100
b	*Shillong Golf Club*	50

S. no.	Purpose	Recommended amount
c	*P. A. Sangma Stadium*	50
d	*Urban infrastructure development at Tura, West Garo Hills*	50
e	*Urban infrastructure development at Jowai, West Jaintia Hills*	50
	Sub-total	**800**
17)	**Mizoram**	
1	Horticulture	330
2	Tourism	200
3	Power and Electricity	170
	Sub-total	**700**
18)	**Nagaland**	
1	Civil aviation (small landing strips, one in each district)	90
2	Construction of check posts for entry/exit at Indo Myanmar border	25
3	Development of Nagaland coffee	150
4	New Raj Bhavan, Kohima	100
5	New High Court Complex, Kohima	100
6	Fire stations (one in each district)	60
	Sub-total	**525**
19)	**Odisha**	
1	Pilgrim facilitation in and around Shree Jagannath Temple, Puri, etc	175
2	Early Warning Dissemination System in cyclone-prone areas	800
3	Preservation and development of Sun temple at Konark	150
4	Barabati Moat preservation and development of surrounding historical places, Cuttack	150
5	Storm water drainage system in Sambalpur Municipal Area	150
6	Construction of high level bridge over Indravati River near Kenduguda in Nabrangapur district	150
7	Proposal for destination development at Hirakud Reservoir, Sambalpur	200
	Sub-total	**1775**
20)	**Punjab**	
1	Remediation of pollution of Sutlej river through Budha Nala	400
2	Four new institutions of medical education and research at Mohali, Hoshiarpur, Shaheed Bhagat Singh Nagar and Fazilka	700

S. no.	Purpose	Recommended amount
3	Pilot project for installation of 15000 KW of rooftop solar power plants, Bhatinda	40
4	Development of Bhatinda Fort	10
5	Reduction in pollution caused by stubble burning by diversification of paddy to other crops	350
6	Development of Partition Museum, Amritsar	10
7	Development of Patiala Fort	13
8	Jang-e-Azadi Memorial, Kartarpur, Jalandhar district	12
9	Pushpa Gujral Science City, Kapurthala district	10
	Sub-total	**1545**
21)	**Rajasthan**	
1	Integrated water management in Jodhpur	400
2	Jodhpur City Elevated Road Project	550
3	Strengthening public health infrastructure- development of tropical and virology infrastructure with quarantine centres in medical college of Rajasthan	270
4	Digital University in Rajasthan	400
5	Establishment of Rajasthan folk arts training institute (Jaisalmer)	150
6	Industrial township at Kayasa, Alwar	320
7	"Project Jodhpur initiative" (initiative taken by Prof. B.S. Murty of IIT Chennai)	10
8	Neemrana Industrial Hub project	200
9	Support to traditional folk artists and singers like Manganiyas or Kulbulas	15
10	Rehabilitation and young war widows facing social discrimination	7
	Sub-total	**2322**
22)	**Sikkim**	
1	Herbal medical/yoga and spiritual healing tourism complex at Nandu Gaon in South Sikkim	50
2	Construction of Gyan Mandir library at Gangtok along with convention centre for promotion of Gangtok as MICE (Meeting, Incentives, Conference and Exhibition) destination	200
3	Conversion of Singshore Bridge as a glass skywalk bridge for tourist attraction in west Sikkim.	52
4	Passenger ropeway from Pelling to Sanga-choeling monastery in west Sikkim.	110
5	Development of eco-tourism complex at Dodak in West Sikkim	78

S. no.	Purpose	Recommended amount
6	Horticulture (Cymbidium Development Centre at Rumtek)	10
	Sub-total	**500**
23)	**Tamil Nadu**	
1	Revamping Chennai water bodies	200
2	Renovation of historically important ancient temples	300
3	Heritage buildings (Fort St. George, High Court of Madras, Government Museum, PWD Complex)	150
4	Restoration of traditional water bodies	900
5	Development of key towns of tourist importance (Rameshwaram, Madurai, Palani, Tiruchendur, Srirangam)	650
	Sub-total	**2200**
24)	**Telangana**	
1	Operation and maintenance of Mission Bhagiratha	2350
2	Revamping the infrastructure of ASCI	12
	Sub-total	**2362**
25)	**Tripura**	
1	Transmission of surface water from Chapaknagar and Champaicherra Dams to ground water reservoir at suitable location in Agartala city for 15 existing/ongoing water treatment plants of Agartala Municipal Corporation	400
2	Construction of ropeway, development of the 51 Shakti Peeths near Tripura Sundari temple, sound and light show at Nirmahal	175
3	Construction of an office building for accommodation of different State Government offices in a single complex	100
4	Rs. 25 crore each to five district headquarter towns for sewerage management, drainage, solid waste management including household waste management, street lights, and internal roads: Khowai, Bishramganj, Ambassa, Belonia, Kailasahar	125
5	Rs. 37.5 crore each to district headquarter towns of Dharmanagar and Udaipur for sewerage management, drainage, solid waste management including household waste management, street lights, and internal roads	75
	Sub-total	**875**
26)	**Uttar Pradesh**	
1	Drainage, sanitation and waste management (Lucknow, Varanasi, Gorakhpur)	950
2	Making Sevapuri block into model block	180
3	**Medical and health**	2365
a	*Cost for running 27 sanctioned new medical colleges @ RS 68.5 crore each*	*1850*

S. no.	Purpose	Recommended amount
b	*Running cost (operation and maintenance) of three established new nursing colleges in Agra, Gorakhpur and Kannauj*	*150*
c	*Establishment and running cost of seven nursing colleges in Prayagraj, Saharanpur, Badaun, Jalaun, Banda, Ambedkar Nagar and Azamgarh*	*300*
d	*Establishment of satellite centres for screening and diagnostics of communicable diseases in eastern and western Uttar Pradesh*	*50*
e	*Establishment of State Public Health Training and Research Institute at* State Institute of Health and Family Welfare, *Lucknow*	*15*
	Sub-total	**3495**
27)	**Uttarakhand**	
1	Jamrani dam multipurpose project for drinking water and sanitation	950
2	Song dam drinking water project for Dehradun	500
3	Sanitation, waste disposal and drainage in Pauri Garhwal	100
4	Sanitation and drainage of Nainital	50
	Sub-total	**1600**
28)	**West Bengal**	
1	Development of infrastructure in backward districts	1000
2	Civil works for restraining Ganga erosion	550
3	Drinking water purification projects from surface water to address issue of arsenic in sub-soil water	550
	Sub-total	**2100**
	All States	**49599**

Annex 10.10
(para 10.118)

Details of State-specific Grants

Andhra Pradesh

Development of core infrastructure in Vishakhapatnam to develop it as an economic hub to overcome the loss of the city of Hyderabad

1. The Government of Andhra Pradesh requested the Commission for grants to help the State build Vishakhapatnam into a major economic hub and growth pole which will serve as an important source of revenue. It requested grants for provisioning of core infrastructure like roads, water supply, power distribution, underground drainage and essential buildings in Vishakhapatnam. We recommend an amount of Rs. 1,400 crore for this scheme.

Water Grid Projects

2. The Government of Andhra Pradesh requested grants for provisioning of drinking water in the areas affected by chronic kidney disease, fluorosis and deficient rainfall. The State has underlined the problems faced in providing safe drinking water from ground water-based schemes, due to salinity ingress and silica content in the coastal region, water pollution due to aquaculture and over-exploitation in the central parts of the State and severe drought and fluoride-affected habitations in the Rayalaseema region.

3. In order to ensure the provision of adequate safe drinking water to all households in the area, reducing household expenditure on healthcare and increasing productivity, we recommend grants of Rs. 900 crore with the proviso that this grant may be utilised only for the following schemes:

	Rs. crore
Uddanam area in Srikakulam district affected by chronic kidney disease	300
Palanadu area in Guntur district affected by fluorosis and Kanigiri area in Prakasam district affected by deficient rainfall	400
Pulivendula area in YSR Kadapa district affected by uranium filtering	200

Arunachal Pradesh

Setting up of small/mini/micro hydro-electric power projects

4. The State has requested grants for setting up small/mini/micro hydro-electric power projects in order to minimise power generation through diesel as well as import of power from outside the State. It also sought funds for the renovation and modernisation of existing hydel stations. We recommend an amount of Rs. 355 crore for this purpose.

Preservation of Tawang Monastery

5. In a supplementary memorandum, the State has sought Rs. 45 crore for the preservation of the Tawang monastery to supplement the works already being carried out, including protection from landslide. In order to execute this plan, we recommend the proposal, as requested by the State Government.

Assam

Construction of new circular road cum embankment around the Majuli Island

6. The State Government has sought funds to provide a peripheral road-cum-embankment for Majuli island by converting/connecting the existing embankment system to a road-cum-bund. We recommend an amount of Rs. 1,075 crore for this purpose.

Heritage Conservation-Kamakhya Mandir complex

7. The State Government has sought support for comprehensive development of the Kamakhya Mandir complex, which reflects the State's heritage. We recommend a grant of Rs. 300 crore for this.

Bihar

Protection of archaeological sites

8. The State Government has sought support for the conservation and protection of archaeological sites and historical monuments. It explained that the State is currently conserving and protecting forty-three archaeological sites, but many more sites in the State require urgent need of conservation and protection. We propose an amount of Rs. 200 crore for this purpose.

University of Arts in Madhubani

9. In its supplementary memorandum to the Commission, the State Government has emphasised that Bihar has historically been a centre of art and culture. Buddhism and Jainism had their origins here and the State is also an active centre for Sikhism and Sufism. The State

Government has proposed to set up a University of Art (visual and performing arts) to study the various facets of art and culture. We recommend a grant of Rs. 300 crore for this purpose.

S*etting up a Digital University in Bihta, Patna*

10. The State Government has apprised us that Bihar needs a Digital University to tap the huge potential of youth in the State, who are willing to pursue higher education in this filed. We recommend Rs. 175 crore for setting up of a Digital University in Bihta.

Revamping health infrastructure - upgradation of Patna Medical College

11. The State Government mentioned, in its supplementary memorandum, that it is in the process of revamping Bihar's medical infrastructure. As part of this plan, it plans to redevelop Patna Medical College by increasing the number of beds to 5,462. It also plans to enhance the grassroots level health infrastructure by the creation of 12,667 health sub-centres. For this purpose, we recommend a grant of Rs. 1,500 crore.

District Development Centre at Banka

12. The State has requested a grant for setting up a District Development Centre at Banka, which is a remotely located district. This centre will bridge the development gap by becoming a hub for training and capacity building. We support this request and recommend a grant of Rs. 22 crore.

Museum of Silk Artisans in Bhagalpur and Revival of Bhagalpur silk Industry by rejuvenating skills of artisans

13(a). The State Government has highlighted that the Bhagalpur silk industry, famous for tussar silk, has the potential of generating significant foreign exchange earnings. The State Government has sought a grant for a museum of silk artisans in Bhagalpur, to showcase the district's glorious past. We recommend Rs. 10 crore for this purpose.

13 (b). The State Government explained the initiatives taken for the revival of the Bhagalpur silk industry by strengthening the entire production and supply chain for export and sought funds for rejuvenating the skills of artisans in Bhagalpur. We recommend a grant of Rs. 50 crore for this purpose.

Fifteenth Finance Commission

Support to Centre for Economic Policy and Public Finance under the Asian Development Research Institute, Patna

14. The State Government has also sought a grant for the Centre for Economic Policy and Public Finance (CEPPF), Patna, which was established under the Asian Development Research Institute in 2008 to provide research and professional support to the State Government like preparation of an annual economic survey, research studies and creating a data bank of Bihar's economy. We recommend a grant of Rs. 10 Crore for CEPPF, Patna.

Chhattisgarh

Preservation and Promotion of traditional crafts - Mati Kala Board

15. The State Government has requested a grant for preservation and promotion of the vanishing traditional crafts of terracotta and clay craft and to help craftsmen to achieve all round development in the field of terracotta craft by providing electric chaak to around 14,000 kumbhakars of the State. Establishing glazing units will impart practical knowledge of newly developed technology and design to traditional Mati Shilpis. Providing training to the artisans will create employment opportunities to the traditional and non-traditional craftsmen of the State. This will improve the income and financial conditions of the craftsmen. We recommend a grant of Rs. 50 crore for this purpose.

Dandakaranya Circuit - Ram Van Gaman Path project

16. The State Government plans to connect and develop the historical route undertaken by Lord Rama in his exile, by upgradation and improvement of sites of historical importance on this route. Facilities at ghats with public wi-fi, upgradation of existing parikrama pathways and last mile connectivity will be developed. The State Government has requested support for development of the Ram Van Gaman Path as a tourist destination and to improve tourism infrastructure on this route. We support this request and recommend a grant of Rs. 60 crore for this purpose.

Development projects

Expansion of Swami Vivekanand Airport, Raipur

17 (a). The development of Raipur and Nava Raipur is happening at a rapid pace, with rising passenger traffic and increasing flight operations year-on-year. The State Government informed that it urgently needs to undertake the expansion of the Swami Vivekanand Airport, Mana, Raipur to develop the capital and surrounding areas. It has sought approximately Rs. 250 crore as grant for this purpose. We recommend this grant.

New capital development projects

17 (b). The Government has requested funding for the new capital development projects. The FC-XII and FC-XIII had provided a grant of Rs. 200 crore and Rs. 550 crore respectively for this purpose. The State Government has requested a grant amounting to Rs. 1,812 crore from this Commission for solid waste management, conservation of water bodies, e-bus procurement, charging posts, shelters, roads and bridges, tourism, water supply and smart bio-toilet. We recommend Rs. 1,300 crore as grant for this.

Goa

Development of tourism

18. In view of the importance of tourism for the State's economy, the Government of Goa has sought grants for the following purposes:

i. To improve communication and connectivity like network solutions, end user experiences, mobility and tracking, unified communications and providing security service.

ii. To enhance the tourism infrastructure including tourist mass transportation system, utilities, health facilities and uplift of cultural and recreational infrastructures.

iii. Cleanliness drive on the beaches and setting up ultra-modern waste treatment plant for beach cleaning purpose.

iv. Safety on beaches and other tourist spots.

We recommend a grant of Rs. 200 crore for this.

Climate Change - Waste to energy and renewable sources of energy

19. The State has sought support to incentivise power generation through bio-methanation and conversion from solid waste, solar energy, tidal power and wind power. The State has informed us that it has identified four municipal solid waste management projects for this. We recommend a grant of Rs. 500 crore for this purpose.

Gujarat

Development intervention in border villages

20. The Government of Gujarat has sought support for balanced development of remote areas near the border, ensuring effective administration in these areas, providing infrastructure facilities and instilling a sense of security among the local population. We recommend an amount of Rs. 200 crore for this purpose.

Fifteenth Finance Commission

Salinity ingress prevention schemes in coastal belt

21. In its memorandum, the State Government has noted that about seven lakh hectares of land in 534 coastal villages have been affected due to the ingress of salinity. The FC-XII and FC-XIII had provided a grant of Rs. 200 crore and Rs. 150 crore respectively for this purpose. We recommend an amount of Rs. 310 crore to address this problem.

Development of desalination plants

22. The State Government has sought support for development of desalination plants at various locations of Kutch and Saurashtra. We recommend Rs. 2000 crore for this purpose.

Conservation and development of arts, culture, tribal and coastal areas development

23. The State Government has sought support for conservation and development of art and culture as well as support for tribal and coastal areas development. We recommend an amount of Rs. 100 crore for this purpose.

Conservation of Asiatic lion landscape

24. The State Government has requested support for strengthening of efforts for the conservation of Asiatic lions, including protection measures, habitat improvement, public awareness programmes, reducing man-animal conflict and skill and capacity building of frontline staff engaged in the conservation. We support the State Government's request and recommend a grant of Rs. 100 crore for this purpose.

Setting up of Birsa Munda Tribal University

25. The State Government has requested a grant of Rs. 341.10 crore for establishing and incorporating a dedicated university for the tribal community near the Statue of Unity project site at Rajpipla in Narmada district. The university will provide higher education to tribal students in its vicinity with quality lodging and boarding facilities. We recommend a grant of Rs. 150 crore for this purpose.

Haryana

Strengthen and upgrade health infrastructure

26. In view of the Covid-19 pandemic, it is imperative to strengthen and upgrade the health infrastructure in the State. The State Government requested grants for upgradation of district civil hospitals at Kurukshetra (additional 100 beds), Sirsa (200 beds), Nuh (additional 100 beds), Gurugram (additional 500 beds), Karnal (additional 200 beds) and Hisar (additional 200 beds) to

provide decentralised health care infrastructure closer to the field. We recommend Rs. 400 crore for this purpose.

Medical education and research

27. To further strengthen medical facilities at the district level and to increase the number of health personnel, the State Government envisages establishing a medical college in every district of the State. The proposed projects include construction of new medical colleges at Bhiwani, Koriyawas, Narnaul and Jind. We recommend Rs. 300 crore for this purpose.

Improved infrastructure and equipment for police force

28. The State requested grants for improved infrastructure facilities, modern equipment and further training of the police force in the application of modern technologies. The State is also implementing the flagship programme of "Dial 112" under which a central Police Control Room for the entire State is being setup at Panchkula to provide police and other emergency services across the State on a 24x7 basis. We recommend Rs. 100 crore for this purpose.

Housing complexes for State Government employees, including police and judicial officers

29. The State Government requested grants for housing complexes for its employees, including police and judicial officers across the State, to facilitate the presence of officials in the field so that citizens can have better access to governance. We recommend Rs. 100 crore for this purpose.

Digital and online education

30. Considering the importance of online education, the State requested additional funds for converting 1,487 senior secondary schools, where the science stream is available, into smart schools (where it is proposed to mainstream digital form of educational instruction) by 2021. We recommend Rs. 70 crore for this purpose.

Irrigation and water resources

31. The State Government has informed that village ponds are shrinking and are running into disuse, leaving a stark gap in meeting local irrigation and animal needs. To address this situation and to provide a fillip to water conservation efforts as well as to explore avenues to gainfully utilise waste water generated in villages, the State Government has set up the Pond and Waste Water Management Authority. We recommend Rs. 350 crore for rehabilitation and rejuvenation of ponds and such water bodies in the State.

Public health engineering

32. The State Government has requested funds for improving the existing drinking water supply facilities in villages by drilling additional tubewells, augmentation of existing canal-based schemes, creating new canal-based water works, constructing boosting stations, strengthening existing distribution system apart from undertaking other relevant measures. The additional funds requested are required to be utilised for augmentation of water supply in various areas such as Gurugram, Mewat and Shivalik areas and construction and augmentation of sewage treatment plants and for laying sewerage network. We recommend Rs. 200 crore for this purpose.

Public work

33. The State Government requested specific funds for various public works projects new railway lines, which include the Delhi Karnal High Speed Rail, Delhi Rewari regional rapid transit system, Haryana Orbital Corridor from Palwal to Sonepat that runs along the Kundli-Manesar-Palwal expressway. These lines will facilitate faster movement of goods, particularly horticulture produce, in the national capital region and also facilitate movement between the northern and western industrial corridors. The State has informed that these projects will also help decongest Delhi. We recommend Rs. 250 crore for this purpose.

Development of tourism infrastructure and restoration of historical places

34. Haryana has a rich cultural heritage, wide array of historical sites such as Kurukshetra, which has mythological, religious and tourist significance, Rakhigarhi, which showcases the Harappa-Mohenjodaro and Panipat, which witnessed vicissitudes of India's history. Keeping this in view, several initiatives are being undertaken for development of tourism infrastructure and restoration of these places. We recommend Rs. 200 crore to support these initiatives of the State Government.

35. We were informed that the condition of some historical monuments in the State are in dilapidated condition due to neglect over many years. These are: (a) Shyameshwar Talab – Charkhi Dadri, (b) Bhai ki Baoli, Kaithal, (c) Mukundpura Baori, Mahendergarh and (d) Takht Baoli/ Mirza Ali Jaan ka Takht. We recommend Rs. 30 crore for this project. The conservation and preservation may be done by Indian National Trust for Art and Cultural Heritage (INTACH) or other domain area experts.

Chui Mal Talab

36. Based upon the request received from the State, a nominal amount of Rs. 3 crore is also recommended for Chui Mal Talab. This project may be implemented by Indian Trust for Rural Heritage and Development (ITRHD).

Himachal Pradesh

Expansion/upgradation of Kangra Airport, Gaggal, Dharamshala

37. The State requested funds for upgradation of existing and construction of new airports and helipads which will bring Himachal Pradesh on the international tourism map and enhance prosperity of the people and revenues of the State. The State has requested funds for the expansion/upgradation of Kangra airport. We recommend a grant of Rs. 400 crore for this purpose.

Construction of Mandi airport (Nagchalla)

38. The State has proposed construction of a new green field airport fit for landing wide bodied aircraft in Mandi district. We believe that this will enhance tourism and prosperity in the State. We recommend an allocation of Rs.1,000 crore for this purpose.

Improvement of water supply and sewerage facilities of Jawalamukhi Temple Town

39. The State Government informed that Jawalamukhi Temple, a Shakti Peeth, attracts thousands of pilgrims every year. The number of pilgrims is increasing every year, which is putting immense pressure on civic amenities of the town. The State has requested grant for improvement of conditions of water supply, sewerage and channelisation of drains in Jawalmukhi temple town and adjoining areas. We recommend a grant of Rs. 20 crore for this purpose.

Jharkhand

Tourism, sports, arts and cultural infrastructure

40. The Government of Jharkhand requested grants for tourism, sports, arts and culture infrastructure. This will help promoting tourism, sports and preserve art and culture in the State. This will also give a boost to youth activities that will help in harnessing and channelising the youth power and energy. It will also help preserving and promoting the cultural diversity and heritage of the State. We recommend an amount of Rs. 400 crore for this purpose.

Development of renewable energy

41. The State Government has requested grants for four major renewable energy programmes - Rooftop Programme for Government Building and Residential Consumers, solar pumps, solar street lights and small hydro projects. Considering the potential of development of renewable energy sources in the State, we recommend an amount of Rs. 700 crore for this purpose.

Development of tourist amenities for Deoghar Baidyanath Jyotirling and surrounding tourist circuit

42. The State Government has sought support for development of tourist amenities for Deoghar Baidyanath Jyotirling and the surrounding tourist circuit. We recommend a grant of Rs. 200 crore for this purpose with the proviso that this grant may be utilised only for concerned schemes.

Karnataka

Holistic improvement of water bodies

43. The State Government has sought assistance for the holistic improvement of tanks in Bengaluru and surrounding areas. Irrigation works with command area of up to 2000 hectares are classified as minor irrigation works consisting of tanks, pickups, bandharas/barrages, vented dams and lift irrigation schemes. There are approximately 8,400 minor irrigation projects in the State with a culturable command area of eight lakh hectares. We recommend Rs. 3,000 crore for this purpose.

Peripheral ring road to decongest Bengaluru

44. Bengaluru is considered the Silicon Valley of India and the information technology, biotechnology and science and technology capital of India. However, its success has led to tremendous increase in traffic density. Therefore, the State Government has requested support for building a peripheral ring road to divert the heavy vehicular traffic to bypass the city. We recommend an amount of Rs. 3,000 crore for this purpose.

Kerala

Waste disposal, cleaning of water bodies

45. In the supplementary memorandum, the State Government has highlighted that local governments are playing a significant role in solid waste disposal by starting centralised waste to energy plants and through decentralised household level segregation of waste. A mission mode programme, Harita Kerala Mission (Green Kerala Mission) is being implemented in the State. The aims of this programme include cleaning of water bodies, testing portability of water, rain water harvesting. The State Government has requested funds for this. We recommend Rs. 450 crore for this purpose.

Replanting of coconut

46. In its supplementary memorandum, the State Government has highlighted the issues faced by the coconut industries in the State. To revitalise the coconut industry and improve of the

genetic base of coconut palms in the State, a massive rejuvenation programme is required. The State Government proposed to distribute and plant coconut seedlings under the Coconut Council scheme, Kera Keralam Samrudha Keralam. The State Government has sought funds for this scheme of replantation of coconut. We recommend Rs. 150 crore for this purpose.

Forest conservation

47. In its memorandum, the State Government highlighted more importance was given to conservation and protection of forests than their economic exploitation. This entailed expenditure needs for controlling forest fires, restricting encroachments, regulated use of forests for getting optimum forest produce and utilising forest for eco tourism. It has requested support for this and we recommend a grant of Rs. 500 crore.

Madhya Pradesh

Establishment of tourism, hospitality and skill university

48. The Government of Madhya Pradesh requested grants for establishment of a tourism, hospitality and skill university to help youth study these sectors within the formal stream. This will open new employment opportunities in the tourism sector. We recommend an amount of Rs. 55 crore for this purpose.

Restoration of heritage gardens

49. The State Government has requested grants to restore forty unprotected royal gardens in the Bundelkhand, Malwa, Bhopal region and other areas and to make these historical gardens a place of tourist attraction. We recommend Rs. 40 crore for this purpose.

Upgradation and development of basic amenities at heritage buildings, water bodies and land banks

50. Madhya Pradesh has large number of heritage sites. To develop heritage tourism (including conversion of heritage sites into heritage hotels), water sports and adventure sports, there is need to provide proper approach roads, water and electricity supply. We recommend Rs. 140 crore for this purpose.

Upgradation and development of tourist infrastructure

51. The State Government has requested grants to upgrade and develop tourism infrastructure at existing and new destinations and to promote the lesser known tourist destinations. We recommend Rs. 150 crore for this purpose.

Construction and maintenance of museums

52. The State has sought Rs. 82 crore for the construction of seven new museums in Chhindwara, Neemuch, Narsinghpur, Harda, Guna, Omkareshwar and Dewas to collect, categorise and keep antiquities safely and to maintain the existing thirty-four museums. We recommend Rs. 70 crore for this.

Conservation and development of monuments

53. The State has requested a grant of Rs. 110 crore for conservation work in the important monuments in the Orchha-Gwalior circuit, Burhanpur-Indore circuit, Bhopal circuit and Vindhya-Jabalpur circuit and development of pathways, electrification of and public amenities in the existing monuments. We support this request with the proviso that this grant may be utilised only for these schemes.

Construction of archival building and conservation of documentary heritage

54. The State has requested a grant of Rs. 50 crore for the construction and extension of archival facilities, proper management and security of records, publication, preparing reference media and lamination of records. We support this request with the proviso that this grant may be utilised only for these schemes.

Construction of 33 new girls' education complexes

55. For the benefit of the tribal community, the State has requested a grant for the construction of thirty-three new education complexes for girls. We recommend a grant of Rs. 250 crore for this purpose.

Solar pump project

56. The State Government has sought support for usage of renewable sources of energy and for improving energy efficiency in the State. We recommend a grant of Rs. 500 crore for this purpose.

Water supply from Chambal river to Gwalior city and Morena city

57. The State Government has sought support for water supply from the Chambal river to Gwalior and Morena cities. This includes construction of intake well, water treatment plant, elevated service reservoirs, distribution system etc. We propose an amount of Rs. 250 crore for this purpose.

Gwalior-Shivpuri-Chanderi tourism and capacity building of traditional textile weavers of Chanderi

58. The State Government has sought support for tourism in the Gwalior-Shivpur-Chanderi circuit and capacity building of traditional textile weavers of Chanderi. We recommend Rs. 75 crore for this purpose.

Development and maintenance of Mahakaleshwar temple

59. The State Government has sought support for the repair, maintenance and development of Mahakaleshwar temple in Ujjain. We propose Rs. 75 crore for this purpose.

Maharashtra

Preservation of cultural heritage

60. The State has requested a grant for conservation, repair and development of State protected monuments and museums at forty-four locations and conservation and repair of forts under the protection of the Government of India at 1ten locations. We recommend an amount of Rs. 500 crore for this purpose

Conservation of forest and wildlife management

61. The memorandum from Maharashtra highlighted the needs for conservation of forests and wildlife and increasing the green cover in the State. The State is rich in biodiversity and is home to six national parks, forty-nine sanctuaries and six conservation reserves and six tiger reserves. We recommend Rs. 500 crore for this purpose

Development of Revas Reddy Coastal Highway

62. The Government of Maharashtra has sought support for construction of roads parallel to Konkan's coastline. The scenic Mumbai-Goa coastal marine highway of 540 km, that is being hailed as Gateway to Konkan, is expected to give a huge boost to the Konkan economy, especially tourism and fisheries. We recommend an amount of Rs. 1,250 crore for this purpose.

Construction of new housing for police

63. The State Government has highlighted the fact that the Maharashtra Police is one of the largest police forces in the country. In the Covid-19 pandemic, the police force played a major role in handling law and order and controlling the spread of Covid-19. For policemen to discharge their duties effectively and efficiently, the residential quarters need to be in the vicinity of the police station. In view of the scarcity of housing for police personnel in Maharashtra, especially

in the metropolitan region of Mumbai and Pune, we recommend a grant of Rs. 500 crore for augmenting the housing facilities for the police.

Manipur

Housing infrastructure

64. In a supplementary memorandum, the State Government has proposed to develop a separate housing complex for Ministers/Members of the Legislative Assembly/government officers and employees in Imphal and a housing complex for officers and employees at the district and sub-divisional offices in the hill districts as the present housing complexes are not only inadequate but also very old. We support these initiatives of the State Government and recommend grants as follows:

Project	*Rs. crore*
Housing complex for Ministers/MLAs at Imphal	75
Housing complex at Imphal for officers and employees	210
Housing complex for officers and employees at district and sub-divisional offices in hill districts	130

Manipur Secretariat Complex

65. The State has sought allocation of funds for completion of the Manipur Secretariat Complex at Mantripukhri. We recommend a grant of Rs. 75 crore for this work.

Setting up of Nursing Institute

66. The State Government has requested funds for setting up of nursing institute with an intake capacity of thirty in Imphal (West) district, affiliated to the Jawaharlal Nehru Institute of Medical Sciences. We recommend a sum of Rs.15 crore for this purpose.

Development of infrastructure in hill districts

67. In view of the need to provide and improve sewerage, drainage, solid waste management facilities and internal roads in six hill district headquarters namely Churachandpur, Ukhrul, Senapati, Kangpokpi, Chandel and Tamenglong, we recommend a total grant of Rs. 300 crore (Rs. 50 crore for each district headquarter).

Renovation of buildings and structures inside Raj Bhavan

68. The Raj Bhavan at Imphal is a heritage structure. The State has drawn our attention to the fact that structures inside the Raj Bhavan complex such as Durbar Hall, Banquet Hall, VIP Guest House and Annexe and boundary wall which have not been renovated for a long time and need immediate attention for keeping them in shape and sought grant of Rs.15 crore. We recommend this grant.

Construction of State Guest House

69. The State Government has requested a grant of Rs.80 crore to construct a new State Guest House with modern facilities as at present the State does not have any infrastructure to provide accommodation to visiting dignitaries. We recommend this grant

Meghalaya

Administrative City in New Shillong Township

70. The State has proposed to build an administrative city in the New Shillong area, with government offices and housing to decongest the city. Land for the proposed township has already been acquired by the State Government. We recommend a sum of Rs.250 crore for this purpose.

Upgradation and construction of new Assembly building

71. The State has proposed construction of a new Assembly Building as the old building was destroyed by fire in 2001 and sought allocation of funds for completion of the work already initiated. We recommend a grant of Rs.100 crore for this purpose.

Water supply scheme for New Shillong Township

72. The State Government has sought assistance for providing water supply in the proposed administrative city in the New Shillong Township. We recommend a grant of Rs.100 crore for this purpose.

Walkways and covered pathways in Shillong City

73. To preserve the cultural heritage of the city, and to improve the public spaces, the State Government has proposed that walkways, covered pathways and skywalks be constructed all across the city. We recommend a grant of Rs. 50 crore for this purpose.

Fifteenth Finance Commission

Sports infrastructure development

74. The State Government has sought assistance for development and upgradation of sports infrastructure for the purpose of hosting and organising the thirty-ninth national games in Meghalaya. We recommend a sum of Rs. 100 crore for the Shillong Integrated Sports Complex and Rs. 50 crore each for the Shillong Golf Club and the P.A. Sangma Stadium.

Urban infrastructure development

75. For the purpose of infrastructure management/development such as public spaces, traffic, waste management, street lighting in Tura (district centre of the West Garo Hills district) and Jowai (the administrative centre of the Jaintia Hills Region), we recommend a grant of Rs.100 crore (Rs. 50 crore each for Tura and Jowai) as requested by the State Government.

Mizoram

Horticulture

76. On the request of the State Government, we recommend a grant of Rs. 330 crore for the upliftment of the State's economy through (a) cultivation of sustainable horticulture crops, (b) transition from shifting cultivation to permanent land utilisation, (c) production of high value crops, (d) reduce felling of forest trees for large scale cultivation, (e) to promote entrepreneurship in bamboo processing, we recommend a grant of Rs.330 crore.

Tourism

77. We recommend an amount of Rs. 200 crore against the State's request for a grant for the development of tourism infrastructure and for promoting eco-tourism across the State.

Power

78. The State has also requested a grant for the construction of critical infrastructure under the Power and Electricity Department for uninterrupted power supply. We recommend Rs.170 crore for this purpose.

Nagaland

Civil Aviation: small landing strips

79. The State has emphasised the need for having small landing strips in each district to provide air travel via small twin-engined aircrafts in interior areas of the State. We recommend an amount of Rs. 90 crore for this purpose.

Construction of police check posts for entry/exit at Indo-Myanmar border

80. The State has requested a grant of Rs.25 crore for the construction of police check posts for entry/exit at the Indo Myanmar border under the Free Movement Regime. We support this request and recommend the same.

Coffee development in the State

81. The State Government has has signed a Memorandum of Agreement with a South African firm for the purchase of Nagaland coffee for the next thirty years. The State Government has sought support for coffee development. We recommend a sum of Rs.150 crore for this purpose.

Construction of the New Raj Bhavan

82. The present Raj Bhavan, covering an area of only 5.5 acres, is perhaps the smallest Raj Bhavan in the country. There are only three guest rooms, which creates a problem during the visit of high dignitaries. The Government of Nagaland has identified a site for the new Raj Bhavan which is about 15 km from the proposed airport in Kohima and is also within the vicinity of the bungalows of Chief Ministers and Cabinet Ministers. We recommend an amount of Rs.100 crore for this purpose.

Construction of the New High Court Complex

83. The State Government has sought assistance for the completion of construction work of New High Court Complex in Kohima which was started in 2008-09 under the erstwhile Special Plan Assistance and not completed due to discontinuation of the SPA arrangement. We recommend Rs.100 crore for completion of the project.

Construction of fire stations

84. In response to the State Government's memorandum, we recommend an amount of Rs. 60 crore for constructing of fire stations in five new districts and additional seven new stations in other seven districts.

Odisha

Pilgrim facilitation in and around Shree Jagannath Temple

85. The State Government has sought support for repair and maintenance of Shree Jagannath Temple and nearby areas. We recommend an amount of Rs. 175 crore for this purpose.

Cyclone warning system

86. The State Government has sought grants for installation of an early warning

dissemination system and other infrastructure work in cyclone prone areas. We recommend an amount of Rs. 800 crore for this purpose.

Preservation and development of the Sun temple at Konark

87. The State Government has sought support for the preservation and development of the Sun temple at Konark and surrounding areas, including the road from Chandrabhaga to Katakpur junction in Konark, Konark ring road and Chandrabhaga beach. We recommend an amount of Rs. 150 crore for this purpose.

Barabati Moat Preservation and development of surrounding historical places

88. The State Government has sought grants for preservation of the Barabati Moat and development of surrounding historical places. We recommend an amount of Rs. 150 crore for this purpose.

Storm water drainage system in Sambalpur Municipal Area

89. The State has requested a grant of Rs. 150 crore for the storm water drainage system in Sambalpur Municipal Area, including renovation of existing drainage system and construction of new covered drains. We support this request and recommend grants accordingly.

Construction of high level bridge over Indravati River near Kenduguda in Nabrangapur district

90. The State has requested a grant of Rs. 150 crore for the construction of a high level bridge over the Indravati River near Kenduguda in Nabrangapur district. We support this request and recommend grants accordingly.

Destination development at Hirakud Reservoir, Sambalpur

91. The State has requested a grant of Rs. 200 crore for destination development at Hirakud Reservoir in Sambalpur, including the construction of a high level bridge over the Mahanadi river, development of existing air strips near the reservoir. We support this request and recommend grants accordingly.

Punjab

Remediation of pollution of Sutlej river through Budha Nala

92. The State Government has sought assistance for a project for remediation of pollution of the Sutlej river through the cleaning of the Buddha Nala. this project will be important for drinking and irrigation. We recommend an amount of Rs. 400 crore for this purpose.

Four new institutions of medical education and research at Mohali, Hoshiarpur, Shaheed Bhagat Singh Nagar and Fazilka

93. The State Government has sought support for four new institutions of medical education and research at Mohali, Hoshiarpur, Shaheed Bhagat Singh Nagar and Fazilka to enhance and deepen health care and education in the State. We recommend a grant of Rs. 700 crore for this purpose.

Pilot project for installation of rooftop solar plants in Bhatinda

94. The State has sizable population of economically as well as socially weaker sections (scheduled castes, slum dwellers etc.) who are unable to afford electricity bills. The State Government has sought assistance for a project for the installation of 15,000 kw of 1 kwp and 2 kwp rooftop solar power plants in the houses of 15,000 scheduled castes, scheduled tribes and below poverty line families of Bathinda. We recommend Rs. 40 crore for this purpose.

Development of Bhatinda Fort and Patiala Fort

95. The State Government has sought funds for the conservation and restoration of Bathinda fort, a historical and protected monument, parts of which are in a dilapidated condition. We recommend grants of Rs. 10 crore for this purpose.

96. The State Government informed us that major conservation/ restoration works are also required in the Patiala fort, which too has historical importance. We recommend a grant of Rs. 13 crore for this purpose. These projects may be implemented by the ITRHD.

Reduction in pollution caused by stubble burning by diversification of paddy to other crops.

97. The State Government has sought support for reduction in environment pollution caused by the stubble burning by diversification from paddy to other crops, especially maize. This will help reduce the air pollution in northern region. We recommend a grant of Rs. 350 crore for this purpose.

Development of Partition Museum, Amritsar

98. The State Government has sought support for the Partition Museum at Amritsar, highlighting that it is the world's first museum dedicated to Partition. It depicts Punjab's role in the freedom struggle. We recommend an amount of Rs. 10 crore for this purpose.

Jang-e-Azadi Memorial, Kartarpur, Jalandhar

99. The State Government has sought assistance to upgrade the Jang-e-Azadi memorial in

Kartarpur in Jalandhar district, with a library. It also proposed that the memorial be powered by solar energy. We support this and recommend a grant of Rs. 12 crore for this purpose. This project may be implemented by ITRHD.

Pushpa Gujral, Science City, Kapurthala

100. The Pushpa Gujral Science City (PGSC) in Kapurthala is a centre for non-formal science education which is trying to enhance societal capacities through science-based decision making to promote sustainable development. The State Government has proposed to develop gallery on ecosystems (including virtual walkthrough in global ecosystems), environment and Sustainable Development Goals as well as a gallery on Covid-19. It has also requested funds for the construction of new building for the galleries and up-gradation of space/dome theatre screen. We recommend an amount of Rs. 10 crore for this purpose.

Rajasthan

Integrated water management in Jodhpur

101. The State Government has informed that the Jodhpur region is facing water scarcity due to limited rainfall. It has proposed to restore the Jojari River into a perennial healthy river with its entire flow route either restored in original or through a new route development. Further, industrial effluents and domestic wastewaters severely affect the soil and ground water and the present common effluent treatment plant is inadequate to treat the effluents and needs to be upgraded along with the effluent collection and conveyance system. The rejuvenated Jojari waters may become the source for community village ponds, micro irrigation, diversified farming and horticulture thus restoring the lost livelihood of thousands of farmers. Support has been sought to strengthen the integrated water management in Jodhpur. We recommend an amount of Rs. 400 crore for this purpose.

Jodhpur City elevated road project

102. The State Government has highlighted the issue of huge pressure of traffic in the heart of Jodhpur City starting from Krishi Mandi Circle (situated on Mandore Road) to Akhaliya Circle (situated on Chopasani Road) via Sojati Gate Circle. Funds have been requested for construction of an elevated road project. We recommend a grant of Rs. 550 crore for this purpose.

Development of tropical and virology infrastructure with quarantine centres in medical colleges

103. In its revised memorandum, the State Government has requested funds for strengthening of public health infrastructure. The existing health infrastructure needs to be upscaled with critical care set up (focussing on tropical and virology infrastructure) at the six medical colleges of the State. We support and recommend a grant of Rs. 270 crore for this purpose.

Digital University

104. In the revised memorandum, the State Government has sought funds for setting up a digital university, with key technological enablers, virtual classrooms, digital labs etc. We support and recommend a grant of Rs. 400 crore for this purpose.

Establishment of Rajasthan folk arts training institute in Jaisalmer

105. In the revised memorandum, the State Government has proposed to bring all the varied performing arts and artists under one umbrella by setting up a folk arts training institute. The cultural hub includes a) one big and two small theatres and an open air theatre; b) eight galleries of differing capacities; c) rehearsal halls and research library; d) recording theatre and art studios; e) different museums and audio-visual library; f) artist residency and guest house; and other related facilities. We recommend a grant of Rs. 150 crore for this purpose.

Industrial Township at Kayasa, Alwar

106. The State Government has proposed an integrated industrial township at Kayasa in Alwar district. Due to its strategic location advantages, this project will provide employment to the youth and will boost the economic growth of the State. We recommend a grant of Rs. 320 crore for this purpose.

Project Jodhpur Initiative

107. In its revised memorandum, the State Government has drawn our attention to the Jodhpur Initiative Project (an initiative of Prof B.S.Murthy of IIT Chennai) that attempts a comprehensive development plan for the city of Jodhpur. The State Government has sought funds for a comprehensive vision and development plan, a city mobility and transport plan, structural safety issues, sustainable urban water and waste management plan and development of information technology in this region. We recommend a grant of Rs. 10 crore for this purpose.

Neemrana industrial hub project

108. In the revised memorandum, the State Government has highlighted the Neemrana industrial hub project. Currently, 448 units are operating in this area and providing direct employment to 38,000 people. This industrial hub has India's first exclusive Japanese zone with forty-five Japanese units operating. Funds have been sought for up-gradation of existing infrastructure of Neemrana. We recommend a grant of Rs. 200 crore for this purpose.

Fifteenth Finance Commission

Support to traditional folk artists and singers like Manganiyas or Kulbulas

109. We recommend a grant of Rs.15 crore as requested by the State Government, for support and promotion of traditional folk arts of Rajasthan like Manganiyas or Kalbulas.

Rehabilitation of young war widows facing social discrimination

110. The State Government has requested grants for rehabilitation of young war widows facing social discrimination. We recommend an amount of Rs. 7 crore for this programme.

Sikkim

Herbal Medical/Yoga and Spiritual Healing Tourism Complex

111. As requested by the State Government, we recommend Rs.50 crore for the development of a herbal medical/yoga and spiritual healing tourism complex at Nandu Gaon in South Sikkim. The major project component includes a multipurpose hall for organising spiritual programmes, meditation, yoga and spiritual preaching, herbal medical complex, approach road, reception block, fencing etc. We recommend grants accordingly.

Setting up of library

112. The State Government has sought assistance to set up a world class library in Sikkim, named "Gyan Mandir", to act as a centre for knowledge and learning and to promote the ethos and values of the State. It will be the centre of all available documents on Sikkim in print and digital format. We recommend a grant of Rs. 200 crore for the construction of the Gyan Mandir Library at Gangtok along with convention centre for the promotion of Gangtok as a MICE (Meeting, Incentives, Conference and Exhibition) destination.

Conversion of Singshore Bridge as a glass skywalk bridge

113. In view of the enormous tourist attraction potential of Singshore Bridge, the State Government has proposed to convert this bridge into a glass skywalk bridge and sought an amount of Rs. 52 crore. We recommend the grants.

Passenger ropeway

114. We recommend a grant of Rs.110 crore, as requested by the State Government, for passenger ropeway connecting Pelling to Sangachoeling Monastery in west Sikkim.

Development of eco-tourism complex at Dodak in West Sikkim

115. The State Government has sought grants for the towards development of an eco-tourism

pilgrimage complex at Dodak in West Sikkim. We recommend a grant of Rs. 78 crore for this purpose.

Horticulture

116. The State Government has requested funds for the upgradation of its existing infrastructure of Cymbidium Development Centre at Rumtek to promote expansion in horticulture and floriculture. We recommend a grant of Rs.10 crore in this regard.

Tamil Nadu

Revamping Chennai water bodies

117. The State Government has apprised us about the shrinking of water bodies in Chennai as a result of urbanisation. The State Government wants to have demarcation of groundwater protection zones, construction of check dams across waterways and additional sub-surface storage tanks to cope with the loss of natural and adapt to climate change. We recommend an amount of Rs. 200 crore for this purpose.

Renovation of historically important ancient temples

118. The Government of Tamil Nadu has briefed us that the state has the highest number of ancient temples known for their historical, architectural and sculptural significance. It has proposed to renovate 500 of these ancient temples. We recommend an amount of Rs. 300 crore for this purpose.

Heritage Buildings (Fort St. George, High Court of Madras, Government Museum, PWD Complex)

119. The State Government has requested a grant for the preservation and restoration of heritage buildings - Fort St. George, High Court of Madras, Government Museum, PWD Complex in Chennai, which are around a century old. We recommend a grant of Rs. 150 crore for this purpose.

Restoration of traditional water bodies

120. The State Government has sought support to take up works for restoring of water bodies in the State. It has proposed to establish ground water recharge structures with various work components needed for construction of check dams, re-construction of anicuts, putting up artificial recharge schemes and restoration of tanks. We recommend an amount of Rs. 900 crore for works related to these water bodies

Development of key towns of tourist importance (Rameshwaram, Madurai, Palani, Tiruchendur, Srirangam)

121. In its memorandum, the State Government has highlighted the importance of key town (Rameshwaram, Madurai, Palani, Tiruchendur, Srirangam) in the tourism sector of the State. These towns have historical importance in terms of ancient temples and heritage sites. It has stated that the development of these key town will boost the economy of the State. We recommend an amount of Rs. 650 crore for this purpose.

Telangana

Operation and maintenance of Mission Bhagiratha

122. The State Government has sought grants for operation and maintenance of Mission Bhagiratha with the objective to provide safe, adequate and treated drinking water for the population. It will cover a geographical area of more than one lakh square kilometre. Ten per cent of the water supply is earmarked for the industrial sector also.

123. The State Government has informed us that this Mission will provide piped drinking water to every household. Under the Digital Telangana Programme, along with the pipes laid for water supply, optical fibre cable duct has also been laid to provide broad band services to each household. We propose an amount of Rs. 2,350 crore for this purpose.

Revamping the infrastructure of Administrative Staff College of India

124. In order to create a climate for accelerating and diffusing innovation in public systems through sharing of experiences across States and to facilitate the establishment of institutional and human capacities for innovation through knowledge sharing and mobilisation of practical help, we recommend an amount of Rs. 12 crore for revamping the infrastructure of the Administrative Staff College of India.

Tripura

Transmission of surface water

125. The State Government has sought funds for the transmission of surface water from the Champaknagar and Champaicherra dams to ground water reservoirs of Agartala city for fifteen existing/ongoing water treatment plants of the Agartala Municipal Corporation. We recommend a grant of Rs.400 crore for this purpose.

Tourism

126. We recommend an amount of Rs.175 crore against the State Government's request for a grant for the construction of a ropeway, development of the fifty-one Shakti Peeths near the Tripura Sundari temple and a sound and light show at Nirmahal.

Construction of office building

127. The State Government has sought assistance for construction of an office complex in Agartala to accommodate of different State Government offices. We recommend an amount Rs.100 crore in this regard.

Infrastructure development in district headquarters

128. In order to improve sewerage, drainage, solid waste management, including household waste management, street lights and internal roads, Rs. 25 crore each is proposed for the five district headquarter towns of Khowai, Bishramganj (headquarter of Sepahijala district), Ambassa (headquarter of Dhalai, Belonia (headquarter of South Tripura) and Kailasahar (headquarter of Unakoti). We recommend the same.

129. In view of making provisions for the improvement of sewerage, drainage, solid waste management, including household waste management, street lights, and internal roads, a sum of Rs. 37.5 crore each is proposed to be sanctioned to the two district headquarter towns of Dharmanagar (headquarter of North Tripura) and Udaipur (headquarter of Gomati). We recommend the same.

Uttar Pradesh

Drainage, sanitation and waste management (Lucknow, Varanasi, Gorakhpur)

130. Financial support has been sought for important projects associated with drainage, sanitation and waste management in Lucknow, Varanasi and Gorakhpur). The State Government apprised the Commission that these cities need to be developed as model cities for sanitation and waste management (both solid and liquid). The financial assistance has been sought for strengthening of waste management infrastructure, sanitary landfill, remediation of legacy waste, bioremediation/treatment of drains, pollution abatement of river Gomti at Lucknow, laying of sewer line and pollution abatement of river Rapti at Gorakhpur. We recommend a grant of Rs. 950 crore for this purpose.

Making Sevapuri Block into model block

131. The State Government apprised the Commission about its project for developing the Sevapuri block of Varanasi district as model development block and sought assistance for this. The project will include construction of cement-concrete roads, interlocking of road pavement and underground drainage development. We recommend a grant of Rs. 180 crore for this purpose.

Medical and health grants

132. Medical and health grants have been sought by the State for various purposes as detailed below. Our recommendations, in this regard are as follows:

i. Twenty-seven sanctioned new medical colleges are being established in a phased manner in Uttar Pradesh. Support is required for the running cost of each medical college. We recommend a grant of Rs. 1,850 crore for this purpose.

ii. Support has been sought for the running cost (operation and maintenance) of three established new nursing colleges in Agra, Gorakhpur and Kannauj. We recommend an amount of Rs. 150 crore.

iii. Funds are needed for establishment and running cost of seven nursing colleges in Prayagraj, Saharanpur, Badaun, Jalaun, Banda, Ambedkar Nagar and Azamgarh. We recommend Rs. 300 crore for this purpose.

iv. Grants are sought for establishing satellite centres for screening and diagnostics of communicable diseases in eastern and western Uttar Pradesh. We recommend an amount of Rs. 50 crore for this purpose

v. For establishment of a State Public Health Training and Research Institute (SPHTRI) at the State Institute of Health and Family Welfare, Lucknow, Uttar Pradesh, we recommend an amount of Rs. 15 crore for this purpose.

Uttarakhand

Irrigation and drinking water infrastructure development

133. The State Government has requested grants for the Jamrani River Multipurpose Dam Project and Song River Drinking Water Project which will enable the State to improve the provision of drinking water supply, control flash floods in foothills areas of Dehradun and help in increasing tourism and other economic activities in the Kumaon region. We recommend a grant of Rs. 950 crore for the Jamrani River Multipurpose Dam Project and Rs.500 crore for the Song River Drinking Water Project.

Solid waste disposal and sanitation

134. The State Government has informed us that the districts of Pauri Garhwal and Nainital have inadequate solid waste disposal and sanitation facilities and sought assistance from the Commission. We recommend a grant of Rs.100 crore for Pauri Garhwal and Rs.50 crore for Nainital for this purpose.

West Bengal

Development of infrastructure in backward districts

135. The revised memorandum of the State Government highlighted the importance of the Backward Regions Grant Fund (BRGF) (Special) which was utilised for redressing persistent regional imbalances in the backward districts in West Bengal. Eight sectors have been selected on priority basis - housing, roads and bridges, education, water supply, micro and small scale enterprises and textiles, power, health and irrigation and waterways. Financial support has been sought to meet the shortfall in completion of various programmes and schemes. We recommend a grant of Rs. 1,000 crore for this purpose.

Civil works for restraining Ganga erosion

136. The State Government has requested funds for civil works for restraining Ganga erosion in the State. We recommend an amount of Rs. 550 crore for this purpose.

Drinking water purification projects

137. In its memorandum the State Government has apprised about the need for drinking water purification projects to address the issue of arsenic in sub-soil water. We recommend an amount of Rs. 550 crore for this purpose.

Annex 12.1
(para: 12.65)

Indicative Debt Path of State Governments

(per cent of GSDP)

State	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Andhra Pradesh	35.0	34.1	34.0	33.4	32.7	32.1
Arunachal Pradesh	40.0	38.4	38.0	36.9	35.8	34.8
Assam	27.1	27.7	29.1	29.7	30.2	30.4
Bihar	41.2	40.2	40.8	40.4	39.9	39.3
Chhattisgarh	28.1	28.8	30.2	30.8	31.3	31.6
Goa	33.3	32.5	32.5	31.9	31.2	30.6
Gujarat	30.6	30.0	30.9	30.6	30.3	29.8
Haryana	31.9	31.2	31.4	30.9	30.4	29.9
Himachal Pradesh	39.8	38.3	37.8	36.8	35.7	34.7
Jharkhand	37.2	36.7	37.5	37.4	37.1	36.8
Karnataka	26.1	26.1	27.1	27.2	27.2	27.1
Kerala	35.9	34.7	34.5	33.7	32.8	32.0
Madhya Pradesh	31.3	31.7	32.9	33.3	33.6	33.7
Maharashtra	25.7	26.0	27.5	28.1	28.5	28.5
Manipur	42.8	41.5	41.8	41.2	40.4	39.6
Meghalaya	40.5	39.9	40.3	39.8	39.1	38.4
Mizoram	37.0	35.8	35.6	34.8	34.0	33.2
Nagaland	45.2	43.0	42.1	40.6	39.1	37.7
Odisha	29.4	30.0	31.3	31.8	32.2	32.5
Punjab	46.3	45.2	45.4	44.9	44.2	43.4
Rajasthan	41.1	39.9	40.2	39.6	38.9	38.2
Sikkim	27.4	27.5	28.1	28.1	28.0	27.9
Tamil Nadu	28.9	28.7	29.3	29.1	28.9	28.7
Telangana	29.5	29.3	29.7	29.5	29.3	29.0
Tripura	36.3	34.9	35.1	34.5	33.7	32.8
Uttar Pradesh	40.9	40.0	40.5	40.2	39.7	39.1
Uttarakhand	33.2	33.1	33.9	34.0	33.9	33.7
West Bengal	42.9	42.1	42.6	42.2	41.7	41.2
All States	**33.1**	**32.6**	**33.3**	**33.1**	**32.8**	**32.5**

Annex 13.1
(para: 13.12)

India's governance of public financial management practices

Public financial management dimension	Union Government	State Governments
Fiscal discipline and management of risks	Fiscal Responsibility and Budget Management (FRBM) Act, 2003 (as amended)	State fiscal responsibility laws
Budget formulation	Budget Manual (Department of Economic Affairs (DEA), Ministry of Finance 2010)	State Budget Manuals (if available) - mostly based on Union's budget manual
Internal control/audit	Internal Audit Manual (CGA, MoF 2014)	State treasury codes, Public Works Department Code, Finance rules
Public procurement	General Financial Rules (GFR), 2017 and various orders issued by DoE, MoF	GFR, orders and instructions of State Finance Departments
Monitoring and reporting	Monitoring by departments/agencies as per fiscal rules FRBM Act, GFR 2017, receipt and payment rules, accounting classifications and rules Reporting as per statements prescribed by FRBM Act, accounting manuals, formats and rules prescribed by CAG/CGA	Accountant General, as a field officer of CAG, of a State compiles financial statements and presents to State legislature. AG (Audit) conducts various audits and submits reports to the legislature. Accounting formats are prescribed by CAG.
External Audit	CAG (Duties, Powers and Conditions of Service) Act Audit standards, rules and guidelines issued by CAG. Central Public Accounts Committee (PAC) in Parliament examines the CAG's audit report.	CAG Act Audit standards, rules and guidelines issued by CAG. PAC of State legislature examines the CAG's report on State.

[1] In the Constitution, Article 112-117, 148-151, 202-207, 264-291 (Chapter I and II of Part-XII) defines the broad framework for management of public finances in India.

Annex 13.2
(para: 13.13)

Selected Significant Gaps in the Existing Public Financial Management Structure

Public financial management dimension	Present coverage	Existing gaps/ inconsistencies in legislation	Existing gaps in implementation
Fiscal discipline and management of risks	Present fiscal responsibility legislations cover a lot of ground for numerical fiscal targets, mandatory disclosures, escape clauses etc.	**Union fiscal responsibility legislation**: definitions of deficit and debt are inconsistent with each other. General government debt target is not consistent with wider definition of 'Central Government Debt.' **State Fiscal responsibility legislations:** Many States do not have wider definition of debt and deficit to cover extra budgetary operations. Many State fiscal responsibility laws do not have debt as an anchor. Even where debt is a target anchor, it is not defined in alignment with the general government debt target adopted by the Union.	Central Government debt is not calculated taking full cognizance of the revised definition of debt in Union fiscal responsibility legislation. Medium Term Expenditure Framework statement is not published regularly by the Union and not published by most of the States. Fiscal Risk Statement is not published either by the Union or the States.
Budget formulation	Constitutional provisions under Art.112-117 cover budgetary process in the parliament. GFR, Delegation of Financial Powers Rules and Budget Manual cover rules governing appropriations, sanctions and allocations.	Constitution covers only broad mandate and basic framework. However, downstream operational budgetary processes have no specific legal framework governing them. Documentation requirements and timelines for budget making are not legally defined.	Budgetary processes are not oriented towards performance budgeting or outcome budgeting. Outcome budget document is prepared without much link to the main budget outlay and performance.
Public procurement	GFR, 2017, Receipt & Payment Rules and various orders issued by DoE, MoF	No overarching legal framework for public procurement. Fragmented rules, guidelines and manuals, making it difficult for public agencies to follow them comprehensively.	Multiplicity of rules hamper efficient procurement rather than aiding competitive, transparent and efficient public procurement.
Monitoring and reporting	Ex-post review and audit by CAG under Art.151 and CAG Act.	**Both in Union and States:** External assessment and evaluation mechanism for fiscal plans, performance and government's macro-economic and fiscal forecasts not in place. There is no provision or mechanism for mid-term review or correction of expenditure plan.	Ad hoc mechanism for almost year-end expenditure review (at revised estimates stage), and only when driven by a pressing need. Year-end expenditure cuts are not effective, as payments get postponed to the next financial year.

Annex 13.3
(para: 13.17)

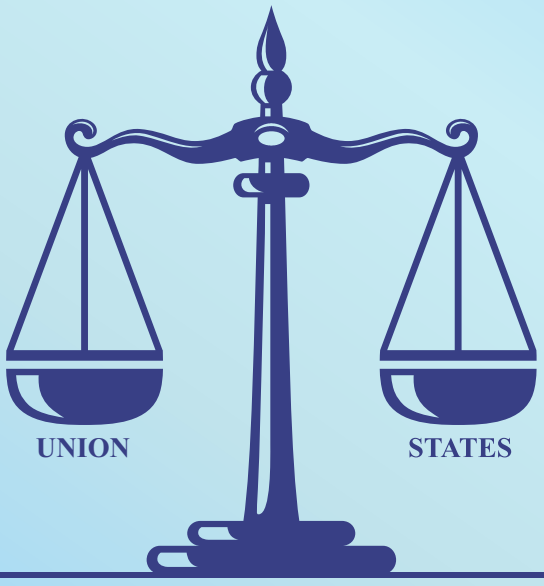
Recommendations of Previous Finance Commissions on Fiscal Architecture

FC	Recommendations
XI 2000 to 2005	The government may (i) examine the feasibility of introducing a multi-year budgeting process; (ii) introduce objective methods of preparing budget estimates so as to improve the quality of budget estimation; (iii) stipulate a maximum time within which reports of the CAG are scrutinised by the Public Accounts Committee and examined by Parliament or State Legislature, as the case may be; (iv) review all expenditure classifications other than revenue and capital; and (v) fully computerise cash flow management at all levels of government in order to improve the efficiency of public expenditure, to have better targeted, beneficiary-oriented programmes and an effective monitoring mechanism.
XII 2005 to 2010	Recommendations with respect to accounting procedure, particularly, adoption of accrual-based accounting. While it recommended a gradual transition in the medium term, it recommended providing some additional information in the form of statements in the interim: (a) a statement of subsidies given, both explicit and implicit; (b) a statement containing expenditure on salaries by various departments/ units; (c) detailed information on pensioners and expenditure on government pensions; (d) data on committed liabilities in the future; (e) statement containing information on debt and other liabilities as well as repayment schedule; (f) accretion to or erosion in financial assets held by the government, including those arising out of changes in the manner of spending by the government; (g) implications of major policy decisions taken by the government during the year or new schemes proposed in the budget for future cash flows; and (h) statement on maintenance expenditure with segregation of salary and non-salary portions.
XIII 2010 to 2015	The adoption of a uniform budgetary classification, particularly object head code and a standardised list of appendices to the Finance Accounts. It also discouraged the incurring of public expenditure by creating funds outside the Consolidated Funds of the States and encouraged improvements in reporting systems.
XIV 2015 to 2020	(I) The Commission endorsed the view that the transition to accrual-based accounting by both the Union and State Governments is desirable. However, recognising that this transition can only be made in stages, as it requires considerable preparatory work and capacity building of accounting personnel, the Commission reiterated the recommendation of the FC-XII that the building blocks for making a transition to the accrual-based accounting system in terms of various statements be appended in the finance accounts by the Union and State Governments. It also reiterated the recommendation that action should be taken to build capacity among accounting professionals in accrual-based accounting systems. (ii) As for the Object Head level, the Commission felt that it is sufficient to have a few uniform Object Heads, such as salary, maintenance, subsidies and grants-in-aid, across both the Union and States and that States should retain their existing flexibility to open new Object Heads, according to their functional requirements. (iii) The Commission underlined the importance of linking outlays with outcomes. However, it emphasised that it is essential to spell out key indicators for outputs and to monitor these within an already defined accountability framework.

सत्यमेव जयते

FINANCE COMMISSION IN COVID TIMES

Report For 2021-26



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FINANCE COMMISSION IN COVID TIMES

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GLOSSARY

ACS-ARR gap	average cost of supply and average revenue realised gap
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
AT&C	aggregate technical & commercial losses
CAMPA	Compensatory Afforestation Fund Management and Planning Authority
CAPFs	Central Armed Police Forces
CEA	Central Electricity Authority
CCAC	Climate & Clean Air Coalition
CIP	central issue price
CSO	Central Statistics Office
CSS	centrally sponsored schemes
COVID	corona virus disease
CPCB	Central Pollution Control Board
CPSEs	central public sector enterprises
DACFW	Department of Agriculture, Cooperation and Farmers' Welfare
DAP	di ammonium phosphate
DAY-NULM	Deendayal Antyodaya Yojana - National Urban Livelihoods Mission
DBT	direct benefit transfer
DARE	Department of Agriculture Research and Education
DIET	District Institute for Education and Training
DISCOM	distribution companies
DISE	District Information System for Education
DLFA	Directorate of Local Fund Audit
DoDW&S	Department of Drinking Water and Sanitation
DRDA	District Rural Development Agency
DoP	Department of Posts
DoT	Department of Telecommunications
EAP	externally aided projects
EBR	extra budgetary resources

ECEA	Electricity Contract Enforcement Authority
FAME	Faster Adoption and Manufacturing of Electric Vehicles
FAR	floor area ratio
FCI	Food Corporation of India
FSI	floor space index
FTAs	free trade agreements
FTP	Foreign Trade Policy
GCA	gross cropped area
GDP	gross domestic product
GEF	Global Environment Facility
GER	gross enrolment ratio
GNP	gross national product
GPI	gender parity index
GSDP	gross state domestic product
GST	goods and services tax
GVA	gross value added
HFCL	Hindustan Fertilizer Corporation Limited
ICDS	Integrated Child Development Scheme
INDC	Intended Nationally Determined Contribution
JJM	Jal Jeevan Mission
Lpcd	litres per capita per day
MNRE	Ministry of New and Renewable Energy
MoAFW	Ministry of Agriculture and Farmers' Welfare
MoEF&CC	Ministry of Environment & Forest and Climate Change
MOP	muriate of potash
MoPR	Ministry of Panchayati Raj
MoRD	Ministry of Rural Development
MoRTH	Ministry of Road Transport and Highways
MW	megawatt

NAMP	National Air Monitoring Programme
NAPCC	National Action Plan on Climate Change
NCA	normal Central assistance
NCAP	National Clean Air Programme
NDMA	National Disaster Management Authority
NDMF	National Disaster Mitigation Fund
NDP	net domestic product
NDRF	National Disaster Response Fund
NDRMF	National Disaster Risk Management Funds
NEH	North-Eastern and Himalayan
NFSA	National Food Security Act
NRDWP	National Rural Drinking Water Programme
NSAP	National Social Assistance Programme
NSSF	National Small Savings Fund
ODF	open defecation free
PCCs	Pollution Control Committees
PESA	Panchayats (Extension to the Scheduled Areas) Act
PFMS	Public Finance Management System
PGI	performance grading index
PLFS	Periodic Labour Force Survey
PMAY-G	Pradhan Mantri Awaas Yojana - Grameen
PMGAY	Pradhan Mantri Garib Kalyan Anna Yojana
PMGSY	Pradhan Mantri Gram Sadak Yojana
PMKSY	Pradhan Mantri Krishi Sinchai Yojana
POL	petrol, oil, lubricants
PPA	power purchase agreement
PPP	public private partnership
RBI	Reserve Bank of India
RCPLWE	Road Connectivity Project for Left Wing Extremist Areas

RDSO	Research Design and Standards Organisation
REC	Rural Electrification Corporation
RGSA	Rashtriya Gram Swaraj Abhiyan
RPO	renewable purchase obligation
SAARC	South Asian Association for Regional Cooperation
SACEP	South Asia Co-operative Environment Programme
SBM-G	Swachh Bharat Mission (Grameen)
SBM-U	Swachh Bharat Mission (Urban)
SCERT	State Council of Educational Research and Training
SDG	Sustainable Development Goals
SDRF	State Disaster Response Fund
SECC	Socio Economic and Caste Census
SEZ	special economic zone
SFC	State Finance Commissions
SPCB	State Pollution Control Boards
TBCB	tariff based competitive bidding
TPDS	Targeted Public Distribution System
UDAY	Ujjwal Discom Assurance Yojana
UNFCCC	United Nations Framework Convention on Climate Change

Chapter 1

Introduction

1. Para (6) of our terms of reference (ToR) mandate that "while making recommendations, the Commission shall have regard, among other considerations, to:

   (i) The resources of the Central Government and the State Governments for the five years commencing on 1st April 2020 on the basis of the levels of tax and the non-tax revenues likely to be reached by 2024-25. In the context of both tax and non-tax revenues, the Commission will also take into consideration their potential and fiscal capacity;

   (ii) The demand on the resources of the Central Government particularly on account of defence, internal security, infrastructure, railways, climate change, commitments towards administration of UTs without legislature, and other committed expenditure and liabilities"

2. In keeping with earlier practice, the Commission had extensive consultations with State Governments, Ministries[1] and Departments of the Union Government and other stakeholders and opinion makers. This Volume III is devoted to the Union Government. Various key departments have been examined in greater depth. Medium-term challenges have been identified, along with some key suggested reforms.

3. In bringing out this volume, we were motivated by a number of considerations. First, the emphasis laid by us on prioritisation of expenditures of the Union Government in Volume I of our Report gets translated into an implementable set of suggestions, disaggregated across important ministries, in this volume. Second, though the ToR recognises the Union as a single entity, its constituent ministries are vital components that make the whole. Third, the performance of some ministries do have a disproportionate impact on the overall finances of the Union; hence the need for a disaggregated analysis. Fourth, a critique by an independent entity can provide useful insights for the reform agenda. Finally, a number of the suggested reforms traverse across ministries and therefore there is need for an integrated approach.

4. We had several rounds of discussions with officials of the Union Ministries, the details of which have been listed in Volume II of our Report. The Ministries also submitted their memoranda to the Commission. We were greatly enriched by these inputs. These thirteen Ministries with the highest allocations account for 53 per cent of the estimated total expenditure in 2020-21. Of these, the Ministry of Defence has the highest

[1] Henceforth, for ease of expression, the use of the word 'ministries' in this volume also includes departments.

allocation of Rs. 4.71 lakh crore (15 per cent of the total budgeted expenditure of the Union Government of Rs. 30.42 lakh crore). Ministries with allocation above Rs. 1 lakh crore are Home Affairs, Agriculture and Farmers' Welfare, Consumer Affairs, Food and Public Distribution and Rural Development. The other Ministries with high allocations are Education, Road Transport and Highways, Communications, Railways, Chemicals and Fertilizers, Health and Family Welfare, Housing and Urban Affairs, Petroleum and Natural Gas. We have covered all these Ministries in our report except three departments related to Consumer Affairs, Chemicals and Petrochemicals and Pharmaceuticals.

5. Thus these thirteen Ministries have been discussed in detail in this volume in the form of separate chapters: Agriculture and Farmers' Welfare, Commerce, Drinking Water and Sanitation, Education, Environment, Forest and Climate Change, Fertilizer, Food and Public Distribution, Home Affairs, Housing and Urban Affairs, Panchayati Raj, Power and New and Renewable Energy and Rural Development. The health and defence sectors have been discussed in separate chapters in Volume I and have, therefore, not been included in this compendium.

6. Apart from the aforementioned Ministries, there are 10 others that are also vital for the growth momentum and for the growth pattern to be socially inclusive. We have dealt with them succinctly and pointedly towards the latter part of this volume.

7. Based upon our extensive interactions with the ministries and also domain experts, our efforts of this volume are directed towards a focus on certain key issues. We have also attempted to leave the contours for many suggested reforms pertaining to the concerned ministries.

8. This Volume III was conceptualised by the Chairman, Fifteenth Finance Commission and has been prepared under the guidance of the Commission.

9. We would like to specially thank Dr. Bibek Debroy, Chairman, Economic Advisory Council to the Prime Minister for providing guidance and valuable suggestions in putting this volume together. We acknowledge and thank the outstanding editorial support provided by Ms. Seetha Parthasarathy.

10. A team of the Commission's secretariat worked diligently and tirelessly in contributing to and assembling this volume. The members of this very professional and cohesive team are: Jasvinder Singh (Consultant, former Director), Sweta Satya, Aditi Pathak, Shikha Dahiya (Joint Directors), Nitish Saini, Vijay Kumar Mann (Deputy Directors) Sushant Kumar Bajaj, Assistant Director and Pallavi Khural, Data Entry Operator. The overall effort was coordinated by Mukhmeet Singh Bhatia, Additional Secretary.

Chapter 2

Ministry of Agriculture and Farmers Welfare

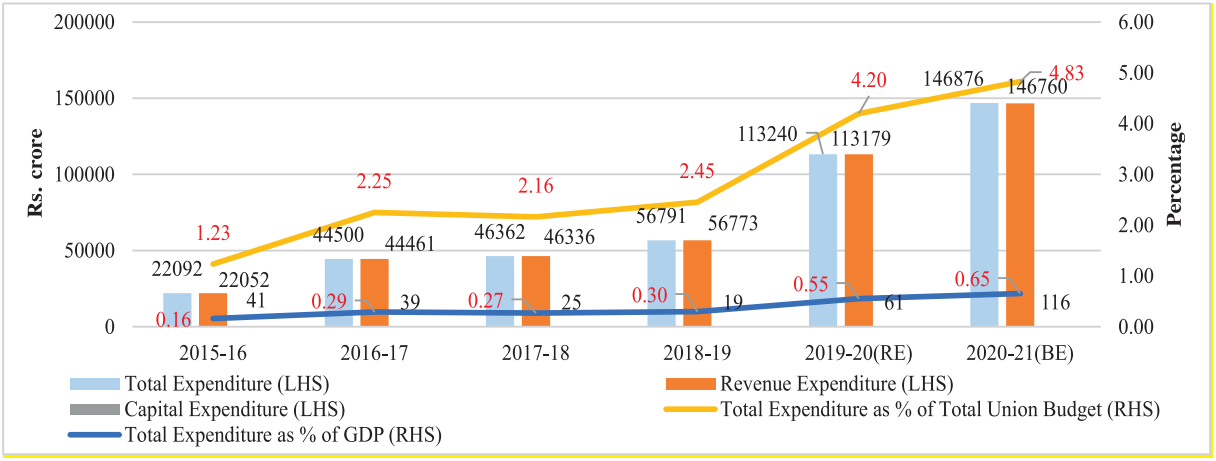
The main objective of the Ministry of Agriculture and Farmers Welfare is the formulation and administration of the rules, regulations and laws related to agriculture in order to maximise agricultural production and farmers' income. The Ministry's role becomes critical as agriculture and allied sectors account for 17.7 per cent of national income and provide employment to around 44 per cent of the country's workforce. Some of the major schemes of the Ministry include PM-KISAN, interest subsidy for short-term credit to farmers and Pradhan Mantri Fasal Bima Yojana.

The sector has shown a long-term trend growth rate of 3.2 per cent and has turned India into a food-secure nation. However, some reforms for sustainable growth in the sector include linking production to processing, diversification towards high-value crops, shifting cultivators to non-farm and subsidiary activities, rationalisation of subsidies, modernisation of land records and more investment in agriculture research.

Overall Profile of Ministry

1. The Ministry of Agriculture and Farmers Welfare (MoAFW), the overall responsibility of which is to nurture a policy environment that helps maximise agricultural production and farmers' income, has two departments: Department of Agriculture, Cooperation and Farmers' Welfare (DACFW) and Department of Agriculture Research and Education (DARE). The Ministry earlier had a third department - Department of Fisheries, Animal Husbandry and Dairying – but this was carved out into a separate ministry in July 2019.
2. The expenditure by the MoAFW (including Fisheries, Animal Husbandry and Dairying) in 2020-21 is budgeted at Rs 1,46,876 crore. This constitutes about 0.65 per cent of gross domestic product (GDP), an increase from 0.16 per cent of GDP in 2015-16 and 4.83 per cent of the total Union Budget (against 1.23 per cent in 2015-16). Of the total expenditure, revenue expenditure is Rs 146,760 crore and capital expenditure is Rs 116 crore. DACFW received 91 per cent of the total budget of the Ministry while DARE received only 6 per cent and Fisheries, Animal Husbandry and Dairying only 3 per cent. The year-wise allocation of the Ministry is given in Figure 1.

Figure 1: Expenditure of Ministry of Agriculture and Farmers Welfare



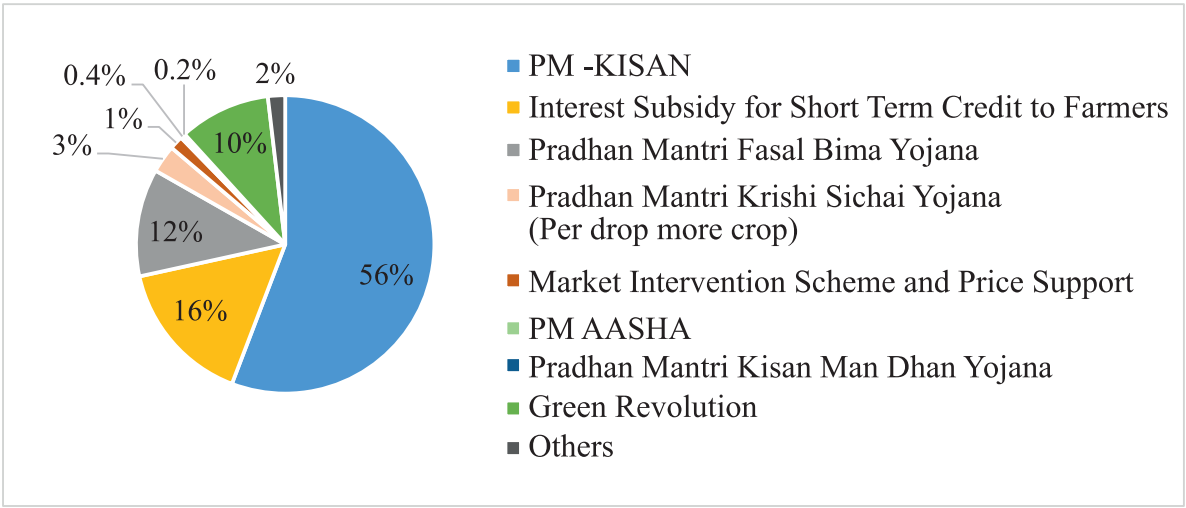
Source: Union Budgets and CSO

Note: Includes expenditure of Department/Ministry of Fisheries, Animal Husbandry and Dairying.

3. The budgetary allocation for MoAFW in 2020-21 is 30 per cent higher than the revised estimate for 2019-20, primarily due to a higher allocation of Rs. 75,000 crore for PM-KISAN (income support scheme for farmers). The scheme had been allocated Rs. 75,000 crore in the budget estimate for 2019-20 as well, but this was later revised down to Rs. 54,370 crore.

4. PM-KISAN accounts for 56 per cent of the allocation to the DACFW. Other major expenditure items of the Department include interest subsidy for short-term credit to farmers (16 per cent) and Pradhan Mantri Fasal Bima Yojana (12 per cent).

Figure 2: Break-up Schemes of the DACFW in 2020-21 (BE)



Source :Union Budget, 2020-21

Box 1 : Higher the Government Intervention, Lower the Growth

Within the agriculture sector as a whole, the crop sector, which the majority of farmers are dependent on, records minimal growth despite getting maximum government support in the form of resources and subsidies. Table below shows the extent and type of government intervention in various sub-sectors of agriculture and their growth rates. This demonstrates that sectors where there is a greater degree of liberalisation and less government intervention show higher growth.

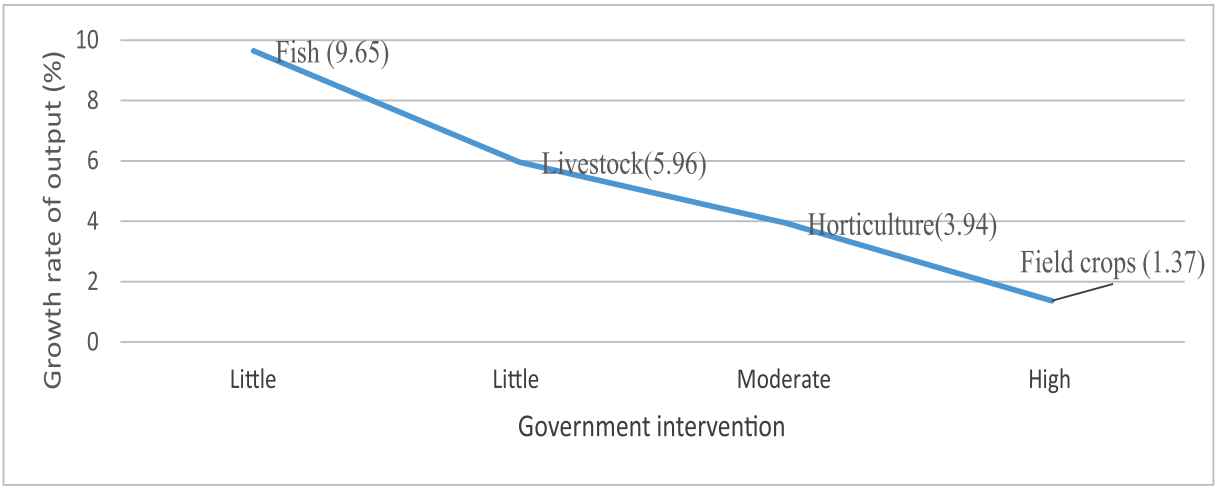
Output Growth in Agricultural Sub-sectors

Sub-Sector	Policies	Government Support	Output Growth 2011-12 to 2018-19 (%)
Fishery	• Little or no subsidy. • Foreign direct investment allowed. • Some institutional support	Very low	9.65
Livestock	• Milk and Milk Product Order, 1992 (MMPO) liberalised. • No restrictions on private investments in milk plants. • No market regulation. • Co-operatives, milk plants, private agents procure directly from farmers directly. Little or no subsidy.	Very low	5.96
Fruits and vegetables	• No price support. Input subsidy given. • Regulated by APMC in some states	Moderate	3.94
Cereals, oilseeds, pulses (Crops under the minimum support price regime)	• Heavily subsidised sector with procurements and MSP. Marketing of products is also over-regulated by APMC Act. Little corporate investment seen in production and marketing	Very high	1.37

Figure 3 underlines the fact that putting more resources into subsidies and support to farmers does not lead to higher growth. Highly controlled and supported sub-sectors like cereals, oilseeds and pulses exhibit very little growth in contrast to liberalised and low intervention sectors like fisheries, livestock and horticulture.

Source: National Accounts Statistics 2020, output data at 2011-12 prices

Figure 3: Government intervention vis-a-vis growth rate of output between 2011-12 and 2018-19 in various agricultural sectors



Source: National Agricultural Statistics 2020, output data at 2011-12 prices

Policy Proposals in Union Budget 2020-21

- The Union Government will encourage State Governments to legislate and implement model laws relating to land leasing, agricultural produce and livestock marketing, and contract farming.
- The Union Government will provide viability gap funding for setting up warehouses at the block/taluk level. A village storage scheme has been proposed to be run by self-help groups.
- Kisan Rail' with refrigerated coaches will be started to build a seamless national cold supply chain for perishables. 'Krishi Udaan' will be launched on international and national air routes to help farmers transporting their products that will help improve their value realisation.

Agriculture Exports

The High Level Group (HLEG) on Agricultural Exports[2] highlighted the following points on agricultural exports:

- India's aspiration to double farmer incomes necessitates a commensurate increase in its

[2] Report at Finance Commission Website
Growing India's agricultural exports through crop-specific, state-led plans

agriculture output. This increase in output would require a fundamental transformation of the agriculture sector. However, the resultant increase in production would only serve to increase pricing pressure and lower farmer remuneration in a balanced, self-sufficient agriculture market. It is in this context that significant enhancement of agricultural exports becomes a national imperative.

- India has strong natural endowments in agriculture. It is a leading producer of several commodities, including shrimps, spices, mango, papaya, banana, rice, cotton, wheat and sugar. It ranks second in total agricultural production and has the largest population of buffaloes. India exported US$ 38.7 billion of agricultural commodities in 2019.
- India has seen success with exporting a set of value chains, including rice and shrimp, which comprise a third of India's total agricultural exports. It has competitive advantage in these products and they were specified as value chains of opportunity by the Agricultural and Processed Foods Export Development Authority (APEDA) and the 2018 Agri Export Policy. It is a significant exporter across a variety of commodities and agricultural products, exporting forty commodities and agriculture products, each at over US$ 100 million of value in 2018 and five commodities/products at over US$ 1 billion each. A view of India's top agricultural exports in 2018 can be seen in Table 1.

Table 1: Top Indian Agricultural Exports in 2018

Commodities and Products	Export Value in 2018 (US$ billion)
Rice	7.3
Shrimps, frozen	4.4
Meat of bovine animals, frozen	3.3
Cotton, raw	2.4
Cotton; not carded or combed	2.2
Vegetable saps and extracts	1.0
Sugar	0.9
Fixed vegetable fats and oils	0.9
Cake, soybeans	0.9

- Despite its agricultural advantages, however, India ranks only thirteenth in total value of agricultural exports, lagging behind countries such as Belgium and the Netherlands. India's processed exports have been steadily improving, but it still has a higher global share of raw commodities than processed goods. Vaulting India into an even more competitive export position globally will require changes in productivity, quality, non-tariff barriers, a continuing drop in all factor costs, lower logistics cost and a greater focus on processing and value addition.

Initiatives to Deal with Fallout of Covid-19 Pandemic

I. *Agricultural policy reforms*

- *The Farming Produce Trade and Commerce (Promotion and Facilitation) Act, 2020:* This Act will result in the long-pending market liberalisation and creation of alternative transaction avenues. It will create an ecosystem where farmers and traders will enjoy freedom of choice in the sale and purchase of agri-produce and promote barrier-free inter-state and intra-state trade and commerce outside the physical premises of markets notified under State Agricultural Produce Marketing legislations. This is a historic step in unlocking the vastly regulated agriculture markets in the country.
- *The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020:* This Act will empower farmers to engage with processors, wholesalers, aggregators, large retailers, exporters etc., on a level playing field without any fear of exploitation. It will transfer the risk of market unpredictability from the farmer to the agents, and also enable the farmer to access modern technology and better inputs. It will reduce the cost of marketing and improve farmers' income. Processors and exporters will, as a result of the agreement with farmers, be able to get the produce of desired quality and quantity at the appropriate time.
- *Amendment to the Essential Commodities Act, 1955:* The amendments to the Essential Commodities (EC) Act, 1955, has taken commodities like cereals, pulses, oilseeds, edible oils, onion and potatoes out of the list of essential commodities. This will reassure private investors that they will not be subject to excessive regulatory interference in their business operations. The freedom to produce, hold, move, distribute and supply will lead to harnessing of economies of scale and attract private sector/foreign direct investment into agriculture-related infrastructure like warehouses, cold storage, logistics and modern food supply chains. The amendment announced will help mop up any glut of commodities in the market and benefit both

farmers and consumers by ensuring price stability. It will create a competitive market environment and also prevent the wastage of agri-produce, which is a serious problem due to lack of storage facilities. A transparent criterion has been specified to invoke the Act for agri food stuff under adverse situations.

II. ***Stimulus package***

- Of the five tranches of fiscal stimulus that the Finance Minister announced to respond to the pandemic, the third tranche included various measures to boost agriculture, strengthen infrastructure logistics and capacity building for the agriculture, fisheries and food processing sectors. A summary of these measures is given in Table 2.

Table 2: Measures to Boost Agriculture in the Fiscal Stimulus Package

(Rs. crore)

Item	Amount
Food Micro Enterprises	10000
Pradhan Mantri Matsya Sampada Yojana	20000
TOP to TOTAL: Operation Greens	500
Agriculture Infrastructure Fund	100000
Animal Husbandry Infrastructure Development Fund	15000
Promotion of Herbal Cultivation	4000
Beekeeping Initiative	500
Total	**150000**

Recommendations of FC-XV in Report for the Year 2020-21

- The income of agricultural workers and farmers remained low and did not keep pace with the growth in the income of non-farm workers. Keeping in view the goal of doubling farmers' income and reducing agrarian distress, we have identified a set of reforms which are central to liberalising agricultural markets, provide for seamless trading, promote competition and catalyse organised investment from the private sector for better growth in agriculture sector.
- The States will be eligible for financial incentives if they enact and implement all features of: (a) Model Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act issued by the Ministry of Agriculture, Cooperation and Farmers Welfare in 2017, (b) Model Agricultural Produce and Livestock Contract Farming and Services (Promotion & Facilitation) Act, issued by Ministry of Agriculture and

Farmers Welfare in 2018, and (c) Model Agricultural Land Leasing Act, 2016, prepared by the NITI Aayog.

- We recommend that State Governments take preparatory action by securing the passage of these Bills in their respective legislatures in 2020-21 to become eligible to avail the grants awarded from 2021-22 onwards.

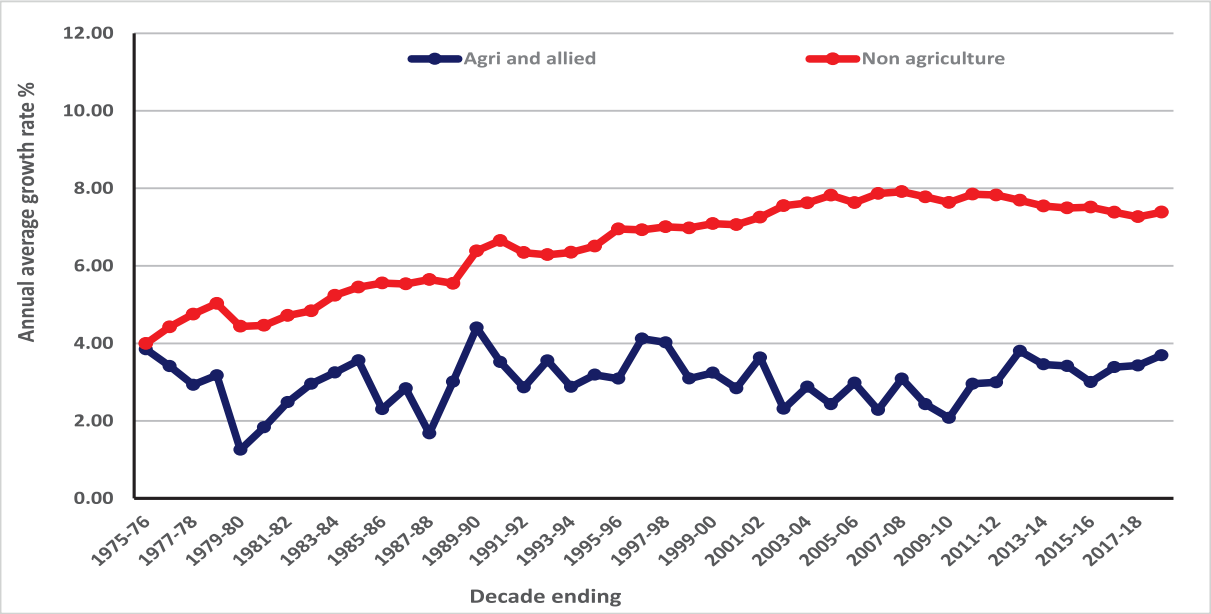
As mentioned earlier, in June 2020, the Union Government announced the implementation of some of these reforms as part of its efforts to mitigate the effects of the Covid-19 pandemic. These will go a long way in helping India's farmers and transforming the agricultural sector.

Challenges

Increasing disparity between agriculture and non-agriculture growth

- Figure 4 shows the divergence in the growth path of output in agriculture and non-agriculture sectors. This low growth, combined with the high dependence on agriculture for livelihood is the prime reason for the low income of farmers. Figure 5 shows the annual income of non-agricultural workers and agricultural cultivators. The ratio between the two was 2.983 in 1983-84 and rose to 3.157 in 2011-12. The low level of absolute income for farmers as well as increasing disparity between the income of farmers and non-agricultural workers can become an important reason for farmer distress.

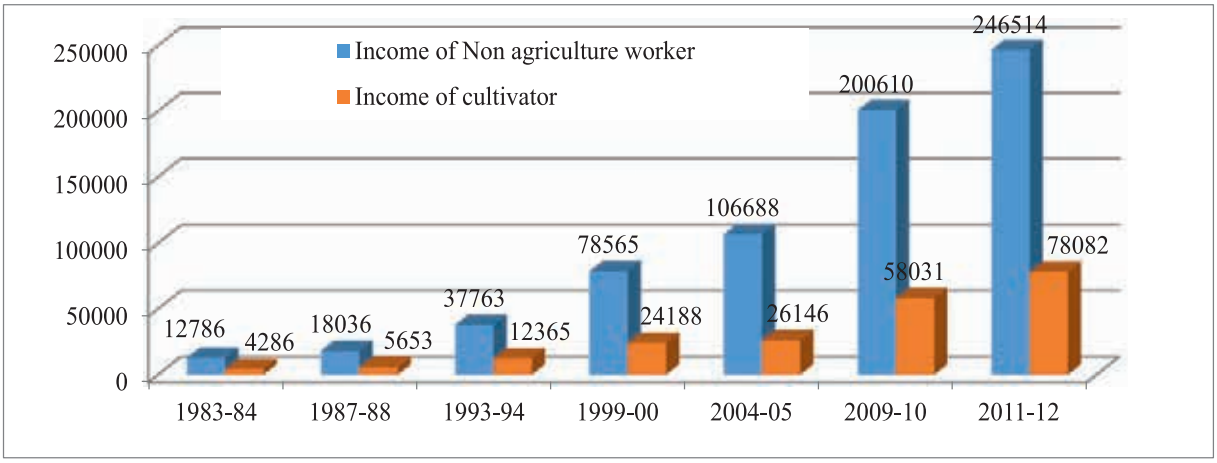
Figure 4: Annual Growth Rate in Agriculture and Non-Agriculture Sectors



Source: National Accounts Statistics

Figure 5: Annual Income Per Cultivator and Non-Farm Worker

(Rs. at current prices)



Source: National Accounts Statistics

Burden of agricultural subsidies is increasing with less than proportionate benefits

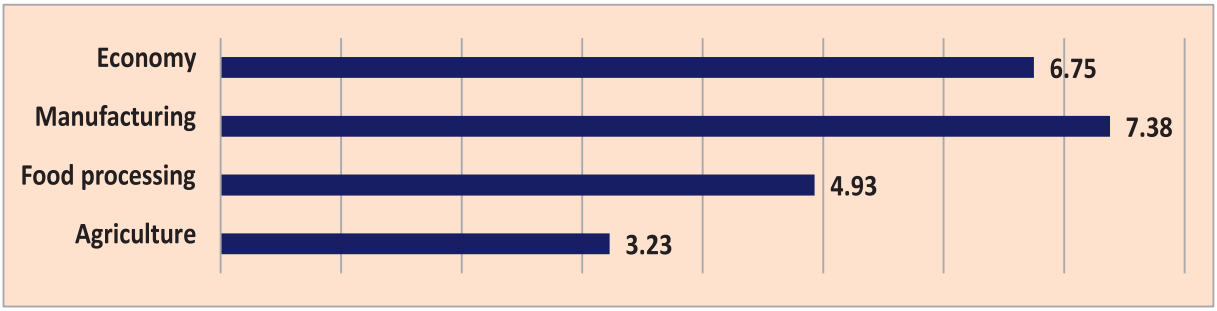
- A study done by Indian Statistical Institute for the FC-XV calculated the annual Union Government subsidies to farmers to be of the order of Rs. 120,500 crore. This includes fertilizer subsidies (Rs. 70,000 crore, 2017-18), credit subsidies (Rs. 20,000 crore, 2017-18), crop insurance subsidies (Rs. 6,500 crore, 2018-19) and expenditures towards price support (Rs. 24,000 crore estimated for 2016-17). Annual State Government subsidies are almost of an equal amount – Rs. 115,500 crore, which is the sum of power subsidies (Rs. 90,000 crore, 2015-16), irrigation subsidies (Rs. 17,500 crore, 2013-14) and crop insurance subsidies (Rs. 6,500 crore, 2018-19). In addition, State Governments announced loan waivers in 2017-18. Overall farm subsidies are estimated at 2-2.25 per cent of GDP.
- As stated earlier, higher intervention in agriculture products have not led to higher growth. Besides this, subsidies have other adverse impacts:
  - ◊ *Price interventions* create inefficiencies because they generate incentives for corruption, diversion and waste.
  - ◊ *Power subsidies* imperil the already stretched groundwater resources by the overuse of motor pumps and adversely affect the sustainability of natural resources.
  - ◊ *Credit or interest subsidies* have a weak rationale. Formal sector interest rates have not been a constraint to increasing access to formal sector lending institutions. These subsidies would be better spent in strengthening the credit infrastructure and rural banking.

◊ *Loan waivers* not only have serious implication for state fiscal resources and banking health but also encourage farmers to default in future.

Slow growth of food processing sector

- The growth rate of the food processing sector has been dismal for some years and picked up recently. This can be attributed to various policy factors. Figure 6 shows that the average growth rate of the food processing sector was 4.93 per cent from 2012-13 to 2018-19, which is much lower than the economy's growth rate. An important reason for this is that farmers do not get an attractive market for their produce and processors do not get assured supply. Thus, linking processors with producers (farmers) through contract farming or market liberalisation has vast scope to raise output and farm income.

Figure 6: Average Growth Rate (%) in GVA - 2012-13 to 2018-19



Source: National Accounts Statistics

Small and marginal farmers

- Indian agriculture is dominated by marginal and small farmers, who suffer serious disadvantage in terms of scale. Small farm sizes discourage many farmers from opting for diversification into fruits and vegetables mainly because of the price risk and uneconomic lots for marketing. Small farmers are also at a disadvantage in terms of bargaining power in various transactions in the input and output markets.

Low involvement of private sector

- Table 3 shows that that capital investment in agriculture as percentage of gross value added (GVA) was only 13.83 per cent. Out of this, 78 per cent investment came from the household sector while only 2.82 per cent came from the private sector. Involvement of the private sector is important for the modernisation of agriculture. The lack of such involvement is one of the reasons for the low growth of the agricultural sector.

Table 3: Gross Capital Formation (2016-17)

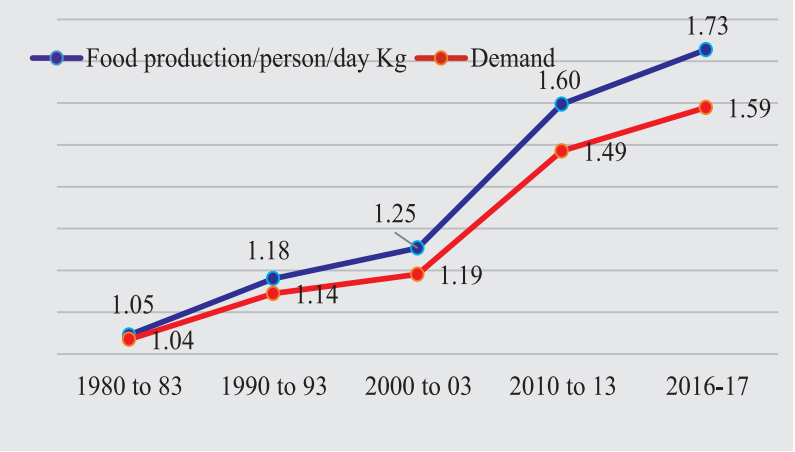
Sector	Capital investment as % of GVA	Share in total gross capital formation in sector (%)		
		Private corporate	Public sector	Households
Agriculture	13.83	2.82	18.75	78.43
Non-agriculture	36.18	46.76	25.77	27.48
Economy	32.17	43.37	25.23	31.41

Source: National Accounts Statistics

Surplus rising but export getting difficult

Figure 7: Food Production and Demand

Figure 7 shows that food surplus in the country has been rising over the years, as the supply has increased far more than demand. At the same time, exports have not been picking up at that pace. One reason for this is that domestic prices of some of commodities are higher than international prices.



Source : National Accounts Statistics

Weak supporting infrastructure

- Agriculture in India is characterised by informal or traditional supply chains that deliver products to local middlemen and then to small local stores. Formal value chains can deliver the same product, usually in better or more uniform quality, to more commercial firms – wholesalers, supermarkets or exporters. The bulk of the produce is sold by farmers in raw form and is taken from the field to the mandi after harvest. This causes a glut in the market and suppresses prices. Farmers do not keep produce for sale in lean months. There is now a provision for warehouse receipt and keeping produce in warehouses registered with the Warehousing Development and Regulatory Authority (WDRA).

- Price crashes are very common in the case of perishables. Absence of on-farm storage facility, lack of scientific method to extend the shelf life and poor processing base in the country are some of the factors behind such price crashes. If market reforms are implemented seriously, it will pave the way for entry of the private sector in agriculture and value chains may then be developed.

Minimum Support Prices

- The Union Government announces MSPs for twenty-two crops – cereals, pulses and oilseeds – in the kharif as well as rabi seasons. This is the price at which public agencies procure agricultural produce in order to keep farm prices from falling below reasonable levels and to meet requirements of the public distribution system, buffer stock and other public objectives.
- While presenting the 2019-20 Union Budget, the Finance Minister announced that MSPs for certain rabi and kharif crops will be set at least at one and a half times the production cost. This production cost, A2+FL, includes costs of inputs such as seeds and fertilizers, hired labour and implied cost of family labour. While MSPs are announced for twenty-two crops, public procurement is limited to a few such as paddy, wheat, cotton and, to a limited extent, pulses and oilseeds. The procurement is also limited to a few states. Three states (Haryana, Madhya Pradesh, and Punjab) which produce 45 per cent of the wheat in the country account for 81 per cent of procurement. In the case of paddy, six states (Andhra Pradesh, Chhattisgarh, Haryana, Odisha, Punjab and Telangana) with 38 per cent of production have 82 per cent share in procurement.
- Other issues with the implementation of MSPs include: (i) low awareness among farmers before the sowing season (according to NITI Aayog, 62 per cent of the farmers were informed of MSPs after the sowing season); (ii) procurement centres being situated far away from farmers' location; (iii) increasing cost of transportation for farmers; and (iv) inadequate storage capacity.
- NITI Aayog noted that the agricultural pricing policy needs to be reviewed to ensure that farmers receive remunerative prices for their produce. Farmers are often forced to engage in distress sales and selling below MSP.

Suggested Reforms and Way Forward

State Governments need to adopt governance reforms

- Policies have a strong effect on farmers' income and create an environment for harnessing opportunities and potential technologies. The Union Government has already initiated some of the policy and governance reforms, as noted earlier in this chapter. As agriculture is a State subject, State Governments need to be proactive as well and work in coordination with the Union Government to promote reform in agriculture sector.
- Two important policy reforms that need to be implemented by State Governments are:
  i. **Land leasing laws:** There is need for a new land leasing legislation on the lines of the Model Agricultural Land Lease Law proposed by NITI Aayog. State legislatures should enact this legislation on similar lines.
  ii. **Forestry on private land:** Remove restrictions on felling and transit of trees. Allow timber and wood based industry, in line with the guidelines issued by the Ministry of Environment and Forests.
- Land reforms should also include computerisation and updating of land records and geo tagging of land parcels with revenue records, as has been done by Karnataka, and move from the present system of presumptive land titling to exclusive land titling.

Linking production to processing

- Linking processors with producers (farmers) through contract farming or market liberalisation has vast scope to raise output and farm income. Food parks need to be developed to enhance the potential of this sector. The food processing industry is much more labour-intensive than other industries. Promoting food processing in rural areas will thus generate more employment and help in shifting the workforce from agriculture to industry.

Promoting Farmers Produce Organisations

- Farmers Produce Organisations (FPOs) should be encouraged and promoted to enable the farmers to reduce transaction costs, access technology, raise bargaining power and integrate with value chains. This will help in raising the income of small holders by increasing production and linking them to the market and will also address the problems of small and marginal farmers.

Increase in agricultural productivity

- Productivity of most crops is low and there is considerable scope to raise this. Barring wheat, the productivity of other crops is below the world average and much lower than in agriculturally advanced countries. Enhancing access to irrigation and technological advancement are the most potent instruments for raising agricultural productivity and production. This will require state-of-the-art technologies starting from seeds and covering the entire production chain.
- There is an urgent need to strengthen the system of agricultural research and development (R&D). Public R&D institutions should be supported to develop capacity in areas of agricultural technologies. Also, scientific knowledge should be disseminated to farmers through modern methods of extension and an enabling environment for the adoption of new technologies should be created.
- Pending projects under the Pradhan Mantri Krishi Sinchai Yojana should be completed at the earliest.

Diversification towards high-value crops

- Diversification towards high-value crops offers immense scope to improve farmers' income. The staple crops (cereals, pulses, oilseeds) occupy 77 per cent of the total or gross cropped area (GCA) but contribute only 41 per cent of total output of the crop sector. On the other hand, high-value crops (fruits, vegetables, fibre, condiments and spices and sugarcane) contributed almost the same value of output, even though they occupied only 19 per cent of GCA during 2013-14. Average productivity of high-value crops, after adjusting for cropping intensity variations, was estimated at Rs. 1,14,777 per hectare as compared to Rs. 41,169 per hectare for the staple crops. With this differential in productivity, shifting one hectare area from staple crops to commercial high-value crops has the potential to increase gross returns up to Rs. 1,01,608 per hectare. Hence, State Governments need to undertake programmes to shift the focus of farmers to high-value crops.

Shifting cultivators to non-farm and subsidiary activities

- According to the Periodic Labour Force Survey (PLFS) 2017-18, about 55 per cent of the male workers and 73.2 per cent of the female workers in usual status in rural areas were employed in the agricultural sector. On the other hand, agriculture contributes only 39 per cent of total rural net domestic product (NDP). This shows over-

dependence of the workforce on agriculture with significant underemployment. Hence, there is need for employment diversification by improving employment opportunities in the non-farm sectors.

Rationalisation of subsidies

- A policy shift is needed from price subsidies and farm loan waivers to income subsidies like PM-KISAN. State Governments need to adopt such policies.
- Free power for agriculture has not only impacted the fiscal health of the power sector but has become serious sustainabilityconcern with the overdrawing of ground water leading to a falling water table. States must take strong measures to check this, including direct benefit transfer of power subsidy instead of free power. Also, States may incentivise farmers to adopt drip irrigation and shift away from water-intensive crops in affected areas.

Investment in agriculture research

- Studies have shown that return on research investments in agriculture is very high. As already noted, DARE receives only about 6 per cent of the total budget of the Ministry of Agriculture. There is need for quality research in areas like productivity of edible oil, anti-microbial resistance, precision farming, digital agriculture and modernisation of crop breeding. Hence, the Union Government needs to enhance investment in agricultural research. This is also central to increasing productivity of crops and increasing farmers' income in the long run. The Indian Council of Agricultural Research (ICAR) and State Agricultural Universities are the two pillars of public sector R&D. Many State Agricultural Universities are starved of funds. Similarly, extension systems have weakened in most states and need to be revamped.

Strengthening of the 16 action points

- In the Union Budget of 2020-21, sixteen action points were put forward to focus on farmers' income, storage, blue economy and animal husbandry. To boost storage and logistics, creation of warehouses through viability gap funding on a public-private-partnership mode at block level, Kisan Rail and Krishi Udaan were started. Under Blue Economy, a framework for the development, management and conservation of marine fishery resources and promotion of algae, sea weed and cage culture to assist in raising fish production are being promoted. Measures are being undertaken to facilitate

doubling of milk processing capacity from 53.5 million metric tonnes to 108 million metric tonnes by 2025.

- As part of the fiscal stimulus package to cope with the Covid pandemic, the Union Government gave further boost to these measures. These need to be strengthened to diversify the risk of farmers and increase their income.

FC-XV recommendations in its final report

- We recommend that Rs. 45,000 crore be kept as performance-based incentive for all States to encourage them to carry out agricultural reforms for the award period based upon four parameters as mentioned in Chapter 10 of Volume I. Its distribution over States, based on gross value added in agriculture in each State. NITI Aayog will be the nodal agency for monitoring and reporting progress of the indicators in each State and recommend the release of performance-based reward on the basis of annual assessment.

Chapter 3

Department of Commerce

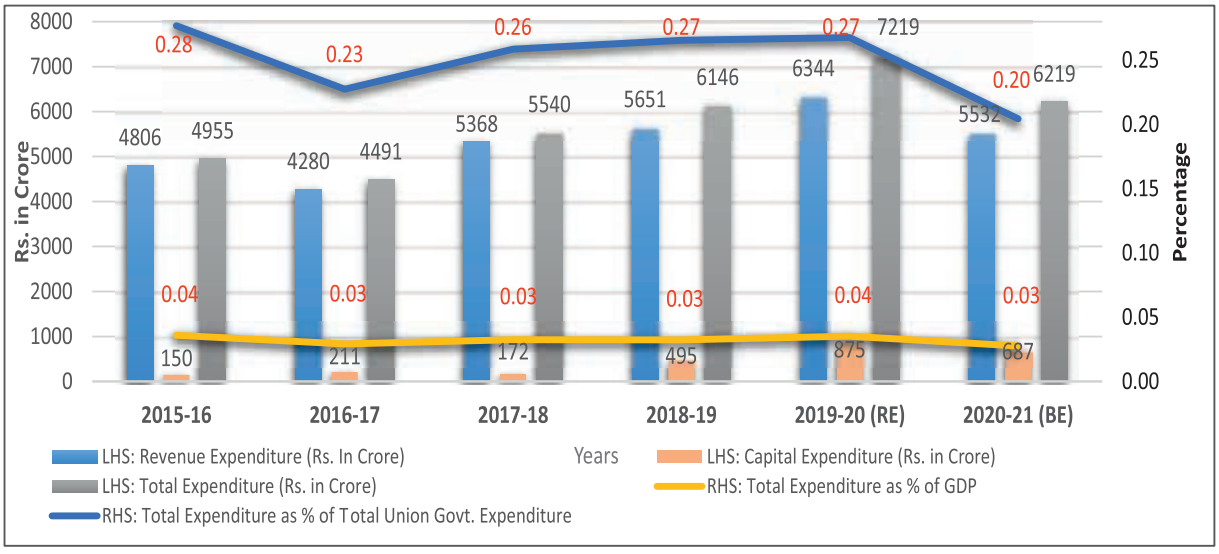
The Department of Commerce formulates, implements and monitors the Foreign Trade Policy which provides the basic framework of policy and strategy for promoting exports and trade. The Foreign Trade Policy is periodically reviewed to incorporate changes necessary to take care of emerging economic scenarios in both the domestic and international economies. Besides, the Department is also entrusted with responsibilities relating to multilateral and bilateral commercial relations, special economic zones, state trading, export promotion and trade facilitation and the development and regulation of certain export-oriented industries and commodities.

As the Indian economy approaches the US$ 5 trillion mark, the nation should aspire to touch the US$ 1 trillion figure in exports. Recognising the enormous potential and opportunity which the export sector presents, the Government of India needs to pursue a comprehensive and focussed strategy aimed at encouraging innovation, skill development, harmonising domestic quality standards and infrastructure upgradation as well as implementing cross cutting domestic reforms in order to enhance competitiveness and make India a global trade hub.

Overall Profile of the Department

1. The Union Budget, 2020-21 allocated Rs. 6,219 crore to the Department of Commerce. This represents 0.20 per cent of the Union Government's total budget and 0.03 per cent of estimated gross domestic product (GDP) for 2020-21. Figure 1 shows the year wise allocation of the Ministry.

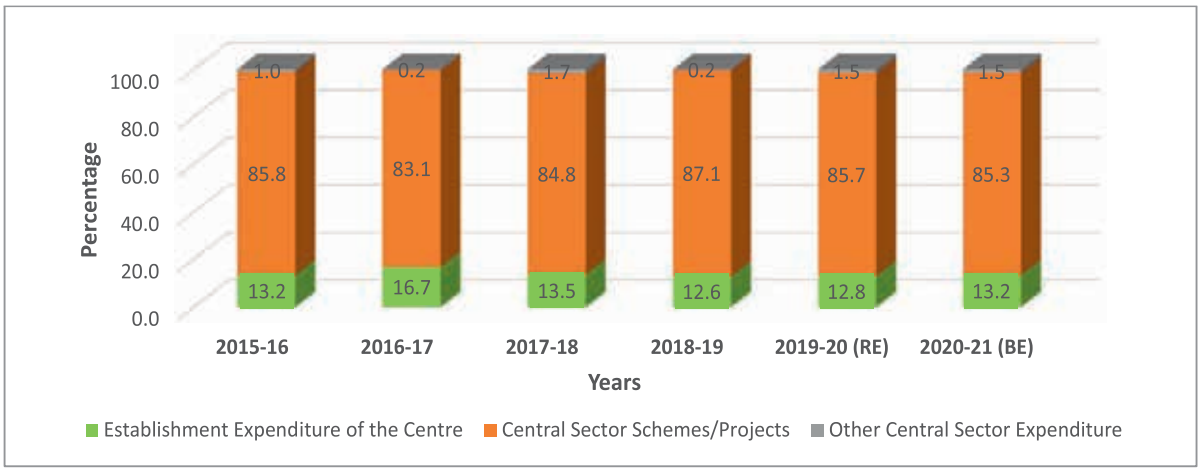
Figure 1: Expenditure of Department of Commerce



Source: Union Budgets and CSO

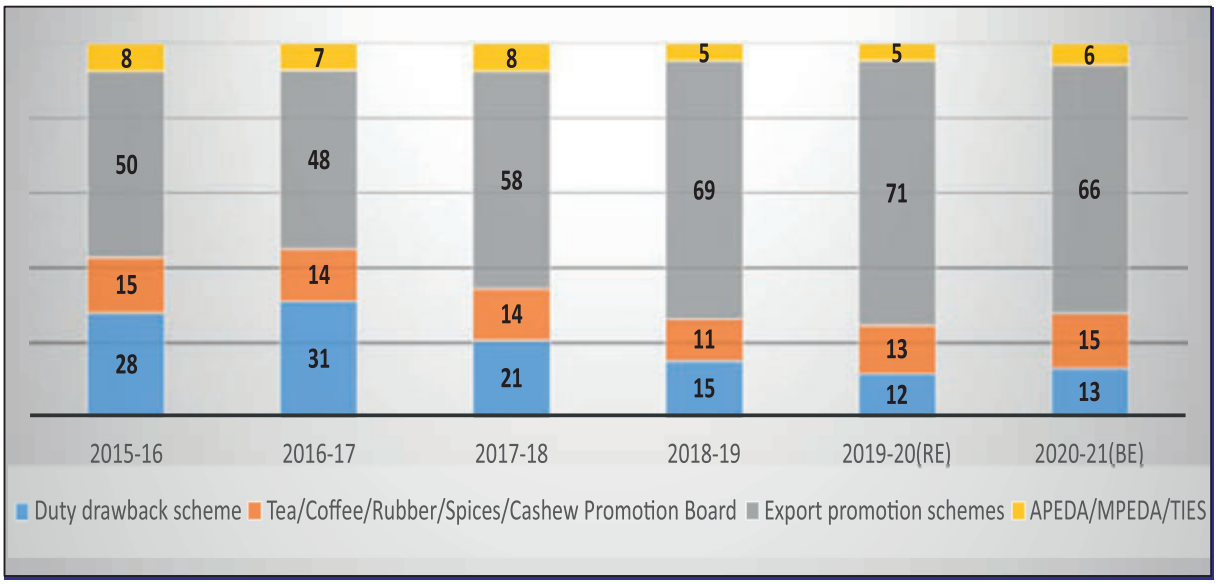
2. Figure 2 indicates the head-wise expenditure of the department. Almost 85-86 per cent of the department's expenditure is on Central sector schemes. Figure 3 shows the break-up of spending on these schemes from 2015-16 to 2020-21 (BE). The bulk of expenditure is on the export promotion schemes.

Figure 2: Head-wise Expenditure (%)



Source: Union Budgets

Figure 3: Spending on Central Sector Schemes (%)



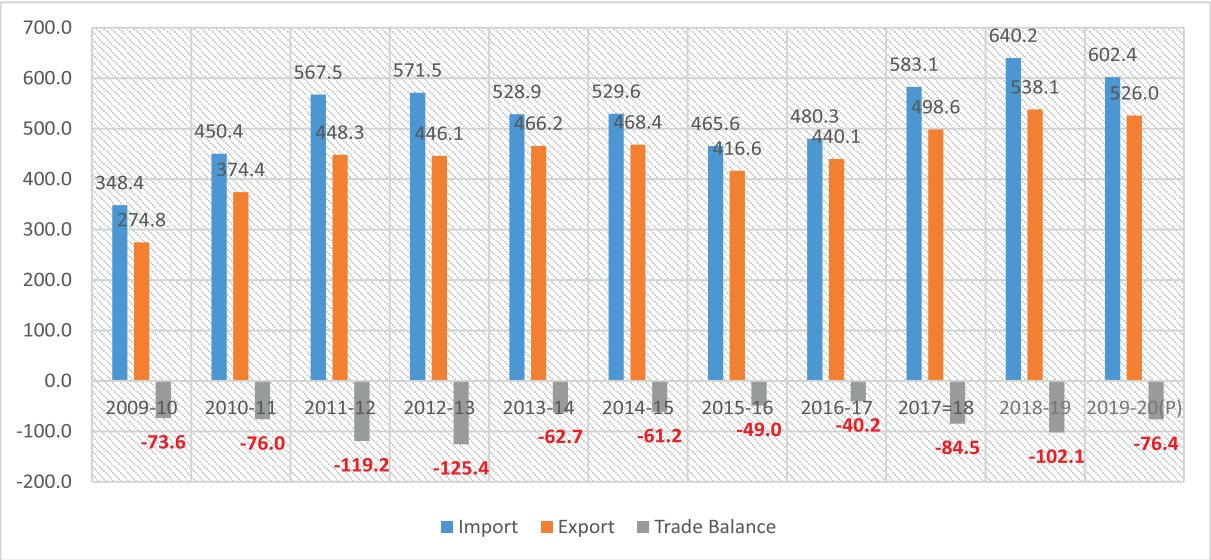
Note : APEDA: Agricultural and Processed Food Products Export Development Authority

MPEDA : Marine Products Export Development Authority

TIES : Trade Infrastructure for Export Scheme

3. Figure 4 indicates the overall trade balance of India in the recent years, while Figure 5 and Figure 6 give a disaggregated view. It can be seen from Figure 6 that though net trade in services is always positive, the overall trade in India is in deficit mainly due to deficit in merchandise trade (Figure 5).

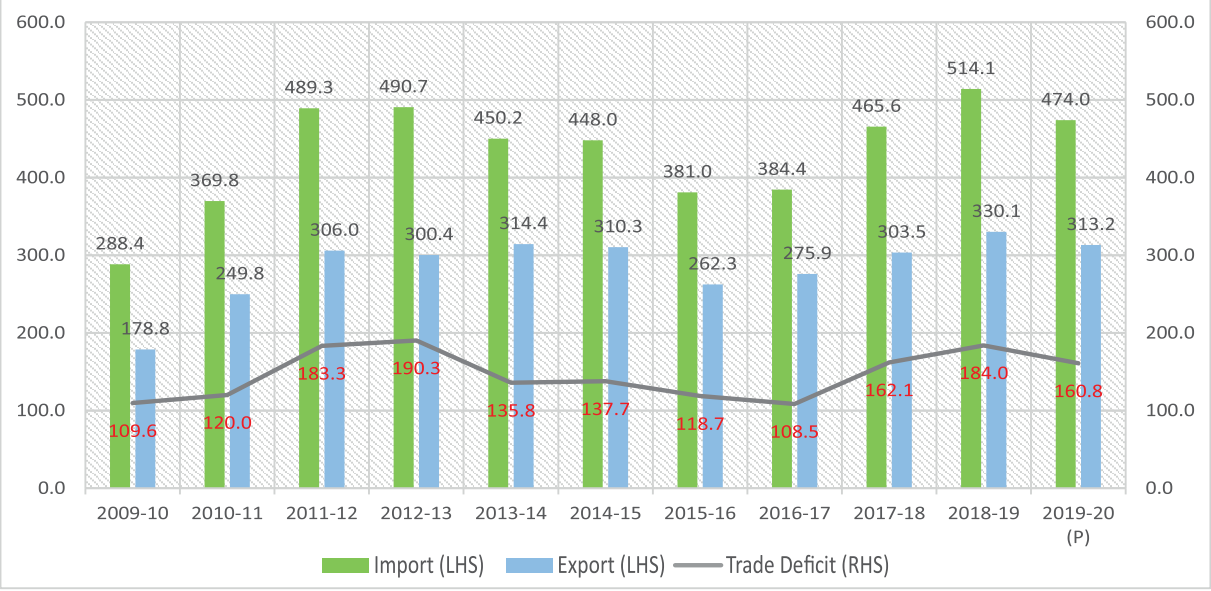
Figure 4: Trend in Overall Trade (US$ billion)



Source: Ministry of Commerce and RBI (Monthly Bulletins)

Note: P: Provisional

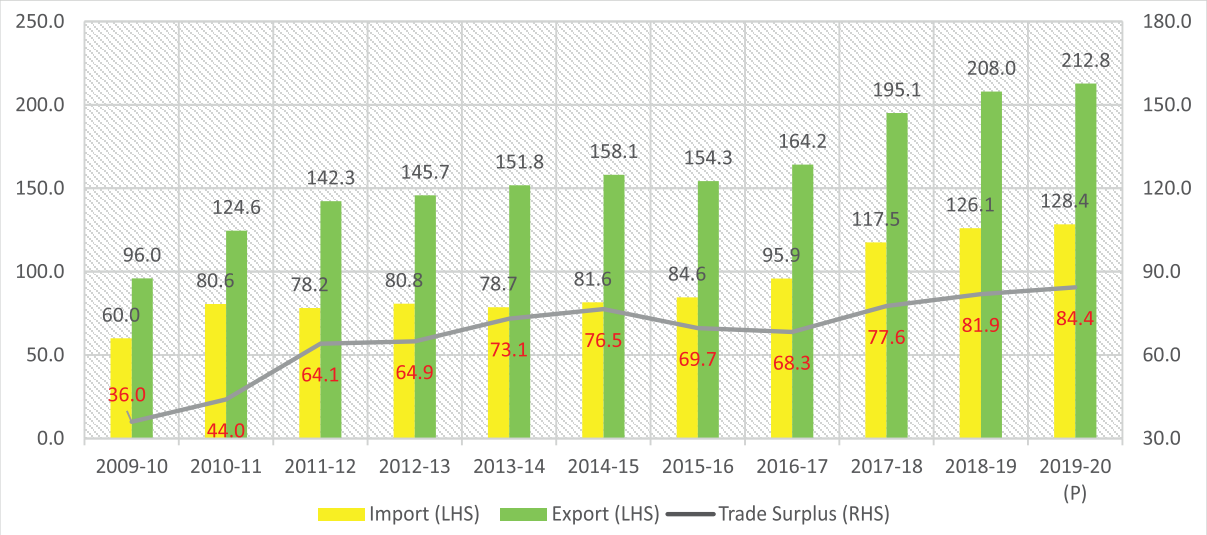
Figure 5: Trend in Merchandise Trade (US$ billion)



Source: Ministry of Commerce and RBI (Monthly Bulletins)

Note: P: Provisional

Figure 6: Trend in Services Trade (US$ billion)



Source: Ministry of Commerce and RBI (Monthly Bulletin)

Note: P: Provisional

4. Table 1 indicates the top ten commodity exports and imports from India. Table 2 indicates the top ten export destinations and sources of imports of India.

Table 1: India's Merchandise Trade (Commodity-wise)

Exports of Top Ten Commodities in 2018-19						Imports of Top Ten Commodities in 2018-19					
In US$ billion						In US$ billion					
Rank	Commodity	Apr-Mar 2018	Apr-Mar 2019	Growth (%)	Share (%)	Rank	Commodity	Apr-Mar 2018	Apr-Mar 2019	Growth (%)	Share (%)
1	Petroleum products	37	47	24.3	14.1	1	Petroleum: Crude	87	114	30.5	22.2
2	Pearl, precious, semi-precious stones	26	26	0.4	7.9	2	Gold	34	33	-2.2	6.4
3	Drug formulations, biological	13	14	11.5	4.4	3	Pearl, precious, semi-precious stones	34	27	-21.0	5.3
4	Gold and other precious metal jewellery	13	13	1.1	3.9	4	Petroleum products	21	27	26.3	5.2
5	Iron and steel	11	10	-13.4	3.0	5	Coal, coke and briquettes etc.	23	26	14.3	5.1
6	Organic chemicals	7	9	30.6	2.8	6	Telecom instruments	22	18	-18.0	3.5
7	RMG Cotton incl. accessories	9	9	2.2	2.6	7	Electronics components	10	16	54.6	3.1
8	Motor vehicle/cars	8	9	0.3	2.6	8	Organic chemicals	12	14	14.7	2.8
9	Electric machinery and equipment	7	8	25.6	2.6	9	Iron and steel	10	13	20.6	2.5
10	Products of iron and steel	7	7	7.2	2.2	10	Industrial machinery for dairy etc.	10	12	19.0	2.4

Table 2: India's Merchandise Trade (Country-wise)

Values in US$ billion						Values in US$ billion					
Rank	**Country**	**Apr-Mar 2018**	**Apr-Mar 2019**	**Growth (%)**	**Share (%)**	**Rank**	**Country**	**Apr-Mar 2018**	**Apr-Mar 2019**	**Growth (%)**	**Share (%)**
1	United States	48	52	9.5	15.9	1	China	76	70	-7.9	13.7
2	United Arab Emirates	28	30	7.0	9.1	2	United States	27	36	33.6	6.9
3	China	13	17	25.6	5.1	3	United Arab Emirates	22	30	37.0	5.8
4	Hong Kong	15	13	-11.5	3.9	4	Saudi Arab	22	28	29.0	5.5
5	Singapore	10	12	13.4	3.5	5	Iraq	18	22	27.0	4.4
6	United Kingdom	10	9	-3.9	2.8	6	Switzerland	19	18	-4.4	3.5
7	Bangladesh	9	9	6.9	2.8	7	Hong Kong	11	18	68.5	3.5
8	Germany	9	9	2.5	2.7	8	Korea RP	16	17	2.4	3.3
9	Netherlands	6	9	40.7	2.7	9	Singapore	7	16	118.1	3.2
10	Nepal	7	8	17.4	2.4	10	Indonesia	16	16	-3.6	3.1

Source: Annual Report, Department of Commerce

5. Table 3 gives the ranking of the world's leading merchandise exporters and importers in 2019. India ranked nineteenth as exporter and tenth as importer.

Table 3: Leading Merchandise Exporters and Importers in 2019

Rank	Exporters	Value (US$ Billion)	Share (%)	Annual Change (%)	Rank	Importers	Value (US$ Billion)	Share (%)	Annual Change (%)
1	China	2487	12.8	10	1	United States	2614	13.2	9
2	United States	1664	8.5	8	2	China	2136	10.8	16
3	Germany	1561	8	8	3	Germany	1286	6.5	11
4	Japan	738	3.8	6	4	Japan	749	3.8	11
5	Netherlands	723	3.7	11	5	United Kingdom	674	3.4	5
6	Korea, Rp	605	3.1	5	6	France	673	3.4	9
7	France	582	3	9	7	Netherlands	646	3.3	12
8	Hong Kong, China	568	2.9	3	8	Hong Kong, China	628	3.2	6
9	Italy	547	2.8	8	9	Korea, Rp	535	2.7	12
10	UK	486	2.5	10					
19	**India**	**325**	**1.7**	**9**	**10**	**India**	**511**	**2.6**	**14**
	World	**19451**	**100**	**10**		**World**	**19867**	**100**	**10**

Source: World Trade Organization, 2019

Challenges

Overvalued Rupee

- Germany, Japan, Korea and China became export powerhouses not just on the basis of their competitiveness in manufacturing but also by the policy of having a competitive currency exchange rate. Unfortunately, India's political lexicon equates a strong (overvalued) rupee as a symbol of national strength. The real export strength can only be derived from a competitive exchange rate. This is all the more important for India as foreign direct investment (FDI) inflows have tended to make the rupee appreciate and harmed its export competitiveness. Corrections that come later due to high inflation and high trade deficits then tend to be volatile, with sudden sharp drops in exchange rate. Such kind of volatility harms exporters excessively.

Structural Constraints

- There are severe structural constraints on the supply side, resulting in an investment crunch for small-scale manufacturers and exporters on account of:
  - ◊ a high-cost, distorted manufacturing environment with quantitative and qualitative deficiencies in utility, logistics and infrastructure services;
  - ◊ virtual approval processes under ease of doing business initiatives have still not been extended to physical issues of land, power, water, rail, road, port etc.
  - ◊ shortcomings remain in policy, regulatory and operational governance, resulting in high transaction costs at the pre-/post-investment stage, in spite of significant steps towards making doing business easier; and
  - ◊ there is still a need for comprehensive single-window clearance.

Suggested Areas of Reforms

Under the standard expenditure approach, GDP[3] = C + I + G + X-M. Maximising X and minimising M is therefore an important element of foreign trade policy. This does not mean complete import substitution. Instead, M should be used as a parameter which does not harm long-term GDP growth and does not hinder job creation opportunities for India's large and growing population.

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[3] GDP = C + I + G + X-M
where: C = Consumer spending on goods and services, I = Investor spending on business capital goods
G = Government spending on public goods and services, X = exports and M = imports

Foreign Trade Policy

- As the Indian economy approaches the US$ 5 trillion mark, the nation should aspire to touch the US$ 1 trillion mark in exports. For this, the Foreign Trade Policy should do the following:
  - ◊ Push for establishment of export enclaves/zones near major ports. These should be set up in the 'plug and play' mode so that foreign and domestic investors have easy access to land, power, water and other world-class infrastructure. The labour regulations in these zones should be benchmarked to regulations in similar zones of other countries in order to enable companies located in them to be competitive in world markets.
  - ◊ Enable India to become a part of global value chains. In order to facilitate this, components imported for manufacturing exported items should be zero duty rated. India should ensure that it is not limited to being in the lower end of global value chains. Zero duty on imports required for exports can be misused by such imports being diverted into the domestic tariff area. Therefore, much of the important global value chain integration should happen through the special economic zones, which should ideally be near coastal areas as is the case in China.

Export Powerhouse

- India should strive to become an export powerhouse by addressing the following:
  - ◊ Enable production in large volumes in order to get benefits of economies of scale. This can be done through cluster zones for products and their ancillaries.
  - ◊ Bring down logistics costs of infrastructure and transport. Many products are competitive at factory gates, but not at port prices because of high freight costs. Rail freight rates should be made internationally competitive by ending cross subsidy with passenger fares. Energy and electricity costs must be competitive with competing manufacturing countries.
  - ◊ Bring down capital costs, which are high compared to competing nations. Capital costs of exporters should be at par with the working capital interest rates of their competitors.
  - ◊ Enable industry to build required skills in the labour pool.
  - ◊ Integrate petroleum and electricity into the goods and services tax (GST) at the earliest. Giving input tax credit will further the competitiveness of exports.

Quality Standards

- It is necessary to harmonise domestic quality standards with prevailing global standards. When India manufactures high quality goods for the domestic market, it can scale this for foreign markets as well.

Free Trade Agreements

- It is time to re-examine the costs and benefits to India from free trade agreements (FTAs). If the costs are found to have outweighed the benefits, these FTAs need to be re-negotiated. Quick market surveys should be conducted among major domestic exporters to countries with which India has FTAs. If it is found that these companies are not able to export at the preferential tariffs but at the most favoured nation (MFN) rates, then the product tariffs of imports from those countries should also be calibrated at the MFN, and not FTA, rates.

Promoting Services of Human Capital and Medical and Tourism

- As indicated earlier (Figures 4, 5 and 6), India has had a services trade surplus and this has played a crucial role in bringing down the overall trade deficit. The services sector has enormous potential and effective policy formulation and implementation can provide huge benefits in this sectors. Some of the reform measures are:
  - ◊ Re-imagine India's ancient ability to attract foreign students and scholars and leverage the country's significant comparative advantages in high-quality education at reasonable cost. Instead of Indian students going abroad for higher education, India has the ability to become a hub for medical, engineering, management and social sciences education. Opportunities should be opened up for private – domestic and foreign – investment in education under the oversight of the University Grants Commission and other regulators.
  - ◊ Aggressively leverage India's competitive strengths in the medical sector. Indian services must become synonymous with “highest quality at most competitive costs”.
  - ◊ Promote Indian services exports in health and tourism, among other sectors, by dismantling all vestiges of visa raj. Visa on arrival from all countries, except for a limited negative list, must be promoted. Visa fees should be kept low; the revenue lost from low rates would be more than made up by an increase in tourist arrival. Long-term (ten-year) multiple-entry visas should be the rule rather than an exception.

◊ Build world-class R&D capabilities in emerging and potential areas. FDI should be fully leveraged in this area and collaborations between academia and domestic manufacturers should be encouraged. An aggressive approach to patents should be adopted to protect intellectual property rights.

Oil and Coal Imports

- Crude oil and coal are among the top ten items of import. A focused approach is required to reduce imports of these commodities by switching increasingly to solar wind and hydropower.

Agricultural Exports

- The High Level Group (HLEG) on Agricultural Exports[4] has stressed that it is important to encourage agriculture exports. These have a very high component of value addition. Even in cases of domestic price spikes there should be no ban/control on agriculture exports, as this is an anti-farmer policy.
- India's aspirations regarding increasing agriculture exports from US$ 40 billion to US$ 100 billion are well suited to capture the opportunity offered by global food and agriculture trends. The HLEG estimates that this will have an impact on the domestic agriculture market and result in meaningful job creation. The HLEG, after extensive consultations, recommended that India can almost double its agriculture exports by:
  - ◊ Prioritising twenty-two crop value chains with potential competitive advantage and establish lighthouses in seven crop value chains (rice, shrimp, spices, buffalo meat, fruits and vegetables, vegetable oil and wood), with a focus on the United States, European Union and the Gulf and West Asia regions.
  - ◊ Implementing State-led crop value chain clusters, dedicated to a single-crop value chain within the State. This will be designed as a comprehensive ecosystem of producers, farmer produce organisations (FPOs), agri-businesses, financiers, commodity boards, Union and State Governments and agencies, complemented by country-level interventions in destination markets.
  - ◊ Building high-quality, well-funded State-led value-chain specific export plans that bring all stakeholders together, converge resources and are anchored by the private sector.

[4]Report at Finance Commission Website
Growing India's agricultural exports through crop-specific, state-led plans

◊ Setting up a two-part Union-State institutional framework with the right governance mechanism to evaluate, track and monitor these plans. The State Governments will identify clusters, attract private investors, develop and operationalise plans while ensuring convergence of all Union and State schemes related to agricultural exports to ensure adequate funding and provide residual funding, where necessary. The Union Government can also align with the State Governments and support their efforts. It will also evaluate and approve the plans, while providing oversight and inter-ministerial coordination and provide any additional funding.

Other Reforms

- Give 'infant industry tariffs' for emerging environmental goods like solar power panels and modules, lithium ion and other emerging large storage batteries. FDI policies should be kept very liberal in all emerging sectors, but the sector needs to be incentivised by having moderate tariffs to support Make in India efforts.
- Dismantle the Export Promotion Capital Goods (EPCG) scheme, since India no longer has prohibitive tariffs on capital goods imports. This will boost domestic manufacturing companies and avoid the over-invoicing problems that were associated with EPCG.
- Build sector- and product-specific strategies in conjunction with export councils. In the pharmaceuticals sector, strategic security interests should be used to build Active Pharmaceutical Ingredient (API) bulk manufacturing of “mother drugs” capabilities for further pharma formulations. Indian manufacturing has scale advantages in vaccines and this should be used to make India the export leader in the world for vaccines.

Chapter 4

Department of Drinking Water and Sanitation

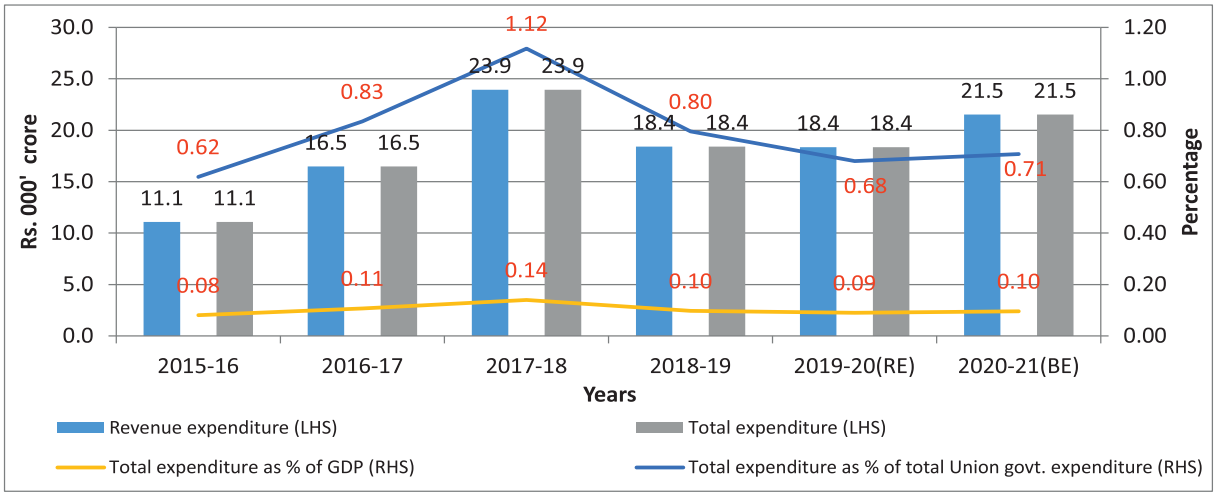
The Department of Drinking Water and Sanitation (DoDWS) is responsible for two flagship programmes: the National Rural Drinking Water Programme (NRDWP) for rural drinking water supply (now restructured and subsumed under Jal Jeevan Mission) with an aim to provide functional household tap connection to every rural household, and the Swachh Bharat Mission (Grameen) for sanitation. The subjects of drinking water and sanitation are part of the State List of the Constitution.

The Department has played a pivotal role in India's progress towards SDG-6 to ensure availability of clean water and sustainable management for sanitation for all. Greater reliance on surface water for piped water supply to households, dedicated funds for ensuring piped water supply in aspirational districts, making the open defecation free status sustainable through provision of piped water supply and need to shift focus towards ODF Plus, should be part of the Department's future strategy.

Overall Profile of the Department

1. The Department of Drinking Water and Sanitation in the Ministry of Jal Shakti is responsible for two flagship programmes: the National Rural Drinking Water Programme (NRDWP)/Jal Jeevan Mission (JJM) for rural drinking water supply and the Swachh Bharat Mission (Grameen) (SBM-G) for sanitation.
2. The budget allocation for the DoDWS in 2020-21 is Rs. 22,000 crore, which is 0.71 per cent of the Union Government's total budget and 0.1 per cent of estimated gross domestic product (GDP) (Figure 1).

Figure 1: Expenditure of Department of Drinking Water and Sanitation



Source: Union Budgets and CSO

Figure 2: Scheme-wise Expenditure on CSS (in %, 2018-19)

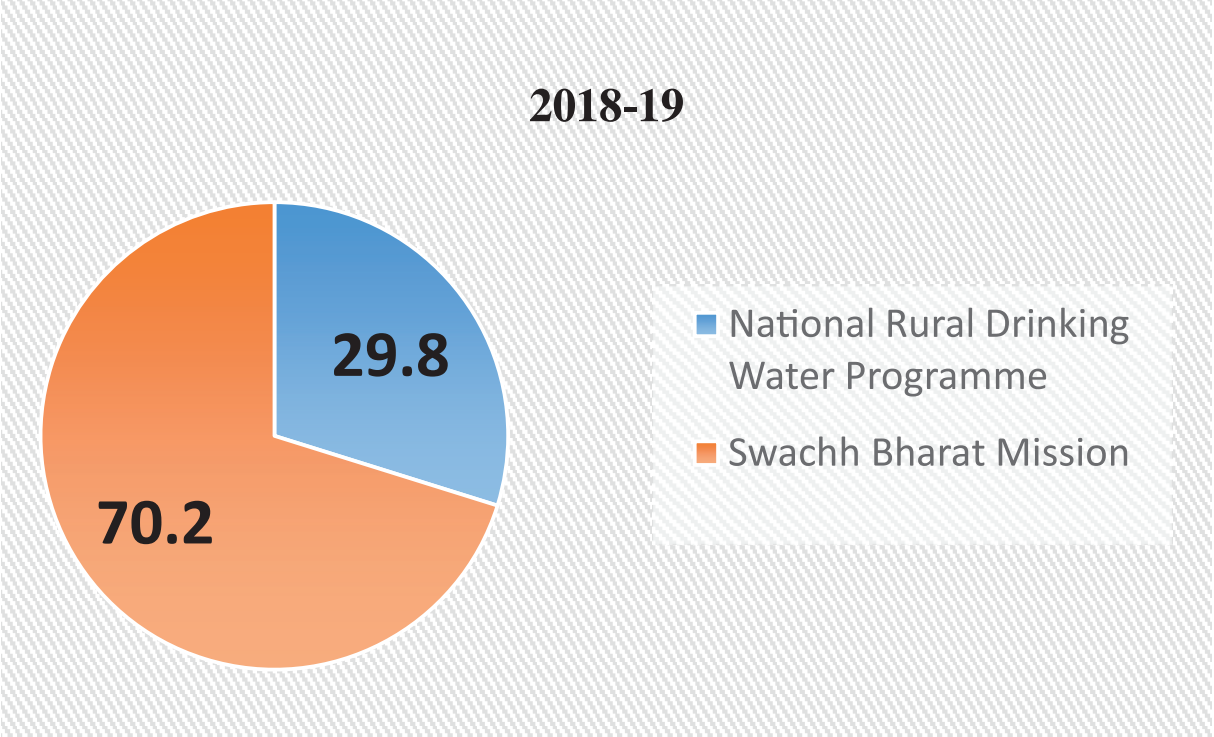


Table 1 : Expenditure on CSS by Department as a % of Union Government Expenditure on CSS

Years	Percentage
2015-16	5.4
2016-17	6.8
2017-18	8.4
2018-19	6.2
2019-20 (RE)	5.8
2020-21 (BE)	6.3

Source: Union Budgets

Key Achievements of CSS

Sanitation (Swachh Bharat Mission-Grameen)

- Large-scale behavioural change, construction of household-owned and community-owned toilets and established mechanisms for monitoring toilet construction and usage.
- Thirty-two States/Union Territories have been declared ODF, as of 2 October 2019. No State had this status on 2 October 2014.
- As of 6 August 2019, 99.86 per cent of rural households had access to toilets.

Drinking Water (Jal Jeevan Mission)

- As of 29 July 2020, 25.17 per cent households had a functional tap connection.
- As of 19 September 2019, 1.1 per cent of rural habitations have been fully covered with 40 litres per capita per day (lpcd) of water supply and 15.6 per cent households have been partially covered.
- As of 19 September 2019, 18.3 per cent of rural households have been covered with piped water supply.

Sustainability of the decentralised drinking water and sanitation programme : Water falls under the State list of the Constitution and active participation of States is crucial for the success of the mission to provide clean drinking water. In order to improve the sustainability of resources and systems, the Government of India has embarked on an ambitious programme of demand-led delivery of water and sanitation. The central principles of the programme are:

- Local government and communities will plan, implement, operate and manage water supply schemes.
- State Government's role will shift from that of service provider to facilitator.
- Gram Panchayats and user groups will be empowered.
- Consumers will be brought on board to pay for a certain minimum level of service such that a portion of the capital cost and all future recurrent costs are covered.

Source : Strategy Plan of Jal Shakti, 2011-2022

Key Suggestions by the Department

- Fifty per cent of the Finance Commission grants to panchayati raj institutions for water supply and sanitation should be placed with the DoDW&S in order to achieve the targets of JJM.
- To achieve drinking water security, DoDW&S requires Rs. 82,000 crore as part of 'sectoral allocation for infrastructure development'.
- Finance Commission grants to urban local bodies should be linked with outcome and performance and be placed with the Ministry of Housing and Urban Affairs.
- Fifty per cent of untied Finance Commission grants to panchayati raj institutions may be placed with the Ministry of Panchayati Raj for other works as requirement dictates and based on gross state domestic product. The grant of funds should be linked with performance.

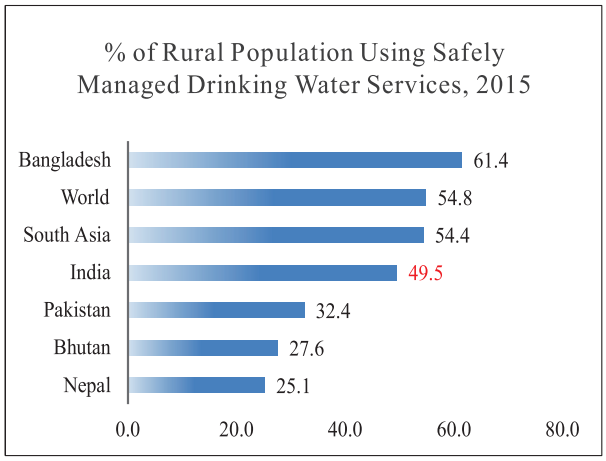
Box 1: Grants by Finance Commissions

	Purpose of Grants[1]	States (Amount of Grants in Rs. crore)
FC-XII	Provision of safe drinking water	Andhra Pradesh (325), Himachal Pradesh (38), Rajasthan (150), West Bengal (600)
FC-XIII		Andhra Pradesh (550), Gujarat (200), Haryana (400), Himachal Pradesh (150), Karnataka (300), Meghalaya (50), Rajasthan (500), Sikkim (20)
FC-XIV	Sector-specific and State-specific grants not given.	
In addition, FC-XII and FC-XIV recommended that local bodies grants should strengthen, among other things, water supply and sanitation sectors.		
FC-XV (FY 2020-21)	Grants to rural local bodies (Rs. 60,750 crore), 50 per cent basic and 50 per cent tied to: a) sanitation and maintenance of ODF status and (b) supply of drinking water, rain water harvesting and water recycling.	
FC-XV (FY 2021-26) (Volume I, Chapter 7)	Grants to rural local bodies (Rs. 2,36,805 crore). To supplement the resources needed to fulfil national priorities, 60 per cent of the grants to rural local bodies is tied to supporting and strengthening the delivery of two categories of basic services: (a) sanitation and maintenance of ODF status; and (b) drinking water, rain water harvesting and water recycling.	

[1]Specific grants recommended only for drinking water supply schemes (rural, urban or both) have been mentioned. In addition, the grants had also been recommended for irrigation schemes or for drinking water/sanitation as a subset of various defined purposes (wherein their exact shares cannot be calculated).

International Perspective

Figure 3a: – Drinking Water[2,3]



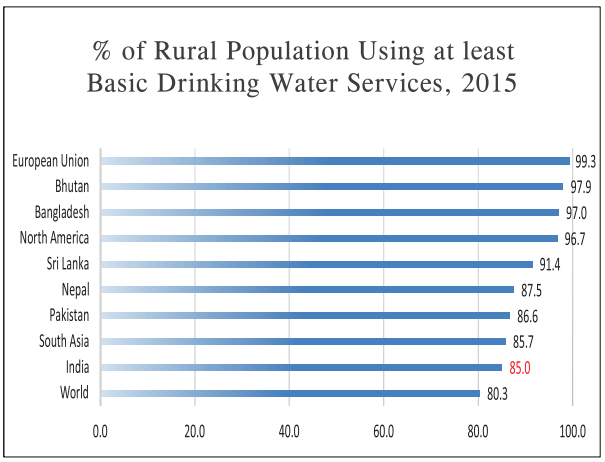
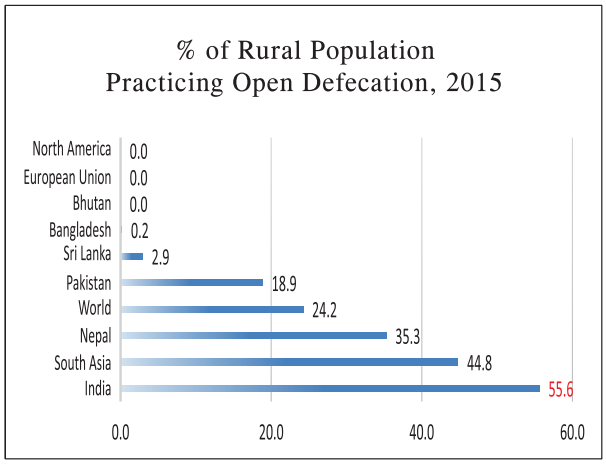
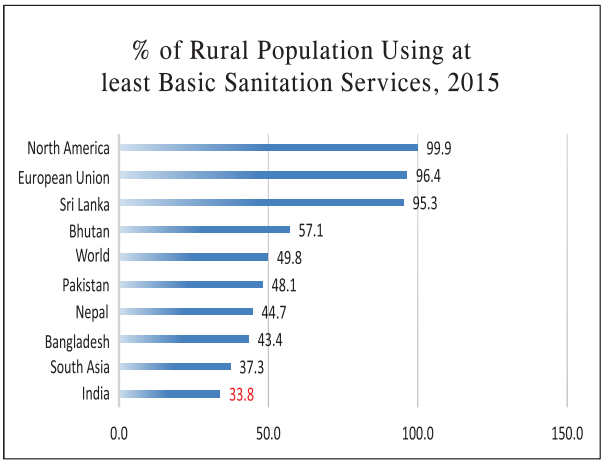


Figure 3b: - Sanitation[3,4]





[2]Data sourced from World Bank. Data pertains to FY 2015 after which India has implemented two flagship programmes to address the issue.

[3]*Safely Managed Drinking Water Services:* It captures the percentage of people using drinking water from an improved source that is accessible on premises, available when needed and free from faecal and priority chemical contamination. Improved water sources include piped water, boreholes or tubewells, protected dug wells, protected springs and packaged or delivered water. Basic Drinking Water Services: It encompasses both people using basic water services as well as those using safely managed water services. Basic drinking water services is defined as drinking water from an improved source, provided collection time is not more than thirty minutes for a round trip.

[4]*Safely Managed Sanitation Services:* It captures percentage of people using improved sanitation facilities that are not shared with other households and where excreta are safely disposed of in-situ or transported and treated offsite. Improved sanitation facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines: ventilated improved pit latrines, compositing toilets or pit latrines with slabs. Basic Sanitation Services: The percentage of people using at least basic sanitation services, that is, improved sanitation facilities that are not shared with other houses. This indicator encompasses both people using basic sanitation services as well as those using safely managed sanitation services.

Linkage Between 'Wash' Practices and Economic/Health Outcomes

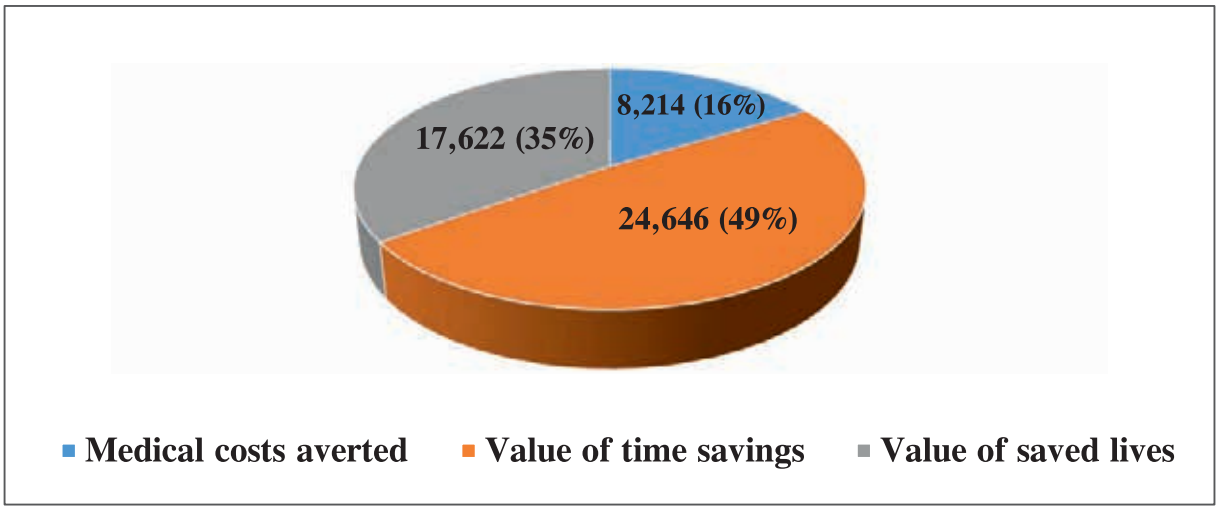
Economic Impact

- According to a World Bank study in 2011, inadequate sanitation caused India economic losses equivalent to 6.4 per cent of GDP in 2006 (US$ 53.8 billion).
- A 2016 study by Oxford Economics estimated that India lost almost 5.2 per cent of GDP due to poor access to sanitation.
- An International Monetary Fund research study in 2017 has shown that improving public sanitation in India reduces the time spent by women in household and childcare work by close to 10 per cent and increases their labour force participation by 1.5 percent.

Impact on Health

- A study conducted in rural areas of five Indian states by the Bill & Melinda Gates Foundation has revealed both significant reduction in diarrhoea prevalence and improvement in nutrition among children in ODF areas as compared to otherwise similar non-ODF areas. This study also indicates that more women in ODF areas have normal body mass index as compared to their counterparts in non-ODF areas.

Figure 4: Annual Benefits of 100% Toilet Usage (Rs.)



- In terms of faecal contamination from human origin, UNICEF has estimated that non-ODF villages in India are, on average, 12.7 times more likely to have their groundwater sources contaminated, 1.1 times more likely to have their soil contaminated, 2.16 times more likely to have food contaminated and 2.48 times more likely to have household drinking water contaminated.

- According to UNICEF, on an average, households in ODF villages save Rs. 50,000 a year and that there is an additional one-off benefit of rise in property value of Rs. 18,991 per house.

Challenges

- The Covid-19 pandemic has underlined the criticality of the drinking water and sanitation sector. Greater emphasis has been laid on working towards ensuring availability of safe drinking water supply and sanitation services to protect human health during all infectious disease outbreaks. There are, however, issues that need to be addressed.

ODF sustainability

- There is need to sustain the behaviour change of people in terms of using toilets. Several studies have revealed that people still practice open defecation despite having access to toilets. The incidence of partial usage of toilets is high.
- The provision of adequate water supply to toilets, along with regular cleaning of public toilets, is a challenge. Water becomes a scarce commodity during droughts, which are now becoming regular. This is imperative in order to ensure that the infrastructure created during the JJM is maintained and used.

High cost of Jal Jeevan Mission

- The Ministry has a large budgetary support of an estimated Rs. 3.6 lakh crore (from both Union and State Governments) under JJM for providing piped water supply to all rural households. Further, a substantial additional amount of Rs. 1.8 lakh crore is expected to be mobilised through convergence of schemes/programmes.

Water supply service levels

- The Working Group on Domestic Water and Sanitation for the Twelfth Plan period (in the erstwhile Planning Commission) had, among other things, recommended increasing drinking water supply service levels in rural areas from 40 lpcd to 55 lpcd. In addition, a target of at least 55 per cent of rural population getting access to 55 lpcd by 2017 was set. However, the Department is yet to incorporate this 55 lpcd target in the JJM.

Expenditure on NRDWP

- Though the targets set for NRDWP have not been achieved, the budget provision for the programme had been substantially reduced by more than one-fifth – from Rs. 7,038 crore in 2017-18 to Rs. 5,500 crore in 2018-19 (RE). This is less than the actual expenditure incurred in 2016-17.

Excessive reliance on groundwater

- More than 63 per cent of rural habitations are being provided piped water from groundwater sources. However, this will become unsustainable given the rapidly depleting water table in the country. This issue becomes more pronounced in view of the launch of the JJM, which aims to ensure piped water for every household by 2024.

'Dry-pipe' problem

- Even after creating infrastructure to supply piped water to all rural households in the country, the non-availability of water, especially during summer seasons, will lead to the 'dry-pipe' problem.

Quality affected habitations

- The Union Government launched the National Water Quality Sub Mission on Arsenic and Fluoride in 2017 to provide safe drinking water to about 28,000 affected habitations in the country by March 2021. The number of quality-affected habitations may rise substantially in the future as deeper drilling for exploiting drinking water sources may lead to chemical contamination of ground water.

Comprehensive and holistic approach

- There is a need to strengthen the institutional framework for participatory ground water management and bring about behavioural change at the community level for sustainable ground water resource management. Hence, the two Departments under the Ministry of Jal Shakti – DoDW&S and Department of Water Resources, River Development and Ganga Rejuvenation (DoWRRD&GR) – should work in tandem to ensure that the JJM under DoDW&S could work towards delivering piped water supply to every house and the Atal Bhujal Yojana (ABY) under DoWRRD&GR could focus on those areas where the ground water is very low. The role of both the

departments in executing and implementing the community-driven social sector schemes pertaining to ground water and drinking water increases manifold during pandemics. Hence, better preparedness is required for future so that the cross-fertilization of demand and supply takes place.

Asymmetric dissemination of information

- During the Covid-19 pandemic, a large number of advisories were issued by various ministries and government organisations, some being Home Affairs, Health and Family Welfare, Housing and Urban Affairs, Panchayati Raj and the Central Pollution Control Board. It would have been more meaningful if there were a nodal Department or Ministry coordinating with everyone in issuing such advisories and guidelines at one forum.

Projection on availability and need of water in India for various uses

- The National Water Policy that is currently being revised stipulates water allocation priorities broadly in the following order: drinking water; irrigation, hydro-power, navigation, industrial and other. Hence, as mentioned earlier, there is a dire need for a comprehensive and holistic approach to address the present and future water needs of the nation.

Suggested Areas of Reforms

Appropriate water pricing

- It is imperative to fix an appropriate price for water on a graded basis, wherein higher consumption entails higher charges. This is necessary because inappropriate water pricing is one of the major causes of over-exploitation of water in domestic sector. Tariffs do not get revised on periodic basis, resulting in a large gap between the cost of supply of water and the revenue collected.

More reliance on surface water

- There is need to ensure optimum utilisation of surface water for the JJM in view of groundwater being overexploited in large parts of the country. Further, the DoDW&S should incentivise the creation of rainwater harvesting structures and reuse of grey water, in order to augment the availability of water. Finally, the laws/rules regarding creation of rainwater harvesting structures need to be enforced strictly.

Focused intervention in 112 aspirational districts

- A certain percentage of JJM funds should be earmarked for the 112 aspirational districts, preferably in proportion to their population. These districts have far lower piped water supply coverage – as of 19 September 2019, it was only 8.7 per cent of rural households against the national average of 18.3 per cent. It is important to bring them on par with the national average.

ODF sustainability

- Provision of piped water supply in rural households is necessary to sustain the ODF status of villages. It has been seen that people do not prefer using toilets in areas where there is no supply of water. Therefore, it is crucial to substantially enhance the coverage of piped water supply from the current low levels of 18.3 per cent of rural households.

ODF Plus

- India will soon achieve ODF status. The next obvious step would be to encourage all aspects of sanitation, including solid and liquid waste management, faecal waste management in case of septic tanks, overall cleanliness of the villages etc.
    - ◊ The goal should be to ensure that all solid waste is segregated, collected and treated within next five to seven years.
    - ◊ Innovative, community managed, decentralised systems should be adopted for solid and liquid waste management.
    - ◊ Along with strong local ownership, such waste management systems should have low operations and maintenance costs considering low paying capacity of rural households.

Grants to rural local bodies

We recognise that the country's achievements on the sanitation front need to be sustained and strengthened at all levels. For this, all the three levels of government will have to join hands in the spirit of cooperative federalism. Local governments form a crucial link for implementation and execution of such schemes. In view of the above and to supplement resources of local bodies to meet the broader objective of fulfilling national priorities, we recommend the following:

◊ 40 per cent of the total grants to be disbursed to rural local bodies shall be untied and can be used by them for felt needs under the twenty-nine subjects enshrined in the Eleventh Schedule, except for salaries and other establishment costs. The expenditure required for auditing of accounts by external agencies approved by the State Government, however, may be borne from this grant.

◊ 30 per cent of the total grants to be disbursed to rural local bodies shall be earmarked for drinking water, rainwater harvesting and water recycling.

◊ 30 per cent of the total grants to be disbursed to rural local bodies shall be earmarked for sanitation and maintenance of ODF status, and this should include management and treatment of household waste, and human excreta and faecal sludge management in particular.

Independent survey

- Though the verification of ODF status of villages is undertaken diligently by Union and State Governments, it is desirable to institute a large independent survey that can offer a nationally representative estimate of the percentage of persons defecating (or not defecating) in the open. This mechanism would also lend more credence to achievements of SBM-G.

Universalisation of coverage of SBM (G)

- SBM (G) provides financial incentives for the construction of individual household latrines for all below poverty line (BPL) households and selected above poverty line households. Since there are considerable exclusion and inclusion errors in identifying BPL households, there is a pressing need to universalise the coverage of this scheme in order to achieve 100 per cent ODF status.

Updation of Baseline Survey, 2012

- It is understood that only those households without toilets that were identified by Baseline Survey (BLS), 2012, have been covered under SBM (G). Despite the provision for updating this data, a large number of States have not undertaken this exercise, as noted by the Comptroller and Auditor General's Audit Report on Local Bodies and several other studies. Therefore, there is an urgent need to update the baseline data of households without toilets to capture the true picture of ODF status.

Need for regulatory measures during times of natural disaster

- As pointed out earlier, coordinated regulatory measures during natural disasters could help curb the asymmetric dissemination of information among stakeholders working on the ground and improve the outcome of the CSS implemented by the Department. India needs to be more prepared to deal with such emergencies/natural disasters and a dedicated policy is required for this.

Chapter 5

Ministry of Education

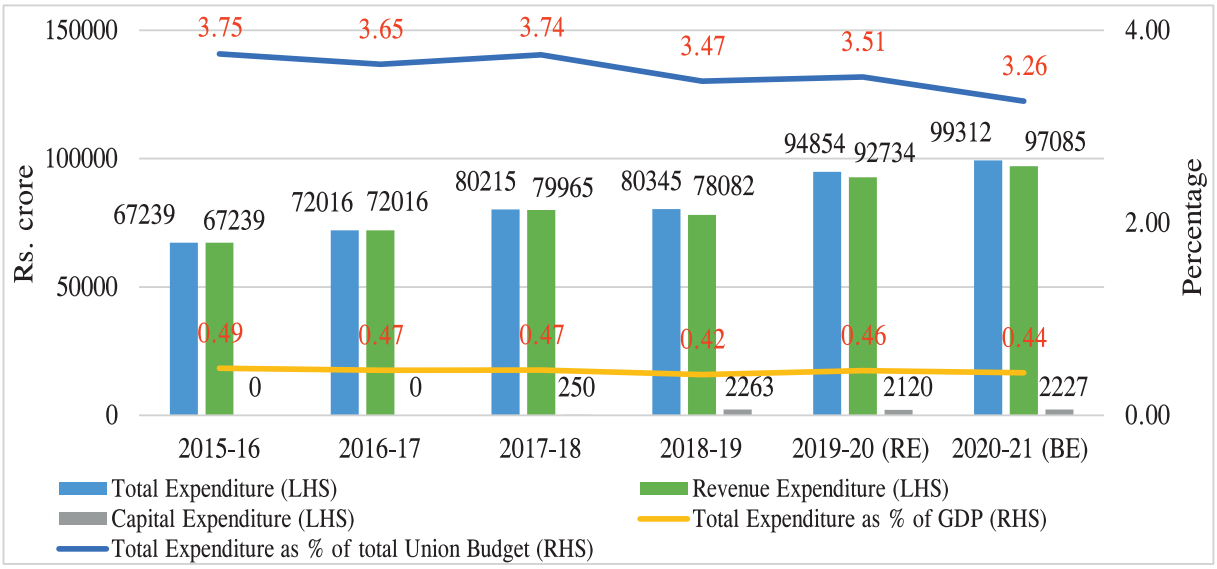
The Ministry of Education has the overall responsibility of expanding access to education and improving the quality of educational institutions across the country. It is also responsible for implementing the National Policy of Education, while paying special attention to economically and socially disadvantaged groups including women, the minorities and scheduled castes and scheduled tribes. It provides scholarships, loan subsidy and other financial assistance to deserving students from the deprived sections of society. The Ministry is the nodal agency for international cooperation in the field of education, working closely with the UNESCO and foreign governments as well as universities, to enhance educational opportunities in the country.

India enjoys an unprecedented demographic advantage as more than 65% of its population is in the working age group. To capitalise on this demographic dividend, it is important to educate children and train them well so they can contribute to the development process. India spends about 3 per cent of its gross domestic product on education which is much below the average of developed countries. Besides low investment, the education system faces various challenges like poor learning outcomes, inadequate teacher training, stifling regulatory regime etc. Use of technology, encouraging private sector participation and better governance can help in bringing desired outcomes.

Overall Profile of the Ministry

1. The Union Budget expenditure by Ministry of Education in the year 2020-21 (BE) is estimated at Rs. 99,312 crore, out of which revenue expenditure is Rs. 97,085 crore and capital expenditure is Rs 2,227 crore. This constitutes about 0.44 per cent of gross domestic product (GDP) and 3.26 per cent of the total Union Budget. The expenditure on education as a percentage of Union Budget has declined from 3.75 per cent in 2015-16 to 3.26 per cent in 2020-21 (BE). In terms of GDP, too, it declined from 0.49 per cent to 0.44 per cent over the same period (Figure 1).

Figure 1: Expenditure of Ministry of Education

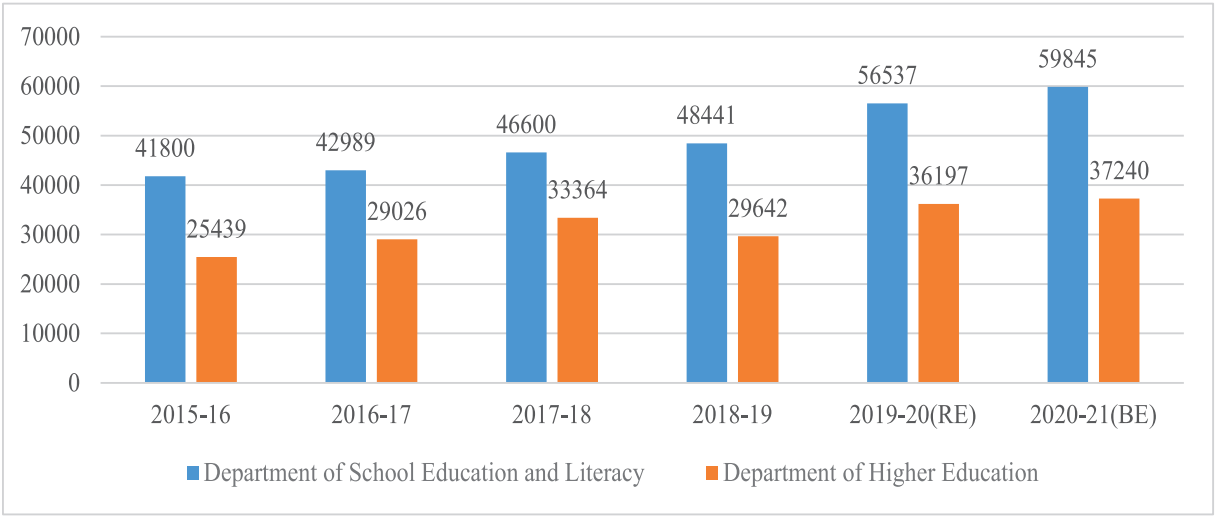


Source: Union Budgets and CSO

2. As shown in Figure 2, in 2020-21 (BE), the Department of School Education and Literacy received about 60 per cent of the allocated revenue expenditure of the Ministry, while the Department of Higher Education received 40 per cent.

Figure 2: Revenue Expenditure of Department of School Education & Literacy and Department of Higher Education

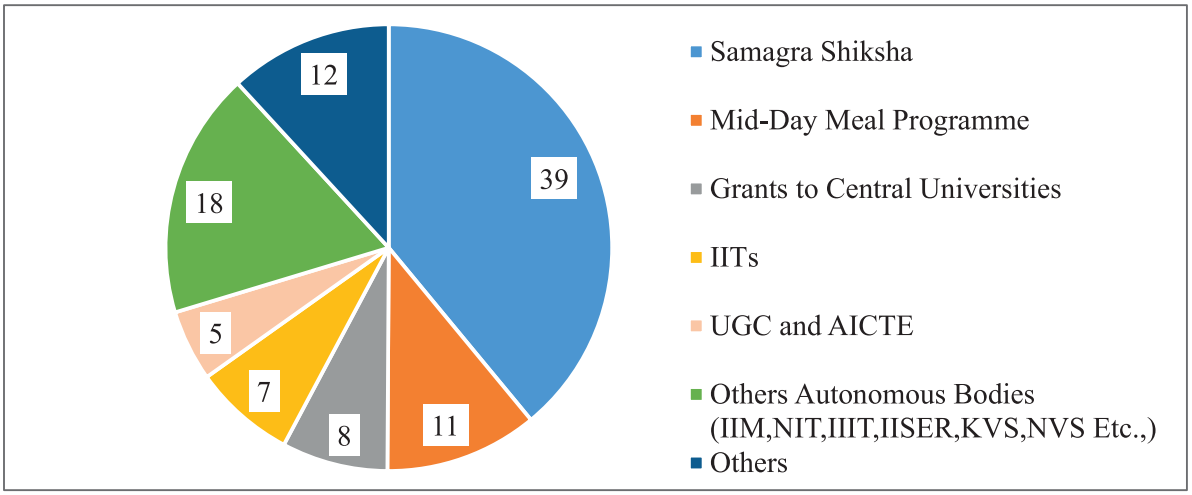
(Rs. crore)



Source: Union Budgets

3. Figure 3 shows the major heads of expenditure of the Ministry. In the budget estimates of 2020-21, expenditure on Centrally sponsored schemes (CSS) – Samagra Shiksha and Mid-Day Meal Programme in Schools – account for 50 per cent of spending, followed by expenditure on autonomous bodies such as the Kendriya Vidyalaya Sangathan (9 per cent) and grants to Central universities (8 per cent).

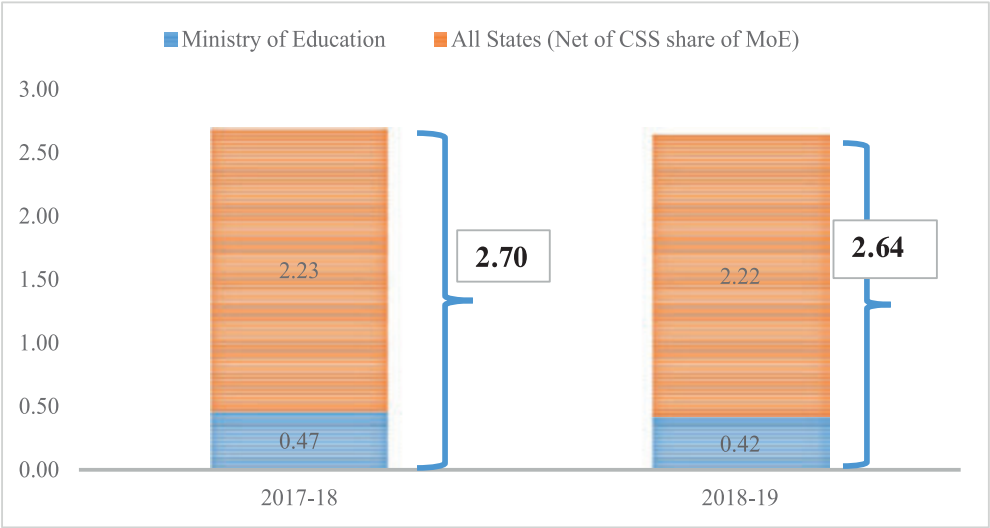
Figure 3: Major Expenditure Heads of the Ministry, 2020-21 BE (%)



Source: Union Budget 2020-21

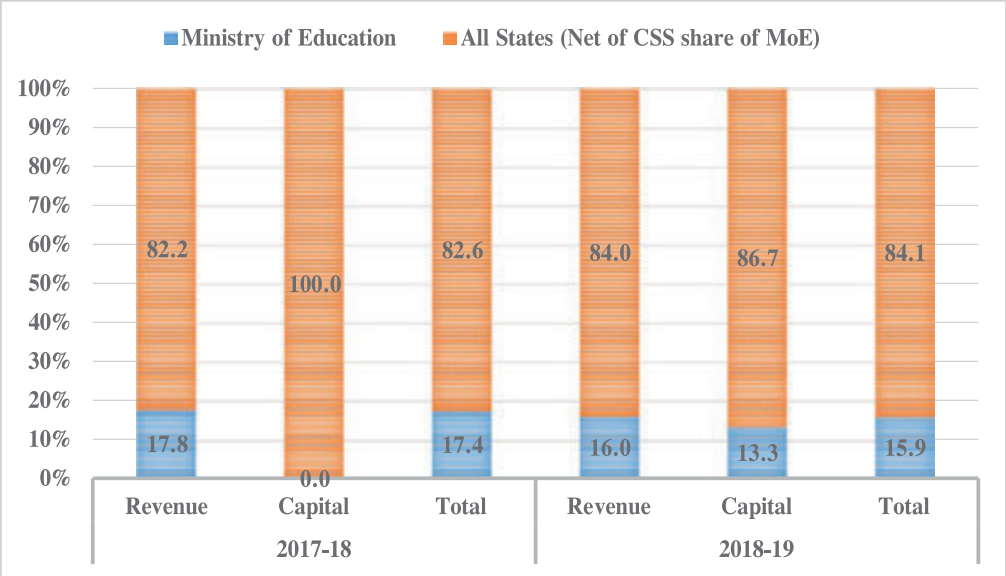
4. Data for 2018-19 shows that the total public expenditure on education is 2.64 per cent of GDP, of which States spend about 2.22 per cent while the Union Government spends 0.42 per cent. States account for the majority share of public spending on education – 84 per cent and the Union Government's share is only 16 per cent.

Figure 4: Expenditure on Education as % of GDP



Source: Union Budgets, State Finance Accounts and CSO

Figure 5: Share of Expenditure by Union (MoE) and States on Education (%)



Source: Union Budgets and State Finance Accounts

Policy Proposals in Budget 2020-21

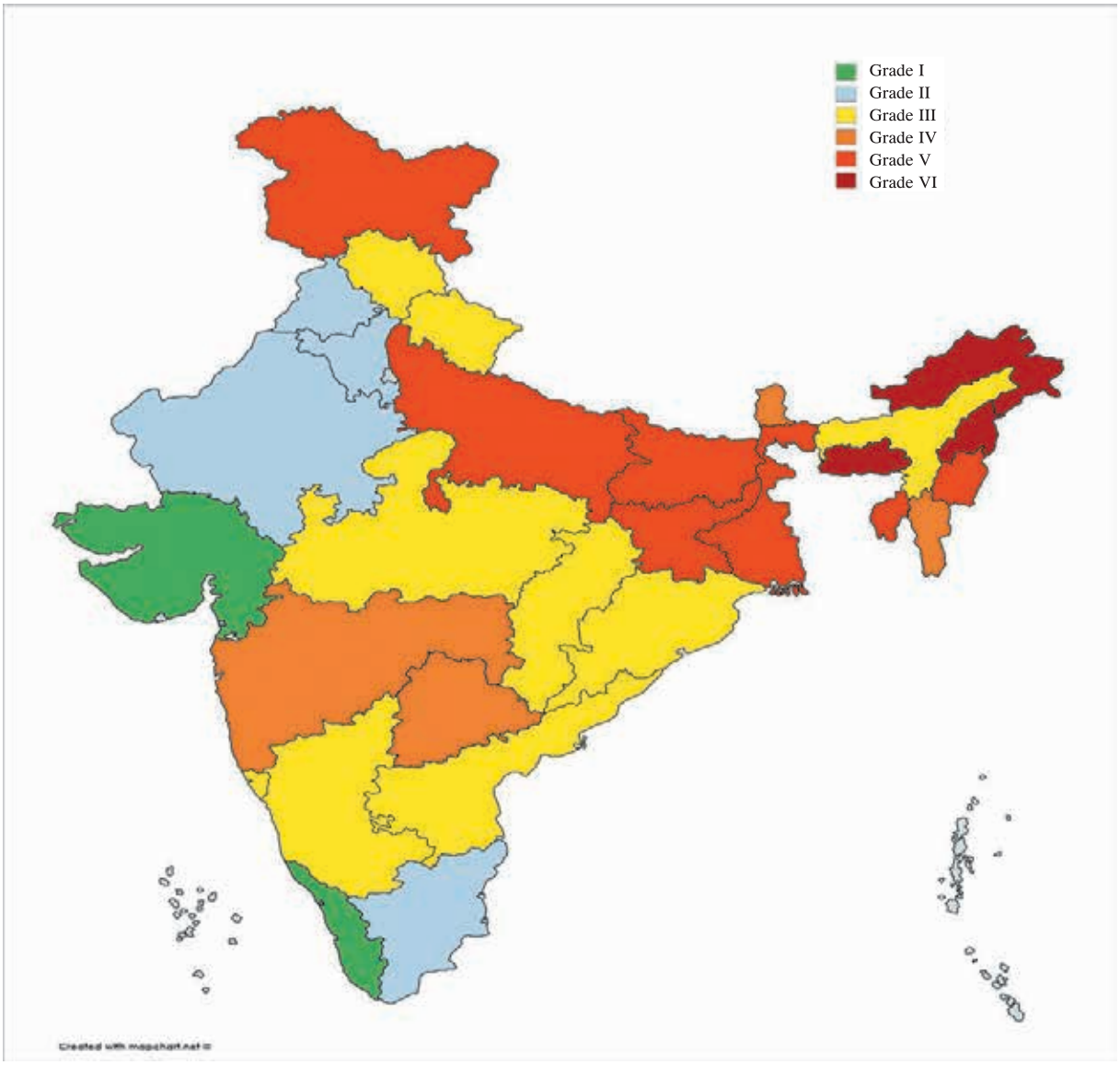
- To ensure greater flow of finance into education, steps will be taken to enable sourcing of external commercial borrowings and foreign direct investment in India.
- About 150 higher educational institutions will start apprenticeship-embedded degree and diploma courses by March 2021.
- As part of the 'Study in India' initiative, which focuses on bringing foreign students to study in Indian higher educational institutions, the Government will hold the Ind-SAT (Indian Scholastic Assessment) in Asian and African countries.
- In order to provide quality education to students of the deprived sections of society as well as those who do not have access to higher education, it is proposed to start degree-level full-fledged online education programmes. This shall be offered only by institutions which are ranked within the top 100 in the National Institutional Ranking framework.

Inter-State Comparison

- There are large inter-State variations in educational performance. The Performance Grading Index (PGI) developed by the Ministry of Education in 2017-18 shows gaps in school education in each State. The PGI is based on seventy indicators relating to, among other things, access, equity, quality, infrastructure and governance. Figure 6

shows grading of States using PGI, where Grade I is the highest level and Grade V the lowest. Arunachal Pradesh, Nagaland and Meghalaya are at the lowest grade, while Uttar Pradesh, Bihar, West Bengal, Jharkhand, Manipur, Tripura and the erstwhile State of Jammu and Kashmir are in the second lowest grade.

Figure 6: Performance Grading Index for School Education, 2017-18



Source : Summary Report on Performance Grading Index(PGI) for States and UTs by MoE.

- Table 1 shows that literacy levels of States vary from 61.8 per cent in Bihar to 94 per cent in Kerala. The pupil-teacher ratio is poor in Bihar, Uttar Pradesh, Jharkhand and Haryana. The gross enrolment rate (GER) in higher education is the lowest in Bihar, Assam, Jharkhand and Odisha.

Table 1: Educational Indicators of States

State	Literacy rate (Census, 2011)	Pupil-teacher ratio (primary school) (Analytical Tables, DISE 2016-17)	Gross enrolment ratio for higher secondary education (Flash Statistics DISE, 2016-17)
Andhra Pradesh	67	22	60.56
Arunachal Pradesh	65.4	12	51.17
Assam	72.2	24	39.74
Bihar	61.8	44	28.82
Chhattisgarh	70.3	20	54.45
Goa	88.7	19	78.65
Gujarat	78	22	43.17
Haryana	75.6	25	60.78
Himachal Pradesh	82.8	12	91.97
Jammu & Kashmir	67.2	10	52.91
Jharkhand	66.4	28	37.06
Karnataka	75.4	16	41.91
Kerala	94	16	79.37
Madhya Pradesh	69.3	22	47.12
Maharashtra	82.3	24	70.72
Manipur	79.2	9	64.36
Meghalaya	74.4	19	40.56
Mizoram	91.3	12	54.6
Nagaland	79.6	6	36.3
Odisha	72.9	18	40.09
Punjab	75.8	20	72.24
Rajasthan	66.1	20	60.31
Sikkim	81.4	4	64.22
Tamil Nadu	80.1	20	83.69
Telangana	67	23	50.57
Tripura	87.2	10	41.89
Uttar Pradesh	67.7	33	58.96
Uttarakhand	78.8	16	77.07
West Bengal	76.3	20	50.89
India	73	25	55.4

Source: Census, 2011, District Information System for Education (DISE)-2016-17

Note: Andhra Pradesh and Telangana figures taken to be same for literacy rate

- Table 2 shows the variations in average per capita revenue expenditure by States. It can be seen that among the North-East and Himalayan States, Assam, Manipur, Meghalaya and Tripura are spending lower than the average. In the case of the general States, Bihar, Jharkhand, Madhya Pradesh, Punjab, Telangana, Uttar Pradesh and West Bengal are spending lower than average.

Table 2: States with Below Average Per Capita Revenue Expenditure on Education (2018-19)

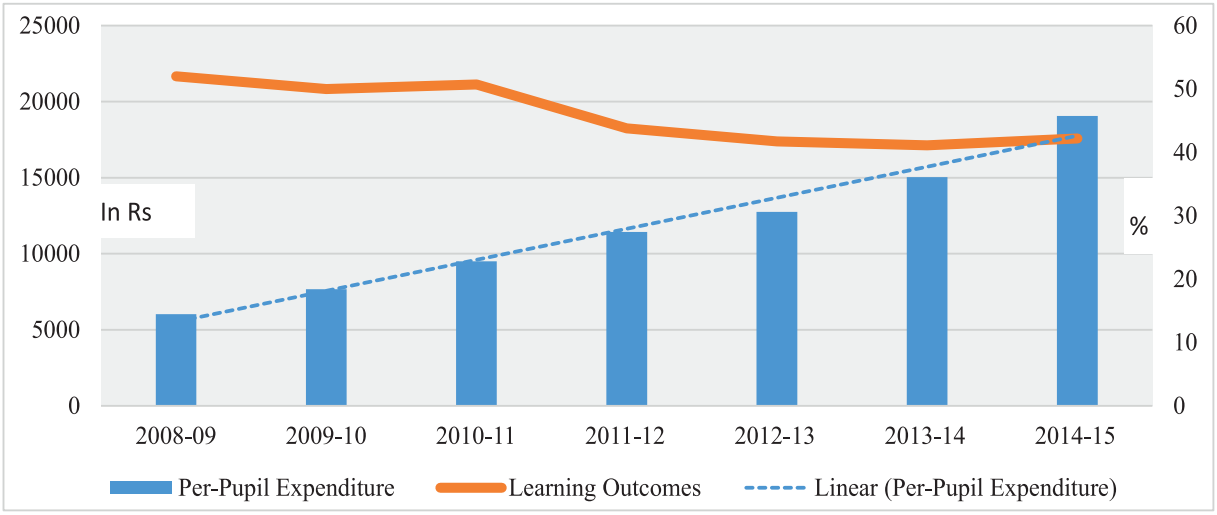
North-Eastern and Himalayan States with per capita spending less than NEH States average of Rs. 5,970	General States with per capita spending less than average of general States of Rs 3,267
Assam, Manipur, Meghalaya and Tripura	Bihar, Jharkhand, Madhya Pradesh, Punjab, Telangana, Uttar Pradesh and West Bengal

Source: State Finance Accounts, Projected population by Central Statistics Office (CSO)

Relationship between Expenditure on Education and Outcomes

- Figure 7 shows that there is a broken link between expenditure on education and educational outcomes. Higher expenditure may not necessarily show improvement in learning outcomes. Dr. Karthik Muralidharan, Tata Chancellor's Professor of economics at the University of California, San Diego, in his presentation to us, has shown that between 2008-09 and 2014-15, per pupil expenditure for elementary education increased from Rs. 6,000 to Rs. 19,000. However, the percentage of children in Class V who could read a Class II level text actually declined over the same period.

Figure 7: Relation between Expenditure and Education Outcome

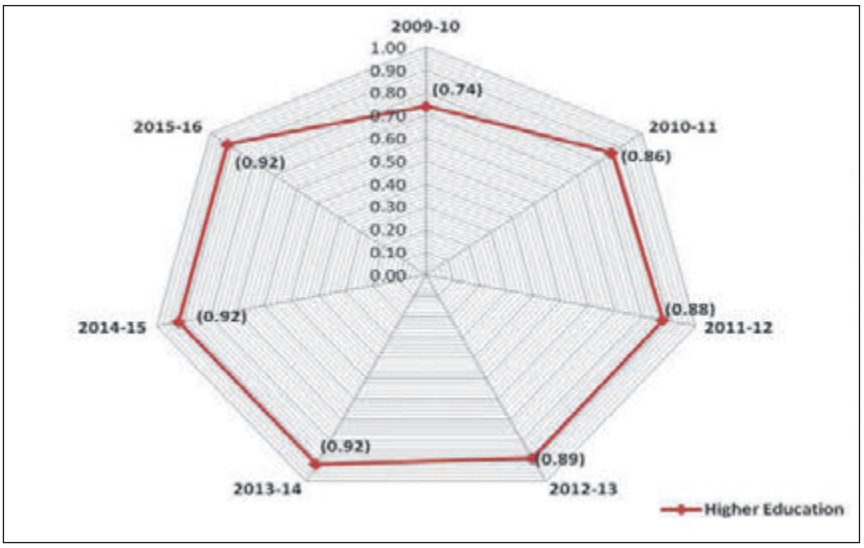


Source: Ministry of Education Statistics 2008 to 2018; Unified District Information System for Education (UDISE); Learning Outcomes (ASER trends over time)

Gender Parity in Education

- The gender parity index (GPI), based on the gross enrolment ratio, shows female participation at all levels of education increasing. Figure 8 shows GPI in higher education increasing from 0.74 in 2009-10 to 0.92 in 2015-16.

Figure 8: Gender Parity Index in Higher Education



Source: Education Statistics at a Glance-2018, Ministry of Education

International Perspective

- When compared with other countries, India, on average, fares poorly in terms of literacy rate and mean years of schooling. However, it has made progress in terms of GER and pupil teacher ratio.

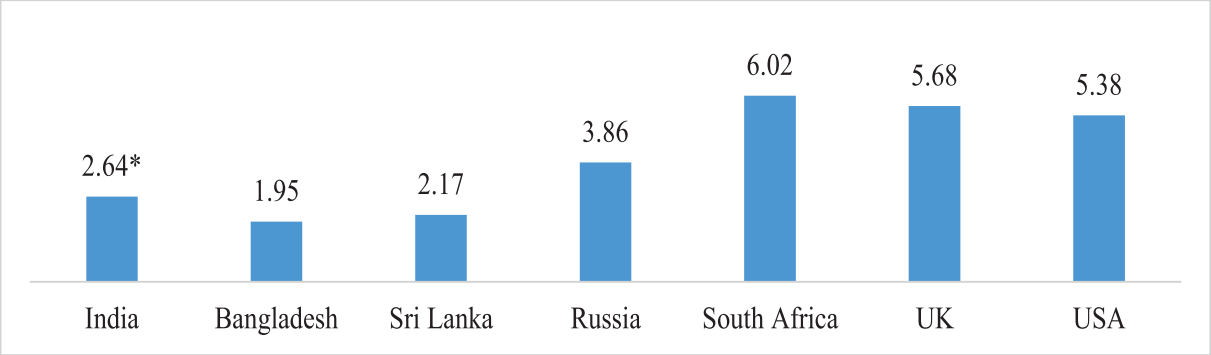
Table 3: Global Comparison in Key Education Indicators (2015)

Indicators	India	Bangladesh	China	Russia	South Africa	United Kingdom	United States
Literacy rate (%)	73^{-4}	92.95^{+2}	99.64^{-5}	99.71^{-5}	98.96	-	-
Mean years of schooling	5.30^{-4}	6.06^{+2}	7.33^{-5}	11.47^{-5}	10.13^{-2}	13.16^{-3}	13.41^{+1}
GER - primary (I to V) (%)	99.2	120.4	104.1	100.5	99.7^{-2}	108.7	100.2
GER – lower secondary (VI-VIII) (%)	92.8	83.4	99.1	101.0	97.1^{-3}	112.7^{-1}	102.1
GER – tertiary (%)	24.5	13.4^{-1}	43.4	80.4	19.4^{-2}	56.5^{-1}	85.8
Pupil-teacher ratio (primary) (%)	23	36.1	16.3	19.8^{-1}	33.6^{-1}	17.4^{-1}	15^{-1}
Pupil-teacher ratio (lower secondary) (%)	17	36.9^{-2}	12.5	–	–	15.3^{-1}	14.8^{-1}

Source: Education Statistics at a Glance 2018, Ministry of Education, and UNESCO Institute for Statistics (UIS)
Note: A^{-x}: x years back of 2015, the value was A
A^{+x}: x years ahead of 2015, the value is A

- India's public expenditure of 2.64 per cent of GDP is much lower than in advanced countries like the United States, United Kingdom and South Africa.

Figure 9: Public Expenditure on Education (% of GDP)



Source: Education Statistics at a Glance, 2018, Ministry of Education
Note: This figure is from Finance Accounts, 2018-19, for States and Ministry of Education combined.

Education Grants by Previous Finance Commissions

- In the past grants for education have been given by FC-XII and FC-XIII. FC-XII gave equalisation grants aggregating to Rs. 10,172 crore for education to Assam, Bihar, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and West Bengal. FC-XIII recommended Rs. 24,068 crore for the Sarva Shiksha Abhiyan to all States.

Recommendations by FC-XV in Report for 2020-21

- **Incentives for education:** Though education is a key area for harnessing the demographic dividend, the learning outcomes of school children remain abysmal, even after achieving 100 per cent gross enrolment at primary levels. Another area that concerns us the most is the low ratio of girls transitioning from upper primary to secondary level of education. Education of girls is a critical determinant of age of marriage, age of first pregnancy, total fertility and child health and nutrition.
- Considering this, we may consider introducing financial incentives for best performing States in terms of incremental change in a few focused indicators which form a subset of the PGI of the Ministry of Education. During 2020-21, the Ministry and the State Governments should prepare State-wise targets based on these indicators and take action so that they can avail incentives from 2021-22 onwards.

National Education Policy (NEP) 2020

I. School Education

a. **Early childhood education:** Over 85 per cent of a child's cumulative brain development occurs prior to the age of six, indicating the critical importance of appropriate care and stimulation of the brain in the early years in order to ensure healthy brain development and growth. Recognising this, the NEP states that 'universal provisioning of quality early childhood development, care, and education must thus be achieved as soon as possible, and no later than 2030, to ensure that all students entering Grade 1 are school ready'. For universal access to early childhood care and education (ECCE), anganwadi centres will be strengthened with high-quality infrastructure, play equipment, and well-trained anganwadi workers/teachers. Also, it is envisaged that prior to the age of five, every child will move to a "preparatory class" or "Balavatika" (that is, before Class I), which has an ECCE-qualified teacher. The learning in the preparatory class shall be based primarily on play-based learning with a focus on developing cognitive, affective and psychomotor abilities and early literacy and numeracy. The impact of malnutrition on the development of the brain, and hence on early education, is significant and thus nutrition and learning are inextricably linked. Hence, under the new NEP, the midday meal programme will be expanded and both a nutritious breakfast and a midday meal will be provided to pre-primary and primary school students.

b. **Foundational literacy and numeracy:** Special attention will be paid to early language and mathematics in Grades I-V. The Policy aims to ensure that every student in Grade V and beyond must achieve foundational literacy and numeracy by 2025.

c. **Curriculum and pedagogy:** A new developmentally appropriate curriculum and pedagogical structure for school education based on principles of brain development and learning has been developed based on a 5+3+3+4 design. This will replace the existing 10+2 model. There will be equal emphasis on all subjects – science, social sciences, art, languages, sports, mathematics – with integration of vocational and academic streams in school. Curriculum and pedagogy will be transformed by 2022 to promote skill-based, and minimise rote-based, learning.

d. **Universal access:** The Policy aims to achieve 100 per cent GER for all school education by 2030 through various measures.

e. **Learning outcomes :** Census assessments to be started at key stage in Classes III, V and VIII to track achievement of essential learning outcomes. Assessment of core

concepts and knowledge, higher-order skills and its application in real-life situations will be done instead of rote learning. AI-based software will be used to help track the progress of students to enable them to make optimal career choices.

II. Higher Education

a. A new vision and architecture for higher education has been envisaged with large, well-resourced, vibrant multidisciplinary institutions. Even engineering institutions, such as IITs, will move towards more holistic and multidisciplinary education with more arts and humanities. Students of arts and humanities will aim to learn more science and all will make an effort to incorporate more vocational subjects and soft skills.

b. The Policy recommends that by 2040, all higher education institutions shall aim to become multidisciplinary institutions, each of which will aim to have 3,000 or more students. There shall, by 2030, be at least one large multidisciplinary higher education institution in or near every district. The aim will be to increase the GER in higher education including vocational education from 26.3 per cent in 2018 to 50 per cent by 2035.

c. The regulatory system of higher education will ensure that the distinct functions of regulation, accreditation, funding, and academic standard setting will be performed by distinct, independent and empowered bodies. Four independent verticals within one umbrella institution of the Higher Education Commission of India (HECI) will be set up: National Higher Education Regulatory Council (NHERC), National Accreditation Council (NAC), Higher Education Grants Council (HEGC) and General Education Council (GEC).

d. A National Research Foundation (NRF) will be set up and its overarching goal will be to enable a culture of research to permeate through our universities.

III. Teacher Education

Teacher preparation programmes will be rigorous and will take place in vibrant, multidisciplinary higher education institutions. The four-year integrated stage-specific, subject-specific Bachelor of Education offered at multidisciplinary institutions would be the predominant way of becoming a teacher.

IV. Vocational education

This will be an integral part of all education and the Policy aims to provide access to vocational education to at least 50 per cent of all learners by 2025.

V. Adult Education

The Policy aims to achieve 100 per cent youth and adult literacy by 2030.

VI. Promotion of Indian languages

The Policy will ensure the preservation, growth, and vibrancy of all Indian languages. The medium of instruction up to Grade V, and preferably till Grade VIII and beyond, will be the home language/mother-tongue/local language.

Key Proposals of Ministry to FC-XV

- Either ring-fence a certain percentage (about 20 per cent) of the funds devolved to the States for school education or consider a clear award to the States for implementation of the Right to Education Act, 2009, on the lines of the FC-XIII.
- Grants may be given for incentivising the performance of States on achievement of pre-specified outcomes, for example, using the PGI.
- Department of School Education and Literacy gave a revised memorandum indicating requirement of Rs. 6.24 lakh crore for five years (2021-22 to 2025-26) and the Department of Higher Education submitted a requirement of Rs 4.01 lakh crore for the same period.

Initiatives to Deal with Fallout of Covid-19 Pandemic

- In March, State Governments across the country shut down schools and colleges as an immediate measure to stop the spread of the Covid-19 pandemic. Closure of schools and universities will not only have a short-term impact on the continuity of learning for students but will also have far-reaching economic and social consequences. The Government took several measures to deal with the pandemic.

Technology-driven Online Education

- SWAYAM PRABHA direct to home channels were started to support and reach those who do not have access to the internet. Three channels were already earmarked for school education and another twelve channels are to be added.
- Provision was made for the telecast of live interactive sessions with experts over Skype on these channels.
- The Ministry of Education coordinated with States Governments to share air time (four

hours daily) on the SWAYAM PRABHA channels to telecast their education related contents.

- 200 new textbooks added to e-Paathshaala portal for online education.

Technology-Driven Education with Equity

- PM eVIDYA, a programme for multi-mode access to digital/online education, was launched. It included:
  - ◊ DIKSHA for school education in States/Union Territories that has e-content and QR-coded energised textbooks for all grades (One Nation, One Digital Platform).
  - ◊ Extensive use of radio, community radio and podcasts.
  - ◊ Special e-content for visually and hearing impaired.
  - ◊ Universities were permitted to start online courses.

Challenges

Challenges posed by Covid-19

- Educational institutions closed down in the second week of March 2020 even before the lockdown was imposed. All examinations and evaluations got postponed. This has hampered learning by students, especially those who do not have access to online education.

Poor learning outcomes

- While access to basic education has been achieved, with 100 per cent gross enrolment at primary levels, learning outcomes have remained very low.
- According to Annual Status of Education Reports (ASER) Survey, only 27.3 per cent children in Class III can read Class II text and only 28.2 per cent children can do subtraction.
- Sub-scale schools and high teachers' vacancies combined with teacher absenteeism lead to poor learning outcomes and low effectiveness of any government intervention. About four lakh schools have less than fifty students, according to NITI Aayog's India Three Year Action Agenda. Further, these schools have only one or two teachers, no supporting staff and poor infrastructure.

Low investment in education sector

- Various committees on education, starting with the Education Commission chaired by D.S. Kothari in 1966 have recommended that expenditure on education should be 6 per cent of GDP. However, as of 2018-19, the Union and State Governments together spent only 2.64 per cent of GDP on education.
- Bulk of the enrolment in higher education is handled by State universities and their affiliated colleges. However, the grants that these universities receive are insufficient compared to their task. Nearly 65 per cent of the University Grants Commission budget is utilised by Central universities and their colleges while State universities and their affiliated colleges get only the remaining 35 per cent, according to the Standing Committee on Human Resource Development chaired by Dr. Satyanarayan Jatiya in February 2017.
- Resources for higher education are thinly spread out.

Teachers' training

- State Councils of Educational Research and Training (SCERT) and District Institutes for Education and Training (DIET) are understaffed and lack skills like curriculum design or assessment design and analysis.
- Evidence shows that a large number of teachers in primary schools lack the desired skills.

Regulatory issues in school education

- Stifling regulations have acted as barriers for entry of private players in the education sector. Some of these are:
    - ◊ The registration of schools is subject to requirements of maintaining minimum financial requirements and infrastructure. Some of these conditions sound unreasonable and result in a few players monopolising the sector.
    - ◊ Various permissions need to be sought from different public institutions. These are State-specific and not uniform.
    - ◊ Most of the States grant permission or issue no-objection certificates only to non-profit entities.
    - ◊ Private unaided schools do not have freedom to determine their own fee structure. This is subject to assessment by State authorities to ensure reasonableness of fees and show that it does not lead to profiteering and commercialisation.

Low gross enrolment rate in higher education

- In India, the GER in higher education has more than doubled over a period of eleven years – from 9 per cent in 2002-03 to 24.5 per cent in 2015-16. However, this is still fairly low as compared to other countries such as the United Kingdom and the United States.

Table 4: GER in Tertiary Education

(per cent)

India (2015)	United Kingdom (2015)	United States (2015)	Bangladesh (2014)	Sri Lanka (2015)	China (2015)	Germany (2015)	South Africa (2013)
24.5	56.5	85.8	13.4	19.8	43.4	68.3	19.4

Source: UNICEF

Lack of employable skills

- India has one of the largest youth populations in the world. Estimates suggest that only 2.3 per cent of India's workforce has undergone formal skill training compared to 96 per cent in South Korea, 80 per cent in Japan, 75 per cent in Germany, 68 per cent in the United Kingdom and 52 per cent in the United States, according to NITI Aayog's Three Year Action Agenda, 2018-18 to 2019-20. Hence, there is a huge gap between the demand and supply of skills.

Regulatory issues in higher education

- Currently, foreign educational institutions are not permitted to establish an independent campus in India for the purpose of degree programmes. As a step towards liberalisation of the heavily regulated higher education sector, the Union Government had, on 10 September 2013, issued a press release informing various stakeholders about its proposal to allow foreign universities to set up campuses in India as not-for-profit companies (without having to collaborate with domestic educational institutions). However, no action has been taken on this front as of now. A bill titled 'The Foreign Educational Institutions (Regulations of Entry and Operations) Bill, 2010', was introduced in Parliament to regulate the entry and operations of foreign educational institutions in India. However, the bill lapsed in 2014. Currently, the only way a foreign educational institution can enter the sector is by collaborating with Indian institutes.

- The higher education sector is regulated by a multiplicity of regulatory agencies, with overlapping mandates – University Grants Commission (UGC), All India Council for Technical Education (AICTE) and various professional Councils.
- Higher educational institutions lack autonomy.

Teachers' vacancies in higher education

- The Standing Committee on Human Resource Development has pointed to the extent of vacancies in higher education. Out of the total sanctioned teaching posts in Central universities, there are vacancies of 35 per cent for professors, 46 per cent for associate professors and 26 per cent for assistant professors.

Accountability and performance of teachers

- At present, there is no mechanism for ensuring the accountability of professors in universities and colleges, unlike in foreign universities where the performance of the college faculty is evaluated by their peers and students.

Suggested Areas of Reforms

Build resilience in India's public education system

- In the light of the Covid-19 pandemic, it is necessary to design an amalgamation of digital and physical classes curriculum. To ensure that children do not suffer because of closure of schools, every school must have an information and communication technology (ICT) lab and smart classroom. Underprivileged children should be given pre-loaded devices.

Private sector in education should be seen as a partner and not a competitor

- The government alone may not be able to fill the huge resource gap in education. Hence, private investment, including foreign direct investment, needs to be encouraged. The following reforms may be undertaken:
    - ◊ Onerous requirements like minimum infrastructure, especially land, other financial requirements and multiple approvals from various authorities should be rationalised.
    - ◊ Foreign universities should be allowed to run independent campuses in India, as

it will help meet the demand for higher education, increase competition and subsequently improve standards of higher education. Their operations may be controlled by law. This will also reduce the number of students going abroad for higher studies.

◊ Public-private partnership (PPP) models could also be explored where the private sector adopts government schools while being publicly funded on a per-child basis.

Bring in reforms to improve learning outcomes in schools

- Attaining foundational literacy and numeracy for all children should become the core target for States.
- State Governments need to work towards having **functional schools** which have minimum size, adequate teachers and basic infrastructure.
- There should be focus on **foundational learning.** There is compelling evidence that children who fall behind in basic literacy and numeracy skills in early grades maintain an almost flat learning curve later because the material being taught in class moves past their level and they have no way of catching up.
- It is necessary to develop and establish an integrated foundational curricular and pedagogical framework, and corresponding teacher preparation, for the critical foundational stage of a child's development.
- **Large-scale teacher rationalisation** is needed, that is moving teachers from surplus to deficit schools, restructuring complicated teacher cadres, and increasing investments in teacher recruitment through better planning and more stringent processes.

Improve skill sets of primary teachers and teacher attendance

- The Ministry should work towards bringing pay parity between private and government schools.
- Performance-based pay should be introduced in order to reduce absenteeism.
- Contractual hiring of the teaching staff should be discouraged.
- Monitoring and assessment of teachers should be done using MIS (management information system).

Use of technology

- MIS needs to be put in place by all States which can have information like teacher attendance, enrolment data and learning levels. It may also contain feedback. This can become a basis for making policy decisions.
- Based upon the information from MIS, a targeted approach can be followed where the schools at the bottom on certain parameters can be identified and resources may be accordingly be devolved.
- All out-of-school children need to be mapped digitally in order to bring them back to school. Similar system needs to be developed for vulnerable children. The data should be fed into a centralised database.

Restructure vocational education courses

- To capitalise on the demographic dividend, it is important to educate the youth and train them well for the job market. Courses for enhancing employability and closing the gap between job market and post-graduation courses should be done.
- Needs of the job market should be assessed annually and vocational courses should be re-oriented.
- Norms/standards and/or outcome-based certification for institutions that focus on skills and trades closely tied to employment should be established and promoted.
- Courses which will see high demand from the public sector in the near future (public health workers, foundational skills teaching, nursing and paramedics) should be promoted.

Promote autonomous colleges

- More established colleges should be brought under the autonomous colleges scheme in order to take them out of the centralised control of the university they are affiliated to and provide greater flexibility in academic matters. Such colleges should be encouraged to adopt higher levels of transparency.

Encourage innovative financing mechanisms

- Mobilisation of funds for State universities should be explored through other means such as endowments, contributions from industry and alumni.

Set up a new regulatory body for higher education

- There needs to be an overarching regulatory body which can subsume the multiple existing regulatory bodies. Such a body would be responsible for monitoring standards and licensing accreditation bodies in the sector. Rationalising the roles of professional councils is important.

Encourage increased inflow of foreign students.

- Systematic brand-building, marketing, social media and digital marketing campaigns should be adopted to increase the intake of foreign students. Exchange programmes with foreign universities need to be enhanced. This will not only help attract foreign students to the universities (which will help earn foreign exchange) but also encourage Indian students to study within the country (which will save foreign exchange).

Set up a digital system of performance audit/rating of professors

- This should be based on the feedback given by students and colleagues. Other inputs like research papers, publications by teachers should be taken into account in the performance auditing.

Encourage and promote research

- The Ministry should promote collaboration between higher educational institutes and top international institutes. It could also explore establishing linkages between national research laboratories and research centres of top global institutions as this could promote better quality and collaborative research outputs.
- Productive academic cooperation should be encouraged in the areas of joint research projects, exchange of faculty and students, joint degrees etc.
- Visits and long-term stay of top international faculty in Indian institutions to pursue teaching and research, visits of Indian students for training and experimentation in premier laboratories world-wide and international conferences should be encouraged.

Start a National University on Agriculture

- The Ministry may consider starting a national university on agriculture. This could promote fair competition among the existing agricultural universities.

FC-XV recommendations in its final report

- **School Education:** A prime area of concern in the field of education is the poor learning outcomes of school children which exist even after 100 per cent gross enrolment at primary levels. Also, there are issues relating to equity and access outcomes. We have, therefore, recommended incentive grants of Rs. 4,800 crore for States to improve these outcomes of school education using the PGI.
- **Higher Education:** State Governments across the country shut down schools and colleges as an immediate measure to stop the spread of the Covid-19 pandemic. Closure of schools and universities will not only have a short-term impact on the continuity of learning for students but will also have far-reaching economic and social consequences. Hence, this has prompted us to provide a grant (Rs. 6,143 crore) for technology-related solutions for higher education to promote learning through DTH channels and online modules. There is also a dearth of professional courses in regional languages, thus creating a hindrance for many coming from rural areas. Thus, we have also recommended grants for this purpose.

Chapter 6

Ministry of Environment Forest and Climate Change

The Ministry of Environment and Forest and Climate Change is the nodal agency in the Union Government for overseeing the implementation of India's environment and forest policies and programmes relating to conservation of the country's natural resources and prevention and abatement of pollution. While implementing these policies and programmes, the Ministry is guided by the principle of sustainable development. The Ministry is also the nodal agency for various international and regional groupings/alliances on environment-related issues.

Forests are the green lungs of the nation and provide various ecological services like clean air, water and maintenance of soil-moisture regime by checking soil erosion etc. Forests maintain environmental stability and ecological balance. Natural forests, with a vast variety of flora and fauna, are hubs of biodiversity. Healthy forest eco-systems are necessary for reversal of land degradation in the country.

Data from the National Air Monitoring Programme reveal that particulate matters far exceed the permissible levels at many locations, particularly in urban areas. The problem of air pollution is complicated by the multiplicity and complexity of sources of pollution (industries, automobiles, generator sets, domestic fuel burning, roadside dust, construction activities, among others). The issue of air quality is directly linked to SDG 7 of affordable and clean energy and SDG 13 of climate change. While the share of renewables in total power generation has increased from 6 per cent in 2014-15 to 10 per cent in 2018-19, India still needs investment in renewable energy. India also needs to give a major push to electric vehicles.

Overall Profile of the Ministry

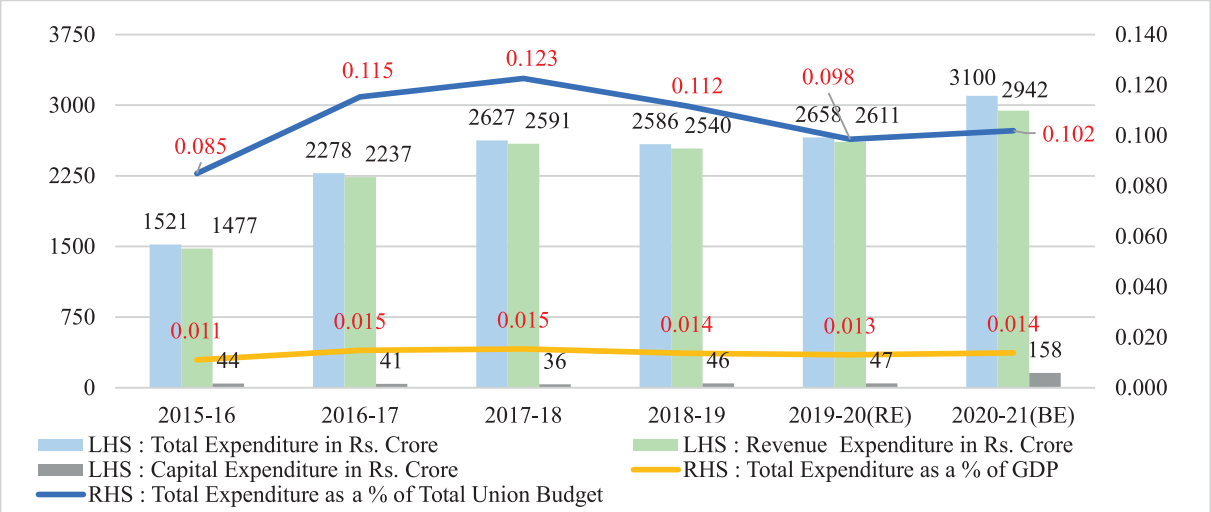
1. The Ministry of Environment and Forest and Climate Change (MoEF&CC) has the responsibility of overseeing the implementation of India's environment and forest policies and programmes. The broad objectives of the Ministry are:
    - Conservation and survey of flora, fauna, forests and wildlife
    - Prevention and control of pollution
    - Afforestation and regeneration of degraded areas
    - Protection of environment, and ensuring the welfare of animals.
2. These objectives are well supported by a set of legislative and regulatory measures. In addition, a National Conservation Strategy and Policy Statement on Environment and Development, 1992, National Forest Policy, 1988, a Policy Statement on Abatement of Pollution, 1992 and a National Environment Policy, 2006, also guide the Ministry's work.

3. The Ministry is broadly divided into three divisions - Establishment, Environment and Forest and Wildlife.

4. The National Compensatory Afforestation Fund Management and Planning Authority (CAMPA) was constituted in 2009 primarily to lay down guidelines for and to monitor/assist State CAMPA and resolve any contentious issues that may arise.

5. The Union Budget of 2020-21 allocated Rs. 3,100 crore to the MoEF&CC. This is 0.1 per cent of the Union Government's total budget for 2020-21 and 0.014 per cent of estimated gross domestic product (GDP). The year-wise allocation of the Ministry is given in Figure 1.

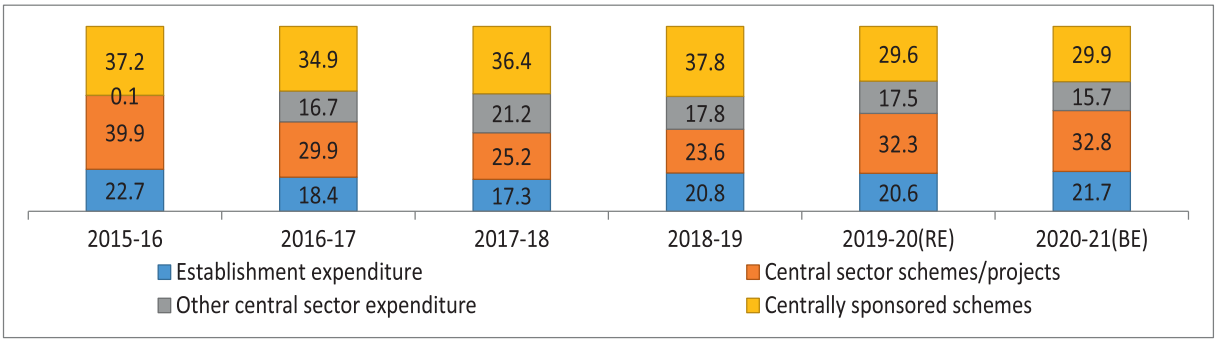
Figure 1: Expenditure of MoEF & CC



Source: Union Budget and CSO

6. There has been a decline in the proportion of expenditure on Centrally sponsored schemes (CSS) and other Central sector schemes in recent years. However, the proportion of expenditure on Central sector schemes has exhibited a rising trend.

Figure 2: Head-wise Expenditure (%) of MoEF&CC



Source: Union Budget

7. The Ministry's expenditure on Central sector schemes as a percentage of total Union expenditure on these schemes has been in the range of 0.10-0.12 per cent. Expenditure on CSS as a percentage of total Union expenditure on CSS was in the range of 0.25-0.33 per cent.

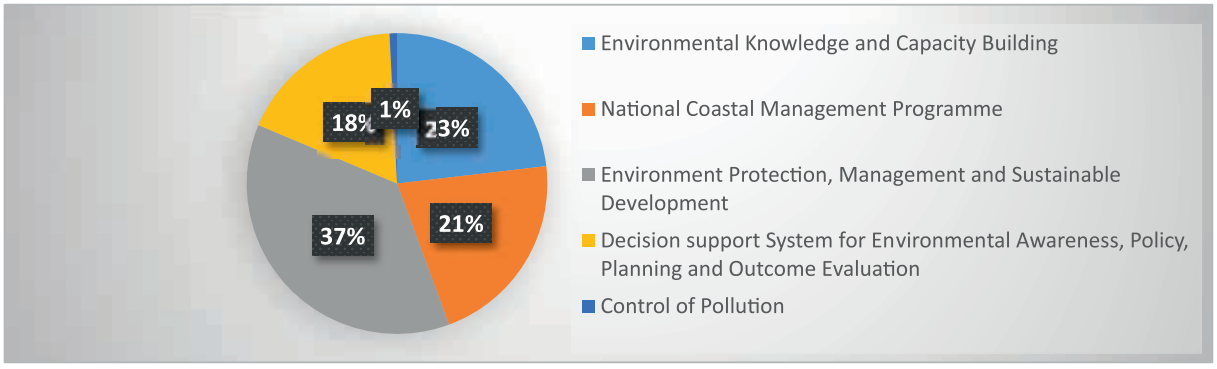
Table 1: Central Sector & Centrally Sponsored Schemes

	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
MoEF&CC expenditure on Central sector schemes as a % of total Union expenditure on Central sector schemes	0.12	0.12	0.11	0.10	0.11	0.12
MoEF&CC expenditure on CSS as a % of total Union expenditure on CSS	0.28	0.33	0.33	0.33	0.25	0.27

Source: Union Budgets

8. The Ministry monitors only one CSS of Environment, Forestry and Wildlife. Scheme-wise spending for Central sector schemes for year 2018-19 (in percentage) is depicted in Figure 3.

Figure 3: Central Sector Schemes of MoEF & CC



Central Pollution Control Board and State Pollution Control Boards

- Under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Union Government constituted the Central Board for the Prevention and Control of Water Pollution on 23 September 1974. The Central Pollution Control Board (CPCB) has been entrusted with the added responsibility of control of air pollution since May 1981 under the provisions of the Air (Prevention and Control of Pollution) Act, 1981. The enactment of the Environment (Protection) Act, 1986, which is the umbrella legislation for the enforcement of measures for the protection of the environment and several notifications of Rules under the Act, widened the scope of activities of the CPCB.
- The CPCB has been playing a key role in the abatement and control of pollution by generating, compiling and collating data, providing scientific information, rendering

technical inputs for the formulation of national policies and programmes, training and development of manpower and through activities for promoting awareness at different levels of the government and the public at large.

- **National Water Quality Monitoring Programme:** Under this programme, the CPCB, in association with the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs), regularly monitors the water quality of aquatic resources across the country through a network of 3,500 monitoring locations: 1,821 on rivers, 473 on lakes/ponds/tanks, 52 on creeks/sea water/coastal waters, 53 on canals, 52 on drains, 50 on sewage treatment plants, 10 on water treatment plant and 989 on wells.
- **National Ambient Air Quality Monitoring Programme:** This nation-wide programme is executed by the CPCB. Presently there are 731 operating stations in 312 cities/towns in twenty-nine States and six Union Territories.

National Clean Air Programme

- The National Clean Air Programme (NCAP) is a five-year action plan with 2019 as the first year.
- The tentative national level target of 20-30 per cent reduction of PM2.5 and PM10 concentration by 2024 is proposed under the NCAP, with 2017 as the base year for the comparison of concentration.
- The approach includes collaborative, multi-scale and cross-sectoral coordination between the relevant Union ministries, State Governments and local bodies.
- The Smart Cities programme will be used to launch the NCAP in the forty-three smart cities falling in the list of the 102 non-attainment cities.
- Other features of the programme include increasing the number of monitoring stations (including rural monitoring stations), technology support, emphasis on awareness and capacity building initiatives, setting up of certification agencies for monitoring equipment, source apportionment studies, emphasis on enforcement and specific sectoral interventions.

India and Recent International Commitments

- India has formally joined the Climate & Clean Air Coalition (CCAC), becoming the sixty-fifth country to join the partnership.
- India will work with CCAC member countries to adopt cleaner energy, sustainable

production and consumption patterns and environment-friendly transport, agriculture, industry and waste management to promote clean air.

- In 2015, India initiated the International Solar Alliance, a global coalition of nations tackling climate change by leveraging the power of solar energy. It has increased its vehicle emissions standards to BS6, which is similar to Euro 6 standards. In 2017, the Union Government announced that from 2030, all new vehicles sold in the country would be powered by electricity.
- The national commitment pledged in the Paris Agreement, United Nations Framework Convention on Climate Change (UNFCCC), in 2015 was:
  - ◊ To have 40 per cent of power generated from renewable resources by 2030. It is noteworthy that currently India has over achieved the target and is well on track to ensure that more than 50 per cent of installed power generation capacity will come from renewable sources by 2030.
  - ◊ To reduce the emission intensity of the economy by 33-35 per cent by 2030 from 2005 levels.
  - ◊ To create additional carbon sink of 2.5-3 billion tonnes of CO2 equivalent through additional forest and tree cover.

India's Post-2020 Climate Goals

- India submitted its Nationally Determined Contribution for the post-2020 period to UNFCCC on 2 October 2015, outlining the climate actions it intends to take under the Paris Agreement. The key action points are:
  - ◊ To put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation.
  - ◊ To adopt a climate-friendly and a cleaner path than the one followed hitherto by others at a corresponding level of economic development.
  - ◊ To abide by the commitments of the Paris Agreement.
  - ◊ To create an additional carbon sink of 2.5-3 billion tonnes of CO2 equivalent through additional forest and tree cover by 2030.
  - ◊ To better adapt to climate change by enhancing investments in development programmes in sectors and areas vulnerable to climate change, particularly agriculture, water resources, health and disaster management as well as the Himalayan region and coastal regions.

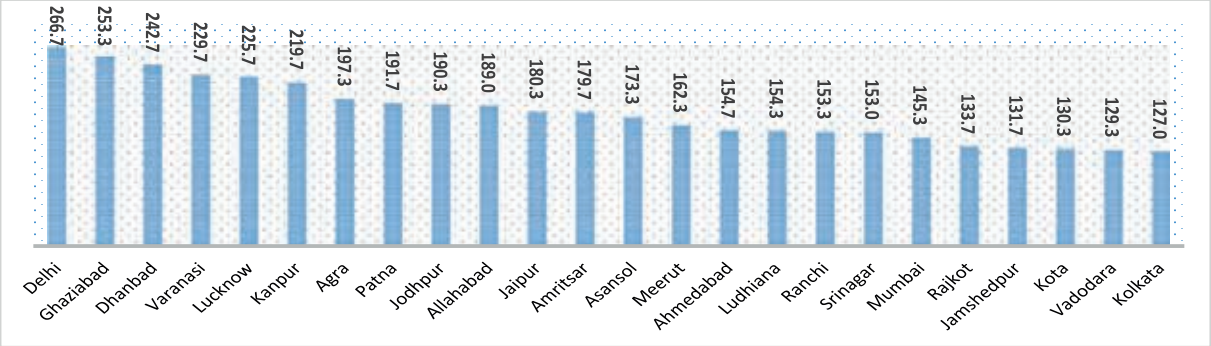
◊ To mobilise domestic and new and additional funds from developed countries to implement the above mitigation and adaptation actions to meet any resource gap that emerges.

◊ To build capacities, create a domestic framework and international architecture for quick diffusion of cutting edge climate technology in India and for joint collaborative R&D for such future technologies.

Inter-State Comparison

- Million-Plus cities have been experiencing high pollution rates in the recent years. This is risking the life of the high population concentrated in these areas.

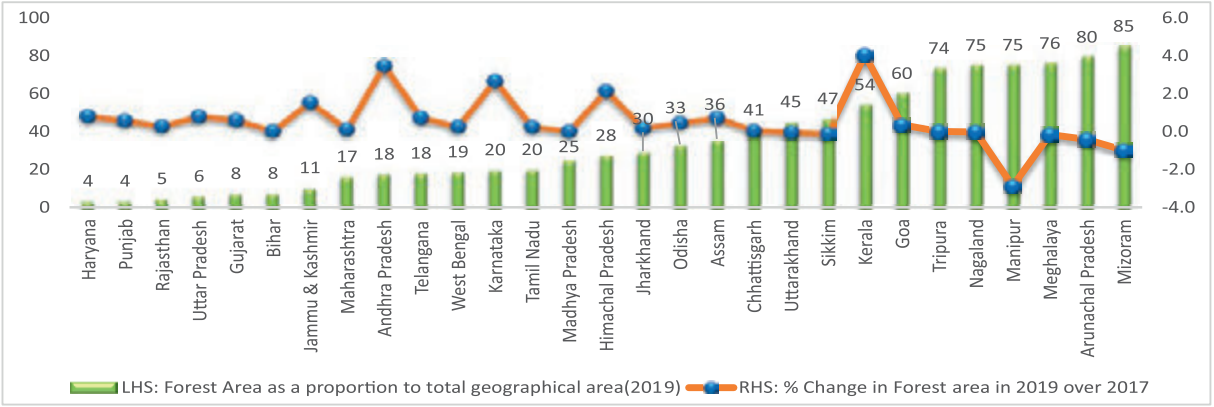
Figure 4: Top 25 Million-Plus Cities with PM_{10} Levels Exceeding NCAP Norms



Source: Data shared by MoEFCC - PM 10 Levels indicates average of 2015, 2016 and 2017

- Both FC-XIV and FC-XV have taken forest cover as an important criterion for devolution. Figure 5 indicates both the present stock of forest area in 2019 and proportional increase over 2017.

Figure 5: State-wise Comparison of Forest Area

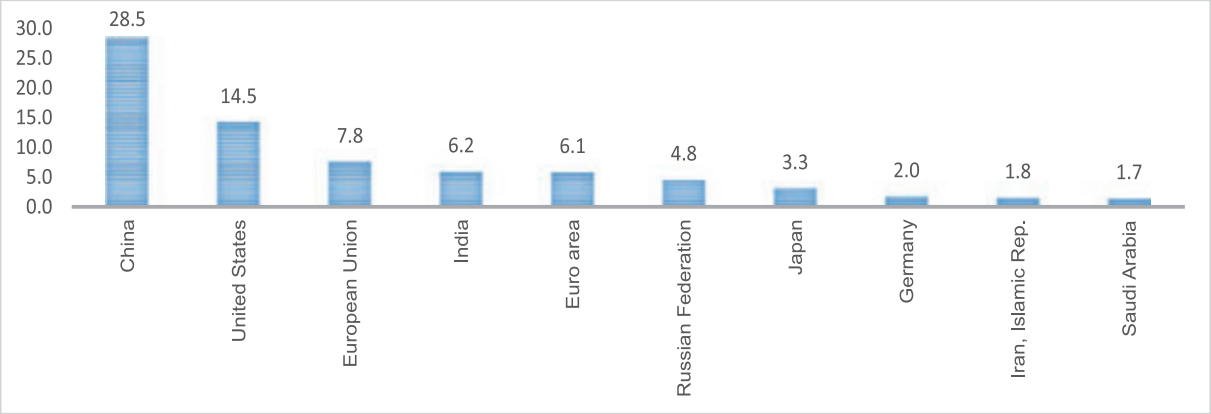


Source: Forest Survey of India Report 2019

International Perspective

- China, the European Union, the United States and India are the top contributors to CO2 emissions, accounting for 57 per cent of the global world emissions.

Figure 6: Top Ten Contributors to CO_2 Emissions (kt) (2014 data)



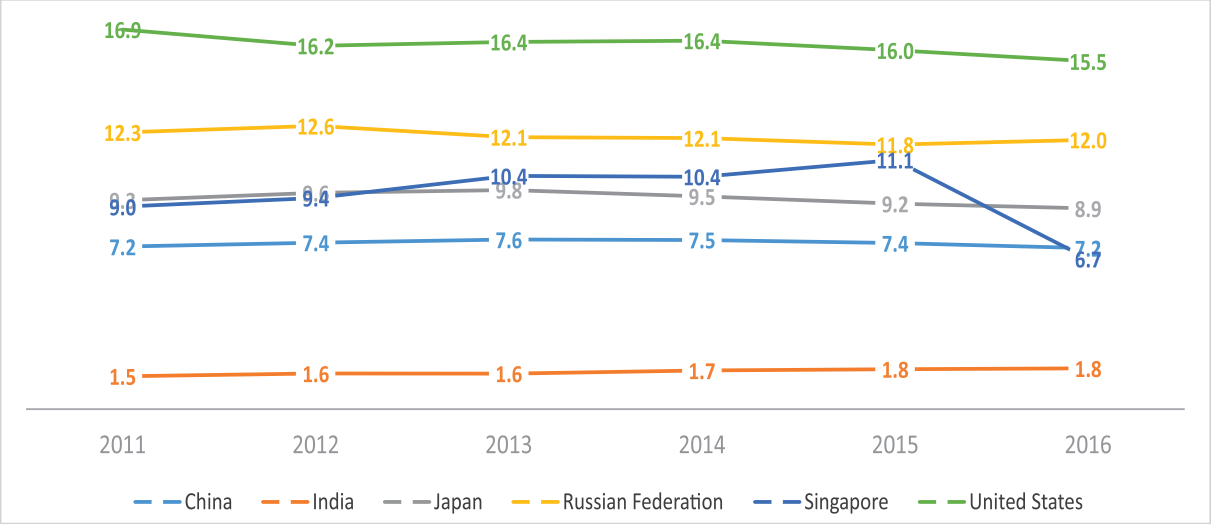
Source: World Development Indicators, World Bank

Note: Carbon dioxide emissions are those stemming from the burning of fossil fuels and the manufacture of cement. They include carbon dioxide produced during consumption of solid, liquid, and gas fuels and gas flaring.

- India's CO_2 emissions are low as compared to other major economies, but the trend has been going up in recent years.

Figure 7: CO_2 emissions – India and Major World Economies

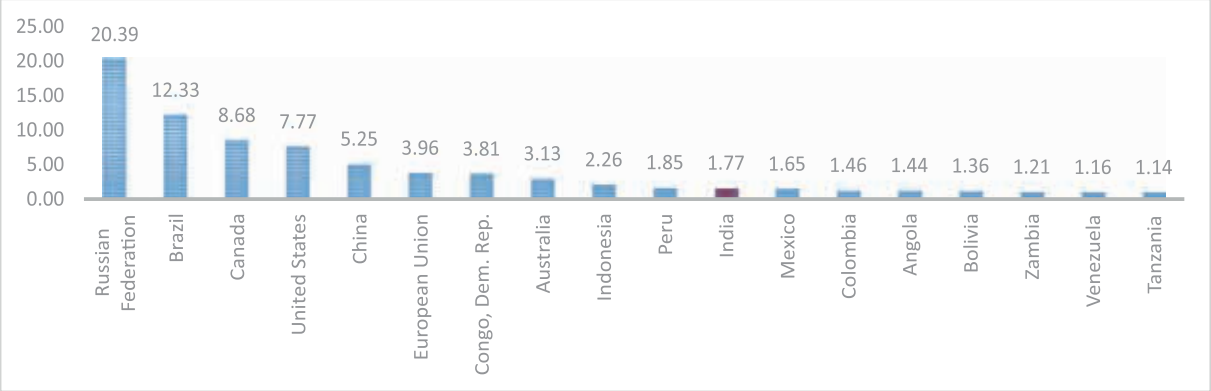
(metric tons per capita)



Source: World Development Indicators, World Bank

- Compared to other world economies, India has only 1.77 per cent of the world's forest area. Russia, Brazil, Canada and the United States have a major proportion of the world's forest area.

Figure 8: Forest Area as Proportion of World Forest Area (2016 data)



Source: World Development Indicators, World Bank

Note: Forest area is land under natural or planted stands of trees of at least 5 meters in situ, whether productive or not, and excludes tree stands in agricultural production systems (for example, in fruit plantations and agroforestry systems) and trees in urban parks and gardens.

Box 1 : Grants by Finance Commissions

	Observation	Grants Proposed
FC-XII	Forests are national wealth, and the country as a whole has a responsibility in preserving it.	Recommended grants of Rs. 1,000 crore for maintenance of forests
FC-XIII	a) Forest grants are a reward for contributing to the ecology and bio-diversity of India, as well as compensation to States for the opportunity loss on account of keeping areas under forests. b) The power sector has great potential for reduction of greenhouse gases. There is, hence, a need to incentivise States to promote clean energy. c) Injudicious inter-sectoral and intra-sectoral distribution of water among various categories of water users, low water use effcie ncy, fragmented approach to water resources planning and development, low water user charges and meagre recovery are some of the major problems associated with the management of water resources.	Recommended grants of Rs. 15,000 crore. (Rs. 5,000 crore each for forests, incentive for grid-connected renewable energy and water sector management)
FC-XIV	Large forest cover provides huge ecological benefits, but there is also an opportunity cost in terms of area not available for other economic activities and this also serves as an important indicator of fiscal disability.	7.5 per cent weight to the forest cover in the horizontal devolution formula

Recommendations of FC-XV in Report for 2020-21

- Forest, a global public good, is a resource that ought to be preserved and expanded through afforestation of degraded and open forests for national benefit as well as to meet our international commitments. In our Report for the Year 2020-21, we allocated 10 per cent weight to forest cover in the horizontal devolution formula.
- As indicated in Figure 4, there is a problem of air quality in the Million-Plus cities. Realising that these cities are future centres of urban growth and that there is a need to increase the livability of these cities to attract investment, we recommended, in our report for 2020-21, **Rs. 4,400 crore for the Million-Plus cities in 2020-21 for the purpose of improving ambient air quality.** The MoEF&CC, as the nodal Ministry, shall, in consultation with State Governments, develop city-wise and year-wise targets on ambient air quality based on annual average concentrations of PM10 and PM2.5, monitor and evaluate the improvement and recommend disbursal of grants of such cities.
- **How has assigning weight to forest cover in the horizontal devolution formula incentivised the States?**
    - ◊ As indicated in Figure 8, India constitutes 1.77 percent of the world's total forest area and is committed towards achieving the targets of the Paris Agreement and other international obligations. There is a clear need to protect, preserve and nurture the rich heritage of this natural resource. Hence, FC-XIV assigned 7.5 per cent weight to the forest cover in the horizontal devolution formula. While this was a positive step in recognising and compensating for the fiscal disabilities that States faced due to forest cover, absence of earmarking of funds has adversely affected the protection of forests in some States.
    - ◊ In our report for 2020-21, we assigned a higher weight of 10 per cent for the forest and ecology criterion. The increase in weight is also recognition of forests, a global public good, as resources that ought to be preserved and expanded (through afforestation of degraded and open forests) both for national benefit as well as to meet our international commitments.

Key Proposals of Ministry to FC-XV

- The Ministry proposed that a weightage of 7.5 per cent should be given to forests in the horizontal devolution formula.
- The Ministry also proposed sector-specific grants in the following areas:

◊ Rs 1.69 lakh crore for pollution abatement and performance.

◊ Rs 1.35 lakh crore for meeting Goal 5 under NDC of Climate Change.

◊ Rs 0.62 lakh crore for catchment area treatment and forest restoration.

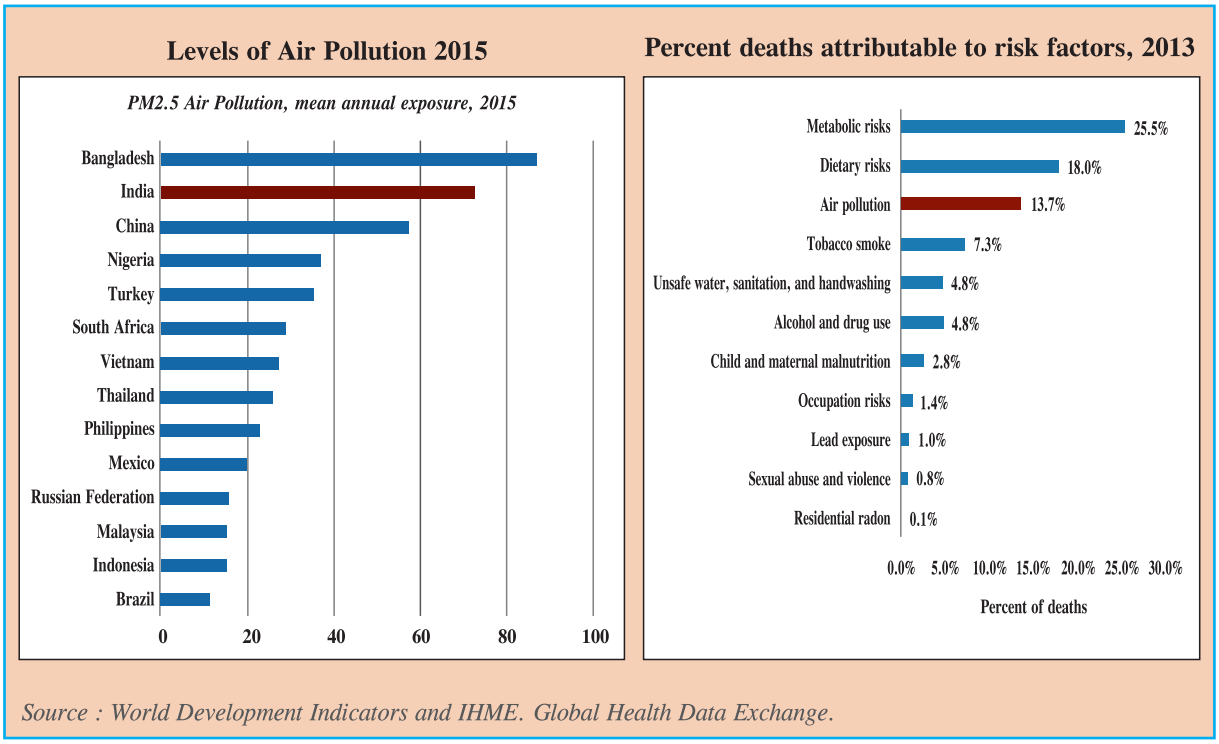
- The Ministry also suggested that evaluation on the improvement of the air quality for a State should be based on four parameters: (a) strengthening of the institutional framework; (b) source-wise cause analysis for air pollution; (c) progress on action plans and compliance with statutory guidelines; and (d) quantification of air quality improvement. The relative weight assigned to these factors will shift over time, with more emphasis on institution and capacity building in the initial years and to outcomes in later years.

Challenges

Air Pollution

- The World Bank, in its report Systematic Country Diagnostics 2018, highlighted that in 2016, Delhi was the world's most polluted megacity. India experienced one of the worst deteriorations in air quality of any country between 1990 and 2013.

Figure 9: High Levels of Air Polution and Assoiated Costs



Source : World Development Indicators and IHME. Global Health Data Exchange.

- In Delhi, the share of days with severe pollution in the winter months rose from one-third in 2014-15 to two-thirds in 2015-16.
- More than 99 per cent of India's population breathed levels of PM2.5 (higher than World Health Organisation guidelines), and 70 per cent (more than 900 million people) inhaled polluted air that exceeded Indian standards for ambient air quality.

Urban Governance

- India is experiencing significant urban growth and this is unevenly distributed across the country.
- Although India's urban areas are engines of growth and poverty reduction, the so-called 'demons of density' – disease, crime, pollution, congestion – are increasingly prevalent.
- This is largely due to the limited and uneven progress in developing a coherent framework for urban governance, despite the Seventy-Fourth Constitutional Amendment. Progress is undermined by the structure of urban governance, with the local tier having:
  - ◊ narrow jurisdictional (geographic) boundaries
  - ◊ lack of functional assignments for the management of the urban built environment
  - ◊ limited fiscal assignments
  - ◊ poor city-level governance, including weak public expenditure and revenue management systems and low level of transparency over governance processes and service delivery outputs.

Dependence on Thermal Energy

- While there has been tremendous increase in the country's renewable energy capacity, fossil fuels, especially coal, continue to remain an important source of energy. Almost 60 per cent of India's installed capacity is in thermal power, within which coal-based thermal power plants account for the largest share. As mentioned earlier, though India contributes less in terms of CO2 per capita (Figure 7) as compared to other world economies, it is a significant contributor in CO2 emissions worldwide (Figure 6).

Suggested Areas of Reforms

Adopt a Hybrid, Performance-Based Approach

- Such an approach would incentivise States to pursue incremental reforms to the enabling environment for effective air quality management, while supporting the broader reform of State Government-local government relations. This approach will serve the longer-term vision for decentralised urban governance. Key dimensions of the approach would include:
  - ◊ **Specific eligibility (prior action) requirements** for States and local bodies to receive funding, including:
    - a) establishment of an air quality coordination mechanism at the State-level and establishment of city (airshed) level data systems (a compliant air quality monitoring system);
    - b) completion of a compliant pollution source apportionment study to be updated at least every three years;
    - c) completion of a compliant abatement action plan by the major source of pollution.
  - ◊ **Faster Adoption and Manufacturing of Electric Vehicles (FAME):** According to FAME guidelines, there is a need for increasing the charging facilities as well as the market share of electric vehicles which, according to the Economic Survey 2019, is only 0.06 per cent, against 2 per cent in China and 39 per cent in Norway. There is a need to enhance the network of charging infrastructure which should be installed across all Million-Plus cities, smart cities, state capitals and major highways connecting major cities.

Frame a Comprehensive Energy Policy

- A comprehensive energy policy should take into consideration the economies of both coal and renewables as they are interdependent. India has been undertaking one of the world's largest renewable energy expansion programmes in the world. The share of renewable energy in the Indian electricity mix is progressively increasing.
- Unlike gasoline and diesel, whose prices are closer to internationally efficient levels, reflecting global warming externalities, those of coal, natural gas, and kerosene are below such levels, party reflecting the provision of subsidies to select consumers of LPG and kerosene. The challenge is to bring their prices closer to environmentally

efficient levels, consistent with India's NDC pledge and commitments made in the 2015 Paris agreement, along with carefully targeted assistance to potentially affected vulnerable households.

FC-XV recommendations in its final report

◊ The forest and ecology criterion in the formula for horizontal devolution set out in Chapter 6 of Volume I has factored in both the ecological services being provided by States' forest cover to the country as well as the cost disabilities. This is arrived at by calculating the share of the dense forest of each State in the aggregate dense forests of all the States. We have assigned a weight of 10 per cent for the forest and ecology criterion. The increase in weight is also a recognition of forests, a global public good, as a resource that ought to be preserved and expanded through afforestation of degraded and open forests for national benefit as well as to meet our international commitments.

◊ Open waste burning on the streets, activities of small informal industries (for example, rice popping using burning tires), spontaneous combustion in landfills are significant, but overlooked, sources of pollution. Waste decomposition and poorly managed composting also affect air quality by releasing toxic gases as well as methane into the atmosphere. We are also of the view that ending open waste burning, proper solid waste management and composting at landfill sites can play significant role in air quality management. Hence, we have recommended in Chapter 7 of Volume I, that both informal burning as well as spontaneous combustion at landfills should be monitored carefully. This could include:

a) Monitoring of open waste burning and chemical traces from waste burning at landfill sites as well as the development of an app to allow reporting by citizens by sending pictures.

b) Process-tracing of waste management in each city to identify where the breakdown in waste management occurs.

◊ We also took feedback from other experts from the World Bank and WRI about our recommendations in the report for 2020-21. It appears that only persistent efforts lead to a reduction in the complex problem of poor air quality. Furthermore, the improvement in ambient air quality observed in 2020-21 may simply be the outcome of the lockdowns triggered by the Covid pandemic. In view of this, we recommend that a preparatory period of one year be provided to put in place the necessary equipment and procedures to move towards the

desired objective of clean air in the medium term. Hence, in the year 2021-22, as suggested by MoEF&CC, the relative weightages for assessment of city performance on air quality may be based on four parameters: (a) strengthening of the pollution monitoring mechanism; (b) source-wise cause analysis for air pollution; (c) progress on action plans and compliance of statutory guidelines; and (d) quantification of air quality improvement with the weights as prescribed in the following table.

Table 2: Relative Weightage for City Performance Assessment

Parameter	2021-22	2022-23	2023-24	2024-25	2025-26
Strengthening of pollution monitoring mechanism	10	-	-	-	-
Source-wise cause analysis for air pollution	10				
Progress on action plans and compliance of statutory guidelines.	10	-	-	-	-
Quantification of air quality improvement	70	100	100	100	100
Total	**100**	**100**	**100**	**100**	**100**

◊ Quantification of improvement in air quality has two parts, namely, reduction in particulate matter (PM98) and increase in the number of good days according to improvement in the air quality index (AQI). Management of open waste burning and combustion at landfill sites should constitute an integral part of the air quality improvement index, with suitable weights arrived at on the basis of source-wise cause analysis for air pollution in specific urban agglomerations. After 2021-22, for all the remaining four years of the award period, the entire weightage will be on the fourth parameter of quantification of improvement in air quality.

◊ While the MoEF&CC shall handhold and monitor the urban local bodies in these efforts, the MoHUA shall take initiative in implementing parameters (b) and (c) and also management of open waste burning and combustion at landfill sites by the concerned urban local bodies, once the MOEFCC, as technical adviser, agrees to the source–wise analysis for air pollution and year-wise action plans from 2021-22 to 2025-26.

Chapter 7

Department of Fertilizers

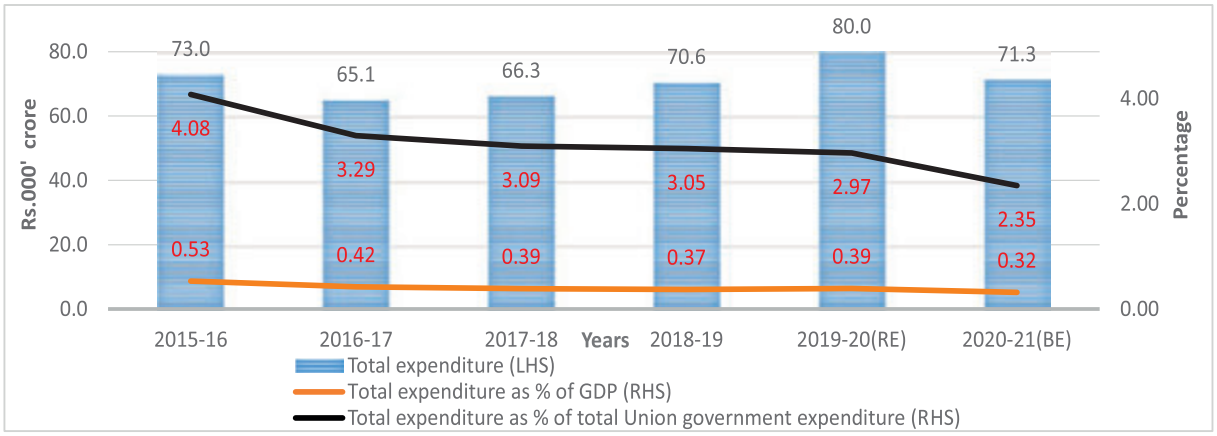
The main objective of the Department of Fertilizers is to ensure adequate and timely availability of fertilizers at affordable prices so as to maximise agricultural production. The key functions of the Department include planning, promotion and development of the fertilizers industry, planning and monitoring of production, import and distribution of fertilizers and management of financial assistance by way of subsidy/concession for indigenous and imported fertilizers. The Department also administers nine public sector undertakings.

In view of the challenges that the Department faces, some of the suggested reforms include the need for balanced use of fertilizers, direct benefit transfer, promoting R&D with the objective of restoration of soil health balance, turning to organic and natural farming and promoting need-based training programmes for farmers.

Overall Profile of the Department

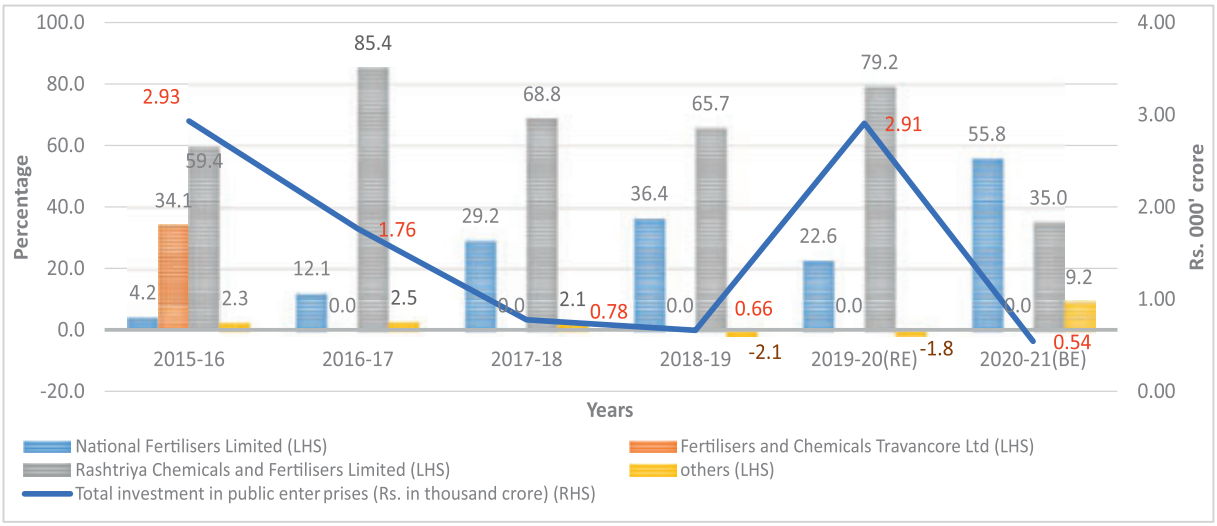
- The main objective of the Department is to ensure the timely availability as well as affordability of fertilizers to the agriculture sector. To this end, it is responsible for promoting the development of the fertilizer industry and has oversight over the production, import and distribution of fertilizers and administering the subsidy regime. It has nine public sector undertakings under its jurisdiction.
- The Union Budget 2020-21 allocated around Rs. 71,000 crore to the Department of Fertilizers, which is 10.9 per cent lower than the allocation in the revised estimates (RE) of the Union Budget 2019-20. This allocation is 2.35 per cent of the Union Government's total budget of 2020-21 and 0.32 per cent of estimated gross domestic product (GDP). The year-wise allocation of Department of Fertilizers is given below in Figure 1.

Figure 1: Total Expenditure of the Department



Source: Union Budgets and CSO

Figure 2: Break-up of Investment Financing of the Department via Budget Support and IEBR

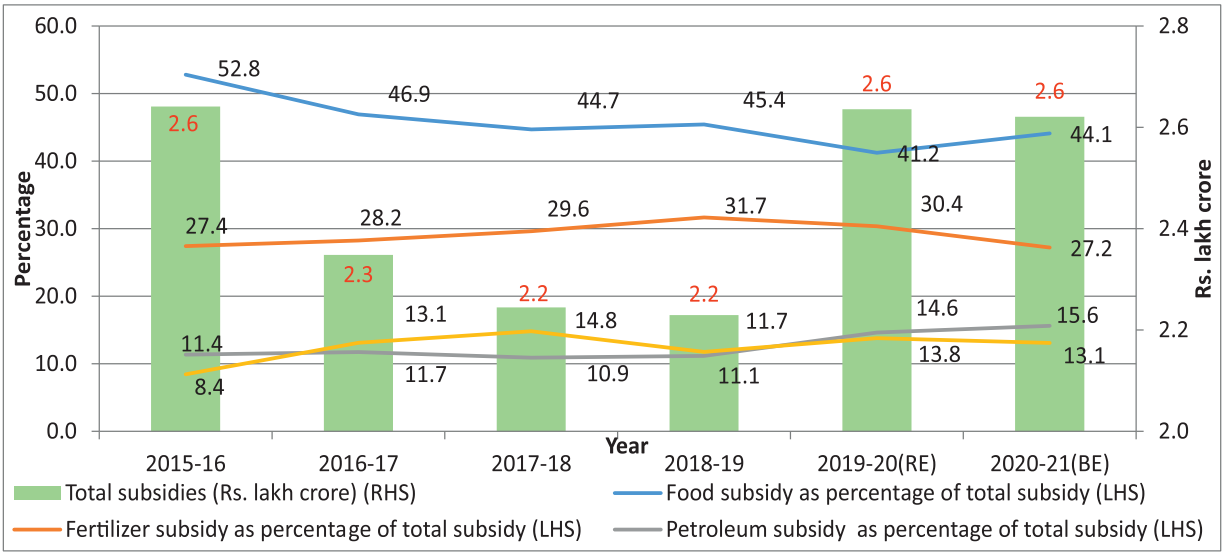


Source: Union Budgets

Fertilizer Subsidy

- Expenditure on the fertilizer subsidy is the second highest after food subsidy. In 2020-21 (BE), the total expenditure on subsidies is budgeted at Rs. 2.62 lakh crore, which is 0.5 per cent lower than the 2019-20 revised estimate figure of Rs. 2.64 lakh crore. The share of fertilizer subsidy in overall subsidies is estimated to decline from 30.4 per cent in 2019-20 (RE) to 27.2 per cent.

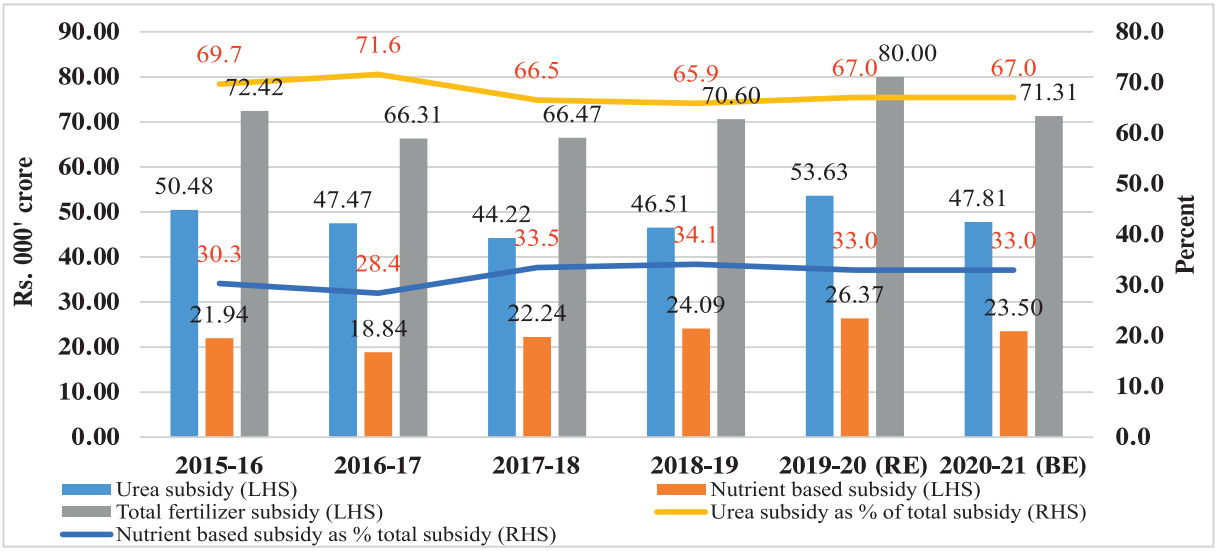
Figure 3: Major Subsidies of the Union Government



Source: Union Budgets

- In the last two years, the expenditure on subsidy has been increasing. This is due to the increasing use of fertilizer and rise in the per unit subsidy for urea. The import prices of fertilizers as well as price of feedstock and intermediaries affect fertilizer prices. It is, therefore, imperative on the part of the Union Government to rationalise the subsidy expenditure for urea as well as phosphate (P) and potash (K) fertilizers (nutrient-based subsidy) to sustainable levels without impacting the agricultural productivity. Figure 4 presents the year-wise and category-wise details of the fertilizer subsidy.

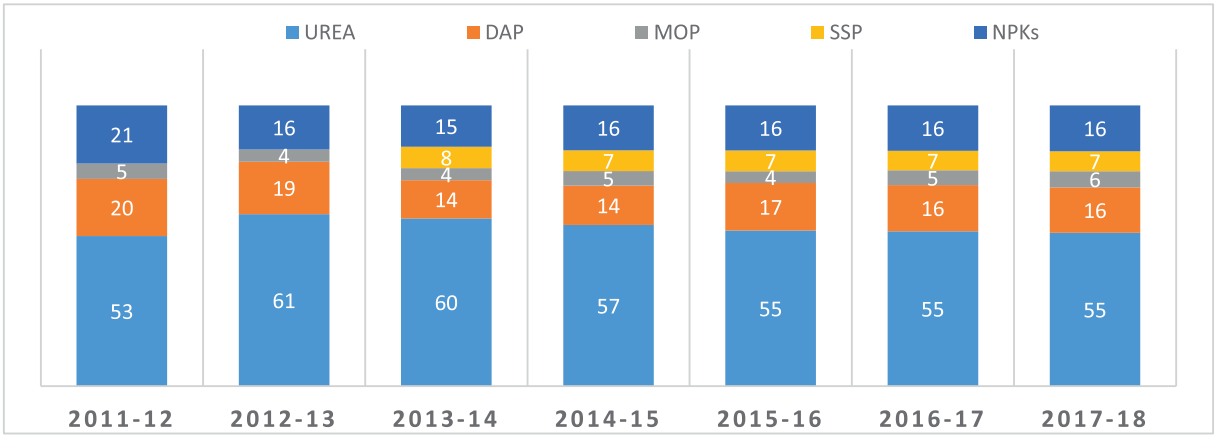
Figure 4: Break-up of Fertilizer Subsidy



Source: Union Budgets

- The Union Government makes urea and twenty-one grades of P&K fertilizers available to farmers at subsidised prices. The subsidy is paid to fertilizer manufacturers and importers who then sell at lower rates to farmers. Since April 2020, the subsidy on P&K fertilizers is being governed by the nutrient-based subsidy (NBS) scheme. The NBS subsidy rates are revised annually. Also, based on the farmer-friendly approach, the Government is committed to ensuring the availability of P&K fertilizers to farmers at an affordable price.
- While urea (N) prices are controlled by the Government, the prices of P&K fertilizers are market-driven. This has kept urea prices low and this has led to its overuse, as also of di-ammonium phosphate (DAP) and muriate of poatash (MOP). This is one of the reasons for imbalanced used of soil nutrients. While the recommended ratio of use of the N, P and K fertilizers is 4:2:1, this ratio in India was at 6.7:2.7:1.34 in 2016-17. It is important to ensure balanced usage of fertilizers through appropriate pricing of primary, secondary and micro-nutrients. Figure 5 gives details of the consumption of N, P and K fertilizers.

Figure 5: Consumption of Fertilizer (%)



Source: Movement Division, Department of Fertilizers

- India is heavily dependent on imports for fertilizer raw materials like natural gas, rock phosphate and potash. Its entire requirement of potash is imported. In the case of phosphate (raw material as well as finished product), the import dependence is 90 per cent, while in the case of natural gas it is 60 per cent. Table 1 gives details of production and import of fertilizer from 2011-12 to 2017-18.

Table 1: Indigenous Production and Import of Fertilizer (%)

	Urea Indigenous	DAP Indigenous	NPKs Indigenous	SSP Indigenous	Total Indigenous	Urea Import	DAP Import	NPKs Import	MOP Import	Total Import
2011-12	37	7	13	7	64	13	12	6	5	36
2012-13	43	7	12	9	70	15	11	1	4	30
2013-14	44	7	13	8	73	14	6	1	6	27
2014-15	40	6	14	8	68	16	7	3	7	32
2015-16	40	6	14	7	68	14	10	3	5	32
2016-17	44	8	14	8	74	10	8	1	7	26
2017-18	43	8	15	7	73	11	8	1	8	27

Source: Fertilizer Statistics, Fertilizer Association of India (FAI) and Movement Division, Department of Fertilizer

Note: DAP: Di-ammonium phosphate; NPK: nitrogen, phosphorus and potassium; SSP: single superphosphate; MOP: muriate of potash

- The Government introduced direct benefit transfer (DBT) of subsidies in fertilizers in October 2016. The Department of Fertilizers chalked out a programme to implement DBT in modified form initially through pilot projects in sixteen districts. The first phase was implemented across the country from March 2018 and the second phase (DBT 2.0) was launched in July 2019. DBT in fertilizer subsidy is a step in the direction of

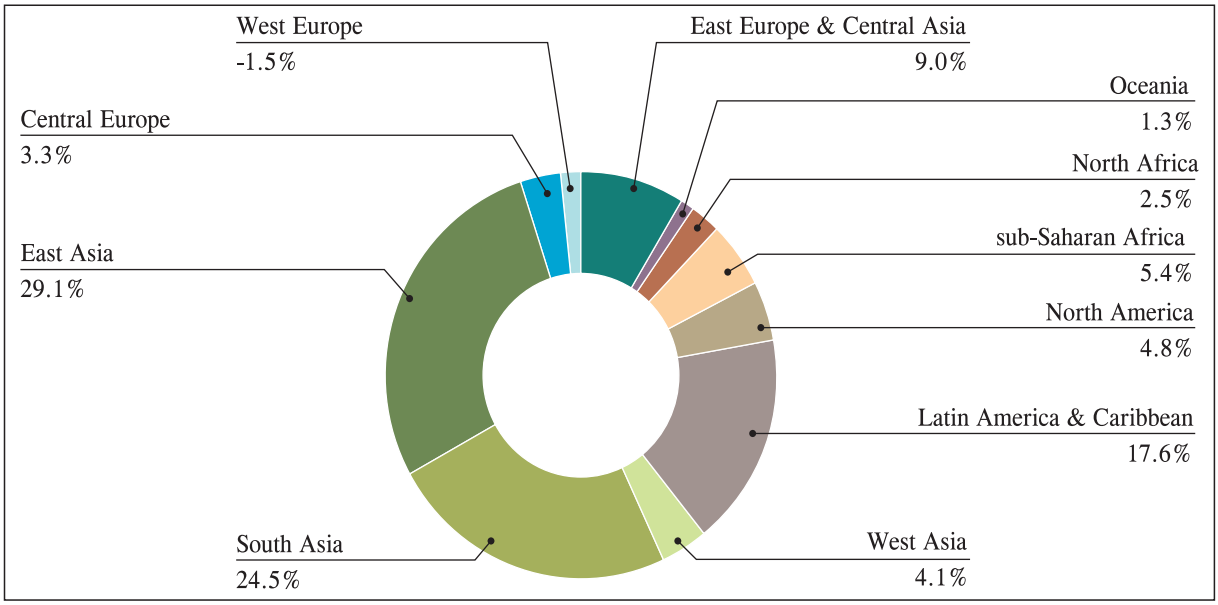
leveraging technology to plug leakages and check pilferages and black marketing while making life easy for farmers. The new initiatives taken under DBT 2.0 include DBT dashboards, PoS 3.0. software, desktop PoS version and initiatives taken to address issues relating to network connectivity, peak season sales and malfunctioning of PoS devices.

India's Fertilizer Consumption when Compared Globally

- Fertilizer consumption in South Asia (including India) has been increasing rapidly and the sub-continent is the second largest fertilizer consuming region in the world. Its share in world consumption of nitrogen, phosphate and potash is 19.8 per cent, 18.4 per cent and 9.1 per cent, respectively.

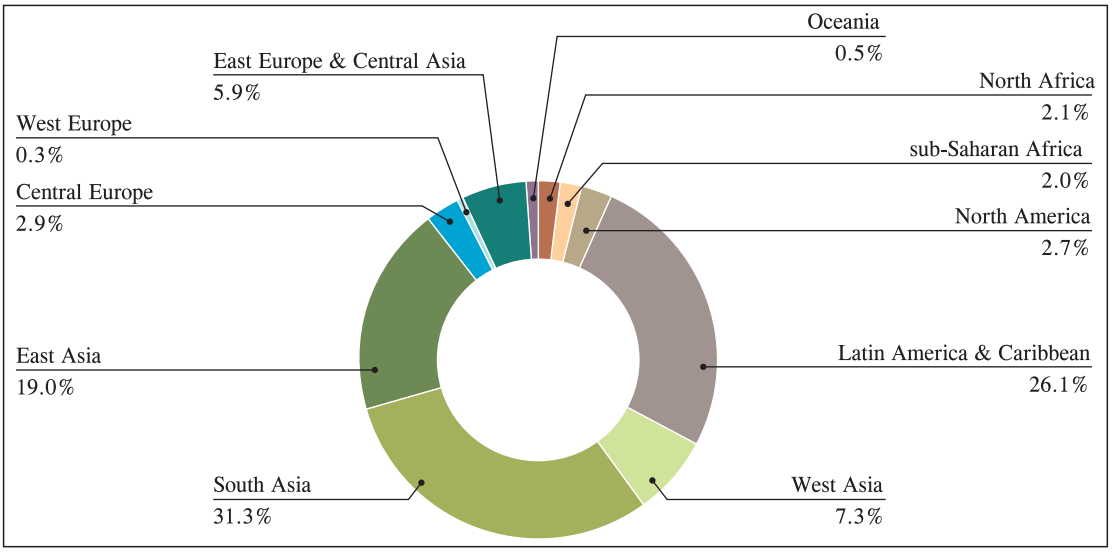
a. **Consumption of nitrogen:** In 2018, among the Asian countries, the bulk of the increase in world demand for nitrogen came from China (18 per cent) and India (17 per cent), followed by Indonesia (6 per cent), Pakistan (4 per cent), Bangladesh, Vietnam (2 per cent each) and Malaysia and Thailand (1 per cent each).

Figure 6: Regional and Sub-Regional Share of World Increase in Nitrogen Fertilizer Consumption, 2014-18



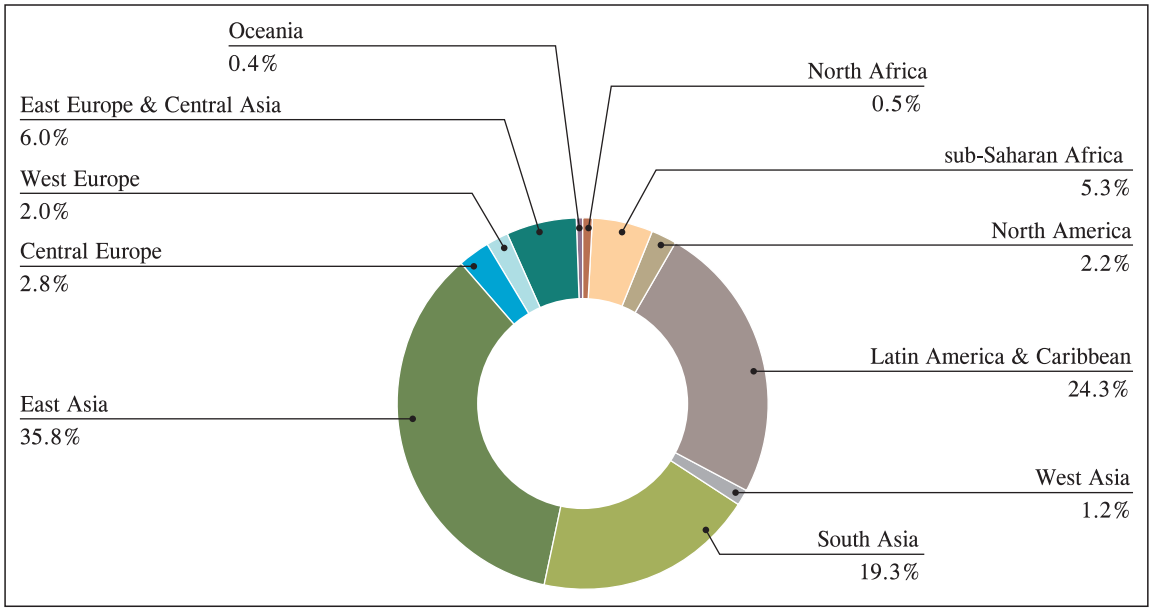
b. **Consumption of phosphate:** In 2018, among the Asian countries, about 27 per cent of the growth in world demand of phosphate came from India, 10 per cent from China, 5 per cent from Indonesia, 3 per cent from Pakistan and 2 per cent from Bangladesh.

Figure 7: Regional and Sub-Regional Share of World Increase in Phosphate Fertilizer Consumption, 2014-18



c. **Consumption of potash:** In 2018, among the Asian countries, China accounted for 23 per cent of the growth in world demand for potash, followed by India (17 per cent), Indonesia (7 per cent), Malaysia (2 per cent) and the rest of Asia (1 per cent).

Figure 8: Regional and Sub-Regional Share of World Increase in Potash Fertilizer Consumption, 2014-18



Source: World Fertilizer Outlook-2018, FAO (Figure 6 to 8)

Challenges

Decline in marginal productivity of soil

- Over the years, the increased usage of fertilizers has helped improve agriculture productivity significantly. However, recent trends in agriculture have indicated a decline in the marginal productivity of soil. Declining efficiency of fertilizers use is also one of the factors for low productivity. Another reason is the comparatively high usage of straight fertilizers (urea, DAP and MOP) as against complex fertilizers (NPKs), which are considered agronomically better. Low or non-usage of secondary and micro-nutrients has also contributed towards reduced productivity. The pricing of fertilizers is also responsible for the high usage of straight fertilizers and skewed usage of nutrients.

Heavy dependence on imports

- As noted earlier, India lacks in fertilizers raw materials and is heavily dependent on imports for natural gas, rock phosphate and potash. Globally, P&K fertilizers is a seller's market with a few countries controlling the raw material, intermediates and finished fertilizers. They, therefore, heavily influence international prices. India's over-dependence on imports impacts international pricing of these commodities and makes it vulnerable to volatility in international prices and also makes fertilizer subsidies unsustainable. The use of organic fertilizer can help in reducing this import dependence. It is necessary to ensure the optimum use of fertilizers and soil nutrients for increased productivity and to reduce the subsidy burden on the exchequer.

Issue of planning and logistics

- It is necessary to arrange supplies of essential kind of fertilizers to more than 600 districts in the country at the right time which entails appropriate demand assessment for state/districts in which fertilizer type for appropriate cropping season. This also helps in ascertaining levels of imports to meet the demand-supply gap.

Increased subsidy expenditure

- Expenditure on subsidy has been showing a rising trend. While this indicates growing consumption which leads to increased productivity expenditure, rising costs and import prices are also a significant factor. As noted by the Comptroller and Auditor General (CAG) in its Report on Compliance of The Fiscal Responsibility and Budget

Management Act, 2003 (Report 20 of 2018), the Union Government has resorted to deferring dues on account of fertilizer subsidies in one year to the following year. This not only leads to increased cost in terms of interest but also affects the cash flow of fertilizer companies, affecting their operations.

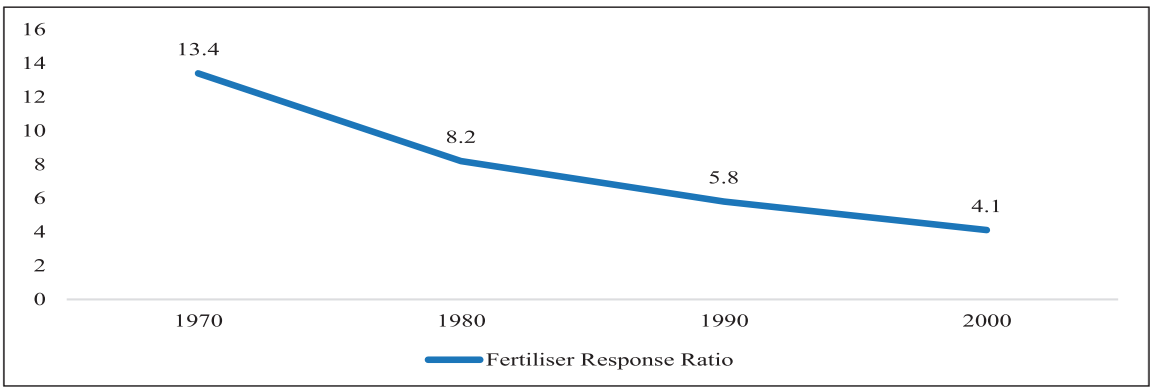
Diversion and leakages

- Subsidised fertilizer is meant only for use in agriculture but some portion, especially urea, is used for non-agriculture purposes. This means that sectors not entitled to subsidy are availing it. In addition, because of the higher prices of fertilizers in neighbouring countries, there are reports of illegal cross-border trade in subsidised fertilizer, which results in farmers in other countries benefiting from subsidies meant for Indian farmers.

Declining fertilizer response ratio

- The fertilizer response ratio is showing a declining trend, which indicates lower responsiveness of the soil to fertilizer application. According to the Department of Fertilizers, this is because of demand-supply mismatches resulting in imbalance in fertilizer usage, increasing multi-nutrient deficiency, lack of farmers' awareness about balanced plant nutrition and poor crop management.

Figure 9: Fertilizer Response Ratio



Source: Department of Fertilizers.

Measuring soil health standards

- A Soil Health Card Scheme was launched in 2015 with the objective of assessing the current status of soil health and to determine changes in soil health over time. A Soil Health Card displays soil health indicators and associated descriptive terms. The indicators are typically based on farmers' practical experience and knowledge of local

natural resources. However, inadequate trained staff, lack of power supply and internet connectivity are adversely affecting implementation of the scheme.

Revival of sick fertilizer plants

- Revamping and revival of existing fertilizer public sector undertakings in West Bengal and other states in eastern India is one of the major challenges the Department of Fertilizer faces. Presently, the Barauni unit of Hindustan Fertilizer Corporation Limited (HFCL) and the Sindri, Gorakhpur, Ramagundam and Talcher units of Fertilizer Corporation of India Limited (FCIL) are being revived. The progress on these would determine the decision on the revival of the Haldia and Durgapur units of HFCL, based on an assessment of the demand-supply gap of urea.

Key Recommendations of the Standing Committee Report dated 17-03-2020 on : 'System of Fertilizer Subsidy'

- The Standing Committee on Chemicals and Fertilizers submitted its report on the subject 'System of Fertilizer Subsidy'. Key observations and recommendations of the Committee include:
  - ◊ The Committee noted that any drastic change in the existing fertilizer subsidy policy would have a huge bearing on the country's food security and must be preceded by an in-depth study and wider consultations with all stakeholders. It also recommended that interests of small and marginal farmers should be kept in mind, best international practices should be carefully studied and that education and awareness of farmers about balanced use of fertilizers should be an integral part of the policy.
  - ◊ **Direct subsidy to farmers:** The Committee observed that many fertilizer manufacturing plants are operating with very old technology and systems, and not at their highest levels of efficiency. The Government bears the cost of their inefficiency in the form of higher subsidy payouts. The Committee recommended that the companies should be free to manufacture, supply, and sell fertilizers. A farmer should be free to buy his choice of fertilizers from the market, while getting the subsidy directly credited into his bank account. Such a system will push manufacturers to produce and sell fertilizers in the most cost-effective manner, and push the inefficient firms out.

Suggested Areas of Reforms

Impact assessment of New Urea Policy, 2015

- The Department, in its memorandum to the Fifteenth Finance Commission, noted that due to the implementation of the New Urea Policy 2015, the country had witnessed the highest-ever production of urea of 24.462 million metric tonnes (MMT) in 2015-16. This has led to a decrease in the import of urea from 8.750 MMT in 2014-15 to 5.480 MMT in 2016-17. The use of urea may reduce further over time, due to the use of neem-coated urea, which was made mandatory from 2015, and with the commencement of urea production from the five public sector plants that are to be revived, each with a capacity of 1.27 MMT and two private sector urea plants of 1.34 MMT capacity each, commencing production. The import of urea may also reduce to nil by 2021-22. However, it suggested that an impact assessment of the substitution of urea with neem-coated urea be conducted.

Need for balanced fertilizer use for increasing agricultural productivity

- The Union Government's objective of doubling the income of the farmers by 2022 may see an increased use of chemical fertilizers, especially urea, the price of which is presently controlled. Hence, it is suggested that measures should be taken for the maintenance of soil health, so that the marginal productivity of soil remains unaffected.

India is turning out to be the biggest virtual exporter of water

- India is a large virtual net export of water because of the high use of fertilizer in agriculture. For example, in 2019-20, India exported 37.72 lakh tonnes of basmati rice, in the production of which around 12 trillion litres of water was consumed. This could have been much less if natural/organic manuring/fertilizer was adopted. In these times of global climate change, water is one commodity where India should not have a trade surplus. Switching to fertilizers which consume less water and also enhance productivity could be an optimum solution.

DBT in fertilizers

- Implementation of DBT in fertilizer subsidy will not only help in plugging leakages but will also reduce the import bill. Also, the pan-India roll-out of DBT was implemented in March 2018. The impact of total savings achieved because of DBT needs to be critically analysed.

Promoting organic and natural farming

- The Union Government should aggressively promote organic farming through various models like natural farming, vedic farming, cow farming, homa farming and zero budget natural farming. States can be given the flexibility to adopt any model of organic farming depending on what farmers prefer.

Addressing problems in Soil Health Cards scheme

- Issues relating to the implementation of the Soil Health Cards scheme – availability of trained staff, lack of power supply, internet connectivity, among others – needs to be addressed.

Need-based training programmes for farmers

Fertilizer use efficiency can improve if farmers are aware about the right product, dosage, time and method of application. Some of the suggested measures are the use of optimal dose based on soil health status, promotion of neem-coated urea, promotion of micronutrients, promotion of organic fertilizers, and promotion of water-soluble fertilizers.

Chapter 8
Department of Food and Public Distribution

The Department of Food and Public Distribution, under the Ministry of Consumer Affairs, Food and Public Distribution, is responsible for ensuring food security through the procurement, storage and distribution of food grains and for regulating the sugar sector.

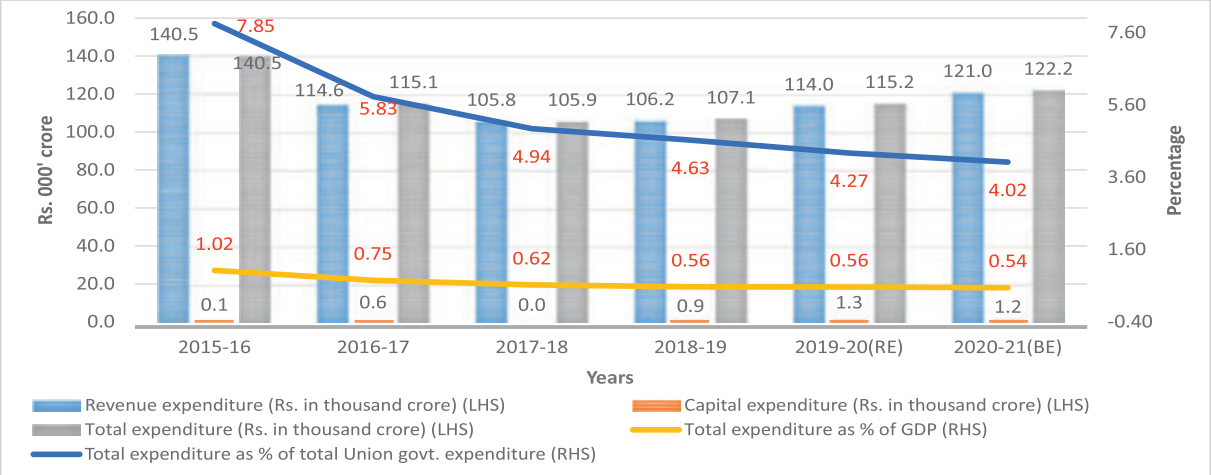
The major challenges of the Department relate to the implementation of the National Food Security Act, 2013, digitalisation of ration cards/ beneficiaries' records, de-duplication due to Aadhaar seeding, direct benefit transfer and automation of fair price shops. The suggested reforms for the Department include restructuring of the Food Corporation of India, rationalising the food subsidy bill and maintaining the nutritional balance, revision of the central issue price, diversification in the basket of choice and initiatives towards plugging leakages.

Overall Profile of the Department

1. The Department of Food and Public Distribution, under the Ministry of Consumer Affairs, Food and Public Distribution, is responsible for ensuring food security through the procurement, storage and distribution of food grains and for regulating the sugar sector. The Department is also responsible for implementing the National Food Security Act (NFSA), 2013.

2. The Union Budget, 2020-21, allocated Rs. 122 thousand crore for the Department, which is 4.0 per cent of the Union Government's total budget and 0.5 per cent of estimated gross domestic product (GDP). The year-wise allocation of the Department's budget is given in Figure 1.

Figure 1: Expenditure as Share of Total Union Government Expenditure and GDP

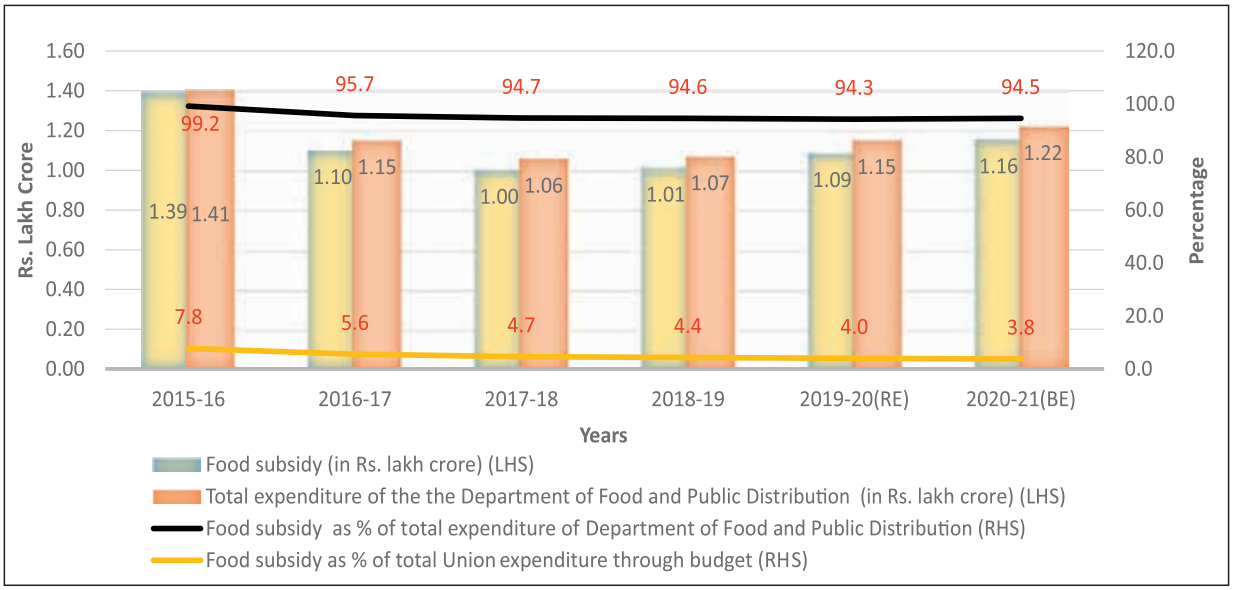


Source: Union Budgets

3. The cash outgo on account of food subsidy has been declining – from Rs. 1.39 lakh crore in 2015-16 to Rs. 1.10 lakh crore in 2016-17 and further to Rs. 1 lakh crore in 2017-18. The food subsidy in 2018-19 was Rs.1.01 lakh crore. But these numbers do not reflect the true outgo. For instance, in 2016-17 the Union Government gave a loan of Rs. 70,000 crore to the Food Corporation of India (FCI) from the National Small Saving Fund (NSSF). When this amount is included, the actual expenditure on food subsidy works out to Rs. 1.80 lakh crore in 2016-17. Similar loans amounting to Rs. 65,000 crore and Rs. 97,000 crore was given in 2017-18 and 2018-19 respectively. These are not reflected in the overall food subsidy figures appearing in Figure 2. In the budget estimates for 2020-21, the Department has allocated Rs. 1.16 lakh crore for food subsidy, which is 95 per cent of the total allocation towards food and public distribution.

4. This subsidy is given to the FCI under the NFSA for the targeted public distribution system (TPDS) or to States for the decentralised procurement of food grains. The NFSA is mandated to cover 75 per cent of the rural population and 50 per cent of the urban population. It currently covers 810 million people.

Figure 2: Expenditure on Food Subsidy



Source: Union Budgets

5. Table 1 shows the expenditure on food subsidy between 2010-11 and 2020-21 (BE). The expenditure on food subsidy increased from Rs. 63,844 crore in 2010-11 to Rs. 1.39 lakh crore in 2015-16.

Table 1: Expenditure on Food Subsidy from 2010-11 to 2020-21

(Rs. crore)

Year	Food subsidy	% increase over the previous year	% of allocation utilised vis-à-vis BE
2010-11	63844		115
2011-12	72822	14	120
2012-13	85000	17	113
2013-14	92000	8	102
2014-15	117671	28	102
2015-16	139419	18	112
2016-17	110173	- 21	82
2017-18	100282	- 9	69
2018-19	101327	1	60
2019-20 (RE)	108688	7	59
2020-21 (BE)	115570	6	-

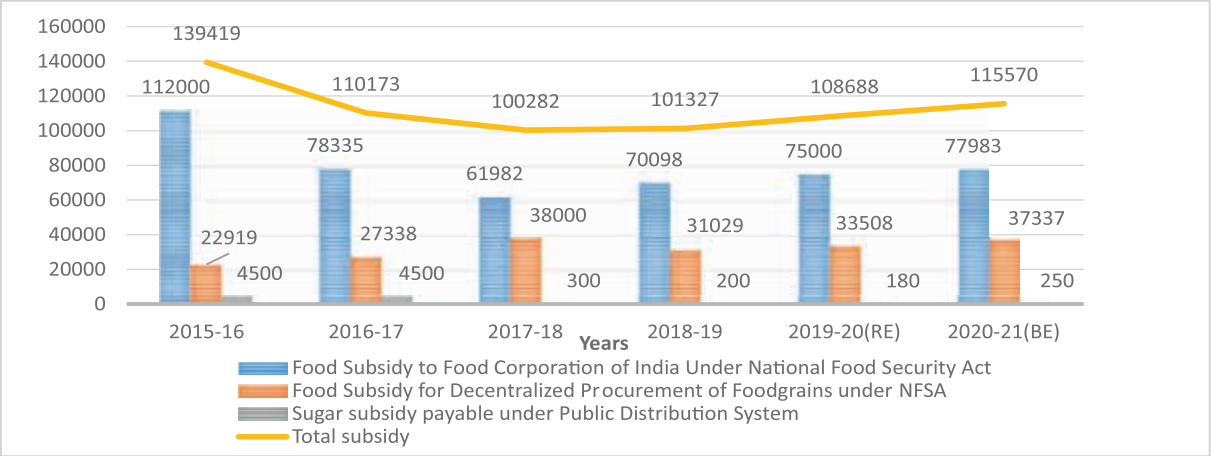
6. The Standing Committee on Food, Consumer Affairs and Public Distribution noted in 2016-17 the following reasons for increase in food subsidy: (i) increase in the procurement cost of food grains, (ii) non-revision of the central issue prices (CIP) since 2002 and (iii) implementation of the NFSA in all States.

7. In 2019, the Cabinet Committee on Economic Affairs approved an increase in the authorised capital of the FCI from the existing Rs. 3,500 crore to Rs. 10,000 crore. With the increase of authorised capital, additional equity capital can be infused in the FCI through the Union Budget, to fund the food grains stock perpetually held by it. This will reduce the borrowings of the FCI, save interest costs and reduce expenditure on food subsidy.

8. Food subsidy is the cost incurred and subsequently reimbursed by the Department for the procurement, storage and distribution of food grains. The subsidy amount is the difference between the cost of procuring food grains and the price at which they are given to the beneficiaries (the CIP). As seen in Figure 3, expenditure on food subsidy is classified under three heads: (i) subsidy to FCI for TPDS, (ii) subsidy to States for decentralised procurement and (iii) sugar subsidy.

Figure 3: Break-up of Food Subsidy

(Rs. crore)

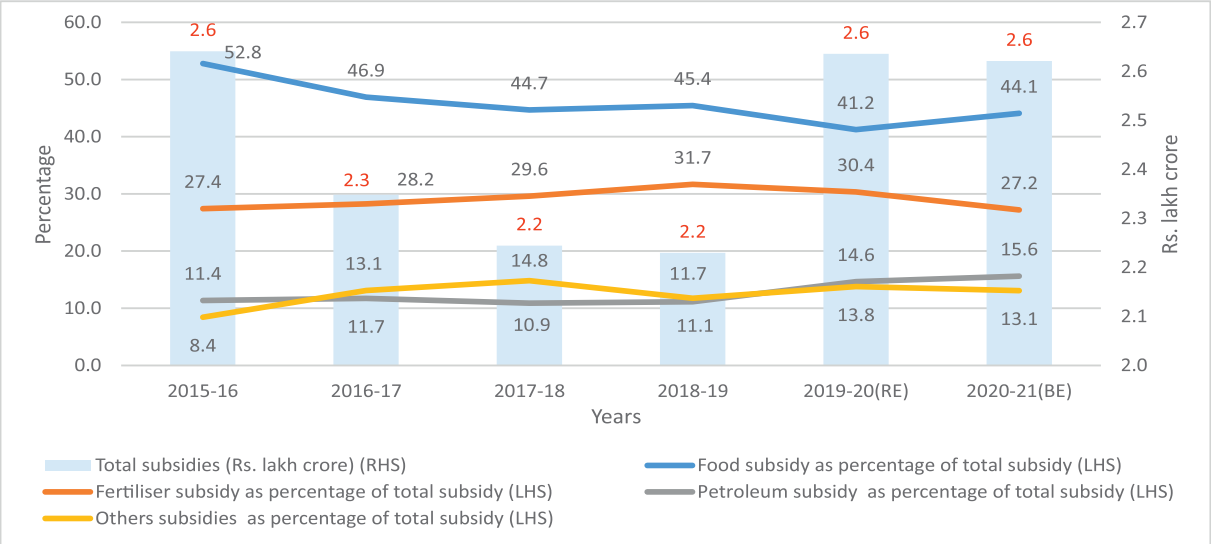


Source: Union Budgets

9. The Union Government provides food subsidy to FCI as reimbursement of the loss it incurs in its procurement, storage and distribution operations. When the budget for food subsidy is not sufficient to clear the dues of FCI, these dues are carried over to the following year. Further, due to delay in payment of subsidy dues, FCI borrows money from various sources for funding its operations.

10. **Major subsidies of the Union Government:** Food subsidy has the largest share in the overall subsidy expenditure of the Union Government, followed by fertilizer and petroleum. It is also the largest component of the Department's expenditure, accounting for 95 per cent of the allocation in 2020-21.

Figure 4: Major Subsidies



Source: Union Budgets

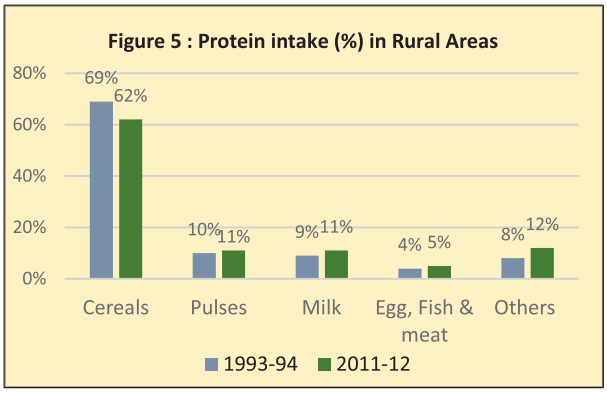
Challenges

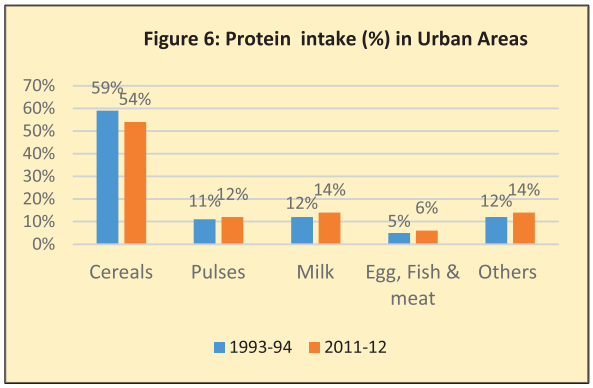
Budget for food subsidy

- As mentioned earlier, in addition to the expenditure on subsidies, the Department is required to provide additional funds for payment of interest on borrowings by the FCI.

Nutritional balance

- The NFSA guarantees five kg of food grains per person per month to entitled beneficiaries. Households that are beneficiaries of the Antyodaya Anna Yojana, which constitute the poorest of the poor, are entitled to 35 kg per household per month.
- Figure 5 and Figure 6 shows there has been a change in the pattern of nutritional intake among people both in rural and urban areas.





Source: Nutritional Intake in India 2011-12, NSSO

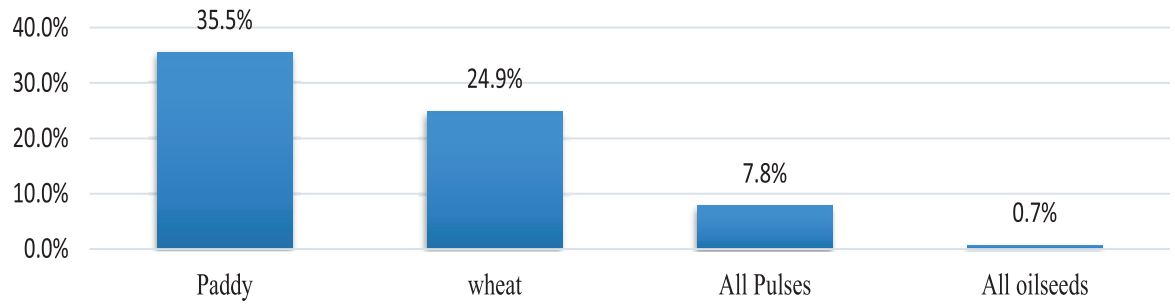
- Although cereals or food grains contain only 10 per cent protein, their share as a percentage of the total protein intake has been over 50 per cent in both rural and urban areas. However, other foods such as meat and pulses, which contain more than 20 per cent protein, account for only 15 per cent of the total protein intake of the country.
- The share of cereals in food consumption has reduced by 7 per cent in rural areas and 5 per cent in urban areas, whereas that of milk, eggs, fish and meat has increased. This indicates a reduced preference for wheat and rice, and a rise in preference for other protein-rich food items. The NFSA states that the Union and State Governments should take steps to diversify commodities distributed under the TPDS.

Imbalance in farm production

- The minimum support price (MSP) is the price at which the government purchases a farmer's produce and seeks to incentivise farmers to grow crops on which the support is

offered. Food grains for the public distribution system are procured at the MSP. Because of the need to maintain a buffer stock for the PDS, procurement under MSP has been dominated by wheat and paddy. This has tended to skew the production of crops in favour of wheat and paddy and does not offer an incentive for farmers to produce other items such as pulses. Figure 7 shows the share of crop produce procured in 2016-17.

Figure 7 : Share of Crop Procured in 2016-17 (%)



Source: Committee on Doubling Farmers' Income 2017, Ministry of Agriculture and Farmers Welfare

Revision of central issue price

- Under the NFSA, food grains are given to beneficiaries at the CIP, which was last revised in 2002. The CIP for wheat is Rs 2 a kg and for rice it is Rs 3 a kg (Table 2).
- Against this, the economic cost (which includes costs incurred in procurement, stocking, distribution) as of August 2020 is Rs. 26.83 a kg for wheat and Rs. 37.26 a kg for rice. Food subsidy is calculated as the difference between the economic cost and the CIP.

Table 2: Economic Cost, Central Issue Price and Subsidy

(Rs per kg)

Commodity	CIP (AAY and Priority Households)	CIP (APL)	Economic Cost 2020-21 (BE)	Subsidy for AAY and Priority Households	Subsidy for APL
Rice	3.00	8.30	37.26	34.26	28.96
Wheat	2.00	6.10	26.83	24.83	20.73

Source: Food Grain Bulletin, August 2020, Department of Food and Public Distribution

Note: AAY – Antyodaya Anna Yojana, APL – above poverty line.

- While the economic cost for rice has increased from Rs. 1,098 per quintal (Rs. 11 per kg) in 2001-02 to Rs. 3,727 per quintal (Rs. 37 per kg) in 2020-21, and of wheat from Rs. 853 per quintal (Rs 9 per kg) to Rs. 2,684 per quintal (Rs 27 per kg) over the same period, the CIP has not been revised since then. This has led to a gap between the economic cost and CIP growing, leading to an increase in expenditure on food subsidy. Trends in economic cost, CIP and subsidies for wheat and rice can be found in Figure 8 and Figure 9 below.

Figure 8: Subsidy on a Kg of Rice (Rs.)

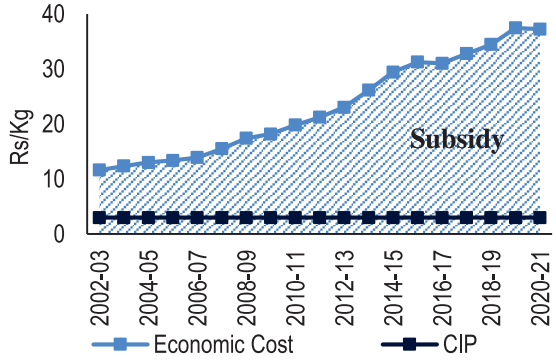
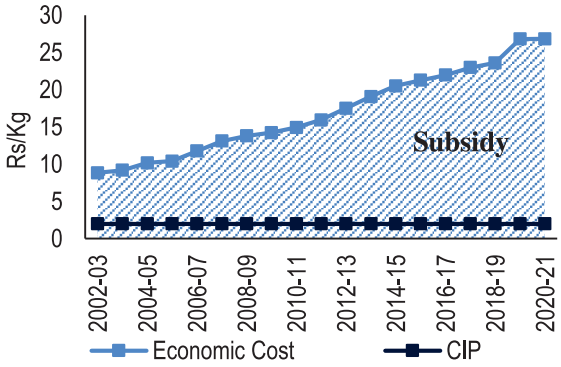


Figure 9: Subsidy on a Kg of Wheat (Rs.)



Source: Food Corporation of India

- Increasing the CIP could be one of the measures to bridge the gap between the funds requires and allocated.

Alternative subsidy systems

- The NFSA states that the Union and States should introduce schemes for cash transfers to beneficiaries. Various experts and committees have also suggested replacing TPDS with a DBT system and emphasised end-to-end computerisation of the entire public distribution system.
- DBT under the public distribution system is being implemented in two models. In the first, the subsidy amount is being transferred in cash into the bank accounts of beneficiaries, who then have the choice to buy food grains from the open market. This is being implemented in the Union Territories of Chandigarh and Puducherry and in the urban areas of Dadra & Nagar Haveli. The second mode involves automation of fair price shops, for distribution of food grains through an electronic Point of Sale (e-POS) device which authenticates beneficiaries at the time of distribution. It also electronically captures the quantum of food grains distributed to the family.

- Complete digitisation and de-duplication of beneficiaries' data are necessary pre-requisites for the implementation of DBT in either mode. In this regard, the Department has stated that during the process of digitisation and implementation of the NFSA, 2.75 crore ration cards have been deleted since January 2013 on grounds of ghost/fraudulent/duplicate/ineligible beneficiaries, migration and deaths of beneficiaries, among other reasons. This has resulted in annualised better targeting of food subsidy amounting to Rs. 17,500 crore per year. This, however, has not led to any reduction in allocation or any savings in the budget expenditure, as deleted rations cards were replaced by inclusion of new eligible beneficiaries under the NFSA. This, therefore, has no bearing on the fiscal federal structure.

Table 3: Achievements of TPDS Computerisation

Scheme Components	Achievement
Digitization of ration cards/ beneficiary's data	Completed in all States/UTs
Online allocation of food grains	Completed in all States/UTs except UTs of Chandigarh & Puducherry, which have adopted DBT/Cash transfer scheme
Computerization of supply chain management	Completed in 25 States/UTs and the work is in progress in the remaining States/UTs
Transparency portals	Set up in all States/UTs
Intra-State portability of ration cards to enable purchase from any FPS in the State	Operational in 11 States
Grievance redressal facilities	Toll-free helplines/online registration facility is available in all States/UTs

Source: Department of Food & Public Distribution, Economic Survey 2018-19

Initiatives to Deal with Fallout of Covid 19 Pandemic

- The Covid-19 pandemic has thrown all global economies, including India, into a crisis, with the International Monetary Fund and rating agencies revising GDP growth projections downwards. This is expected to have a serious impact on food security. According to the Food and Agricultural Organization, the four pillars of food security are availability, access, stability and utilisation. Availability and access become extremely important in the present context.
- The lockdowns and resultant stoppage of transport networks across the country

affected the availability of labour and inputs for agricultural operations. It also disrupted food supplies. The consequent fall in rural incomes is expected to adversely impact food demand as well as overall economic growth. Under the given circumstances, the Union Government has taken the following measures:

◊ As part of the Rs 1.70 lakh crore Pradhan Mantri Garib Kalyan Anna Yojana (PMGAY), the Union Government announced distribution of free food grains and cash payment to economically vulnerable women and senior citizens and farmers. More than 420 million people received financial assistance of Rs. 65,454 crore under the package. The Union Government has extended PMGAY till November 2020.

◊ Under the Atmanirbhar Bharat package, the Government of India has decided that five kg of food grains will be provided free of cost per month for two months – May and June 2020 – to about 80 million migrant labour who are not covered under NFSA or State-specific schemes. The all-India allocation of food grains under this scheme is eight lakh metric tonnes. The Union Government will fully bear the total estimated cost of about Rs. 3,500 crore for implementation of this scheme. State Governments are responsible for identification of migrants and distribution of food grains.

◊ Another initiative of the government is the "One Nation One Ration card" programme, which seeks to use technology to enable migrants to access the public distribution system from any part of the country by March 2021. At present, migrant families are not able to access food in States other than their domicile State. This scheme will enable a migrant beneficiary to access the public distribution system from any fair price shop in the country. Intra-State portability has been introduced in twenty States. As many as 670 million beneficiaries in twenty-three states covering 83 per cent of beneficiaries of the public distribution system will be covered by national portability by August 2020 and 100 per cent national portability will be achieved by March 2021. All the States/Union Territories are expected to complete full automation of fair price shops by March 2021.

Suggested Areas of Reforms

Restructuring of FCI

- The entire food grain management system must be made more efficient by reorienting

the role of the FCI in MSP operations, procurement, storage and distribution of grains under the TPDS. This was one of the key recommendations of the Report of the High Level Committee on Reorienting the Role and Restructuring of Food Corporation of India (Shanta Kumar Committee) Report and we agree with this recommendation.

Revision in the rates of CIP

- The issue of the burgeoning food subsidy bill needs to be addressed by the Union Government for the sustainability of food security operations. The rates of CIP were fixed under the NFSA initially for a period of three years from the date of commencement of the Act on 13 July 2013. Since then these rates have not been revised. The wider coverage provided under the Act, together with lower CIPs than the pre-NFSA regime, have obvious implications for the food subsidy bill.

Issue of procurement under stocking norms and transparency in the subsidy mechanism

- Open-ended procurement of food grains by FCI far beyond buffer stocking norms creates a shortage in the open market at a particular point of time. Later, FCI resorts to open market sale. In 2018-19, FCI godowns were stocked with three times more food grains than the stocking norms/buffer norms required, following which it started an open market sale scheme to bulk buyers. It was also seen that the infrastructure required for storage of the food grains was short of requirement. Adequate efforts should also be made to address this issue.

Accountability with responsibility

- Improving government accountability, efficiency and effectiveness along the chain from inputs to outcomes is perhaps India's biggest economic policy challenge. More than a third of the value of food subsidies does not reach the intended beneficiaries because food stocks are either wasted or sold illegally in the open market. The Government needs to strengthen the implementation mechanism and ensure that subsidies reach the beneficiaries without any leakages.

Switch to DBT

- It is recommended that all the States should strive to switch to DBT as this can help in reducing the food subsidy bill of the Government. It is also suggested that 100 per cent

introduction of biometric identification and Aadhaar can plug the leakages in the public distribution system.

Diversification in basket of choice

- In order to maintain nutritional balance and looking at the change in the food consumption pattern from cereals to other protein-rich foods, the Union and State Governments should take steps to diversify commodities distributed under the public distribution system.

Rationalisation of sugarcane pricing

- In line with recommendations of the Commission for Agricultural Costs & Prices, it is suggested that rationalisation of sugarcane pricing is extremely important for improving the efficiency of the sugar industry. Fair and remunerative price (FRP) must be implemented in all the States and the announcement of the State-advised price (SAP) by States could be reconsidered. Also, if a State Government decides to continue with the SAP, the difference between SAP and FRP should be paid by it directly to the farmers.

Sustainable planning and implementation

- The Department of Food and Public Distribution has mentioned in its memorandum that in the medium term, subsidy rationalisation and better targeting may result in a reduction in the subsidy bill. It also pointed to many factors influencing the procurement price, which is part of the economic cost. The Government may often increase the minimum support price to help farmers in distress or because of market conditions. The Government needs to look closely at this issue as well in order to manage the rising subsidy bill.

Chapter 9

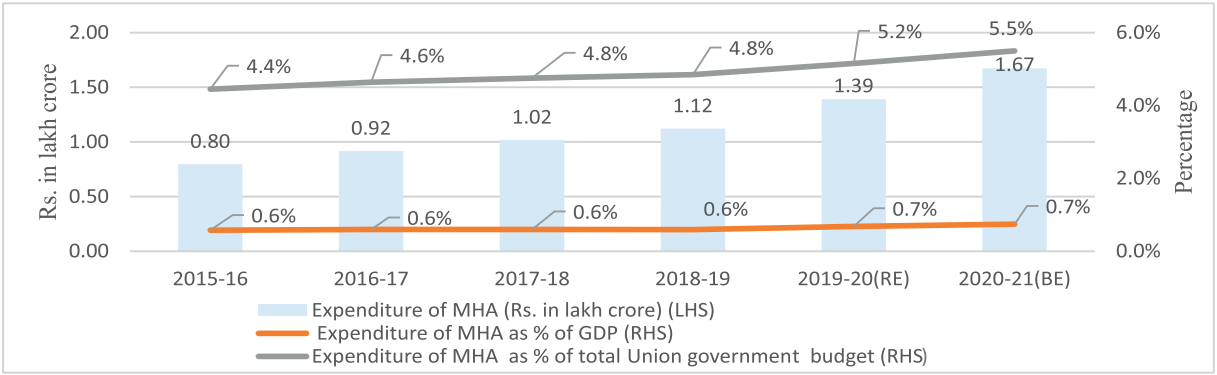
Ministry of Home Affairs

The Ministry of Home Affairs (MHA) has varied responsibilities, the most important among them being internal security, border management, Union-State relations, administration of Union Territories, management of the Central Armed Police Forces and disaster management. Though 'public order' and 'police' are the responsibilities of States under the Seventh Schedule to the Constitution, Article 355 charges the Union with the responsibility to protect every state against external aggression and internal disturbance and to ensure that the government of every state is carried on in accordance with the provisions of the Constitution. In pursuance of these obligations, the Ministry of Home Affairs continuously monitors the internal security situation, issues appropriate advisories, shares intelligence inputs, extends manpower and financial support, guidance and expertise to State Governments for the maintenance of security, peace and harmony without encroaching upon the constitutional rights of the States.

Overall Profile of the Ministry

1. The Union Budget 2020-21 allocated Rs. 1.67 lakh crore to the Ministry of Home Affairs (this includes police and Union Territories). This allocation is 5.5 per cent of the Union Government's total budget of 2020-21 and 0.7 per cent of estimated gross domestic product (GDP). This is an increase of 20 per cent over the revised estimates in 2019-20, which was Rs. 1.39 lakh crore. Further, this is 41 per cent higher than the budget allocation of 2019-20, which was Rs 1.19 lakh crore. A significant part of the increase is because funds to Jammu and Kashmir and Ladakh are being allocated through the Ministry of Home Affairs in 2020-21, following the reorganisation of Jammu and Kashmir into two Union Territories of Jammu and Kashmir and Ladakh.
2. The allocation to the Ministry of Home Affairs is the fourth highest allocation among all Union Ministries. The year-wise allocation is given in Figure 1.

Figure 1: Year-Wise Expenditure on Ministry of Home Affairs

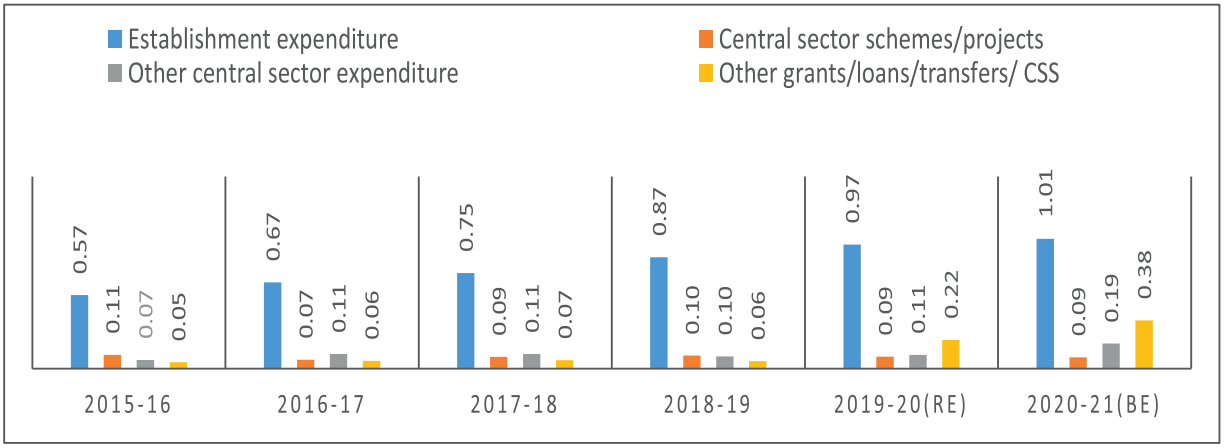


Source: Union Budgets and CSO

3. The Ministry spends 60 per cent of its allocation on establishment alone, followed by expenditure on other grant/loans/transfers.

Figure 2: Composition of Budget Allocation

(Rs. lakh crore)

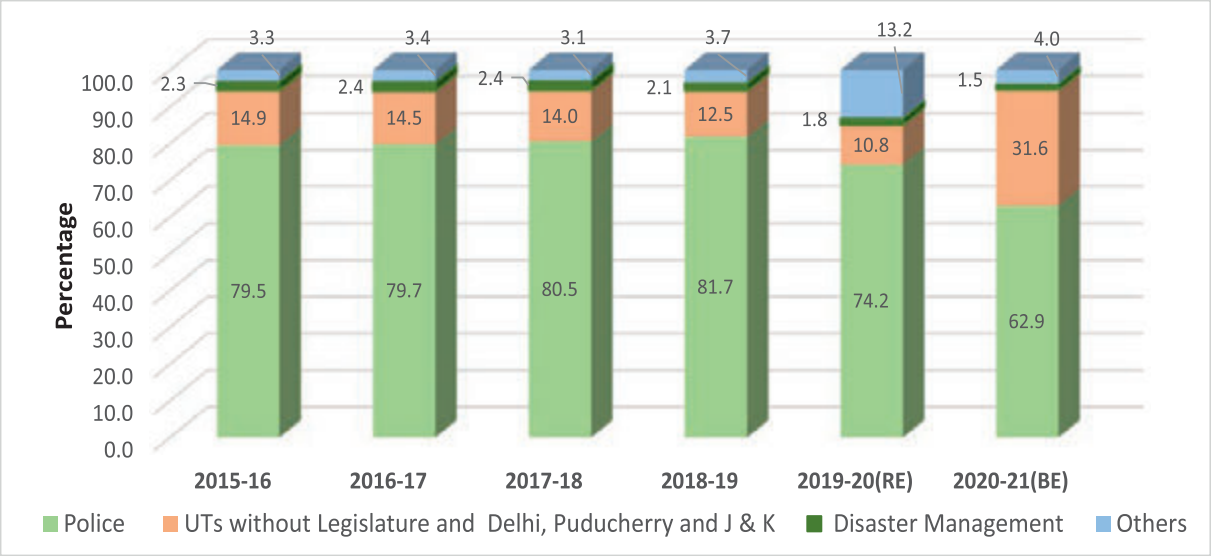


Source: Union Budgets

4. Of the total budget provision for 2020-21, 62.9 per cent is allocated for the police, 31.6 per cent for Union Territories, and 1.5 per cent for disaster management and the balance 4 per cent for miscellaneous items.

5. The expenditure on Union Territories declined from 14.9 percent in 2015-16 to 10.8 percent in 2019-20 (RE). It increased to 31.6 percent in 2020-21 (BE) due to the reorganisation of Jammu and Kashmir. In our Report for the Year 2020-21 we stated that since Union Territories are the responsibility of the Union Government, they are within the purview of the Union Budget. After notional estimation, the share of the erstwhile State of Jammu and Kashmir would have come to around 0.85 per cent of the divisible pool. We took a view that there is a strong case for enhancing it to 1 per cent of the divisible pool in order to meet the security and the other special needs of the two Union Territories. Since this enhancement is to be met from Union Government's resources, we recommended that the share of States in the Union's taxes be decreased from 42 per cent to 41 per cent for 2020-21.

Figure 3: Sector-Wise Expenditure (%)



Source: Union Budgets

6. Under the Constitution, police and public order are State subjects. However, the Union Government supplements the efforts of the States to fight extremism. The Union is responsible for the seven Central Armed Police Forces (CAPFs) and the Delhi Police. In addition, it provides the infrastructure for border management and intelligence gathering. The Union Government also supports the expenditure on the state police through the Centrally sponsored schemes (CSS), Assistance to States for Modernisation of Police Forces etc.

Figure 4: Composition of Police Expenditure, 2015-16 (%)

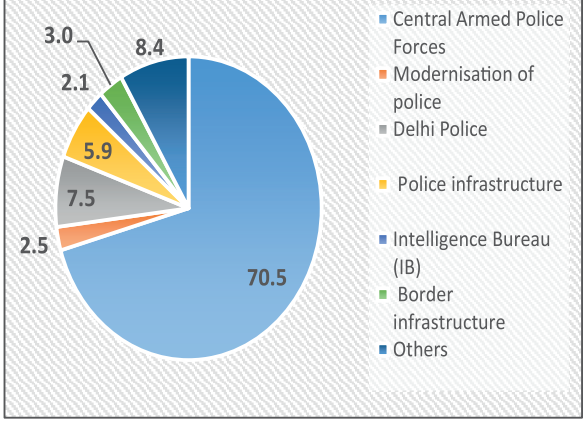
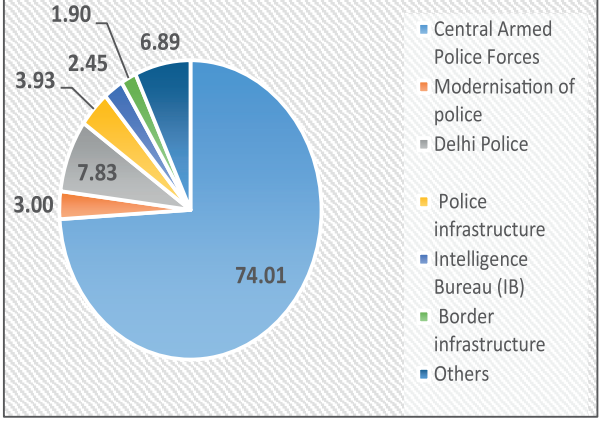


Figure 5: Composition of Police Expenditure, 2020-21 (BE) (%)

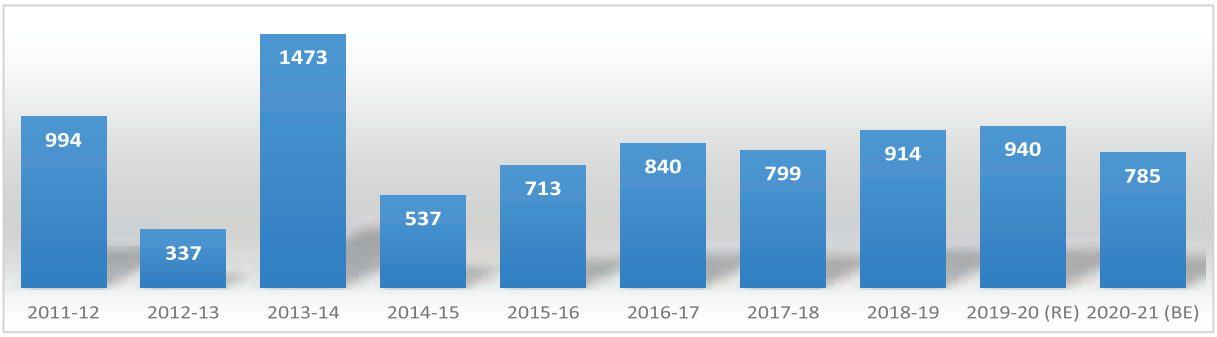


Source: Union Budgets

7. Following the recommendations of the Fourteenth Finance Commission (FC-XIV), it was decided that the CSS for modernisation of police forces would be delinked from Union Government funding from 2015-16. However, the **Standing Committee on Home Affairs, in 2015 and 2017, highlighted the strategic importance of the scheme, and the improvements brought about in infrastructure of state police forces throughout the country.** The Ministry advocated for continuation of the scheme and also extended Central assistance to the States.

Figure 6: Union Funds for Modernisation of State Police Forces and Crime and Criminal Tracking Network and Systems

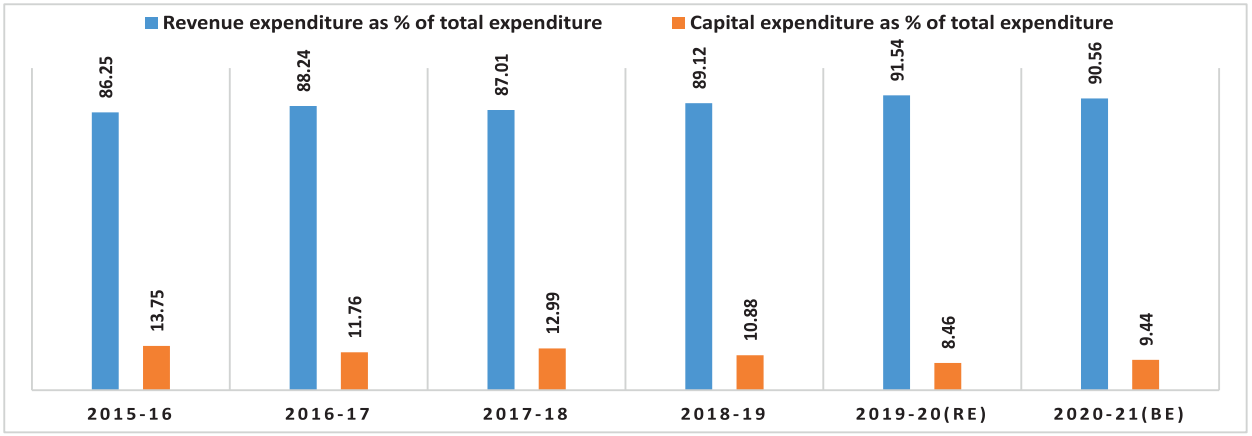
(Rs. crore)



Source: Expenditure Budgets, Union Government

8. The share of revenue expenditure in the total expenditure of the Ministry has increased from 86.25 per cent in 2015-16 to 91.54 per cent in 2019-20 and the share of capital expenditure has, correspondingly, declined from 13.75 per cent to 8.46 per cent over the same period. However, the revenue expenditure is estimated to decrease by 0.98 per cent and the capital expenditure increase by the same ratio in the budget estimates of 2020-21.

Figure 7: Ratio of Revenue and Capital Expenditure

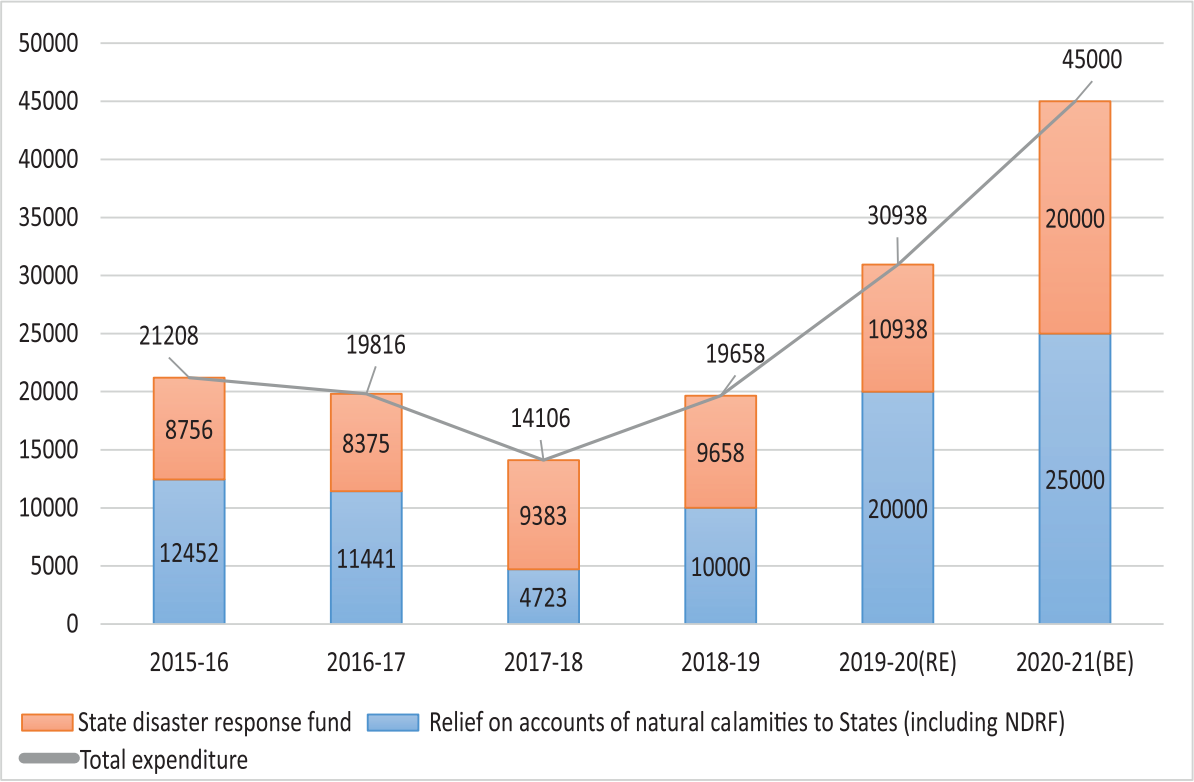


Source: Union Budgets

9. **Disaster Management:** The Ministry of Home Affairs is the nodal Ministry for handling all types of disasters other than drought, which is handled by the Ministry of Agriculture. It is responsible for various aspects of disaster management, including capacity building, mitigation and response to natural calamities and man-made disasters. With the outbreak of the novel Corona virus disease (Covid-19) globally, it is for the first time that a pandemic has been recognised as a 'notified disaster'. The move has enabled State Governments to spend a larger proportion of funds from the State Disaster Response Fund (SDRF) to fight the pandemic. Subsequently, the Disaster Management Act has also been invoked for the first time to effectively manage this crisis. In April 2020, the Union Government released an amount of Rs. 11,092 crore in advance to States under the SDRF to fight the pandemic. Figures 8 and 9 show the item-wise allocation related to disaster management. The major portion of the expenditure on disaster management is spent by the Ministry of Finance, while the Ministry of Home Affairs has a smaller share in spending.

Figure 8: Expenditure on Disaster Management met from the Ministry of Finance Budget

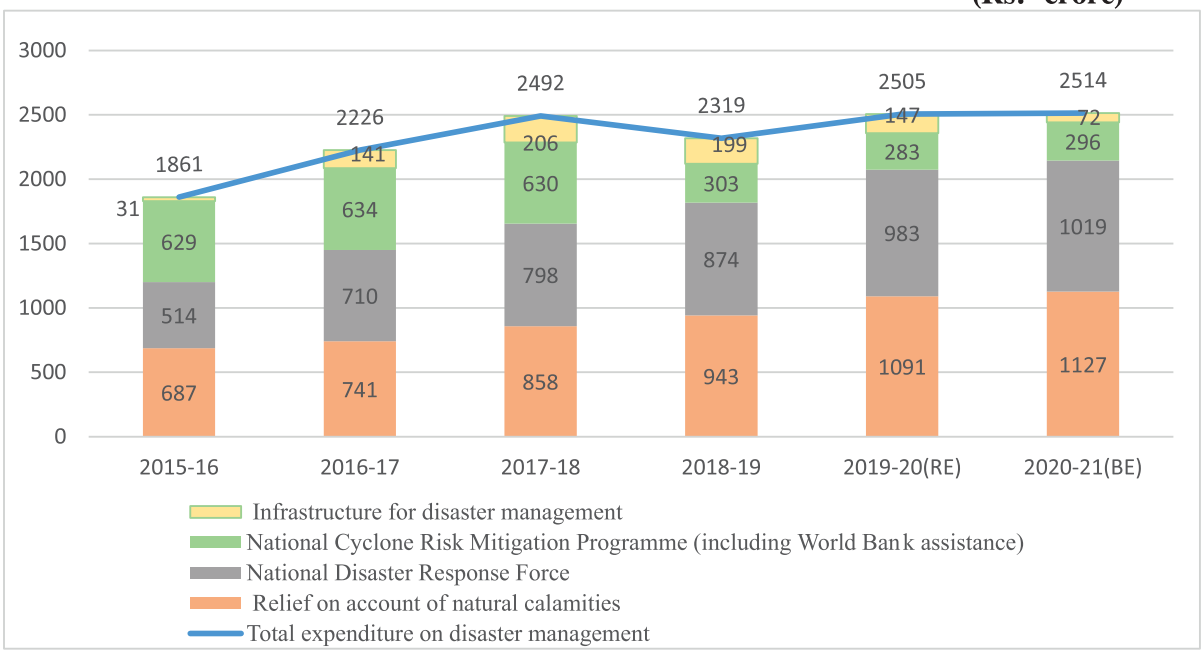
(Rs. crore)



Source: Union Budgets

Figure 9: Expenditure on Disaster Management met from the Ministry of Home Affairs Budget

(Rs. crore)



Source : Union Budgets

Challenges

Insufficient budget allocation

- In its memorandum to us, the Ministry of Home Affairs has mentioned that the budget allocation is not sufficient to meet its requirements, as a result of which capital spending has stagnated. There is an immediate need to increase spending on security, including expenditure on police. It will also facilitate ease of doing business and attract foreign investment.

Need for separate funding mechanism for internal security

- The Ministry has proposed that a separate fund for internal security be set up, which could be utilised to meet the capital expenditures of the Union and States on a priority basis. The shortfall between budgetary projections and allocations for capital heads for CAPFs and also for the scheme for modernisation of police forces could be an indicator for quantifying the amount for the separate fund.
- The Ministry estimated specific grants for internal security to the tune of Rs. 63,385

crore over the five years of our award period. This was based on the shortfall between budgetary projections and allocations for capital heads for CAPFs and other organisations under the Ministry's purview and also for the Scheme for Modernisation of State Police Forces. This may be allocated in the form of a separate fund and not clubbed with defence.

- The mechanism for funding of internal security and defence should be evolved separately for both, as the States have a shared responsibility for internal security but not for defence.

Central Armed Police Forces

- In 2017, the Standing Committee on Home Affairs expressed concern over the working conditions of personnel of forces guarding the borders (Border Security Force, Indo-Tibetan Border Police, Sashastra Seema Bal and Assam Rifles). The Committee also observed that the hard-area allowance for personnel of these forces guarding the borders was much lower than that of the armed forces, despite being posted in the same difficult terrains and facing harsh weather conditions.
- Some common issues related to the CAPFs are:
  - ◊ The police-population ratio remains low in India, with only 160 personnel for 100,000 population. The United Nations recommends 222 personnel for every 100,000 population, while the United Kingdom has 307 and the United States 256. There is a need to raise more battalions across the forces in order to ensure operational preparedness. This can also help in addressing the issue of low police-population ratio.
  - ◊ There is a backlog of equipment, which will become larger when battalions are raised.
  - ◊ Service and security-related issues pertaining to dedicated women battalions raised across the forces have not been addressed.
  - ◊ There is need for simplification of procedures pertaining to procurement of land as it has to be in proportion to the size of the Force.
  - ◊ Issues pertaining to human resources management and ensuring availability of family accommodations for all ranks of officers and staff across the forces need to be addressed.
  - ◊ Assessment of prospects of career advancement and training needs across the forces should be done.

Border management and infrastructure

- Funds should be provided for office and residential buildings, especially family accommodation, as these are the major reasons of high stress and dissatisfaction amongst the personnel, as well as for purchase of land.
- Border infrastructure along the open and porous borders with Pakistan, Bhutan, Nepal and Bangladesh needs to be scaled up to ensure mobility of troops and preparedness of the forces guarding these. Emphasis should be laid on better integrated border outposts.
- It is necessary to beef up essential infrastructure such as border fencing, all-weather roads and lighting of borders as it can help in strengthening the security of campuses.
- There should be need-based procurement of unmanned aerial vehicle (UAVs) for surveillance, life-saving vehicles and other essentials.
- Need-based Air Force support should be provided for the delivery of essentials for forces based in sensitive and difficult terrains.

Disaster management

- The National Disaster Response Force (NDRF) needs to be strengthened on a continuous basis by increasing its manpower as well as providing it modern equipment and training infrastructure. In addition, the various schemes under the National Disaster Management Authority (NDMA) also need to be revisited and the requirements for disaster management for the 2020-25 period need to be meticulously worked upon in consultation with various stakeholders.
- Allocation to the SDRF may be enhanced to Rs. 1.50 lakh crore during the FC-XV award period.
- The National Disaster Mitigation Fund (NDMF) needs to be set up and various Central schemes relating to disaster mitigation should be brought under its purview.
- A certain percentage of allocations to States and urban local bodies should be earmarked for revamping of fire services.

Union Territories without legislature

- Union Territories without legislature should be provided adequate financial support to bridge the resource gaps they face. This should be duly supplemented by appropriate delegation of administrative and financial powers by making suitable Constitutional and executive interventions in a phased manner.

Suggested Areas of Reforms

General

- The Union Government could direct State Governments to promote skill and competence among police personnel at the grass-root level, encourage attitudinal changes in the police, encourage gender sensitisation, harness technology and ensure community policing.
- The National Crime Records Bureau (NCRB) database needs to be updated.

Police and CAPFs

- There is a need to balance the inter-se priority between the different CAPFs. An optimal manner to distribute the funds among the different forces may be developed.
- Steps must be taken to build residential units to meet the shortages of houses for police and CAPFs personnel.
- Need-based skill development schemes may be introduced. Existing training programmes at all levels of the organisational set-up may be reviewed.
- Steps should be taken to improve the working conditions of forces at border and the CAPFs and the hard area allowance may also be suitably revised.

Security

- As suggested by the Standing Committee, the Ministry of Home Affairs should make efforts to procure mine-resistant vehicles. This could be done through import or domestic manufacturing under the 'Make in India' programme. The Committee had recommended this in the light of the fact that police and paramilitary personnel fighting left-wing extremism were getting killed because of mine blasts and ambushes.
- The Standing Committee noted that the proposal to construct 509 outposts along the borders with Bangladesh and Pakistan had been reduced to 422 outposts in 2016. It recommended that such a reduction should be reconsidered since 509 outposts would reduce the inter-outpost distance to 3.5 km, which would strengthen security. We endorse this recommendation.
- We also endorse the Standing Committee recommendation that the Ministry of Home Affairs should adopt a multi-pronged strategy to prevent youth from taking to militancy and curb financing of militant groups and simultaneously launch counter-insurgency operations.

Disaster Management

- In our Report for the Year 2020-21, we proposed comprehensive treatment of the entire gamut of functions of the disaster management cycle and had made the following recommendations:
  - ◊ Mitigation funds shall be set up at both the national and State levels in the form of a NDMF and State Disaster Mitigation Funds (SDMF).
  - ◊ Creation of funds for disaster mitigation along with disaster response, which will together be called National Disaster Risk Management Fund (NDRMF) and State Disaster Risk Management Funds (SDRMF).
  - ◊ Total amount allocated to the States for SDRMF shall be Rs. 28,983 crore in 2020-21, of which the Union share is Rs. 22,184 crore (which is 114 per cent more than the Rs. 10,344 crore provided for SDRF in the 2019-20 budget estimates). Out of this amount of Rs. 28,983 crore, the share of SDRF shall be 80 per cent and the share of SDMF 20 per cent. Within the SDRF allocation of 80 per cent, there would be three sub-allocations: Response and Relief (40 per cent), Recovery and Reconstruction (30 per cent) and Preparedness and Capacity-building (10 per cent).
  - ◊ We recommended a total national allocation for disaster management (NDRMF) at Rs. 12,390 crore in 2020-21 by using the expenditure-based methodology.

- **FC-XV recommendations on disaster management in its final report**
  - ◊ The ratio of contribution by Union and States to the State-level allocations for disaster management recommended by FC-XIII should be maintained. Thus, States are to contribute 25 per cent of funds of SDRF and SDMF except the North-east and Himalayan States which shall contribute 10 per cent, and the rest is to be provided by the Union Government.
  - ◊ Mitigation Funds should be set up at both the national and State levels, in line with the provisions of the Disaster Management Act. The Mitigation Fund should be used for those local-level and community-based interventions which reduce risks and promote environment-friendly settlements and livelihood practices.
  - ◊ Allocation of disaster management funds to SDRMFs should be based on factors of past expenditure, area and population, and disaster risk index (which reflect States' institutional capacity, risk exposure, and hazard and vulnerability

respectively). Assuming an annual increase of 5 per cent, we arrive at the total corpus of Rs.1,60,153 crore for States for disaster management for the duration of 2021-26, of which the Union share is Rs. 1,22,601 crore and States share is Rs. 37,552 crore.

◊ Total States' allocation for SDRMF should be subdivided into funding windows that encompass the full disaster management cycle. Thus, the SDRF should get 80 per cent of the total allocation and the SDMF 20 per cent. The SDRF allocation of 80 per cent should be further distributed as follows: Response and Relief – 40 per cent; Recovery and Reconstruction – 30 per cent; and Preparedness and Capacity-building – 10 per cent. While the funding windows of the SDRF and SDMF are not interchangeable, there could be flexibility for re-allocation within the three sub-windows of SDRF.

◊ The allocation for the NDRMF should be based on expenditure in previous years. Assuming an annual increase of 5 per cent, the total national allocation for disaster management is estimated to be Rs. 68,463 crore for the duration of 2021-26.

◊ The allocation for the NDRMF should also be subdivided into funding windows similar to that of States' allocation for disaster management. Hence, the NDRF should get 80 per cent of the total allocation for the NDRMF, with further division into 40 per cent for Response and Relief, 30 per cent for Recovery and Reconstruction and 10 per cent for Preparedness and Capacity-building. The NDMF should be allotted 20 per cent of the total allocation for the NDRMF. If required, the Ministry of Home Affairs may examine the need for amending the Disaster Management Act to create three sub-windows within the NDRF. While the funding window of NDRF and NDMF should be maintained, there could be flexibility for re-allocation within these sub-windows.

- **FC-XV recommendations on Defence and Internal Security in its final report**

◊ The Union Government may constitute in the Public Account of India, a dedicated non-lapsable fund, Modernisation Fund for Defence and Internal Security (MFDIS), to bridge the gap between projected budgetary requirements and budget allocation for defence and internal security. This may be called *Rashtriya Suraksha Naivedyam Kosh* or any other appropriate name. The proceeds of the fund will be utilised for the following three purposes:

(a) capital investment for modernisation of defence services;

(b) capital investment for CAPFs and modernisation of State Police forces as projected by MHA; and

(c) a small component as welfare fund for our soldiers and para-military personnel.

The fund shall have the standard notified rules for its administration, public reporting, and audit by the Comptroller and Auditor General.

◊ The details are given in Chapter 11 (Defence and Internal Security) of Volume I of the report.

Chapter 10

Ministry of Housing and Urban Affairs

The Ministry of Housing and Urban Affairs has the overall responsibility of formulating policies, sponsoring and supporting programmes, coordinating the activities of various Union Ministries, State Governments and other nodal authorities and monitoring programmes relating to all aspects of housing and urban development.

India is urbanising rapidly. The Census 2011 reports India's urban population at 377.1 million, having risen from 286 million in 2001. Million-Plus cities are faces with increasing responsibilities and deteriorating finances. These cities are, of late, facing challenges of urban sprawl and migration leading to severe strain on infrastructure, ecological degradation, especially rising air and water pollution, amongst others. These are constraining their capacity to act as engines of growth, thereby hampering their capacity to generate "agglomeration economies".

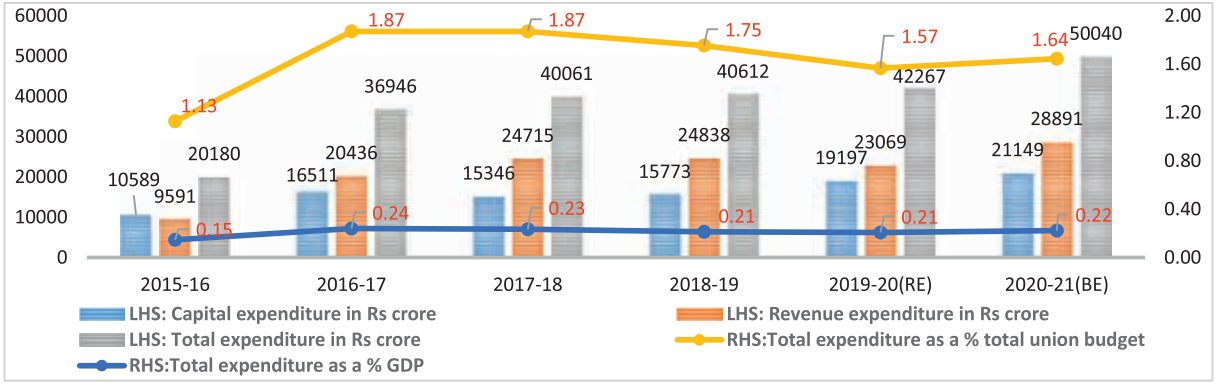
There is a need to adopt an integrated and holistic approach by developing more compact and eco-friendly cities. Revenue mobilisation methods to financially empower the municipalities should be amongst the key agenda items of the Ministry.

Overall Profile of the Ministry

1. In the Union Budget of 2020-21, the Ministry of Housing and Urban Affairs has been allocated Rs. 50,040 crore, which is 1.64 per cent of the Union Government's total budget and 0.22 per cent of estimated gross domestic product (GDP). The year-wise allocation of the Ministry is given in Figure 1.

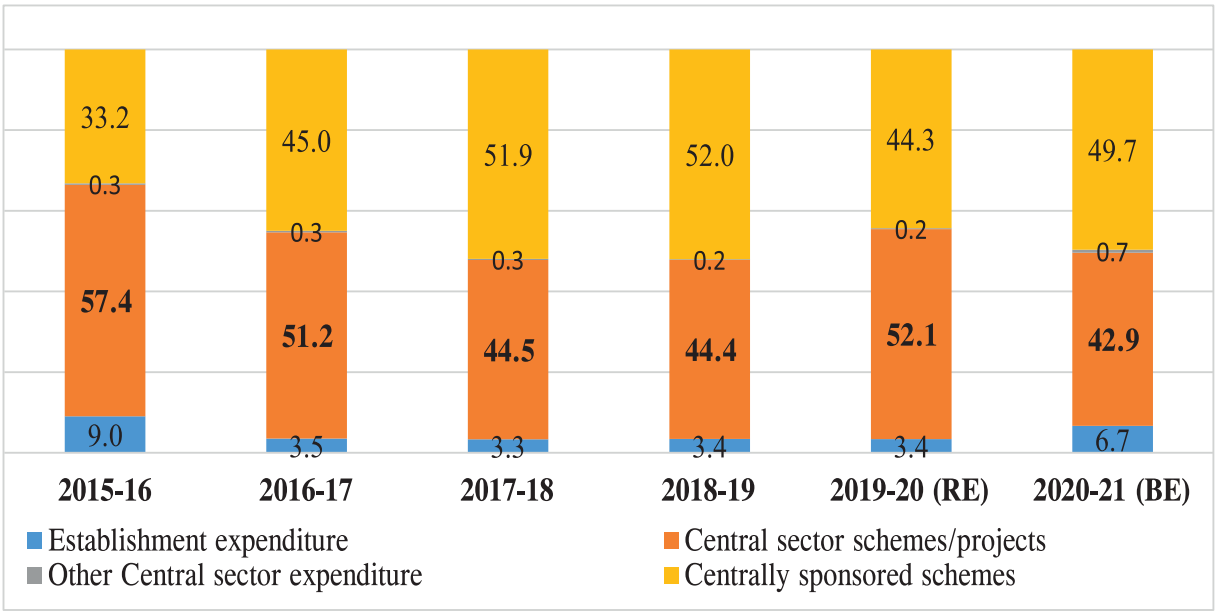
2. In the last few years, almost 96-97 per cent of the Ministry's expenditure is on Central sector schemes and Centrally sponsored schemes (CSS). The year-wise head-wise expenditure is detailed in Figure 2. The Ministry implements a few of the core schemes of CSS relating to urban planning, infrastructure and urban transport (Figure 3).

Figure 1: Expenditure of Ministry of Housing and Urban Affairs



Source: Union Budget

Figure 2: Head-wise Allocation of Ministry of Housing and Urban Affairs



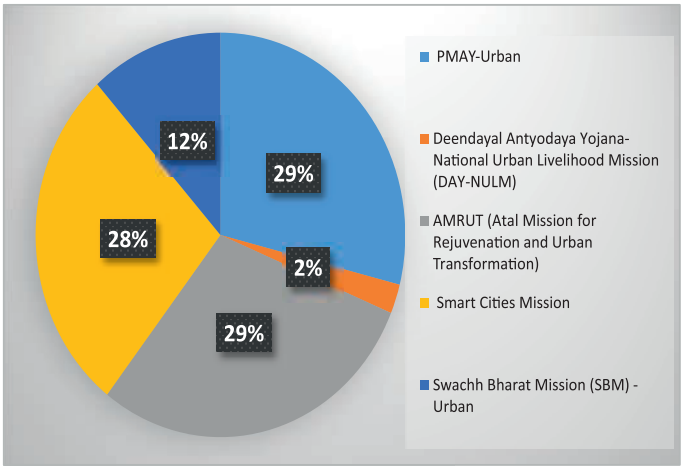
Source: Union Budget

Table 1: Central Sector and Centrally Sponsored Schemes

	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Ministry expenditure on Central sector schemes as % of Union expenditure on Central sector schemes	2.22	3.21	3.03	2.82	2.85	2.58
Ministry expenditure on CSS as a % of Union expenditure on CSS	3.29	6.89	7.29	7.13	5.92	7.31

- Of the total expenditure on Central sector schemes around 80 per cent is spent on metro rail projects.
- Scheme-wise spending for CSS for 2018-19 (in percentage) is depicted in Figure 3.

Figure 3: Scheme-wise Spending on CSS for 2018-19



Source: Union Budgets

Major Schemes Undertaken By the Ministry

Deendayal Antyodaya Yojana – National Urban Livelihoods Mission: The DAY-NULM aims to reduce poverty and vulnerability of the urban poor by access to gainful self-employment and skilled wage employment opportunities, build strong grassroots level institutions, provide shelters with essential services to the urban homeless and address livelihood concerns of the urban street vendors.

Employment generated for over 12.4 lakh beneficiaries
More than 13 lakh urban poor imparted skill training
Over 3.7 lakh self-help groups formed
Over 9 lakh street vendors given ID cards

Pradhan Mantri Awas Yojana (Urban): PMAY-U aims to provide housing for all by 2022 and is being implemented since June 2015. It provides Central assistance to urban local bodies and other implementing agencies for: in-situ rehabilitation of existing slum dwellers; Credit Linked Subsidy Scheme (CLSS); affordable housing in partnership and beneficiary-led construction/enhancement.

79.77 lakh houses sanctioned
43.83 lakh houses grounded for construction
18.07 lakh houses completed
Over 5.07 lakh beneficiaries under Credit Linked Subsidy Scheme (CLSS)

Swachh Bharat Mission (Urban): SBM-U was launched on 2 October 2014 for a five-year period with the objective of achieving 100 per cent open defecation free (ODF) status and 100 per cent solid waste management in all urban local bodies.

All cities of twenty-three States/Union Territories declared ODF
62.7 lakh (94 per cent) individual household toilets and 5.12 lakh (100 per cent) community/public toilets constructed
52 per cent scientific processing of municipal solid waste, up from 18 per cent in 2014

Atal Mission for Rejuvenation and Urban Transformation: (AMRUT) was launched on 25 June 2015 with the objective of providing universal water supply, improvement in sewerage network, developing green spaces and parks friendly to children-and differently abled; improvement in storm water drainage and non-motorised urban transport and incentivising States/Union Territories to implement a reform agenda.

4,758 projects worth over Rs. 62,704 crore under implementation/completed
Over 59 lakh street lights replaced with LED lights
Municipal bonds worth over Rs. 3,390 crore issued by eight cities
Online Building Permission Systems (OBPS) implemented in 1,668 urban local bodies, of which all urban local bodies of eleven States/Union Territories

Smart Cities Mission: The Smart Cities Mission, launched on 25 June 2015, aims to strengthen urban infrastructure through the application of smart solutions and provide a better quality of life to citizens.

No. of Smart Cities: 100
4,758 projects worth over Rs. 62,704 crore under implementation/ completed
5,151 projects worth Rs. 2.05 lakh crore sanctioned
2,676 projects worth Rs. 86,693 crore grounded
823 projects worth Rs. 14,236 crore completed
16 Smart City Centres operationalised

Heritage City Development and Augmentation Yojana: This is a Central sector scheme launched on 21 January 2015 with a provision of Rs. 500 crore. The scheme aims to bring together urban planning, economic growth and heritage conservation in an inclusive manner in Ajmer, Amaravati, Amritsar, Badami, Dwarka, Gaya, Kanchipuram, Mathura, Puri, Varanasi, Velankanni and Warangal.

77 projects worth over Rs. 423 crore approved
31 projects worth over Rs. 196 crore completed

Urban Transport : There is an urgent need to conserve energy and land, control pollution and greenhouse gas emissions. Urban transport is a solution to these issues. Hence, planning and management of urban transport services (especially metro services) require immediate attention.

400 km of metro projects commissioned
647 km of Metro Rail operational in eighteen cities
880 km of Metro Rail under implementation in eighteen cities
Approval of 82 km of Delhi-Meerut Regional Rapid Transit System (RRTS) project

Source: e-Book Ministry of Housing and Urban Affairs, Transforming Urban Landscape 2014-2019

International Comparison

Global Liveability Index (GLI) 2018

- The GLI, developed by the Economic Intelligence Unit ranks 140 cities (Mumbai and New Delhi from India) in terms of security, affordability, education, and healthcare, urban lifestyle and infrastructure. New Delhi was ranked 112 and Mumbai 117 in the 2018 index.

Global Competitive Index (GCI) Ranking 2018

- The GCI, developed by the World Economic Forum (WEF), ranks 140 countries on competitiveness on the basis of indicators organised into twelve pillars: institutions, infrastructure, ICT adoption, macroeconomic stability, health, skills, product market, labour market, financial system, market size, business dynamism, and innovation capability.
- The pillar of infrastructure captures the quality and extension of transport infrastructure (road, rail, water and air) and utility infrastructure. Well-developed infrastructure lowers transportation and transaction costs and facilitates the movement of goods and people and the transfer of information within a country and across borders. India lags in key indicators of service delivery as highlighted in Table 2.

Table 2: Ranking of India with Key World Economies on Parameters of Service Delivery

	India	Brazil	Russia	China	South Africa	Singapore	United States
Quality of roads	51	112	104	42	58	1	11
Electrification rate (% of population)	105	73	1	1	102	1	1
Electric power transmission and distribution losses (% output)	110	96	64	21	50	1	26
Exposure to unsafe drinking water (% of population)	106	57	54	75	95	25	1
Reliability of water supply	74	78	53	68	93	3	27
Infrastructure	**63**	**81**	**51**	**29**	**64**	**1**	**9**

Source: Global Competitiveness Report, WEF

Note: Ranking Order: Ascending Order (Best to Worse)

Property Rights and Quality of Land Administration

- India still has a weak land administration regime as compared to key world economies. Land is a State subject, which has led to variations across States in the digitisation of land records, mutation, and real-time updating of the Record of Rights. According the GCI 2018 ranking, India lags in quality of land administration; its position is 112, as compared to eighty-two for Brazil, fifteen for Russia, fifty-one for China and eighty-three for South Africa.

- According to the World Bank's Doing Business Report 2019 too, India lags in the areas of registering property and enforcing contracts.

Table 3: India's Rank in Property-related Reforms

Economy	Ease of doing business rank	Reforms making it easier to do business									
		Starting a business	Dealing with construction permits	Getting electricity	Registering property	Getting credit	Protecting minority investors	Paying taxes	Trading across borders	Enforcing contracts	Resolving insolvency
Djibouti	99	✓			✓	✓	✓			✓	✓
China	46	✓	✓	✓	✓		✓	✓	✓		
India	77	✓	✓	✓		✓		✓	✓		
Kenya	61				✓	✓	✓	✓			✓

Source: Doing Business Report 2019, World Bank

Initiatives to Deal with Fallout of Covid-19 Pandemic

- According to a United Nations Policy Brief on the impact of Covid-19, urban areas are the epicentre of the pandemic, hosting an estimated 90 per cent of total cases. With sectors such as tourism, housing, healthcare being negatively affected by the pandemic, coupled with difficulties in access to clean drinking water, urban areas might find it more challenging to address the crisis. The Government of India has launched various relief packages for this sector.

Affordable rental housing complexes for migrant workers/urban poor

- The Union Government announced the building of affordable rental housing complexes (AHRCs) as a sub-scheme of PMAY-U in order to provide housing to the urban poor and migrant workers close to their places of work workplace at affordable rents. This could follow two models:
  - ◊ **Model 1:** Converting existing government-funded vacant houses in cities into ARHCs through a concessionaire in a public-private-partnership arrangement.
  - ◊ **Model 2:** Construction, operation and maintenance of ARHCs by public or private organisations on their own vacant land. These could be trade associations, manufacturing companies, educational/ health institutions, development authorities, housing boards, Central/State public sector undertakings.

Extension of registration and completion date of real estate projects under Real Estate Regulatory Authority (RERA)

- The Ministry issued an advisory on 13 May 2020 suo-moto extending, by six months, from 25 March 2020 the registration and completion date of all incomplete registered projects.

Pradhan Mantri Street Vendor's Atma Nirbhar Nidhi

- The Union Government announced a Rs. 5,000 crore special credit facility to benefit fifty lakh urban street vendors.

Key Recommendations of FC-XV in its Report for the Year 2020-21

- The mandatory condition of growth of property tax in tandem with the growth of gross state domestic product (GSDP), made by us in the report for 2020-21, in order to qualify for grants may be removed as there is no correlation between the two. Instead, it should be mandatory for urban local bodies to notify a road map for increasing collection of property tax rates and user charges to cover operations and maintenance cost.
- The MoHUA must be made the nodal ministry with respect to grants for Million-Plus cities to take steps to check air pollution, like use of mechanical sweeping machines, promotion of non-motorised transport (pedestrian and cycle), paving the side flanks of the road with facility for water percolation, etc. The Ministry of Environment, Forests and Climate Change (MoEF&CC) may be given a separate grant for installation of systems to monitor air quality.
- Separate grants may be allocated to ULBs for public health infrastructure and primary health care clinics in informal settlements and low-income neighbourhoods.
- An active municipal borrowing market must be created through the cityfinance portal, which serves as a national framework of standardised, timely and credible financial information on cities. It facilitates benchmarking, comparison and peer learning between cities on a range of financial indicators[1].
- A substantial increase in grants is needed for bridging the resource gap of municipalities, which is anticipated at Rs. 12.27 lakh crore over the period 2021-22 to 2025-26.

[1]https://cityfinance.in/home

- Devolution to municipalities may be increased by at least four times (Rs. 3,48,575 crore), as compared to the FC-XIV award.
- The MoHUA and the Controller General of Accounts (CGA) should develop an account maintenance system, National Municipal Accounting Manual (NMAM), which will be integrated with the Public Financial Management System (PFMS). For this, the Ministry suggested a total fund requirement of Rs. 213 crore (Rs. 193 crore to State Governments and Rs. 20 crore to the MoHUA).
- The Ministry sought Rs. 450 crore for building service centres shared by municipal-clusters.
- The Ministry was of the view that instead of a model property tax act, what is required is a toolkit consisting of (a) best practices across States/cities in each stage of the property tax lifecycle; and (b) model statutory provisions that can be incorporated within existing property tax rules to strengthen administration. It informed us that a consultative group of urban development ministers from six States (Gujarat, Odisha, Tamil Nadu, Punjab, Tripura and Uttar Pradesh), constituted to pursue our recommendations on property tax, has reviewed the municipal legislations of all twenty-eight states and identified the best practices in laws, procedures and on-ground activities.

Key Proposals of Ministry to FC-XV

The MoHUA, in its revised memorandum to us following the release of the report for 2020-21, made the following proposals:

- The mandatory condition of growth of property tax in tandem with the growth of GSDP in order to qualify for grants may be removed. Instead notification of, and adherence to, a road map for increasing property tax rates and user charges to cover O&M cost and part of capital expenditure must be made mandatory.
- MoHUA must be made the nodal ministry with respect to grants for Million-Plus cities to take steps to check air pollution, like mechanical sweeping machine, promotion of non-motorised transport (pedestrian and cycle), paving the side flanks of the road with facility for water percolation etc. The MoEF&CC may be given a separate grant for installation of systems to monitor air quality.
- Separate grants may be allocated to urban local bodies for public health infrastructure and primary health care clinics in informal settlements and low-income neighbourhoods.

- An active municipal borrowing market must be created through the cityfinance.in portal, which serves as a national framework of standardised, timely and credible financial information on cities. It facilitates benchmarking, comparison and peer learning between cities on a range of financial indicators.
- Substantial increase in grants is needed for bridging the resource gap of municipalities, which is anticipated as Rs. 12.27 lakh crore over the period 2021-22 to 2025-26.
- Devolution to municipalities may be increased by at least four times (Rs. 3,48,575 crore), as compared to the FC-XIV award.
- The MoHUA and the CGA should develop an account maintenance system, National Municipal Accounting Manual (NMAM), which will be integrated with PFMS. For this, the Ministry suggested total fund requirement of Rs. 213 crore (Rs. 193 crore to States and Rs. 20 crore to MoHUA).
- The Ministry sought Rs. 450 crore for building municipal clustered shared service centres.
- The Ministry noted that a consultative group of urban development ministers with regional representation from six States (Gujarat, Odisha, Tamil Nadu, Punjab, Tripura and Uttar Pradesh) has been constituted. A steering committee of the Principal Secretary of these has been constituted to support the consultative group.
- The Ministry is of the view that instead of a model property tax Act, what is required is a toolkit consisting of the following:
  - ◊ Best practices across States/cities in each stage of the property tax lifecycle;
  - ◊ Model statutory provisions that can be incorporated within existing property tax rules to strengthen administration.

Challenges

Rapid Urbanisation

- India is urbanising at a rapid pace, with the level of urbanisation increasing from 17 per cent in 1951 to 31 per cent in 2011. According to the World Urbanization Prospects: The 2018 Revision, the urbanisation level will reach 37-38 per cent in 2025 and the urban sector will start superseding the rural sector from 2045-46 onwards.

- The urban population has been rising much faster than the total population. The urban population, estimated at nearly 377 million in the 2011 Census, is poised to grow to 600 million by 2031[2] . Urban areas contribute to approximately 62-63 per cent of GDP[3] , and this is estimated to increase to 75 per cent by 2030[4] .

Growth of Million Plus Cities

- The United Nations World Urbanization Prospects 2018 also projects most of the huge increase in urban population will be concentrated in the Million-Plus cities. These cities will have to act as economic power centres attracting and facilitating investments.

Table 4: No. of cities based on size of urban settlement[5]

Size of Urban Settlement	1990	2018	2030
3,00,000 to 5,00,000	40	71	94
5,00,000 to 1 million	30	49	70
1-5 million	20	52	62
5-10 million	2	4	2
10 million or more	2	5	7

The Perils of Urban Sprawl

- Cities have attracted huge migratory and floating population resulting in horizontal expansion through what is called urban sprawl, a particular form of urban development which poses several major challenges, including greenhouse gas emissions, air pollution, road congestion and lack of affordable housing.
- Cities are developing in a way that results in longer commuting distances and hence higher dependence on personal vehicles. This leads to more traffic jams, higher greenhouse gas emissions and more air pollution. It also substantially increases the per-user costs of providing public services that are the key for well-being, such as water, energy, sanitation and public transport.

Deteriorating Urban Environment

- According to the National Clean Air Programme (NCAP) as well as data generated from the National Air Monitoring Programme over the years, particulate matters (PM10 and PM2.5) far exceed the permissible levels at many locations, particularly in urban areas. The air pollution problem becomes complex due to the multiplicity and

[2]MOHUA presentation to XV FC

[3]Planning Commission (2008). Eleventh Five-Year Plan (2007-2012).

[4]MOUD (2011). Estimating the investment requirements for urban infrastructure services – Report of the High Powered Expert Committee

[5]*Source: World Urbanization Prospects 2018*

complexity of air polluting sources (for example, industries, automobiles, generator sets, domestic fuel burning, road side dusts, construction activities, etc.).

Low Revenue Base

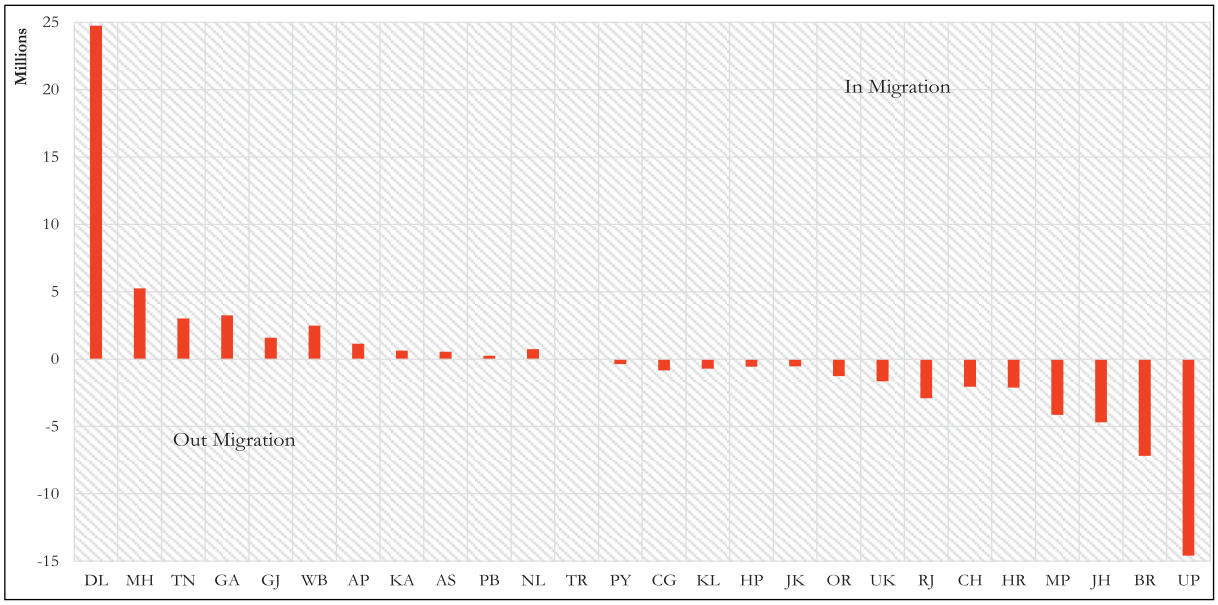
- Urban local bodies have a very narrow revenue base, coupled with inadequate revenue certainty and buoyancy. Municipalities' own sources of revenue have declined from 56 per cent in 2007-08 to 52 per cent in 2013-14 and 44 per cent in 2015-16[6] . According to a study done by the World Bank for us, the average collection from property taxes in the OECD group is about 1.1 per cent of national GDP. However, in India it is about 0.2 percent of GDP. For some OECD countries, such as Canada, the United Kingdom and the United States, property tax collections form the bedrock of local bodies revenues and are about 3 per cent of their respective GDPs.

Migration Management

- The Economic Survey of India 2017 estimates that the magnitude of inter-state migration in India was close to nine million annually between 2011 and 2016.
- Figure 4 shows the net flows for the twenty-six States. Positive numbers indicate in-migration and negative numbers denote out-migration. The largest recipient was the Delhi region, which accounted for more than half of migration in 2015. Uttar Pradesh and Bihar taken together account for half of total out-migrants. Maharashtra, Goa and Tamil Nadu had major net in-migration, while Jharkhand and Madhya Pradesh had major net out-migration.
- To sustain this churn, however, there is need for an integrated migration management policy. It is, therefore, crucial to address issues like portability of food security benefits, healthcare and a basic social security framework for migrants.

[6]Municipal Finance in India, Discussion Paper – September 10, 2018, UN Habitat, India.

Figure 4: Migration Across States



Source: Economic Survey of India 2017

Suggested Areas of Reforms

Making Cities Go More Compact

Need for a National Transit-Oriented Development Policy

- Transit-Oriented Development (TOD) focuses on the creation of high-density mixed land use development in the influence zone of transit stations, that is, within walking distance (500-800 metres) of transit stations or along the corridor in case the station spacing is about 1 km.
- Integrated land use and transport planning will provide a planned sustainable growth to urban centres.
- There is a need to involve community-based organisations, urban local bodies, State/Union Territory Governments, Union Government ministries/departments/ agencies and all other stakeholders in urban development, in understanding the benefits of TOD and working out an implementation strategy.

Cities need to go vertical

- Restrictions on height of buildings prove a significant barrier to the emergence of a compact city. Floor space index (FSI) is typically in the 1.5-3 range for Indian cities. In contrast, FSI in most Asian cities varies from 5 to 15 and goes up to even 25 in many western cities.

Table 5 : Permissible Floor Area Ratio (FSI) in Major Cities

Ahmedabad	1.2 – central localities, 1.8 – outskirts
Bengaluru	Generally ranges from 1.75-3.35
Chennai	1.5 – ordinary buildings, 2 – high rises, >3 – influence zones
Delhi	Generally ranges from 1.2-3.5 and 4 – redevelopment projects
Gurgaon	Generally ranges from 1-1.45
Kolkata	Generally ranges from 1.5-2.5
Mumbai	1.33 – inland city , 2.5 – Maharashtra Housing and Area Development Authority (Mhada) Buildings
Noida	0.5-1 – Suburbs 2.75-3.5 – central localities

- An integration of TOD and flexible FSI norms in influence areas will accommodate higher population density and foster greater job generation as compared to the area around and beyond the influence areas.
- There is a need to adopt mixed land use and compact city norms for different scales of cities.

Co-living spaces

- A new trend – co-living – is emerging in the burgeoning student and working populations across Indian cities like Bengaluru, Mumbai, Gurgaon and Pune. NestAway, OYO and CoHo are some of the private players operating in the market.
- Co-living may offer a higher rental yield of as much as 8-11 per cent, as compared to the current average yield of 1-3 per cent on residential properties. Co-living spaces could also bring down the consumer's average cost of living by as much as 10-15 per cent with optimal real estate utilisation and economies of scale. There is a definite need for orienting policy towards this segment of affordable housing.

Green building

- The norms suggested by the MoEF&CC with Green Rating for Integrated Habitat Assessment (GRIHA) guidelines for the development of green buildings should be encouraged, depending on the requirement.

National Clean Air Programme - Ease of Breathing

- State Governments and city authorities should be encouraged and enabled to meet local targets prescribed by NCAP for PM 2.5 and PM 10. The MoHUA needs to work in coordination with the MoEF&CC to achieve this objective.
- Faster Adoption and Manufacturing of Electric Vehicles in India (FAME) guidelines need to be promoted with a network of charging infrastructure to be installed across all Million-Plus cities, smart cities, State capitals and major highways connecting major cities.

Revenue Mobilisation

Property Rights

- According to a World Bank Study commissioned by FC-XV, only twelve out of thirty states examined had constituted Property Tax Boards, which was recommended by FC-XIII. The Ministry should urge the states to set up Property Tax Boards to increase the buoyancy in property tax revenue.
- Clearly defined regulations and equal access to property rights are essential for enabling businesses to expand their operations. Many countries have undertaken reforms in this area, a snapshot of which is provided from the World Bank's Doing Business Report 2019. Reforming property rights in integration with the Department of Land Resources needs to be a priority agenda for the Ministry. Property Tax is a State subject and reforms are required at the State level to address this issue (Table 6).

Municipal Bonds

- The Ministry should continue its support to local bodies to explore the issuance of municipal bonds as a source of finance. Larger municipal corporations should directly approach the markets while an intermediary could be set up to assist medium and small municipalities which may not have the capacity to access the markets directly.

Using land as resource to finance urban development

- Land value tax should be used as a value capture tool, which, apart from capturing any value increment, helps stabilise property prices and discourages speculative investments. It is considered to be most efficient among all value capture methods.

Table 6 : Some initiatives for making property registration easier

Feature	Economies	Some highlights
Increased reliability of infrastructure	Croatia, Djibouti, Pakistan, Sri Lanka, Tonga	Croatia became fully digitised, increasing the efficiency and transparency of services provided by the Land Registry and Cadaster. Sri Lanka worked toward implementing a fully digital Land Registry and Survey Department by rolling out a geographic information system and creating a single window counter for the issuance of certificates.
Increased transparency of information	Azerbaijan, Croatia, Eswatini, Gabon; Indonesia, Israel, Mauritius, Pakistan, Papua New Guinea	Gabon and Israel upgraded their official websites to include relevant information to the public at large regarding and registry services.
		Pakistan and West Bank and Gaza began publishing online official statistics tracking the no. oftransactions at the immovable property registration agency.
Reduced taxes or fees	Chad, Congo, Dem. Rep., Congo, Rep., Djibouti, Guinea, Tonga	Democratic Republic of Congo reduced the cost of securing land and property titles. Guinea reduced the fees to transfer property from 2 per cent to 1.2 per cent of the property value.

Source: Doing Business Report 2019, World Bank

- Since land is a State subject, reforms are required at the State level to address this issue. For instance, Maharashtra and Tamil Nadu, through State laws, have expanded the scope of this mechanism to cover urban land also. Globally, land value tax is widely used in Denmark, Australia and New Zealand. There is a need for guiding and supporting States to undertake more of such initiatives.
- Development charges (impact fees) and market-linked area-based charges are the most widely used land-based fiscal tools in States. States like Andhra Pradesh, Gujarat, Maharashtra, Tamil Nadu and Madhya Pradesh levy impact fee and collect it upfront while granting development permissions. This can serve as an important revenue-generating tool especially in the newer developing townships.
- The Ministry, along with the Department of Public Enterprises in the Ministry of Heavy Industries and Public Enterprises should work out a plan for the release of land parcels available with Central public sector undertakings, which can be used for affordable housing projects.

FC-XV recommendations in its final report

◊ The total size of the grant to local bodies should be Rs. 4,36,361 crore for the

period 2021-26. Of this, Rs. 2,36,805 crore is earmarked for rural local bodies, Rs. 1,21,055 crore for urban local bodies and Rs. 70,051 crore for health grants through local bodies. We have also recommended Rs. 8,000 crore to States as grants for incubation of new cities and Rs. 450 crore for facilitating shared municipal services. The MoHUA will need to undertake both ecosystem-building as well as hand-holding for implementation of these shared services.

◊ To address the long pending issue of account, audit and property taxation, we have recommended that for urban local bodies, apart from the entry level condition of having both provisional and audited accounts of local bodies online in the public domain, after 2021-22, fixation of minimum floor for property tax rates by the relevant State will be an additional mandatory pre-condition to avail the urban local bodies, Grants. Specific recommendations regarding property taxes is highlighted in volume I, Chapter 7 on Empowering Local Government.

◊ Urban local bodies are categorised into two groups, based on population and different norms have been used for the flow of grants to each, based on their specific needs and aspirations. For the Million-Plus cities, 100 per cent of the grants are performance-linked through the Million-Plus cities Challenge Fund (MCF). Basic grants are proposed only for cities/towns having a population less than one million.

◊ Category I cities (urban agglomerations with a population of more than one million) will be treated as a single unit for monitoring of performance indicators of ambient air quality and service level benchmarks. One-third of the total MCF of each city is earmarked for achieving ambient air quality. The balance two-thirds of the city-wise MCF is earmarked for achieving service level benchmarks for drinking water (including rainwater harvesting and recycling) and solid waste management and sanitation. For drinking water (including rainwater harvesting and recycling) and sanitation and solid waste management criteria under service-level benchmarks, the MoHUA shall act as the nodal ministry for determining the eligible urban local bodies.

◊ Sixty per cent of the basic grants for urban local bodies for non Million-Plus cities should be tied to supporting and strengthening the delivery of: (a) sanitation and solid waste management and attainment of star ratings as developed by the MoHUA; and (b) drinking water, rain water harvesting and water recycling.

◊ The State Government while deciding the share of basic grant among various ULBs in cities other than Million-Plus cities, shall make allotment of grants (only under basic grants) on a per capita basis for the Cantonment Boards falling within the State.

Chapter 11

Ministry of Panchayati Raj

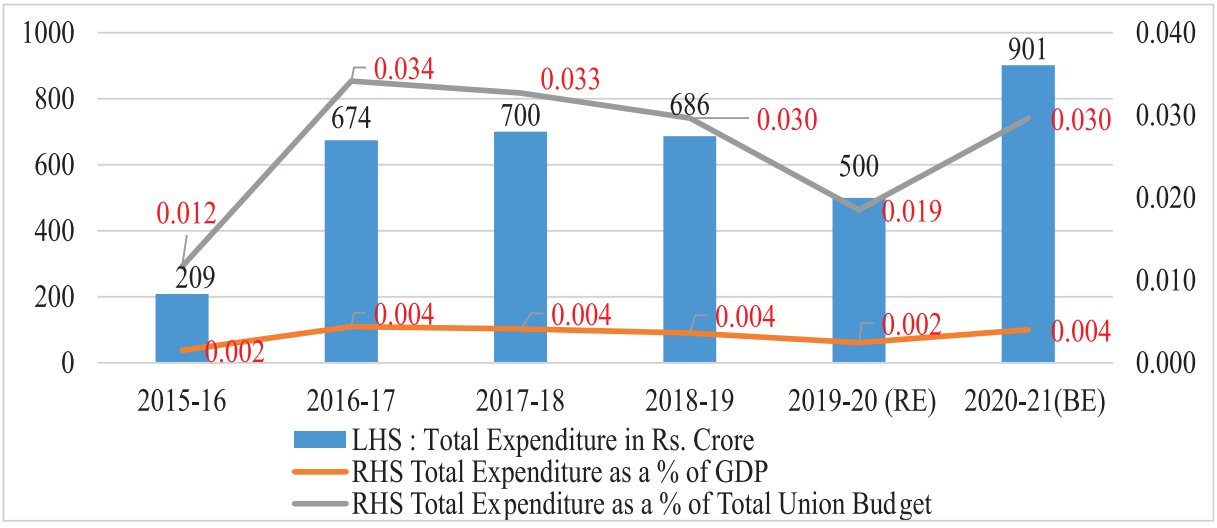
The Ministry of Panchayati Raj has played a pivotal role in democratic decentralisation by strengthening the panchayati raj institutions across the country. The PriaSoft software for panchayat accounts initiated by the Ministry has played a key role in increasing the transparency and accountability of the accounts of panchayati raj institutions. Lack of inter-operability of accounts owing to different coding structure at the local, State and Union Government levels remains one of the key issues to be addressed by the Ministry. There is a need for uniform standardisation of accounting standards across the three levels of Government.

Strengthening the institution of State Finance Commissions, acting on the recommendations of the Report of the Committee on Performance Based Payments for Better Outcomes in Rural Development Programmes (Sumit Bose Committee) for improving the human resource capability at the third tier of government and taking the digital revolution to the ground level need to be focus areas for the Ministry.

Overall Profile of the Ministry

1. The mandate of the Ministry of Panchayati Raj is to ensure compliance with the provisions of Part IX of the Constitution, provisions regarding the District Planning Committees as per Article 243ZD, and Panchayats (Extension to the Scheduled Areas) Act (PESA). The Ministry's mission is empowerment, enablement and accountability of panchayati raj institutions to ensure inclusive development with social justice, and

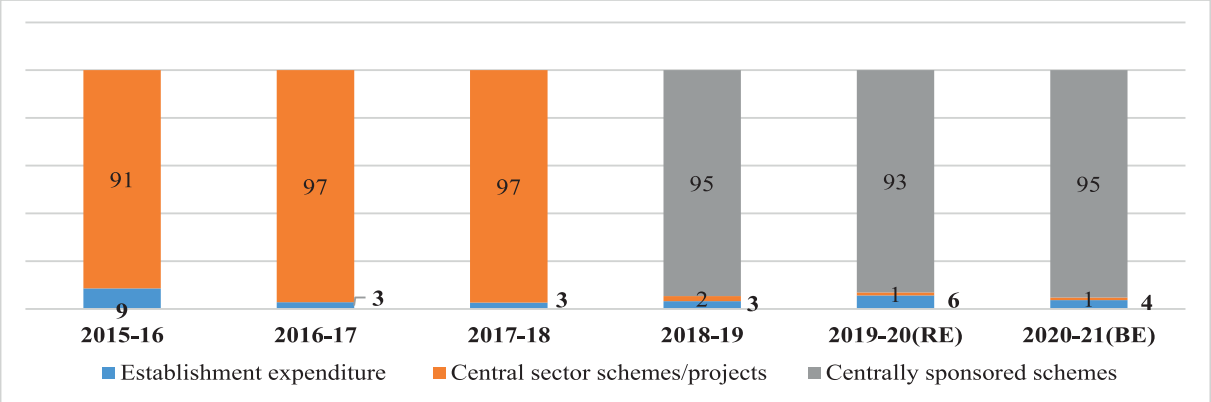
Figure 1: Expenditure of Ministry of Panchayati Raj



Source: Union Budget and CSO

efficient delivery of services. The Union Budget of 2020-21 allocated Rs. 901 crore to the Ministry, which is 0.03 per cent of the Union Government's total budget of 2020-21 and 0.004 per cent of estimated gross domestic product (GDP). The year-wise allocation of the Ministry is shown in Figure 1. Figure 2 indicates the head-wise expenditure of the Ministry. In the recent years, the bulk of this expenditure is on Centrally sponsored schemes (CSS).

Figure 2: Head-wise Expenditure (Percentage)



Source: Union Budget

2. Of the schemes being implemented by the Ministry, three major ones – Rashtriya Gram Swaraj Abhiyan (RGSA), Incentivisation of Panchayat and Mission Mode Project on e-Panchayats – were Central sector schemes till 2017-18 and have been converted to CSS from 2018-19.

Table 1: Central Sector Schemes and Centrally Sponsored Schemes

	Central Sector Schemes (Rs. crore)			CSS (Rs. crore)		
Heads	**2015-16**	**2016-2017**	**2017-2018**	**2018-19**	**2019-20 (RE)**	**2020-21 (BE)**
	Total Exp.	**Total Exp.**	**Total Exp.**	**Total Exp.**	**Total Exp.**	**Total Exp.**
Capacity Building – Panchayat Sashaktikaran Abhiyaan (PSA)/Rashtriya Gram Swaraj Abhiyan (RGSA)	184.4	592.8	622.4	598	433	791
Incentivisation of Panchayat		33	34	41	25	47
Mission Mode Project on e-Panchayats		16.6	12.8	10.1	7.5	20
Other schemes	6.3	12.6	12.3			
Total	**190.7**	**654.9**	**681.5**	**649**	**465**	**858**

Source: Union Government Budgets

Note : Other schemes include Action Research, International Contribution, Media and Publicity, ATM services in Panchayat Bhawans

Recent Initiative to Improve Village Mapping

SVAMITVA Scheme stands for Survey of **V**illages and **M**apping with **I**mprovised **T**echnology in **V**illage **A**reas

The main objective of the scheme is to demark abadi (inhabited) land and digitally prepare maps of these areas. The scheme has the following objectives:

- Provide an integrated property validation solution for rural India.
- Leveraging property as a financial asset by the citizens of rural India.
- Creation of accurate land records for rural planning.
- Determination of property tax.
- Creation of survey infrastructure and GIS map that can be leveraged by any other department for their use.
- Promote spatial planning in panchayats by focusing on 60,000 Gram Panchayats located along national and State highways. These spatial plans are to be levers for:
  - ◊ planning growth and change, thus providing for orderly and predictable development
  - ◊ setting priorities for developing and maintaining infrastructure and public facilities
  - ◊ strengthening local identity and creating a framework for future policy decisions
  - ◊ providing guidance to land-owners, developers, and Government authorities.

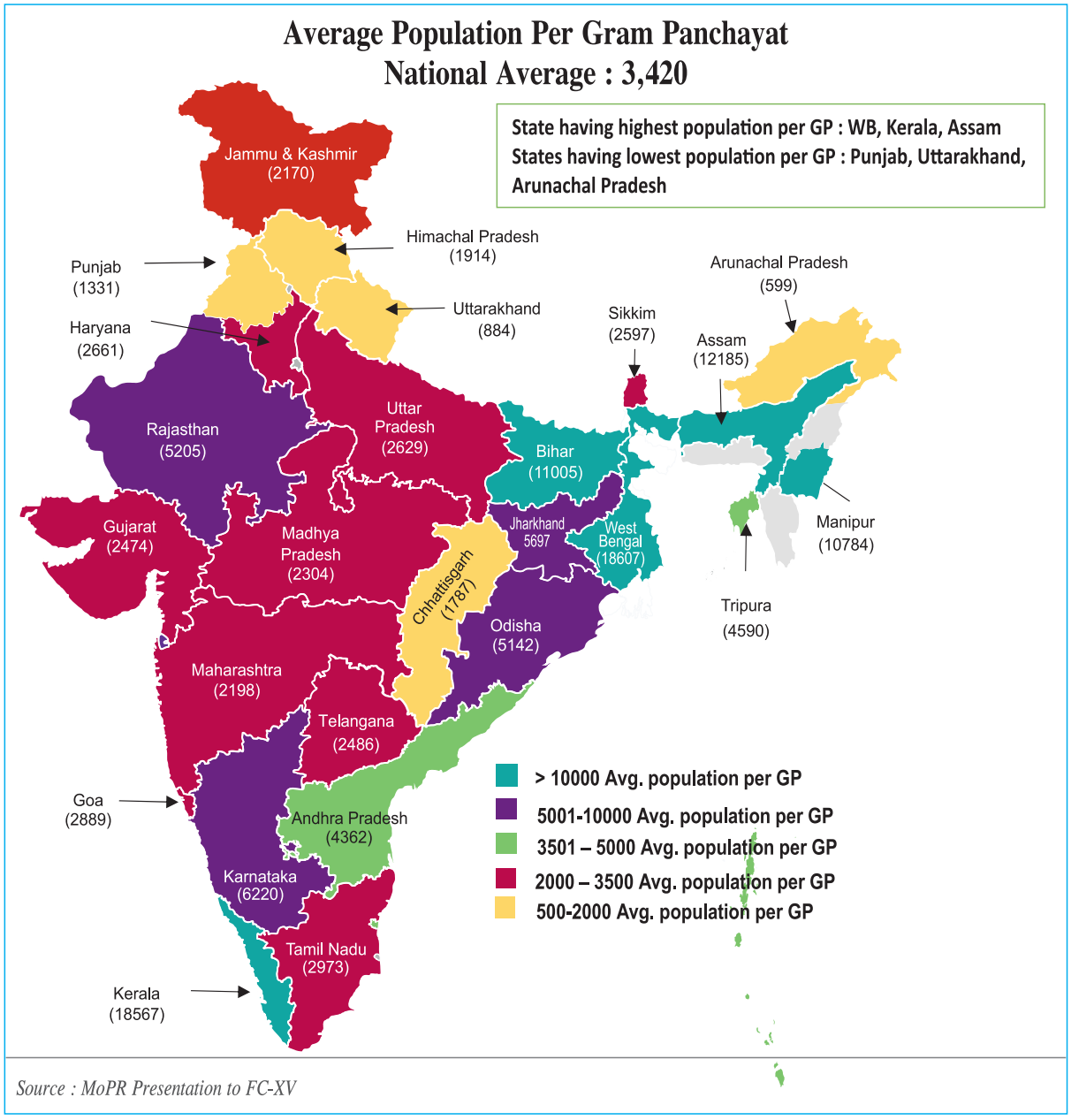
Inter-State Comparison

3. Table 2 indicates that approximately 3.1 million representatives are regularly elected to about 2.6 lakh rural local bodies all over the country. Providing basic services at the grassroots level makes them the primary interface between citizens and the government.

Table 2: Basic Data on Panchayati Raj Institutions

No. of Panchayati Raj Institutions	No. of Gram Panchayats	No. of Block Panchayats	No. of District Panchayats	No. of Elected Members of Panchayati Raj Institutions	No. of Elected Women Representatives
263028	**255549**	**6825**	**654**	**31.00 lakh**	**13.76 lakh (44%)**

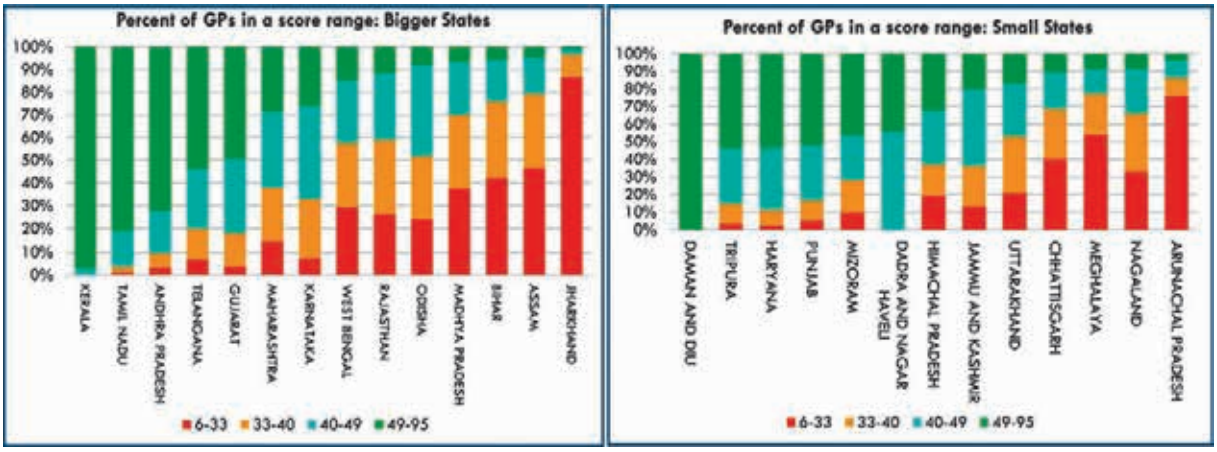
4. The map below shows the average population per gram panchayat.



Source : MoPR Presentation to FC-XV

5. The Ministry has developed a score for Gram Panchayats in each State, based on the performance of the gram panchayat on indicators relating to infrastructure and access to services, social development and protection, economic development and diversification of livelihoods. This has been developed through data from the Socio Economic and Caste Census 2011 (SECC) and the 2011 Census. Kerala, Tamil Nadu and Andhra Pradesh are the leading States in the index.

Figure 3: State-Wise Scoring of Panchayats

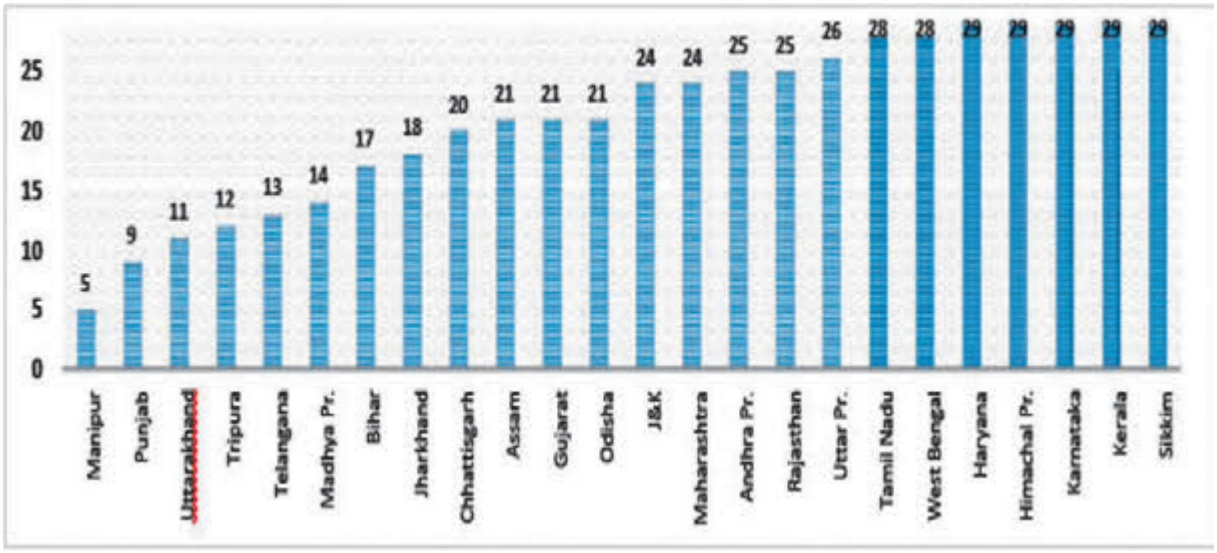


Source: MoPR and MoRD presentation to FC-XV

Note: Ranking order: high scor-low score: best to worse

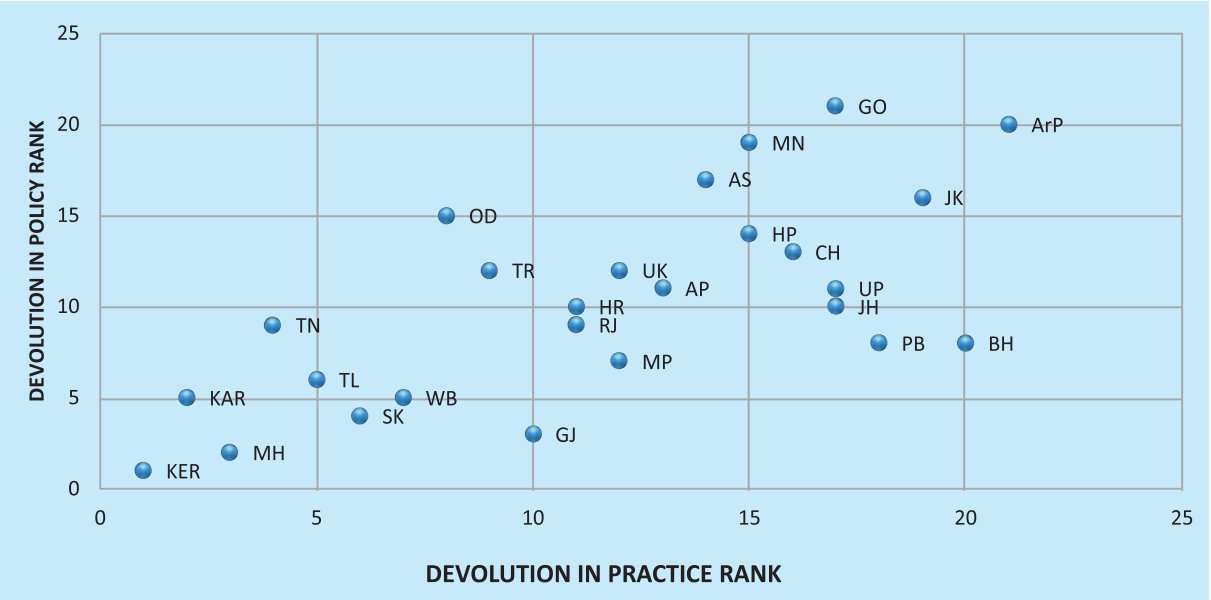
6. Figure 4 depicts the variation among States in the extent of devolution of twenty-nine functions of the Eleventh Schedule of the Constitution. Figure 5 indicates the scatter plot of how States rank in the devolution in policy and devolution in practice. It can be seen from both the figures that Kerala and Karnataka have effectively devolved functions both in practice and policy to the third tier.

Figure 4: Devolution of 29 Subjects in States



Source: MoPR and MoRD presentation to FC-XV

Figure 5: Comparison of States based on Indexes of Devolution in Policy and Devolution in Practice



Source: Report of Devolution Study 2015-16 commissioned by MoPR, https://www.panchayat.gov.in/web/guest/activities/schemes

Note: Ranking order: low rank to high rank: best to worse

Box 1: Grants Proposed by Finance Commissions

FC-X	Since the FC-X was constituted in 1992, a year before the Seventy-Third and Seventy-Fourth amendments, its terms of reference did not specify considering grants for the local bodies. However, it still recommended grants which were equivalent to 1.38 per cent of the divisible pool to the rural and urban local bodies to enable them to discharge the new role assigned to them during its award period.	Recommended grants of Rs. 4,381 crore over the award period.
FC-XI	The terms of reference for FC-XI to FC XIV asked them to assess "The measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State on the basis of recommendations made by the Finance Commission of the State".	Recommended grants of Rs. 8,000 crore over the award period of FC-XI.
FC-XII		Recommended grants of Rs. 20,000 crore over the award period of FC-XII.
FC-XIII		Recommended grants of Rs. 65,161 crore over the award period of FC-XIII.
FC-XIV		Recommended grants of Rs. 2,00,292 crore over the award period of FC-XIV.

Recommendations of FC-XV in Report for the Year 2020-21

- In our Report for the Year 2020-21, we recommended grants of Rs. 60,750 crore to rural local bodies. While 50 per cent of the grants were untied, the remaining 50 per cent were tied as grants for sanitation and water supply which are identified national priorities. No conditions were prescribed for getting the grants in 2020-21.

Key Proposals of the Ministry to FC-XV

- The Ministry submitted its revised memorandum to us highlighting the following key points:
  - ◊ The FC-XV may consider keeping its award for the panchayati raj institutions for the revised period 2021-2026 at Rs. 10 lakh crore.
  - ◊ In conformance with the provisions of the report for 2020-21, the devolution of grants to panchayati raj institutions may be kept as 50 per cent untied for ensuring basic services and 50 per cent tied towards drinking water supply and sanitation, for the initial four years of the award period (2021-25). After this, only 25 per cent may be tied for drinking water and supply and sanitation and 75 per cent left untied for 2025-26, taking into account the progressive saturation levels expected to be achieved in drinking water supply and sanitation. Out of the untied grants, the panchayati raj institutions may be allowed to carry out basic services through various modes of outsourcing, on contract or self-engagement. They may also utilise the grants towards various revenue/recurring expenditure such as operation, maintenance, wage payments, internet and telephone expenses, fuel expenses, rentals, contingency expenditure during calamities.
  - ◊ The Ministry proposed additional requirement of grants for Rs. 12,000 crore for the five-year period 2021-26 towards enabling the States to construct Gram Panchayat bhawans, in those which do not have them, in a time-bound manner.

Challenges

Audit and Accounts of Panchayats

- All Finance Commissions since the FC-XI have highlighted the lack of reliable financial data on panchayats and municipalities and the difficulty in realistically assessing the requirement of resources for carrying out core functions and development expenditure and stressed the need for proper maintenance of audit and accounts.

Status of State Finance Commissions

- Constitution of SFCs is mandated in Article 243-I (1) and 243-Y (1) of the Constitution. Though the constitution of the sixth SFC was due by 2019-20, only four States have done so. Several States are still in their second and third SFC.
- It is also observed that SFCs faced challenges of poor administrative support, inadequate resources for their smooth functioning and delays in placement of reports before State legislatures with Action Taken Reports (ATR). According to a report by the National Institute of Public Finance and Policy done for FC-XV, after constitution, average time taken by a SFC to submit its report is two and a half years and average delay has been about sixteen months.

Table 3: Status of Constitution of SFCs

State	Last SFC Constituted
Assam, Bihar, Punjab, Rajasthan	VI
Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Odisha, Sikkim, Tamil Nadu, Tripura, Uttarakhand and Uttar Pradesh	V
Andhra Pradesh, Karnataka and West Bengal	IV
Chhattisgarh, Goa, Gujarat, Jharkhand and Manipur	III
Arunachal Pradesh, Mizoram	II
Erstwhile Jammu & Kashmir, Telangana	I

Source: MoPR presentation to the FC-XV

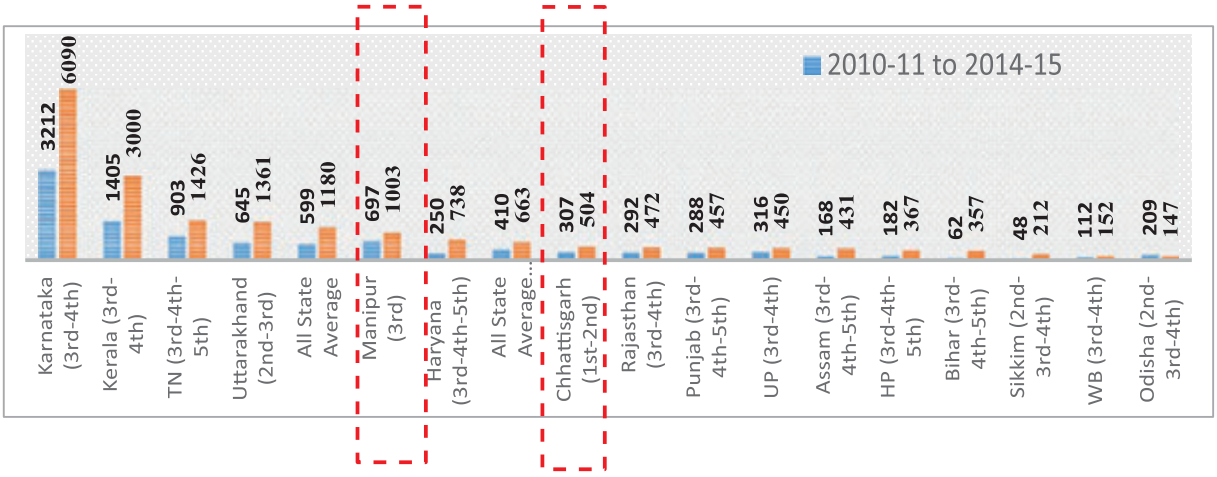
Disparate and Varied SFC Transfers

- The NIPFP study indicated that there had been a huge variation in the SFC per capita devolution recommended across States during the award period of FC-XIII (2010-11 to 2014-15). The average per capita devolution varied from Rs. 48 in the case of Sikkim to Rs. 3,112 in the case of Karnataka. The all-State average was Rs. 599. During the award period of FC-XIV (2015-16 to 2019-20), the average per capita SFC devolution varied between Rs. 147 in the case of Odisha and Rs. 6,090 for Karnataka and the all-State average per capita devolution was Rs. 1,180.
- Overall, the average increase in per capita devolution by the States to local bodies on the basis of SFC awards (after excluding Karnataka[1]), was around 62 per cent in the

[1]Karnataka is an outlier in average per capita devolution. During the five-year period from 2015-16 to 2019-20, the average per capita devolution varies between Rs. 146.78 in case of Odisha to Rs. 6,090.06 for Karnataka. Including the State in calculation of all States average distorts the average.

period between 2010-11 and 2019-20. This is way below the 221 per cent increase in per capita Finance Commission devolution over the same period. The low levels of recommended per capita SFC devolution and the wide variation across States makes the role of Finance Commissions more critical than what was originally envisaged in the Constitution.

Figure 6: Per Capita Devolution by the States to Local Bodies



Human Resources in Local Bodies

- Gram Panchayats perform agency functions in programmes funded by the Union Government like MGNREGA, Pradhan Mantri Awas Yojana and National Social Assistance Programme. The core functions of Gram Panchayats include functions of service delivery associated with the Eleventh Schedule of the Constitution.
- It has been observed that Gram Panchayats are concentrating more on the agency functions (as these programmes are well funded) and neglecting their own core functions.
- There has been a general concern that most of the local bodies in the country are suffering from lack of adequate quality of human resources. Except for a few states, there is no systemic focus to improve this aspect in panchayati raj institutions.

PriaSoft – Lack of Inter-Operability of accounts

- **The** PriaSoft system has a four-level structure of accounting code – Major Code, Minor Code, Scheme Code and Object Code – while there is a six-level accounting code for the Union and State Governments. There is no consistency in the mapping of

the accounting codes at any level of the heads. Table 4 gives a snapshot of a few examples of inconsistency in the mapping of major codes at Major Head level.

Table 4: Example of Difference in Account Classification

Accounting Classification for State and Union Accounts	Accounting Classification for Panchayats (PriaSoft)
2403 - Animal Husbandry 2404 - Dairy Development	2403 - Animal Husbandry, Dairying, Poultry and Fuel and Fodder
2210 - Medical and Public Health 2211- Family Welfare	2210 - Health and Family Welfare
0406 - Forestry and Wild Life	0406 - Forestry

Source: Priasoft Manual

Treatment of Excluded Areas

- Articles 243M and 243ZC of the Constitution stipulate that the Seventy-Third and Seventy-Fourth Amendments do not apply to the Scheduled Areas where the States have not enacted laws for establishing duly-elected panchayats and municipalities (Clause 1 of Article 244), to tribal areas (Clause (2) of Article 244) and areas specified in Clauses 2 and 3 of Article 243M and Clause 2 and 3 of Article 243ZC. Previous Finance Commissions have followed different approaches in treatment of these areas.

Box 2 : Grants by Finance Commissions	
FC-XI	Stipulated that its award for excluded areas should be made available to the respective States only after the enactment of relevant legislative measures for the extension of the provisions of the Seventy-Third and Seventy-Fourth Amendments to such areas.
FC-XII	Did not indicate separate grants for normal and excluded areas and left it to the States to distribute the grants between them, after noting that a Bill for amending the Sixth Schedule for extension of certain provisions of the Seventy-Third and Seventy-Fourth Amendments to these excluded areas was then under consideration in the Ministry of Home Affairs.
FC-XIII	Recommended grants of Rs. 1,357 crore for the excluded areas after considering Parts IX and IX-A, Articles 244, 280 and 275 of the Constitution.
FC-XIV	Recommended no grants.
FC-XV(2020-21)	Recommended grants for the Fifth and Sixth Schedule Areas.

During the stakeholder's consultation, the States took the position that an inclusive and uniform approach should be adopted for all three tiers within rural local bodies, as well as the Excluded Areas (Fifth Schedule and Sixth Schedule) to augment resources for providing basic services by similar local level entities.

Suggested Areas of Reforms

Accounts and Audit - Peer Learning across States

- Many States have been certifying and auditing accounts through the Directorate of Local Fund Audit (DLFA). However, the practice of involvement of external agents like chartered accountants is growing. More efforts in this direction are required across all State Governments.

Table 5 : Status of Accounts and Audit of some State

States	Status
Chhattisgarh	Preparation of annual account and audit of the urban local bodies are entrusted to chartered accountant firms and are placed before the general body of each urban local body for perusal.
Madhya Pradesh	Accounts of local bodies are prepared and certified by chartered accountants
Rajasthan	DLFA and chartered accountants certify the accounts of urban local bodies.
Sikkim	• The DLFA audits the accounts of the local bodies and submits a consolidated report to the Sikkim Legislative Assembly. • Chartered accountant appointed by the State Government certifies the accounts on a year-to-year basis.

Source: Compiled from inputs received from CAG

Timely Constitution of SFCs

- The Ministry should work with State Governments towards timely constitution of SFCs as laid down in the Constitution.

Devolution in Policy versus Devolution in Practice

- States like Bihar, Jharkhand, Uttar Pradesh, Punjab and Chhattisgarh have weak devolution in practice as compared to policy devolution. The Ministry of Panchayati Raj should play an advisory role to these States to ensure real and effective devolution of funds, functions and functionaries at the ground level.

Segregation between Core and Agency Functions

- While the cost of functionaries for agency functions of panchayati raj institutions should be borne by the sponsoring agencies, the cost of establishment for core functions should be borne by the panchayati raj institutions themselves through budgetary support from the States, internal revenues, grants from SFC and basic grants from Finance Commissions.
- State Governments must ensure continuous capacity building of personnel of panchayati raj institutions in coordination with the Ministries of Panchayati Raj and Rural Development.
- The benchmarks for annual appraisal of human resources should be decided in consultation with the Ministries of Panchayati Raj and Rural Development.
- These two ministries should facilitate States to develop a comprehensive competency framework for all staff at across hierarchies.

Panchayati Raj versus District Rural Development Agencies

- There is a need for administrative restructuring by merging the State-level Panchayati Raj Department and District Rural Development Agencies (DRDAs) into a single entity in order to ensure coordination and better management and implementation of schemes related to rural areas.
- In the light of the Seventy-Third Constitution Amendment Act, the DRDAs need to work under the overall control and supervision of the Zilla Parishads. DRDAs have already been merged with the Zilla Parishads in Karnataka, Kerala and Madhya Pradesh. In Himachal Pradesh, Odisha, Rajasthan, Uttar Pradesh and West Bengal, the chairman of Zilla Parishads is also the chairman of the DRDAs.

Consistent Standardised Accounting Codes across Union, States and Local Bodies

- There is a need to upgrade the basic accounting system of local bodies and serious work should begin with the long-term objective of integration of the accounts of revenue and expenditure of the local bodies with the Government Finance Statistics (GFS). The Ministry of Panchayati Raj has started this process and the initiative needs to be speeded up.

Initiatives by Ministry for Auditing and Integration of Accounts

- For the **Integrated Accounts Maintenance System**, the Ministry, in February 2020, constituted a Technical Committee for Harmonisation Head of Accounts comprising representatives from the Comptroller & Auditor General of India, Controller General of Accounts, National Informatics Centre, National Institute of Rural Development and Panchayati Raj.
- The Ministry has initiated Audit-Online for facilitating financial audit of accounts of panchayats by auditors (either State Auditor General or Local Fund Auditors). The Audit-Online application not only facilitates the auditing of accounts but also provides for maintaining audit records.
- The Audit Online was launched during a video conference with States held on 15 April 2020, during which the various actionable items with the timelines relating to roll-out of Audit-Online were discussed with a view to ensuring timely completion of audit of panchayati raj institutions. A draft Audit Manual has also been prepared by the Ministry and shared with State Governments.
- In order to ensure the success of the rollout of Audit-Online, States have been requested to make sure that the following actions are completed in a time-bound manner:
  - ◊ Closure of account books for 2019-20 in PRIASoft.
  - ◊ Registration of auditors on Audit Online.
  - ◊ Preparation of audit plan.
  - ◊ Completion of training of officials involved in audit.
  - ◊ Completion of entire exercise of online audit of panchayat accounts.

FC-XV recommendations in its final report

- The total size of the grant to local bodies is Rs. 4,36,361 crore for the period 2021-26. Of this, Rs. 2,36,805 crore is earmarked for rural local bodies, Rs. 1,21,055 crore for urban local bodies and Rs. 70,051 crore for health grants through local bodies. We have has also recommended Rs. 8,000 crore to States as grants for incubation of new cities and Rs. 450 crore for facilitating shared municipal services.
- To supplement the resources needed to fulfil national priorities, 60 per cent of the grants to rural local bodies is tied to supporting and strengthening the delivery of: (a) sanitation and maintenance of ODF status; and (b) drinking water, rain water harvesting and water recycling.

- Since every resident of India is eligible for the per capita grants, grants should be distributed to even those areas which are not required to have panchayats (Fifth and Sixth Schedule Areas and Excluded Areas), for augmenting their resources for providing basic services by similar local-level bodies.

Chapter 12

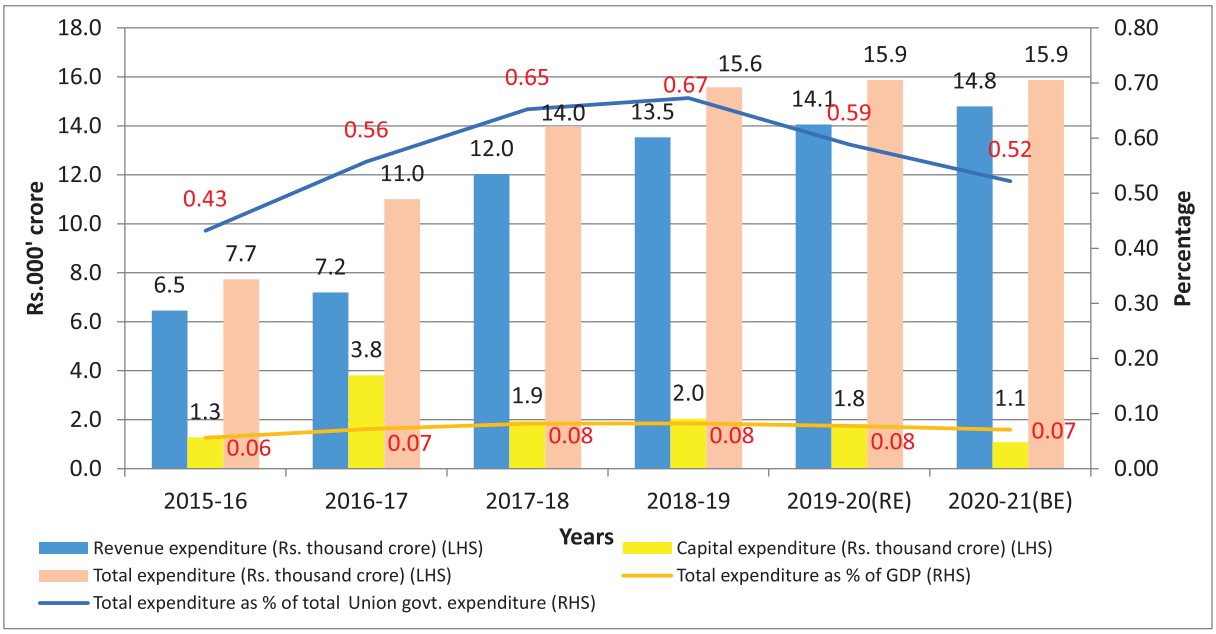
Ministry of Power

The Ministry of Power became an independent entity in July 1992; till then it was a department which was known as Ministry of Energy. The primary responsibility of the Ministry is the development of electrical energy in the country. To this end, the Ministry is involved in perspective planning, policy formulation, processing of project proposals, monitoring of the implementation of power projects, training and manpower development and the administration and enactment of legislation in regard to thermal, hydro power generation, transmission and distribution. The growth and health of the power sector is crucial for overall economic development as all sectors – from agriculture to services – are dependent on it. The Ministry is also responsible for the administration of the Electricity Act, 2003, and the Energy Conservation Act, 2001. Electricity is listed as a concurrent subject in the Seventh Schedule of the Constitution, which means the Ministry has to work in close collaboration with State Governments.

Overall Profile of the Ministry

1. In the Union Budget 2020-21, the Ministry of Power has been allocated around Rs. 16,000 crore which is 0.52 per cent of the Union Government's total budget of 2020-21 and 0.07 per cent of estimated gross domestic product (GDP). The year-wise allocation of Ministry of Power budget is given in Figure 1.

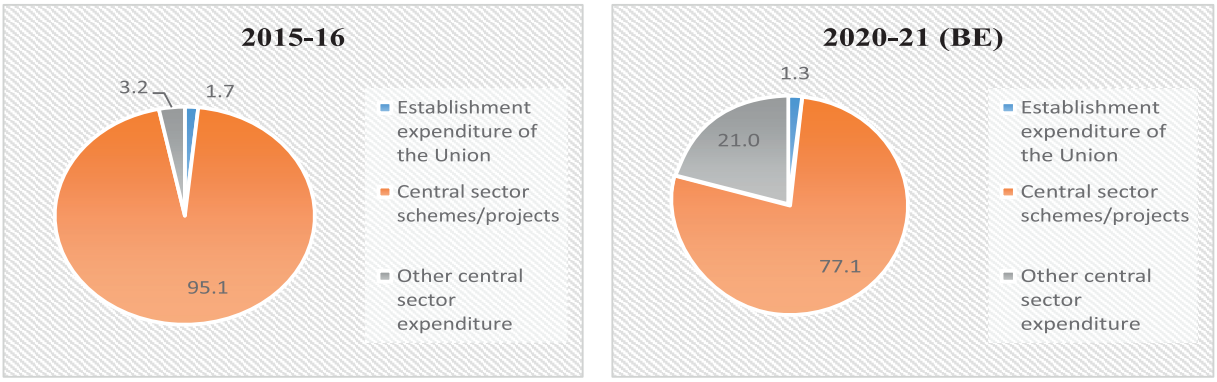
Figure 1: Total Expenditure of the Ministry



Source: Union Budgets

2. The share of other Central sector expenditure in total expenditure has increased from 3.2 per cent in 2015-16 to 21 per cent in 2020-21 (BE), while the establishment expenditure has decreased from 1.7 per cent to 1.3 per cent in 2020-21. The expenditure on Central sector schemes, which was 95.1 per cent in 2015-16, came down significantly to 77.7 per cent in 2020-21.

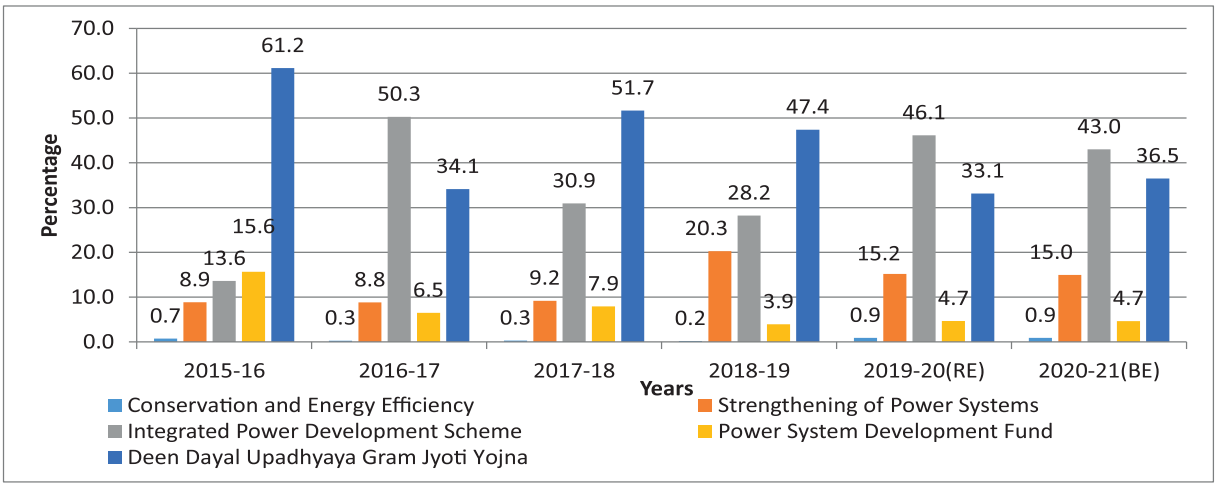
Figure 2: Head-wise Expenditure of Ministry as Percentage of Total Expenditure



Source: Union Budgets

3. The expenditure on Deendayal Upadhyaya Gram Jyoti Yojana has increased from 34.1 per cent in 2016-17 to 36.5 per cent in 2020-21 (BE). The expenditure on the Integrated Power Development Scheme has also increased from 30.9 per cent in 2017-18 to 43 per cent in 2020-21 (BE) in relation to total expenditure on Central Sector Schemes. The pattern of expenditure speaks volume about the direction in which the power sector is currently moving.

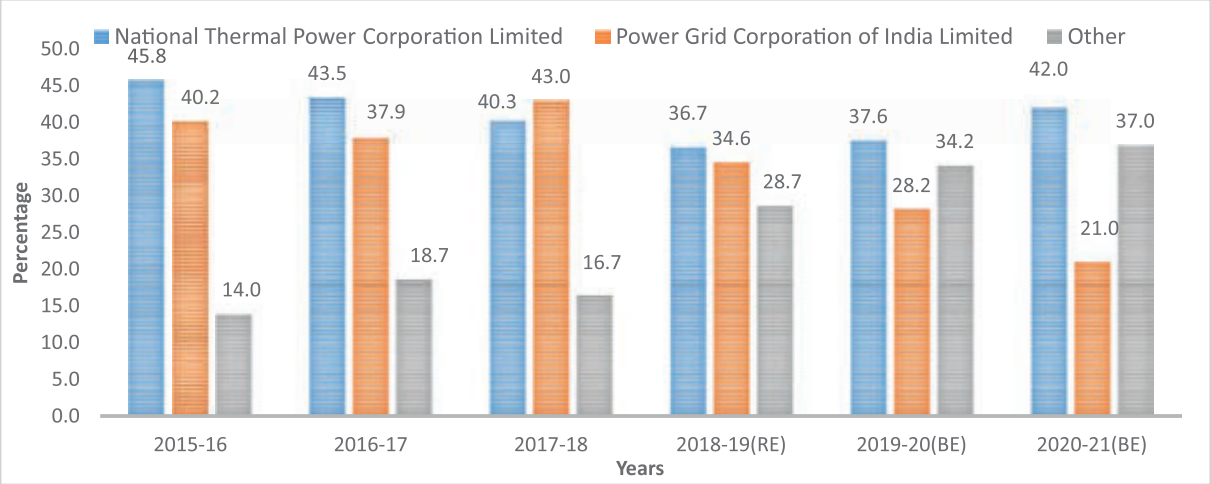
Figure 3: Expenditure in Central Sector Schemes/Projects as Percentage of Total Expenditure in Central Sector Schemes/Projects



Source: Union Budgets

4. The investment in two major public enterprises administered by the Ministry has decreased between 2015-16 and 2020-21 (BE). In the National Thermal Power Corporation Limited (NTPC), it has decreased from 45.8 per cent of total investment in 2015-16 to 42 per cent in 2020-21 (BE) and for the Power Grid Corporation of India (PGCIL) it has fallen from 40.2 per cent to 21 per cent in 2020-21 over the same period.

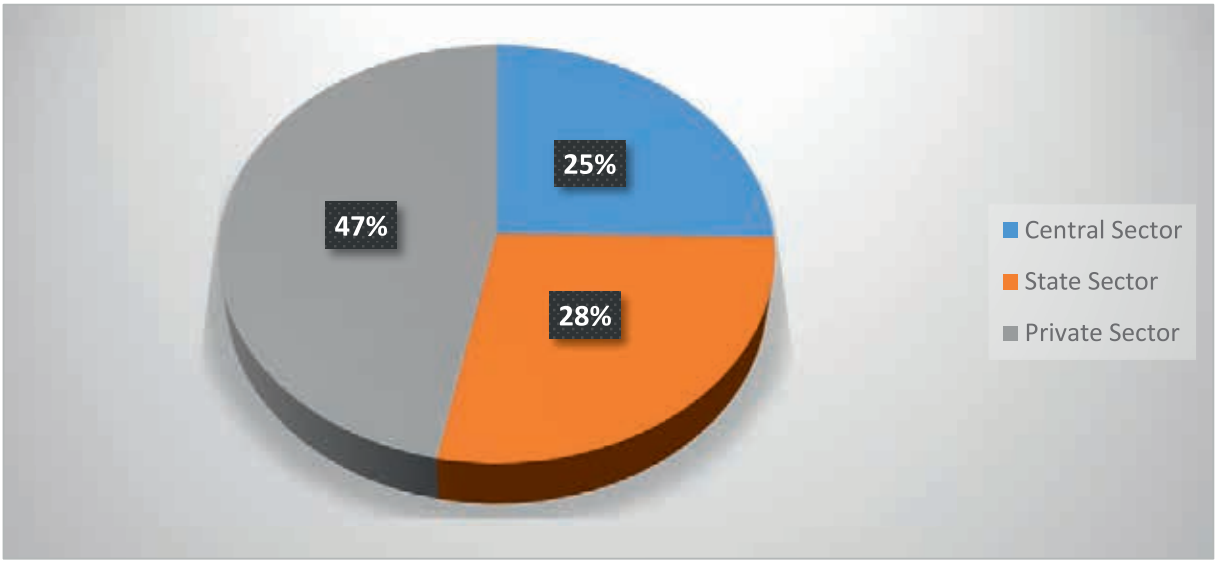
Figure 4: Details of Investment in Public Enterprises as Percentage of Total Investment



Source: Union Budgets

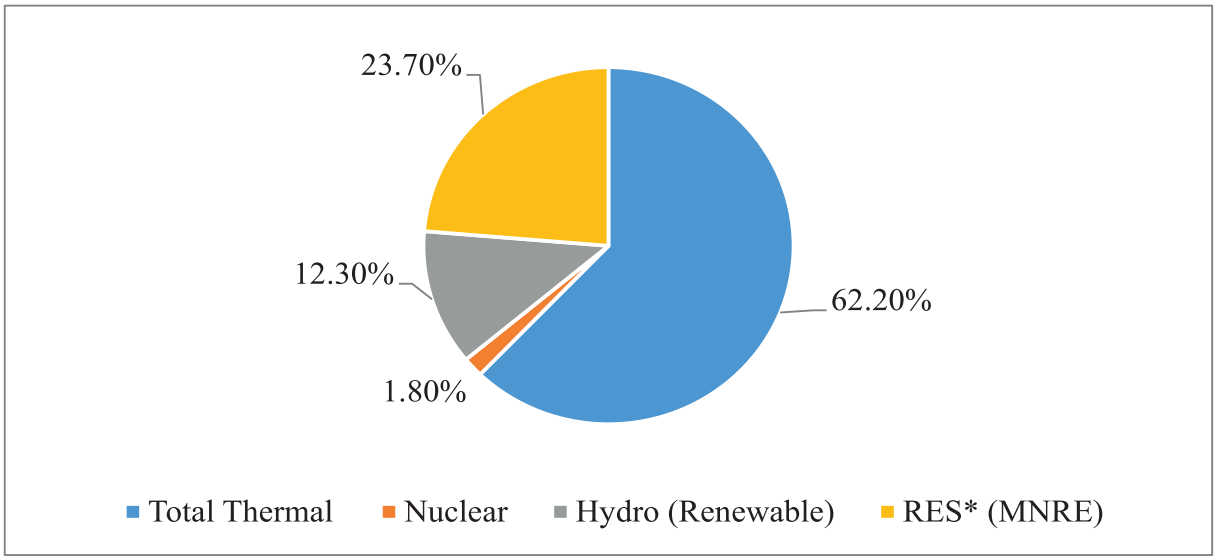
Note: The investment includes the internal and extra budgetary resources (IEBR) componentfor public sector undertakings.

Figure 5: Sector-wise Total Installed Capacity in Power (as on 31 July 2020)



Source: Central Electricity Authority

Figure 6: Fuel-wise Total Installed Capacity in Power (as on 31 July 2020)



Source: Central Electricity Authority (CEA)

Note: RES (Renewable Energy Sources) include Small Hydro Project, Biomass Gasifier, Biomass Power, Urban & Industrial Waste Power, Solar and Wind Energy.

Initiatives to Deal with Fallout of the Covid-19 Pandemic

5. The Covid-19 pandemic and the lockdowns resulted in a significant drop in power consumption. In the April-June 2020 period, the consumption of power declined by 18.3 per cent on a year-to-year basis. More importantly, there has been a steeper fall in industrial and commercial consumption – two major revenue earners for the distribution companies (DISCOMs). There is clearly a longer term impact of the Covid-related slowdown on electricity offtake, adversely affecting power demand and hence revenues.

6. The pandemic has had a serious negative impact on the resources of both Union and State Governments. To enhance the revenues of the State Governments, the Union Government provided an additional borrowing limit of up to 2 per cent of gross state domestic product (GSDP) in the current fiscal year (2020-21), out of which 0.25 per cent was linked to State Governments undertaking power sector reforms in this fiscal year on the lines recommended by us in our Report for 2020-21:

   a. an additional borrowing limit of 0.05 per cent of its GSDP has been allowed for reduction in aggregate technical & commercial losses (AT&C) in a State as per targets.

   b. an additional borrowing limit of 0.05 per cent of its GSDP has been allowed for reduction in the gap between average cost of supply and average revenue

realised (ACS-ARR gap) in a State as per targets.

c. an additional borrowing limit of 0.15 per cent of its GSDP has been allowed for introduction of direct benefit transfer of subsidy amount to all farmers in a State in lieu of free electricity given to them. In order to become eligible for this, the State Government must (a) formulate the DBT scheme and (b) implement this scheme at least in one district by 31 December 2020.

7. In addition, the Government of India decided to make an infusion of liquidity of Rs. 90,000 core through the Power Finance Corporation (PFC) and Rural Electrification Corporation (REC) as a part of the Atmanirbhar Bharat Abhiyan. The loans will be given against State Government guarantees in two equal instalments and the amount will be used by DISCOMs exclusively to pay their dues to transmission and generation companies. Under this intervention, REC and PFC would extend special long-term transition loans up to ten years to DISCOMs that have headroom for further borrowing within the working capital limits prescribed under the Ujjwal DISCOM Assurance Yojana (UDAY) scheme. A provision has also been made for DISCOMs that do not have this headroom.

Challenges

Thermal power generation

- Thermal power includes diesel, gas and coal-based electricity generation, which accounts for 62 per cent of total electricity generation capacity in India. The main challenges in this sector are:
  - ◊ The close relationship between consumption of electric energy and level of economic activity is well understood. With the onset of the pandemic, power demand has fallen dramatically in the industrial and commercial sectors that largely source power from thermal power plants.
  - ◊ The thermal power sector is being increasingly affected by non-availability of fuel. A significant gas-based capacity of more than 20,000 MW is idle due to non-availability of gas, while supply of coal is only around 65 per cent of actual requirement by coal-based thermal plants. This is leading to increased dependence on imported coal, which, in turn, results in higher cost of power generation.
  - ◊ Past efforts at providing coal linkages to thermal power plants have not been successful. Though an announcement has been made recently to auction forty-one new coal blocks to private players, there has to be a fundamentally new

approach to address this issue.

- ◊ The stress in the financial sector, along with the limits on bank exposure to certain sectors, has reduced the availability of funds. Further, promoters of thermal power generation projects are finding it difficult to bring in equity and service debt.
- ◊ Greenhouse gases emitted by the thermal sector are very harmful for the environment. Measures to mitigate this are costly, as exemplified by the recent actions by the power plants to comply with new emission standards by 2022. This entails compulsory installation of flue gas desulphurisation (FGD) system, which comes with a high cost.
- ◊ Years of populist tariff schemes, mounting AT&C losses and operational inefficiencies have adversely affected the financial health of State DISCOMs. This has not only suppressed demand, but also led to delayed payment of dues by DISCOMs. This has, in turn, strained the finances of thermal power plants.
- ◊ Low plant efficiency not only leads to burning of more coal in the plants but also adds to the volume of CO2 produced. Thermal plants being the mainstay of power generation in India, there is urgent need to replace inefficient plants through a modernisation programme.

Distribution sector

- The distribution sector has been the weakest link in the entire power value chain and in most States the distribution-related reforms are incomplete. This segment has been grappling for a long time with questions of financial sustainability on account of below-cost tariffs to different consumer groups, supply of un-metered, free electricity to agriculture, State Governments not providing the promised subsidies to the utilities, high AT&C losses and poor regulatory governance.
- The impact of the UDAY scheme on state finances has been marginal and only a few States have been able to eliminate the ACS-ARR gap and meet the target of reducing AT&C losses to 15 per cent in 2019-20. In 2018-19, the ACS-ARR gap remained high at 72 paise per kwh and the national AT&C losses was 22.03 per cent.
- State Governments have been lending to the power sector mainly to fund the capital expenditure of transmission and distribution companies, as well as to cover the mounting financial losses accrued by them. In addition to direct lending, State Governments have been providing support to the State DISCOMs in the form of grants

and subsidies. State Governments also provide guarantees for the borrowings of DISCOMs from financial institutions. Given that the State Governments are guarantors, these resultant contingent liabilities are a risk to state finances, owing to the large outstanding debt and rising losses of DISCOMs. The aggregate losses (PAT on subsidy received basis) for all the utilities increased from Rs. 33,594 crore in 2017-18 to Rs. 61,360 crore in 2018-19. The total borrowings of the DISCOMs on 31 March 2019 stood at Rs. 4,78,452 crore, of which borrowings from State Governments is Rs. 91,228 crore.

- Attempts at reforming the sector have been primarily focused on the distribution end – control of AT&C loss and tariff rationalisation. At no point of time has any attempt been made to reform the inefficiencies of the upstream segment – coal production and transportation, cost of power generation and evacuation, etc. With the increasing cost of coal, transmission and taxes/duties, controlling AT&C loss and tariff rationalisation has not had much of an impact on the financials of the DISCOMs.
- These inefficiencies are the result of the cost-plus regime prevalent in almost all upstream activities such as coal production, coal transportation, transmission of power, etc. Even though the power generation sector has been delicensed and opened up to competition, it is still dominated by public sector entities which function on a cost-plus basis. All this affects the finances of the DISCOMs.
- These distortions in the competitive power sector landscape are detrimental to the consumers' interest. There is a need to move away from this cost-plus regime in generation, transmission and coal production. All policies and regulations in the sector should be ownership-neutral and efficiency-centric.

Suggested Areas of Reforms

- In our main report, we have noted that the measures taken by the Union Government in the course of addressing the pandemic have already set in a process of incentivising the States to improve the distribution sector. These, along with the proposed amendments to the Electricity Act 2003 and the likely approval of the New Tariff Policy, will further provide momentum to the reform agenda. These measures need to be continued as the attendant structural reforms are expected to be completed over the next four-five years.
- Accordingly, we have recommended, in Chapter 10 of Volume I, an extra annual borrowing space for the States, of the magnitude of 0.5 per cent of their GSDP for the each of the first four years of the award period, that is from 2021-22 to 2024-25.

- As an entry-level condition it has been recommended that a State will become eligible for this extra borrowing, once it ensures and certifies that all DISCOMs within the state have up-to-date audited accounts. This implies that in determining the eligibility of the State in the year (t), all the DISCOMs in the state should have filed their consolidated financial statements for the financial year (t-1) as per the statutory requirements.
- In addition to this entry-level condition, we have proposed to continue with the three indicators that have been mandated by the Ministry of Finance for a State to become eligible for extra borrowings for 2020-21: (i) reduction in AT&C losses; (ii) reduction in ACS-ARR gap; (iii) reduction in payment of cash subsidy by adopting DBT. All these three indicators were also identified by us in our first report. The third indicator has been expanded to include reduction in tariff subsidy as a percentage of revenue from the sale of power (including tariff subsidy booked). This will measure the extent to which State Governments are providing subsidy to the power sector. We have added a fourth indicator that looks at per capita consumption of units through metered supply that yield actual revenue, including subsidies on demand side made through DBT, and excluding supply side transfers through the State budget for unmetered supply.

Five-year Road Map for Reforms[1]

Reforms in Distribution

- The three performance indicators identified by us will create the right incentive to increase metered energy for which revenue has actually been collected. Non-metered supply poses a problem for accurate measurement and the possibility of including figures that do not actually represent increased energy offtake but merely a juggling of T&D losses. Metered supply is also at the core of DBT of subsidies because such direct transfer of subsidy for consumption based on metered supply gets automatically captured. Supply of energy that is not metered or supplied free gets excluded unless there is an up-front payment of subsidy. The availability of up-to-date audited accounts will enable the capture of this vital information that is central to the three performance indicators identified.
- There is a need to progressively replace existing electricity meters with operational smart meters, including smart prepaid meters. This will help DISCOMs understand and manage their load better, while also reducing metering and billing losses and theft, while facilitating distributed rooftop solar and storage.

[1]The Commission gratefully acknowledges the valuable inputs of Shri Rakesh Nath, ex-Member Appellate Tribunal for Electricity and ex-Chairperson, Central Electricity Authority

- The distribution companies are saddled with huge losses on account of long-term power purchase agreements (PPA) with costly and inefficient thermal power plants. These inefficient, highly polluting, end-of-life coal plants need to be closed down. This will result in huge savings from fixed charge payment for such assets and will also reduce pollution and carbon footprints. DISCOMs need to stop entering new long-term PPAs with costly, subsidised thermal plants which are still on the drawing board or where financial closure has not been achieved.
- The Electricity Act 2003 mandates that tariffs should reflect costs. However, due to several factors – including strong political vote-buying pressure for low tariffs, perceptions of DISCOMs' inefficiencies and disagreements on the accuracy of subsidy claims – regulators have generally failed to allow prices to rise with the inflationary impact of rising power supply costs over time. A few States have not increased their tariffs at all in the last few years. There is need for timely revision of tariffs by State Governments.
- There is a need to move quickly to the separation of the content (electricity supply) and carriage (distribution network) business of distribution entities. This will make DISCOMs aggregators of power and owners of the distribution network. Such separation will allow multiple suppliers in an area to offer choice to consumers. Separation of network and supply in the right manner will help in capturing some supply risk and limit high-cost incremental purchases by commercial/industrial consumers.
- Carriage involvement of the private sector is integral to any reform in the distribution sector. The acceptable forms of private sector participation in distribution are the franchisee model and privatisation of distribution where the private entity obtains a distribution license. A public-private-partnership (PPP) model where the State keeps 49 per cent equity and the private company owns 51 per cent was adopted in Delhi and has been successful in reducing the AT&C losses and improving the operational performance dramatically. However, a different strategy has to be adopted for rural areas. Towns with population of more than one million account for most of total consumption of electricity in the country. Many of these towns have high AT&C losses and poor distribution networks, affecting the reliability and quality of power supply to the consumers. Privatisation or adopting a franchisee model or sub-licensee model in such towns will make commercial sense for the existing DISCOMs and the State Government.
- The tariff structure of most of the utilities today have complex categories and tariff

slabs which do not have much logical reasoning but are largely driven by social and political priorities. These multiple slabs have created multiple consumer categories, resulting in a very complex structure, which leads to significant inefficiencies. Too many tariff slabs, which may not necessarily reflect the cost of supply, lead to much higher administrative costs for monitoring consumers. Multiple slabs coupled with cross subsidies also incentivise the consumer to indulge in manipulation to maximise the subsidy benefits.

Strategy in Rural Area Distribution

- Electricity supply to agriculture accounts for about 20 per cent of total electricity consumption in India and is either free or heavily subsidised. The financial gap is partly subsidised by the State Government or by cross subsidy by high-end consumers through retail supply tariff. The subsidies to agriculture have been rising and have doubled in last five years. The subsidy by State Governments, paid at nominal rates, does not cover the actual cost of supply.
- Agriculture supply can be provided by installing solar plants developed by entrepreneurs on vacant and unused land in the nearby DISCOM sub-stations or in the nearby wastelands at much lower cost. This will not only result in saving but also in reducing T&D losses and meeting the renewable purchase obligation (RPO) targets of the DISCOMs. This will help in reducing losses of the DISCOMs; lowering the subsidy burden on State Government and cross subsidising by industrial and commercial consumers to agriculture; meeting RPO obligations and reducing greenhouse gas emissions.
- Even though connectivity has been provided to all villages, the continuity and quality of supply to rural households and rural industry is still an issue. There is no incentive to DISCOMs to ensure uninterrupted supply in rural areas, as the cost of supply to rural areas is more than Rs 7 per kWh but the recovery is much less. It is important to reduce the cost of supply to rural areas. Development of decentralised generation by renewable energy connected to 33/66 kV sub-stations in the vicinity of rural areas by entrepreneurs should be encouraged. There is a need to set a target that in the next five years 50 per cent of rural energy consumption (10 per cent every year) may be supplied by electricity from renewable energy resources through decentralised generation.

Deepening Power Markets to relieve DISCOMs distress

- The country has two power exchanges – India Energy Exchange Ltd and Power Exchange India Ltd – where price is discovered by double-sided auctions. These have contributed to better utilisation of national resources and reduced unmet energy and consequent economic losses. Over the years, the prices discovered in the exchanges have been lower than prices in bilateral contracts. However, the total energy transacted at these exchanges is still very low. In the last five years, the total short term trade has remained constant at 10 per cent of the total generation but the volume traded has grown from 2.9 per cent to 4.1 per cent of total generation. Power markets in developed economies trade 30-40 per cent of total demand. The major transactions in the country are through long-term PPAs, which burden DISCOMs with fixed charges of unutilised capacity. There is, therefore, a strong need to increase the share of short-term markets and exchange volumes.

Developing Fuel Markets

- The cost of power procurement is about 65-75 per cent of the total annual revenue requirement of a distribution licensee. The cost of fuel is a major component of the overall procurement cost. Coal linkages have been given to only power projects with long-term PPAs. It would be necessary to develop fuel markets which can align with power market operations and facilitate the supply of coal and gas, as the case may be, to power generating stations wanting to enter into shorter duration contracts on term-ahead, day-ahead and intra-day basis. An electronic bidding platform for coal may be considered to enable clearing house operations and enable short-term trades under market clearing prices. As an immediate step, progressive decoupling of coal linkages with long-term PPAs would be necessary to enable power plants with untied capacity to participate in the short-term power market and supply power at competitive rates.
- Market dynamics warrant that the operations of power exchanges will multiply as DISCOMs will economise their cost of power procurement and benefit from the marginal cost of generation discovered through the market. Aligning fuel supplies to the short-term power market will enable generators to respond to demand dynamics impacted by the uncertain nature of generation from renewable sources, supply imbalances and changes in aggregate demand.

Development of Transmission System through Tariff Based Competitive Bidding

- In order to bring in competition in transmission, the development of an inter-State transmission system is taking place through tariff-based competitive bidding (TBCB), except for transmission system identified as being of strategic importance, which is assigned to POWERGRID. POWERGRID also participates in the competitive bidding along with private developers and this concept should be encouraged so that all assets get formed on market-based pricing, both at State and Union levels. Development of intra-State transmission systems is generally being carried out by the State-owned transmission companies. It is recommended that the States should also develop the intra-State transmission system through TBCB.

Regulatory Measures

- Independence, transparency, predictability, timely disposal of case and enforcement of decision and institutional capability are the key attributes of a regulatory authority. One of the objectives of the Electricity Act was to separate the regulatory responsibilities from the government. There is a perception among the stakeholders that the State electricity regulators are not balancing the interests of generating companies and state distribution licensee and that the State Government is exercising some influence in their decisions. Large regulatory assets have been created in many DISCOMs by the State Electricity Regulatory Commissions (SERCs) denying fair retail supply tariff, after having accepted the legitimate expenditure, to avoid tariff rise. Also, the increase in number of private players in the sector has resulted in an increase in appeals being filed in the appellate tribunal.
- There is a need to separate the adjudication function of electricity regulators from the regulatory and tariff determination role and vest this in a separate Electricity Dispute Resolution Authority. The selection of all members of the regulatory commissions, including the members of the SERCs, needs to be modified to introduce an element of impartiality in their selection so that the professionals with domain knowledge are selected. This is under consideration in the draft bill to amend the Electricity Act.

Chapter 13

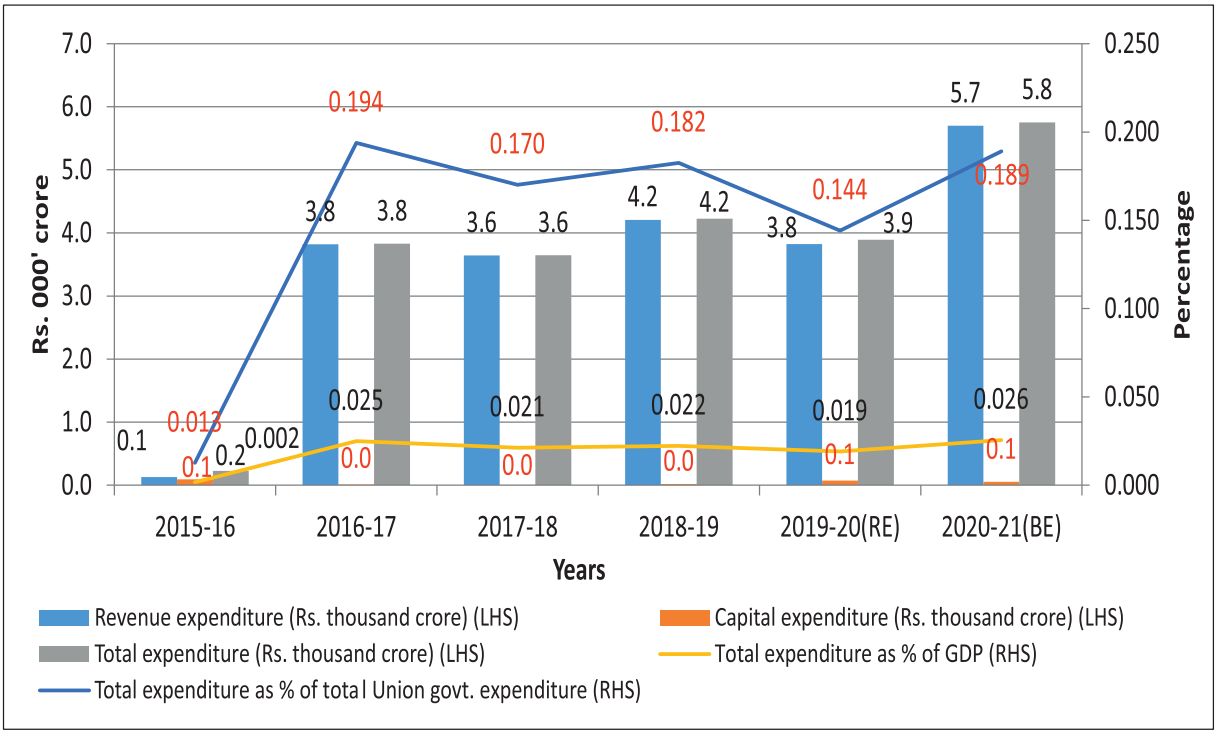
Ministry of New and Renewable Energy

The broad aim of the Ministry of New and Renewable Energy is to develop and deploy new and renewable energy in order to supplement the energy requirements of the country. The role of the Ministry has been assuming increasing significance in recent times because of the growing concern for the country's energy security. India has vowed to become a global leader in the solar energy space by 2030. It has already attained fourth and fifth positions globally in installed capacity of wind and solar power installed capacities and is now ranked fifth globally in overall installed renewable energy capacity.

Overall Profile of the Ministry

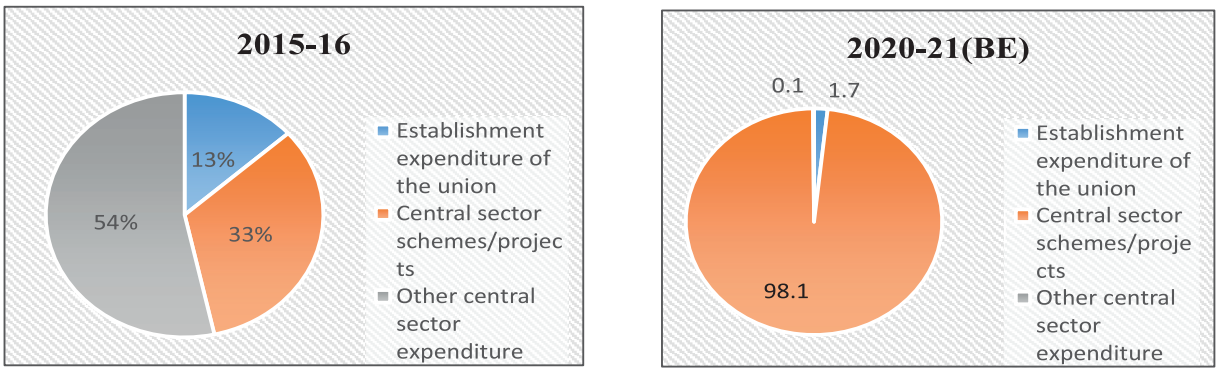
1. The Ministry of New and Renewable Energy (MNRE) has the overall responsibility of giving a boost to renewable sources of energy. The Union Budget 2020-21 allocated around Rs. 6,000 crore to the Ministry, which is 0.19 per cent of the Union Government's total budget of 2020-21 and 0.1 per cent of estimated GDP. The year-wise allocation of MNRE budget is given below in Figure 1.

Figure 1: Total Expenditure of the Ministry



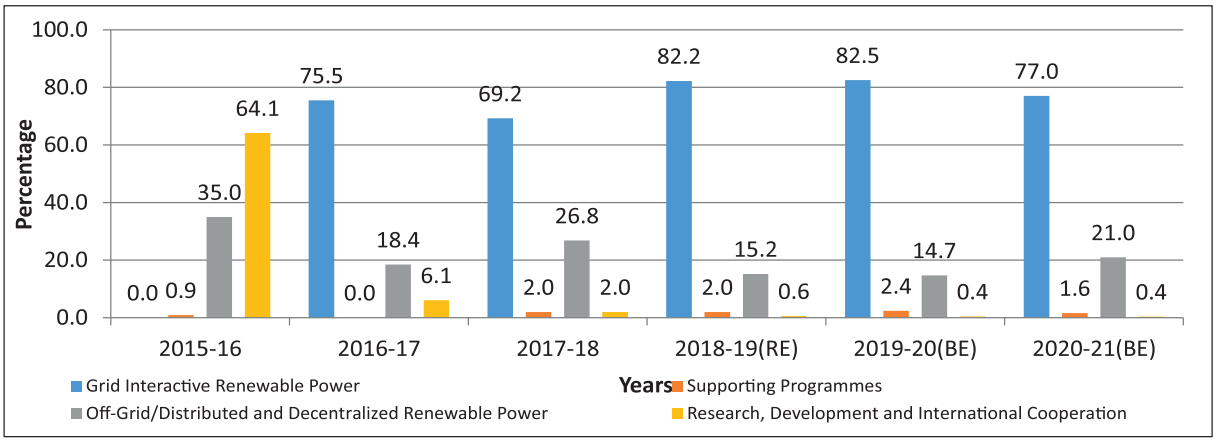
Source: Union Budgets

Figure 2: Head-wise Expenditure of the Ministry as Percentage to Total Expenditure (2015-16 and 2020-21)



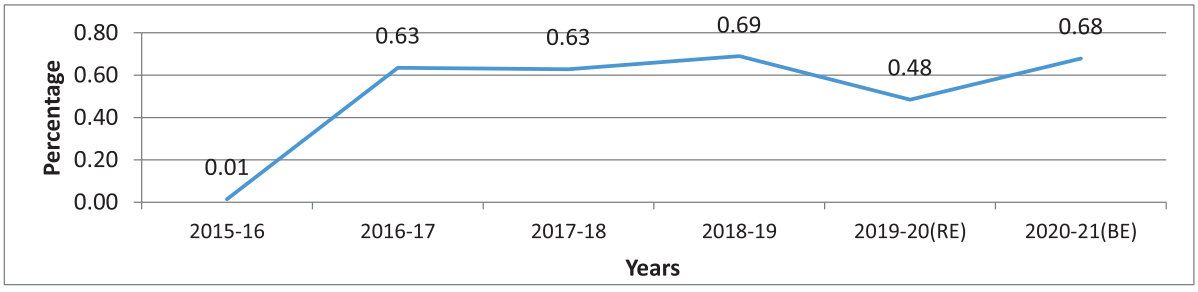
Source: Union Budgets

Figure 3: Expenditure in Central Sector Schemes/Projects as a Percentage of Total Expenditure in Central Sector Schemes/Projects



Source: Union Budgets

Figure 4: Expenditure on Central Sector Schemes/Projects by MNRE as Percentage of Total Union Expenditure on Central Sector Schemes



Source: Union Budgets

Note : Though the percentage-wise expenditure, when compared to total Union expenditure, is low, it is interesting to see the attention this segment has received post 2015-16.

Commitment to Renewable Power

2. Buoyed by the growth in the clean energy sector, the Government of India, in its submission to the United Nations Framework Convention on Climate Change (UNFCCC) in Intended Nationally Determined Contribution (INDC), has stated that India will achieve 40 per cent cumulative electric power capacity from non-fossil fuel-based energy resources by 2030. This will be done through transfer of technology and with the help of low-cost international finance, including from the Green Climate Fund.

Table 1: Renewable Power – Global Perspective

Country	Capacity (GW)	% Share
World	**1081**	
1. China	334	30.90
2. United States	161	14.90
3. Germany	107	9.90
4. India	**61**	**5.64**
5. Japan	54	5.00

Source: MNRE

Increasing Relevance of Hydropower

3. Till March 2019, only hydro projects up to 25 MW capacity were considered as renewables and were eligible for various incentives like financial assistance and cheaper credit. In March 2019, these incentives became applicable to hydro projects above 25 MW as well. This also paved the way for adding hydro capacities of about 45 GW to the renewable energy basket of 74 GW, which includes solar, wind and small hydro.

4. Significant reforms made in recent years include the Hydro Power Policy of 2008, which encouraged private sector participation in hydro power generation and the National Tariff Policy 2016 on frequency response markets and extended certainty of PPAs. Some of these policy proposals include new ancillary service markets, separate purchase obligation benefits and more integrated planning.

5. Some of the key challenges in the hydro power sector include the high cost of projects, which are generally located in remote areas, technical challenges due to fragile geology, issues related to land acquisition, environment and forests and the rehabilitation and resettlement of displaced people.

6. Table 2 gives the basin-wise assessed potential of hydro power in the country. In addition, fifty-six pumped storage projects have also been identified with potential installed capacity of 94,000 MW. Further, hydro potential from small, mini and micro schemes has been estimated as 6,782 MW from 1,512 sites. In sum, India is endowed with hydro power potential of about 2,50,000 MW, according to the Forty-Third Report of Standing Committee on Energy, 2018-19.

Table 2: Basin/Rivers Probable Installed Capacity (MW) (As on 30-06-2020)	
Indus Basin	33832
Ganga Basin	20711
Central Indian River System	4152
Western Flowing Rivers of Southern India	9430
Eastern Flowing Rivers of Southern India	14511
Brahmaputra Basin	66065
Total	**148701**

Source: Central Electricity Authority

7. According to the National Electricity Plan (2022-27), the electricity requirement in 2027 is expected to be 2,047 BU and the peaking demand 298.77 GW. Keeping this in mind, the capacity of hydro power will need to be enhanced by 46,420 MW. This additional capacity should be preferably from flexible sources of generation to meet the peaking, balancing and ramping requirement of the grid.

8. As part of India's INDC for climate change, 40 per cent of total generation is to come from non-fossil sources by 2030. This expansion of renewable energy will require balancing power of grid stability which can be provided by hydro power.

Challenges

Inordinate delays in payments from State DISCOMs

- State-owned DISCOMs delay payments for the power purchased by them from renewable energy generating companies. This has adversely affected the investment climate, causing a slowdown in the credit flow to projects in the sector. If this is not arrested immediately, achievement of renewable energy targets may suffer, severely damaging one of the most important initiatives to meet the challenge of climate change.

Non-compliance with renewable purchase obligation

- RPO is the single most important policy instrument for increasing the share of renewables in the overall electricity mix. RPO compliance is central to achieving the obligation under the Paris Climate Agreement. The RPO trajectory, as notified by the Ministry of Power, requires 21 per cent share of renewables by the year 2022. However, currently the share is only around 9 per cent, mainly due to RPO non-compliance by a large number of States. Regulatory provisions for ensuring RPO compliance provide for invoking penal provisions by the respective SERCs. However, these have not yielded the desired results.

Emissions Level (Paris Climate Change Accord, 2015)

- India has achieved reduction of 21 per cent in the emission intensity of its GDP between 2005 and 2014, thereby meeting its pre-2020 voluntary target. Further, it is required to reduce the emissions intensity of GDP by 33 to 35 percent by 2030 from the 2005 level.

Intermittency of renewable power

- The power from renewable energy sources is prone to frequent fluctuations, forcing the grid operator to make multiple adjustments in operations. This also requires flexible reserve capacity to maintain the stability of the grid.

Policy needs to be more consistent

- An emerging sector that seeks to attract global investors cannot have ad hoc and abrupt policy changes. An example is that of the solar module manufacturing industry. Import duties have been applied and then removed; currently, no duty is being levied on imported modules but a proposal to do so is under consideration.

Underperforming DISCOMs

- The most recent attempt to reform DISCOMs, UDAY, has not yielded the desired results. The financial stress that DISCOMs are in has meant delays in payments for developers, cancellation of auctions and lack of enforcement of contracts. All this dampens investor confidence and interest of developers.

Lack of encouragement of rooftop solar

- Rooftop solar has failed to make any headway in the current market, which is skewed towards large-scale renewable energy. There is a preference for commercial and industrial installations while residential consumers, who hold immense potential, account for less than 20 per cent of the total installed capacity. The country is aiming for a 40 GW capacity by 2022, but till December 2018, only 1,889 MW of grid-connected solar rooftop systems had been installed.

Distributed energy pushed to the back-burner

- Almost all the schemes that have been floated for ensuring access to energy for the people, such as SAUBAGHYA, are tied to extending the grid and connecting un-electrified households to centralised distribution and transmission networks. The CSE analysis shows that grid connectivity does not lead to availability of electricity or consistent supply. The focus on grid-based power supply to ensure universal access needs to be reconsidered.

Suggested Areas of Reforms

Create infrastructure for renewables

- States need to be given support for creating infrastructure for renewables, including Renewable Energy Management Centres and renewable power evacuation systems. The on-going Green Energy Corridor projects seek creation of grid infrastructure for renewable power evacuation.

Ensure contract enforcement

- An increasing number of State Governments are attempting to renegotiate PPAs with solar power developers. This hurts the country's ability to attract investments and also creates a perception of uncertainty over the sanctity of legal contracts. The creation of an Electricity Contract Enforcement Authority (ECEA) to deal with contractual disputes in the power sector as a whole will also help the renewable sector to tackle such issues.

Encourage rooftop solar systems

- States should encourage distributed solar rooftop deployments by creating policy

certainty and an environment where self-generation is promoted. This will help reduce system-wide AT&C losses and reduce the burden of funding massive grid transmission and distribution infrastructure that is needed to be installed over the coming one or two decades as electricity demand doubles. This will also help in setting up mini-grids.

Boost adoption of solar pumps

- The Government must encourage the use of solar pumps under the PM-KUSUM (Pradhan Mantri Krishi Urja Suraksha evam Utthan Mahabhiyan) scheme. This will help States in curbing losses by reducing the aggregate cross subsidy burden on other high-paying customer categories. It will also bring down cost of power procurement by DISCOMs and transmission losses by building domestic distributed generation capacity at the end of the grid.

Encourage 'smart grids'

- Such grids use communications infrastructure, control systems and information technology for efficient delivery.

Invest in developing inexpensive energy-storage capacity

- Indigenous research can improve upon existing technology in terms of both cost and performance. Policy support can drive scale for the battery industry. The energy storage infrastructure in renewable resources in States needs to be ramped up in order to address variability of renewables. Energy shortage will be a key element in enabling the transition to a greater share of renewables in the electricity mix. States would require support for setting up energy storage capacity in conjunction with renewable power and also for promoting indigenous manufacturing of storage technologies.

Incentivise States for undertaking waste to energy projects with different waste substrates

- Waste to Energy projects will be taken up in around 100 Class A cities to address waste management as well as energy demand. The Union Government may consider providing support for creating an incentive grant to these cities.

Reassess the hydro power potential in the country

- The last assessment of hydro power potential was conducted in 1987. There is now

robust scientific data available on updated hydrological and topographical information, and information relating to land use and submergence. The north-eastern and Himalayan States have huge potential for hydro power generation and there is scope for external assistance programme funding which can help in increasing the non-tax revenue of States as well as reducing their need for revenue-deficit grants. The total potential for renewable energy in the North-eastern region from solar, small hydro and bio-energy is estimated at 65,838 MW, a substantial part of which is suitable for grid-connected applications. The installed capacity as of December 2019 was only 415 MW.

Chapter 14

Ministry of Rural Development

Rural development is about both economic betterment of people and greater social transformation. Increased participation of people in rural development programmes, decentralisation of planning, better enforcement of land reforms and greater access to credit will help in providing people in rural areas with better prospects.

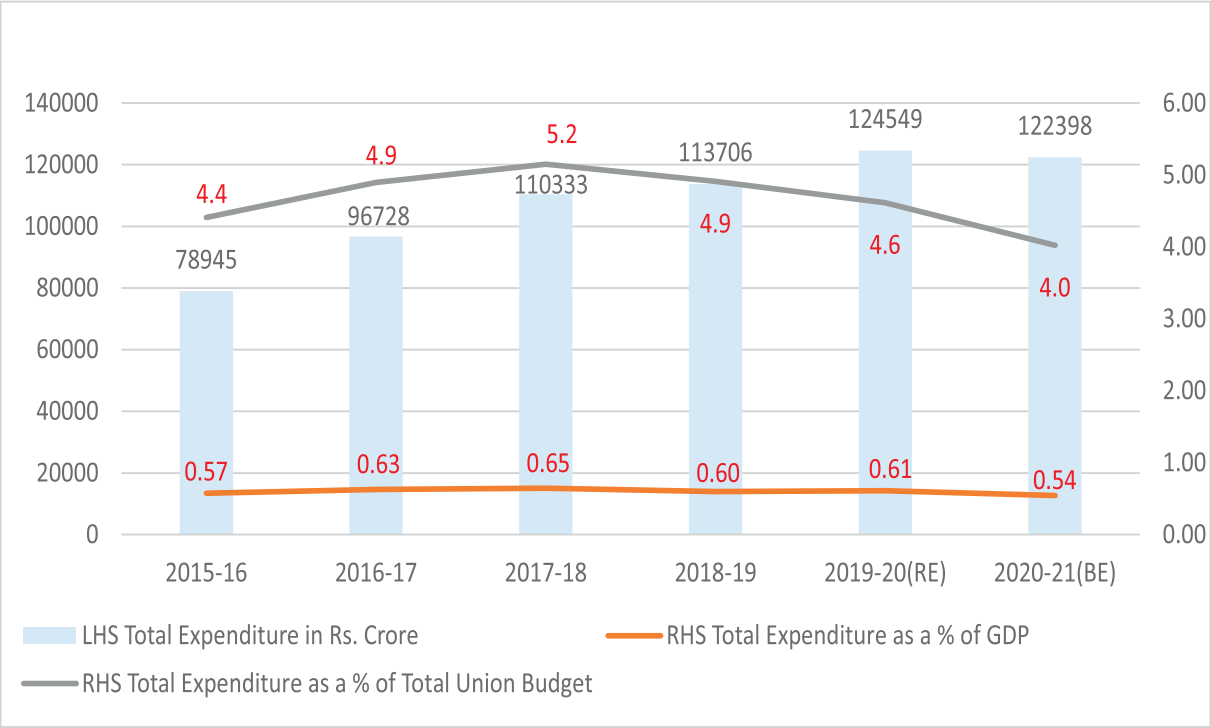
The Ministry of Rural Development has played a pivotal role in meeting the SDG-1 of poverty reduction, connectivity through rural roads, social protection for senior citizens/ widows/disabled and promoting accountability and transparency of panchayats through PriaSoft software.

Reducing inter-state disparity in rural roads network, maintenance of rural assets, standardising social security, empowering panchayats through enhancing human capabilities and digitisation of land records should be the development strategy for the Ministry to meet the broader objective of inclusive growth.

Overall Profile of the Ministry

1. The Ministry of Rural Development (MoRD) comprises of two departments – Department of Rural Development and Department of Land Resources. The objective of the Ministry is sustainable and inclusive growth of rural India through a multi-pronged strategy for eradication of poverty by increasing livelihoods opportunities, providing social safety nets and developing infrastructure for growth. This is expected to improve the quality of life in rural India and to correct developmental imbalances, aiming, in the process, to reach out to most disadvantaged sections of the society.
2. The Union Budget, 2020-21, allocated Rs. 1,22,398 crore to the Ministry, which is the fifth highest allocation for the financial year. This is 4 per cent of the Union Government's total budget and 0.54 per cent of estimated gross domestic product (GDP). The year-wise allocation of the Ministry is given in Figure 1.

Figure 1: Expenditure of Ministry of Rural Development



Source: Union Budget

3. The Department of Rural Development accounts for 98 per cent of the MoRD expenditure, and the Department of Land Resources only 2 per cent. This trend has been broadly consistent over the past five years. As much as 95-99 per cent of the expenditure of both the departments is on Centrally sponsored schemes (CSS), as Table 1 shows. Almost 35-40 per cent of total Union Government expenditure on CSS is on the department's CSS (Table 2).

Table 1: Average Head-Wise Expenditure (2015-16 to 2020-21, BE)

Expenditure Heads (in %)	Department of Rural Development	Department of Land Resources
Establishment expenditure	0.04	0.56
Central sector schemes/projects	0.46	4.49
Centrally sponsored schemes	99.51	94.96

Source: Union Budget

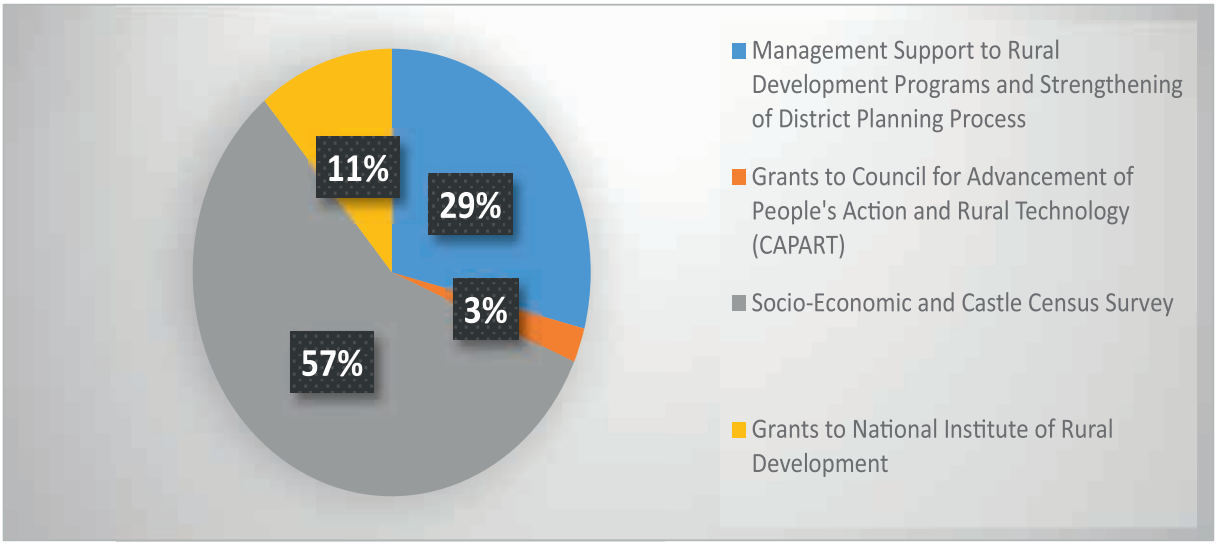
Table 2: Department of Rural Development Expenditure on Central Sector and Centrally Sponsored Schemes

	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Expenditure on Central sector schemes as percentage of total Union Government expenditure on Central sector schemes	0.09	0.05	0.06	0.10	0.06	0.04
Expenditure on CSS as percentage of total Union Government expenditure on CSS	37.75	39.30	37.90	37.55	38.53	35.16

Source: Union Government Budgets

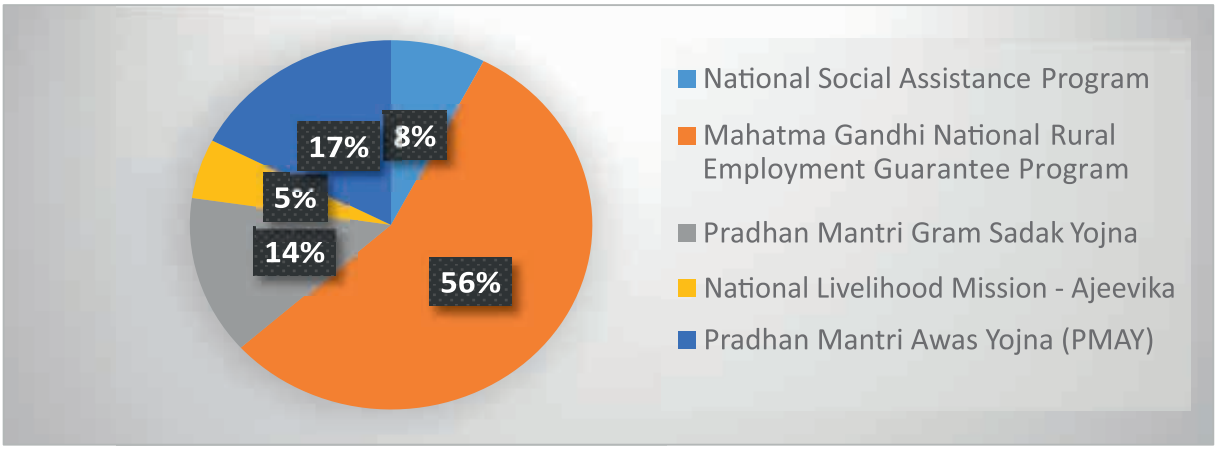
4. The Department of Land Resources implements only one Central sector scheme, Digital India Initiative – Land Records Modernisation Programme, and one CSS scheme, Pradhan Mantri Krishi Sinchai Yojana (PMKSY). The Department of Rural Development administers many Central sector schemes and CSS (Figure 2 and Figure 3).

Figure 2: Scheme-Wise Expenditure on Central Sector Schemes of Department of Rural Development



Source: Union Budget

Figure 3: Scheme-wise Expenditure on CSS of Department of Rural Development



Source: Union Budget

Achievements of CSS Schemes[1]

Mahatma Gandhi National Rural Employment Guarantee Programme

5. The Mahatma Gandhi National Rural Employment Guarantee Programme (MGNREGA) programme is implemented in 691 districts and 6,919 blocks covering 2.62 lakh Gram Panchayats. As of 31 March 2019, there were 118.1 million active MGNREGA workers across the country.

Table 3: Achievements of MGNREGA from 2014-15 to 2018-19

Expenditure Heads (in %)	Department of Rural Development	Department of Land Resources
Person days generated so far (crore)	166.21	265
No. of completed works (lakh)	29.44	86.33
Total expenditure through eFMS[2] (%)	77.35	99
Payments generated within 15 days (%)	26.85	92

Pradhan Mantri Awaas Yojana - Gramin

6. In order to achieve the objective of 'Housing for All 2022', the Indira Awaas Yojana (IAY) was restructured as the Pradhan Mantri Awaas Yojana – Grameen (PMAY-G) and was launched on 20 November 2019.

7. Under Phase-I of PMAY-G a target of completing one crore houses between 2016-17

[1]Source: State Performance Report 2018-19 and Action Plan 2019-10 – MoRD
[2]eFMS- electronic Fund Management System

and 2019-20 was set. As on 1 March 2019, 71.47 lakh houses have been constructed. The top performing states were: Madhya Pradesh (89 per cent of the target), West Bengal (86 per cent), Tripura (84 per cent), Himachal Pradesh (83 per cent) and Uttar Pradesh (81 per cent). In two States, Bihar and Odisha the shortfall from the target was as high as 26 per cent and 15 per cent respectively. They should take necessary steps to meet the target.

8. Under Phase-Il of PMAY-G, the Union Government has set a target of completion of 1.95 crore houses between 2019-20 and 2021-2022.

Pradhan Mantri Gram Sadak Yojana

9. The Pradhan Mantri Gram Sadak Yojana (PMGSY) is a CSS with the objective of providing all-weather road connectivity in the rural areas. The programme envisages connecting all eligible unconnected habitations with a population of 500 persons and above (as per 2001 Census) in plain areas and 250 persons and above (as per 2001 Census) in North-East and Hill States (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura Himachal Pradesh, and Uttarakhand), tribal or Fifth Schedule areas, the desert areas (as identified in the Desert Development Programme) and in selected tribal and backward districts (as identified by the Ministry of Home Affairs/erstwhile Planning Commission).

10. PMGSY-II has been launched to consolidate the existing rural road network. It aims to take up upgradation of selected rural roads to make the road network vibrant. The routes would be selected with the objective of identification of rural growth centres and other critical rural hubs and places of importance (connectivity to other growth poles, markets, rural hubs, tourist places and the like).

11. In December 2016, the Cabinet approved a new vertical under PMGSY – Road Connectivity Project for Left Wing Extremist Areas (RCPLWE) – in forty-four districts of nine States. All sanctions have been given for the first phase of RCPLWE of 4,313.36 km of road length and 216 bridges with a total estimated value of Rs. 4,721.62 crore.

12. The Prime Minister's dream of "New India 2022" requires connectivity and also consolidation of roads that connect markets in order to enable farmers to get access to, and benefit of, markets. Realising the importance of good quality and wide roads to connect agriculture markets, there is a proposal to consolidate the rural road network by providing for upgradation of existing selected rural roads based on their economic potential and their role in facilitating the growth of rural market centres and rural hubs.

The Improved Access to Market by 2022 (PMGSY-III) scheme proposes to upgrade 1.25 lakh km. This will further strengthen Phase-Il of the programme which is already under implementation. PMGSY-III is in the final stage of approval.

Deendayal Antyodaya Yojana – National Rural Livelihood Mission

13. The Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM) was launched in 2011 with the objective of improving the livelihood of 70-80 million poor households and helping them come out of abject poverty by 2024-25. This is to be done by social mobilisation in 600 districts, 6,000 blocks, 2,50,000 Gram Panchayats and 6,00,000 villages over a period of eight to ten years. Women – one from each rural poor household – are to be organised into self-help groups (SHGs), train them, help them develop micro-livelihood plans and facilitate access to financial resources and credit from banks and lending institutions.
14. As of January 2019, 752 additional blocks have been covered under an "intensive" implementation strategy, bringing the total number of blocks covered by the scheme to 5,207.

National Social Assistance Programme

15. The National Social Assistance Programme (NSAP) is a social assistance programme for the aged, widows, disabled and to below poverty line (BPL) families in the case of death of the breadwinner. This scheme is in line with Article 41 of the Constitution of India, which directs the State to provide public assistance to its citizens in case of unemployment, old age, sickness and disablement and in other cases of undeserved want within the limit of its economic capacity and development. The programme gets 100 per cent Central assistance.

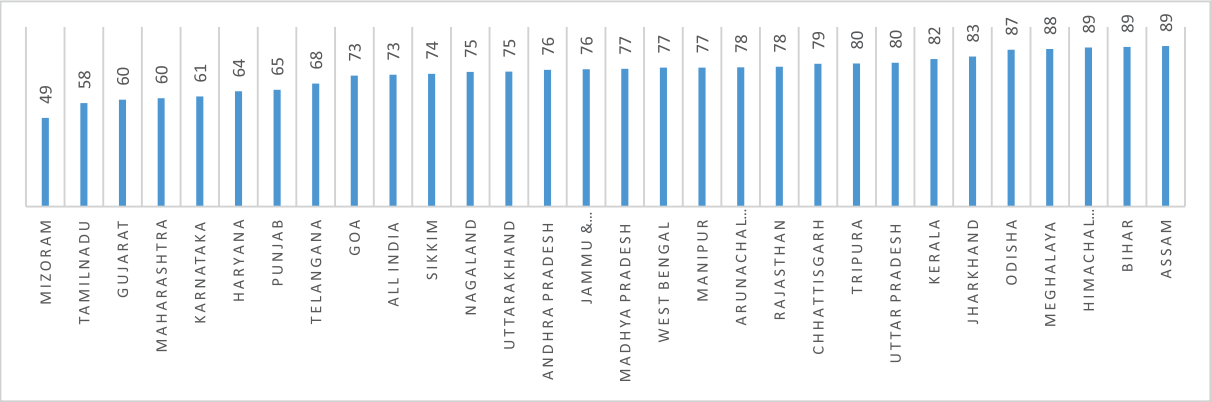
Table 4: National Social Assistance Programme (NSAP)

Indira Gandhi National Old Age Pension Scheme	**BPL**	Rs. 200 per month for elderly in the age group of 60-79 years. Rs. 500 per month for elderly who are above 80 years of age.
Indira Gandhi National Widow Pension Scheme		Rs. 300 per month for widows in the age group 40-79 years. Rs. 500 per month for widows above 80 years.
Indira Gandhi National Disability Pension Scheme		Rs. 300 per month for persons suffering from severe or multiple disabilities in the age group 40-79 years and Rs. 500 per month for those above 80 years.
National Family Benefit Scheme		One-time assistance of Rs. 20,000 in case of death of primary breadwinner in the age group of 18-59 years.
Annapurna		10 kg of food grains is provided free of cost per month to the eligible households.

Inter-State Comparison

16. Figure 4 indicates the State-wise distribution of deprived people based on the Socio-Economic and Caste Census, 2011 (SECC-2011). This index is based on the combined score of seven deprivation criteria. This index is used by Ministry of Rural Development to assess target beneficiaries of various schemes under its purview.

Figure 4: Percentage of Deprived Household in Rural Areas



Source: Socio Economic and Caste Census 2011

17. Figure 5 provides details of the total road network in the country (56,03,293 km). Figure 6 provides the state-wise percentage of targeted habitations connected by all-weather roads under PMGSY.

Figure 5: Total Road Network

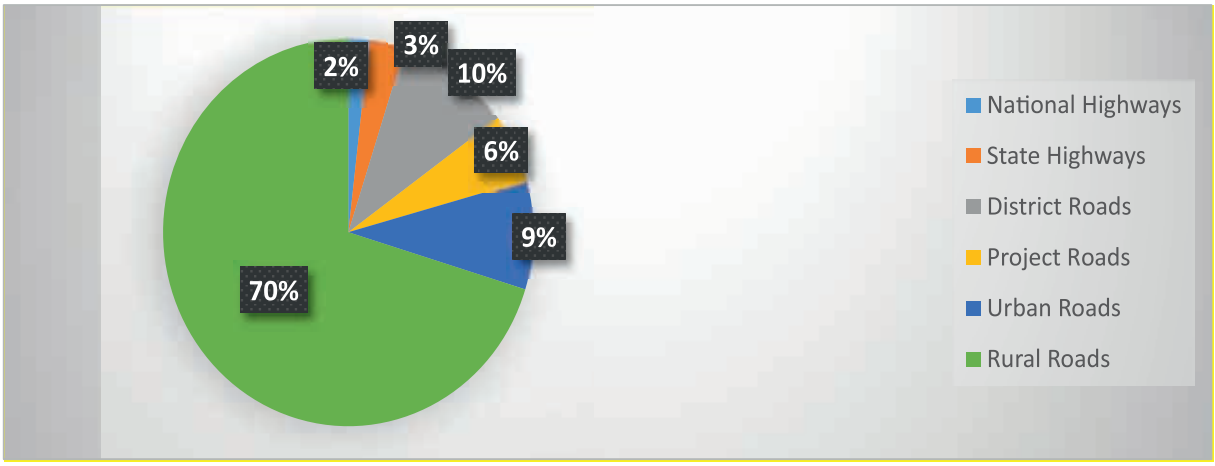
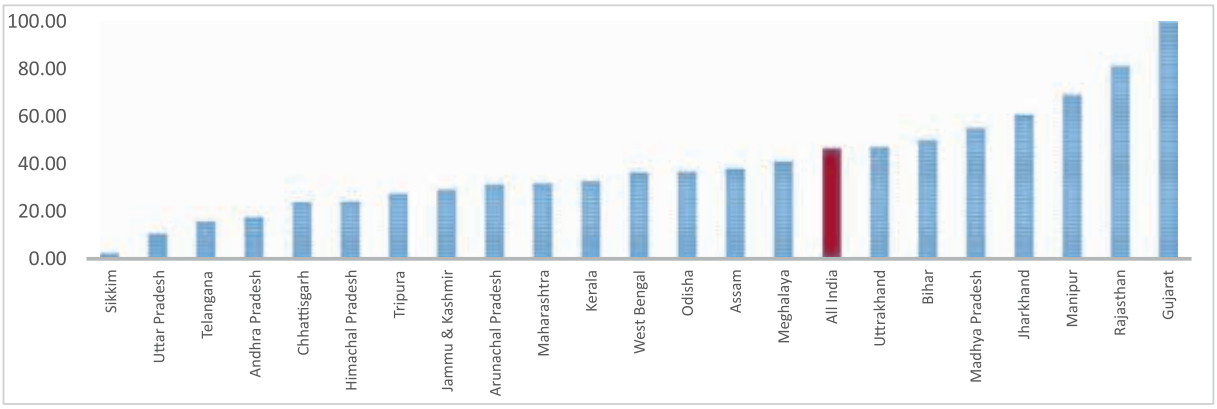


Figure 6: Percentage of Targeted Habitations Connected by All-Weather Roads under PMGSY



Source: NITI Aayog SDG Index 2018

Initiatives to Deal with Fallout of Covid-19 Pandemic

18. People and businesses in rural areas have had to deal with the pandemic and associated containment measures. Demographic characteristics (a higher share of elderly population) and geographic features (larger distances to access health care centres), along with reduced health care staff and facilities, affect the ability of rural regions to respond to the pandemic. Moreover, the overall slowdown in aggregate demand has affected some primary sectors, and the expected further slowdown in trade and global demand will hit rural economies severely, given their higher reliance on tradable activities, such as mining and tourism.

19. As a part of the initiatives taken under the Atmanirbhar Bharat package, the budget allocation in 2020-21 for MGNREGS was increased by Rs. 40,000 crore. This is expected to:

    ◊ provide a boost to employment by generating nearly 300 crore person days of work;

    ◊ address need for more work including for returning migrant workers;

    ◊ lead to the creation of a larger number of durable and livelihood assets including those relating to water conservation; and

    ◊ boost the rural economy through higher production.

20. On 20 June 2020, the Prime Minister inaugurated the Garib Kalyan Rojgar Abhiyaan, an employment generation-cum-rural infrastructure creation programme which aims to provide employment to returnee migrant workers at their native places in the following four months. A web portal of the programme was inaugurated on 26 June 2020.

Box 1: Grants for Roads and Bridges by Previous Finance Commissions

	Observation	Grants Proposed
FC-XII	Maintenance of roads and buildings has not been given adequate importance by the States, hence there is a need for priority focus for this sector.	Recommended grants of Rs. 15,000 crore for maintenance of roads and bridges.
FC-XIII	PMGSY roads are high priority rural roads where quality has been the prime focus and, thus, need special attention.	Recommended grants of Rs. 19,930 crore for maintenance of roads and bridges. Provided grants in aid to an extent of 50 per cent of the requirement assessed for non-PMGSY roads and 90 per cent of the requirement assessed for PMGSY roads for four years starting 2011-12.
FC-XIV	Separate grants not given.	

Recommendations of FC-XV in Report for the Year 2020-21

21. Rural roads were recognised as catalysts to rural development and a significant element of poverty alleviation initiatives. Under the PMGSY, 5,50,528 km road length has been constructed and 89 per cent of all eligible habitations have been connected. This huge asset demands a recurring and predictable stream of funds for maintenance. It is extremely important to provide for maintenance of PMGSY roads, following the completion of the five-year maintenance contract.

Key Proposals of Ministry to FC-XV

- Rural roads form an important segment of the total roads network. Seventy per cent of all road length in India is rural roads and 18 per cent of all rural roads are PMGSY roads. Sectoral grants may be proposed for maintenance of PMGSY roads.
- Roads in hilly areas should be given a higher cost factor of 1.2 as compared to those in plain areas.
- States should be incentivised to operationalise the recommendations of the Sumit Bose Committee Report on capacity enhancements for Gram Panchayats.
- District Rural Development Agency (DRDA) should be owned and funded by the States.
- The Ministry proposed the following grants:

Table 5 : Grants Proposal of the Ministry

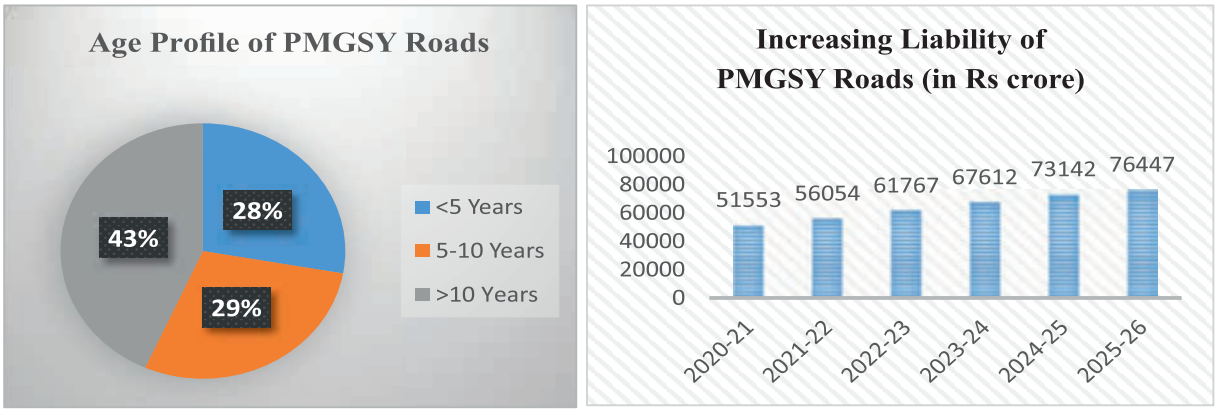
Item	Requirement of funds (Rs. crore)
Maintenance of roads under PMGSY	76446
Strengthening of human resources for Gram Panchayats	5000
DRDA	1500
Total	**82946**

Challenges

Last-mile Connectivity and Maintenance of PMGSY Roads

- All roads constructed under PMGSY are covered by five-year maintenance contracts. After this, State Governments are entrusted with the responsibility of maintenance of these assets. This has led to inter-State variations.
- Age profile shows that almost 64 per cent of the PMGSY roads are out of their five-year maintenance contract.
- Rural roads, of which 16 per cent are PMGSY roads (i.e. 6,32,423 km), are witnessing much higher traffic than before, which requires investment for upgradation and strengthening.

Figure 7: Age Profile of PMGSY Roads and Increasing Liability of the PMGSY Roads



Source: MoRD revised Memorandum to FC-XV

National Social Assistance Programme

- While the Union Government provides 100 per cent of funding, States can provide additional assistance from their own resources. Given the varying resource position of States, this has led to variations in social security provisions across States.

Status on Human Resources in Local Bodies

- Gram Panchayats perform agency functions in programmes like MGNREGA, PMAY and NSAP. The core functions of Gram Panchayats include service delivery associated with the twenty-nine functions enshrined in the Eleventh Schedule of the Constitution. Over time, it has been observed that Gram Panchayats are concentrating more on their agency functions (as these programmes are well funded) and neglecting their own core functions.
- There has been a general concern that most of the local bodies in the country are suffering from lack of adequate and quality human resources.
- Except a very few States, there is no systemic focus to improve this aspect in all panchayati raj institutions.

Digitisation of Land Records

- As much as 86 per cent of land records have been computerised. However, only 47 per cent of the mutation records (recording the transfer of ownership) have been computerised.
- Real-time updation of Record of Right (RoR) and maps has been done for only 15 per cent of the land records.

Suggested Areas of Reforms

Maintenance of PMGSY Roads

- **Bridge the inter-State gap:** There is a need to reduce the inter-State disparity in PMGSY roads. The Ministry should issue State-wise directions in this regard.
- **Revise terms of contract:** Usually the maintenance of PMGSY roads is the responsibility of the contractor for the initial five years, after which, as noted earlier, the responsibility of maintenance lies with the State Government. The terms of contract need to be modified and the maintenance clause needs to be continued beyond five years. State Governments need to ensure dedicated and continuous stream of funds to take care of maintenance.
- **Use of Central Road Fund:** The Ministry has proposed that a provision for maintenance of PMGSY roads can be made under the Central Road Fund.
- **Innovative methods of maintenance:** Many States have adopted innovative ways to tackle the problem of upgradation and road maintenance. Peer learning across States should be encouraged.

Table 6 : Innovative methods of maintenance of some States

States	Models Adopted
Chhattisgarh, Rajasthan	Zonal maintenance contracts with the contractor
Uttar Pradesh, Madhya Pradesh and Uttarakhand	ILO pilot project wherein SHGs were given the responsibility for maintenance of rural roads
Madhya Pradesh, Punjab and Rajasthan	Mandi cess used for funding maintenance of roads

Source: MoRD Memorandum to FC-XV

Social Security

- The States, in coordination with the MoRD and Ministry of Finance, need to work out a minimum uniform standardised annual per capita amount to be spent on social security across the country. The States should make the necessary budget arrangements under a separate head for this purpose.
- This additional top-up by the States should be directly credited to the beneficiary account through direct benefit transfer.
- States need to ensure social audit, at least once a year, to verify and update the list of beneficiaries.

Segregation between Core and Agency Functions

- While the cost of functionaries for agency functions of panchayati raj institutions should be borne by the sponsoring agencies, the cost of establishment for core functions should be borne by the panchayati raj institutions themselves through budgetary support from State Governments, internal revenues, grants from State Finance Commissions and basic grants from Finance Commissions.
- States must plan and ensure continuous capacity building of these personnel in coordination with the Ministries of Panchayati Raj and Rural Development.
- The benchmarks for annual appraisal of human resources should be decided in consultation with the Ministries of Panchayati Raj and Rural Development.
- These two ministries should facilitate States to develop a comprehensive competency framework for all staff across hierarchies.

Legislative Framework

- States need to extend the scope of their Town and Country Planning Acts beyond the planning areas for developing cluster villages. Karnataka has already extended its Town and Country Planning Act to the whole state.

Digitisation of Land Records

- Use of technology such as GIS, GPS and satellite imagery is the need of the hour for upgradation, registration, and maintenance of land records. Many States have developed successful models in this regard. More efforts in this direction are required across all State Governments.

Table 7 : Models Adopted by some States

States	Models Adopted
Karnataka	AASTHI project for GIS-based property tax system
Pune Municipal Corporation	GIS-based system for city mapping and creation of unique IDs for all properties
Raipur Municipal Corporation	Improvement of GIS-based municipal tax and fee collection system

Source: Property taxation study by World Bank, Commissioned by XV-FC

Note : Refer Chapter on Local Governments in Volume I for more details.

FC-XV recommendations in its final report

- We feel it is important to provide for the maintenance of the PMGSY roads beyond the end of the five-year maintenance contract. We have taken the projected expenditure on maintenance of roads from the MoRD for a period of five years and have covered a part of the maintenance cost by recommending grants for these roads. We have covered a higher proportion of the total maintenance cost for NEH States, considering that they have limited alternatives to fund it. Accordingly, we recommend Rs. 27,539 crore for the maintenance of PMGSY roads for the 2021-26 period.

Chapter 15
Significant Drivers of Economic Growth

As highlighted in Chapter 1, apart from the thirteen Ministries discussed in detail, there are ten others that are vital for the growth momentum and for the growth pattern to be socially inclusive. In this chapter, we examine these ministries succinctly and suggest reforms pertaining to them. Four of these ministries have high budget allocations and contribute significantly to economic development. These are Railways, Road Transport and Highways, Communications and Petroleum and Natural Gas. Six other ministries, which contribute significantly to the country's overall socio-economic development are also included in this chapter: Women and Child Development, Electronics and Information Technology, Tourism, Tribal Affairs, Culture and Skill Development and Entrepreneurship.

A. Ministry of Railways

1. Railways are the principal mode of transportation for freight and long-distance passengers in India. The Commission in its first Report for the Year 2020-21 mentioned that ''Railways are the engine of economic growth and development of the country. Expansion and development of railways, particularly for efficient and cost-effective freight movement, has seriously lagged behind the economic progress of the country. The Government of India is planning to create infrastructure that would be capable of carrying twice the freight traffic over the next six to eight years and meet the passenger demands without undue crowding of passenger trains."
2. Railways are an energy-efficient and cost-effective mode of long-distance transportation. Indian Railways is facing stiff competition from other modes of transportation and its share in freight movement has been declining primarily due to its high tariff structure. The finances of Indian Railways are also not very robust and it has been struggling to generate higher surpluses. The operating ratio (the amount spent to earn one rupee) has consistently been higher than 90 per cent for last ten years, and touched 98.4 per cent in 2017-18. Indian Railways' highest expenditure (approximately 41 per cent) is on staff, followed by expenses on pension fund (21 per cent) and fuel (17 per cent).
3. Recognising the importance of Indian Railways, the Union Government has focused on prioritising investment in important areas such as dedicated freight corridors, high speed rail, high capacity rolling stock, last mile rail linkages and port connectivity. We now suggest some key reforms for the consideration of the Ministry:

i) **Human Resource Management:** There is a need to synergise the human talent pool within the organisation. The Commission suggests framing need-based training policies and breaking down of the erstwhile silo framework of different wings of the Railways.

ii) **Capital and Development Works:** In the Union Budget 2020-21, the Government announced investment of Rs. 100 lakh crore on infrastructure over the next five years. This will include projects on modernising railway stations, metro and railway transportation and logistics and warehousing. We are of the view that steps need to be taken for modernising existing track and bridges and rolling stock, improving signalling, developing dedicated freight corridors and high-speed passenger train corridors and taking public-private-partnership initiatives. The key emphasis should also be on completion of long pending projects before taking up new ones.

iii) **Passenger Safety:** Currently, the three vital functions relating to Indian Railways (rule-making, operations and regulation) are all vested in the Railway Board. In our view, there is need for an independent mechanism for safety regulation. The High-Level Safety Review Committee had recommended the creation of a statutory Railway Safety Authority with enough powers to have a safety oversight on the operational mode of Indian Railways. Also, earlier Committees have noted that the Research Design and Standards Organisation (RDSO), the apex technical wing of Indian Railways, works with numerous constraints. This has hampered the ability of the system to adopt emerging technologies. The Commission agrees with the general consensus on the need to restructure RDSO for greater empowerment. It also recommends that a Railway Research and Development Council (RRDC) be set up directly under the Union Government. We have also felt a need for adoption of an advanced signalling system (akin to the European Train Control System). All level crossings (both manned and unmanned) should be eliminated over five years.

iv) **Electrification of Railway Routes:** In the Union Budget for 2020-21, it was announced that "large solar power capacity will be set up alongside the rail tracks, on the land owned by the Railways". Indian Railways is a licensee in the field of generation, transmission and distribution. The Commission is of the view that Railways should be treated as one entity at the national level like the Power Grid Corporation of India Limited (PGCIL). This will bring clarity on various issues related to distribution of power, transmission systems and other electrical systems in which Railways is a major stakeholder and reduce disputes between Indian Railways and State Governments and enhance the progress of both railways and the power sector. The

delays in execution of electrification works may be reduced through better project monitoring, and the project teams should be adequately empowered to take decisions within reasonable time limits. Due diligence has to be ensured in performance evaluation of bidders. Contracts should include incentives to ensure the projects are completed in a timely manner. We expect that almost all railway routes should be fully electrified before 2023.

v) **Inflation-linked Passenger Fares:** Indian Railways uses profits from its freight business to provide for losses in the passenger segment and to manage its overall finances. Such cross-subsidisation results in high freight tariffs, which leads to lower freight traffic, as business moves to cheaper modes of transportation. High railway freight rates also hurt India's export competitiveness. A clear roadmap needs to be developed by Indian Railways wherein cross-subsidisation of passenger fares needs to be capped at not more than 10-15 per cent, within a reasonable timeframe of not more than three years.

vi) Other suggestions

a) There should be focus on better port connectivity and attracting private and foreign investment.

b) In-house solar/wind capacity should be rapidly developed on railway land, in such a manner that at least 70-80 per cent of the energy needs of Indian Railways are met from this captive source within four to five years.

c) Opt for more non-fare sources of revenue generation, including station redevelopment and putting vacant assets at stations to commercial use, monetising of surplus land along tracks by leasing it out to promote horticulture and tree plantation, and advertisements. Promote greater parcel delivery earnings.

d) Assess the surplus land value of railways and monetise these assets through sale/lease.

B. Ministry of Road Transport and Highways

1. Road transport is the dominant mode of transport in India, both in terms of traffic share and contribution to the national economy. The reforms pertaining to road transport and highways should be seen as part of an integrated multi-modal system of transport. The major constraints that the roads sector faces are availability of funds for financing large projects, lengthy processes in acquisition of land and payment of compensation to those whose land is acquired, environmental clearances, time and cost overruns of projects, procedural delays and lower than expected traffic growth. As a result, there has been an

increase in the risk profile of projects and shortfall in funds for maintenance. The Ministry is also facing challenges related to governance, namely, the need for a single regulator for the transport sector, safety of passengers, maintenance of roads and research and development. Inter-ministerial coordination and other interventions listed below will help yield better outcomes:

i) Connectivity in remote and left-wing extremism-affected areas needs improvement.

ii) Connectivity to ports, airports, mining areas and power plants should be an important consideration in the development of road projects.

iii) Dedicated courts and arbitrators should be established for speedy resolution of conflicts and to address issues pertaining to safety, traffic, maintenance, disputes, among other things.

iv) Attention should be paid to efficient transportation of agricultural commodities.

v) There is urgent need for continuous upgradation of technology in the auto industry, especially the commercial vehicle sector, to meet the objectives of improved comfort, energy efficiency, safety and emission standards in line with international practices and standards.

vi) Issues related to National Highways include increasing private sector financing for sectors which are less economically viable and enhancing public sector funding. The policy of collecting toll and monetizing highways can generate substantial resources that can fund both construction of new highway and periodical maintenance. Tolls should be levied on multi-lane highways, both access-controlled and non-access controlled, as also for spot improvement projects such as bridges, tunnels, flyovers and bypasses.

vii) We are in agreement with the recommendation of the Standing Committee on Transport (2015 and 2016) and Committee on Public Undertakings (2017) that a coordination mechanism at the Union level with the Ministries of Finance, Environment, Forests and Climate Change and Defence will help speed up the process of clearances for roads projects. A similar mechanism could be established in the States.

viii) Sufficient earmarking of funds should be done for proper maintenance of National Highways, including highways in the mountainous terrain of North Eastern and Himalayan States which require greater maintenance support.

ix) A dedicated road design institute under the jurisdiction of MoRTH should be set up. Similar institutes should be set in each State. The MoRTH should entrust all national

highways and national expressways to the National Highways Authority of India (NHAI) and retain only planning, policy and budget functions with itself.

C. Ministry of Communications

1. The Ministry of Communications comprises two Departments: Department of Telecommunications (DoT) and Department of Posts (DoP). In today's digital world, telecommunication has become crucial for businesses, governments, communities and families to connect and share information, thus leading to value addition in the economy. The telecom sector has been facing severe financial stress and this has affected public sector as well private sector companies, with the former being in a more precarious situation. The DoP has been the backbone of the nation's communication for over 150 years and has played a crucial role in the country's social economic development. However, India Post, which was once regarded as the lifeline of the country's postal network, is in poor financial shape.

(i) Department of Telecommunications

2. According to the National Digital Communications Policy, 2018, there is a need to create a roadmap for harnessing emerging technologies such as 5G, Artificial Intelligence, Internet of Things, cloud computing, robotics and M2M (machine to machine). Given the fiscal stress in the telecom sector, an appropriate balance must be maintained between the need for revenue generation from future spectrum auctions and the financial viability of this sector, in order to ensure unhindered growth.
3. A large number of inhabited villages are yet to get basic mobile phone connectivity and a majority of these are located in left-wing extremism-affected areas. It is imperative to provide connectivity to such unconnected villages by expeditious deployment of unused funds in the Universal Service Obligation Fund (USOF).
4. According to the Telecom Regulatory Authority of India's recommendations on green telecommunications released in 2011, the sector accounts for 1 per cent of CO2 emissions of the country. Telecom firms need to be incentivised for deploying green energy for telecom towers.
5. India ranked 134 out of 176 countries on the ICT Development Index of the International Telecommunication Union in 2017. There is a need to propel India into the top twenty-five nations in this index within the next five years. A similar index may be developed at the State level.

(ii) Department of Posts

6. The differential pricing structure of postal services should be modified, with only rural areas getting a subsidy, against the current situation where even government departments are not paying the full cost of postal services. The post offices can be integrated with the Union Government's eNAM (National Agriculture Market) initiative, with trading terminals being available for use by farmers. The staff of post offices should be trained to sell financial products like mutual funds, insurance, sovereign gold bonds, providing the Department with an additional source of revenue. The India Post banking system needs to be systematically strengthened so that rural banking services are consolidated.

D. Ministry of Petroleum and Natural Gas

1. Currently, petroleum is the fuel driving the economy. Petroleum products are used for transport as well as heating and cooking. Close to 95 per cent of India's petroleum consumption is imported, up from 85 per cent in 2011-12. The Ministry will, over the next decade, need to align its objectives with India's Nationally Determined Contributions (NDCs) under the Paris Agreement related to reducing the emission intensity of the economy by 33 to 35 per cent by 2030 from the 2005 levels.
2. A sound policy, including fiscal incentives, needs to be framed to enhance production of domestic hydrocarbons and improve the productivity of existing oil fields. The policy should provide for systemic assessment of every field for its enhanced recovery potential, appraisal of appropriate enhanced recovery techniques and fiscal incentives to de-risk the cost involved in enhanced recovery projects and to make them economically viable.
3. In addition, a committee of experts may be constituted for a reassessment of the country's hydrocarbon resource potential. The north-east region has around 18 per cent (7634 MMT) of the country's total prognosticated hydrocarbon resources. About 2246.6 MMT of in-place hydrocarbon reserves have been established so far by exploration and production companies, which means about 73 per cent of hydrocarbon resources are under the 'yet to discover' category.
4. The Union Government should encourage States to promote alternative sources of energy like compressed natural gas (CNG), electricity (for vehicles), ethanol-blended petrol (EBP) and pipeline liquefied natural gas (LNG), and increase the share of non-fossil fuel, use of non-conventional energy sources like biomass, stubble etc.

5. Goods and service tax (GST) on five specified petroleum products (crude, petrol, diesel, aviation turbine fuel and natural gas) is to be applicable from a date to be recommended by the GST Council. These need to be included in GST, as tax credits are not transferable between the old and new systems and companies are forced to comply with two tax regimes. This non-inclusion in GST also affects India's export competitiveness.

E. Ministry of Women and Child Development

1. The Ministry of Women and Child Development is responsible for advancing the rights and interests of women and children who together constitute 67.7 per cent of the country's population (as per 2011 Census). It is necessary to improve the social, economic, health and nutritional status of women and the physical, mental, intellectual, and nutritional status of children for the overall development of society and the country. In our report for 2020-21 we had observed:

   'Nutrition is both the maker and marker of development. Improved nutrition is a new building block for progress of health, education, employment, empowerment of women and reduction of poverty and inequality. FC-XV is of the opinion that this issue needs to be addressed and a delay of one year could adversely impact the future human capital of the country.'

2. We had recommended an additional grant of Rs. 7,735 crore to States for nutrition in 2020-21, apart from the grants allocated by the Union Government under the Centrally sponsored schemes. In the Explanatory Memorandum as to the action taken on the recommendations in the report for 2020-21, the Union Government had said: *'The Fifteenth Finance Commission has recommended for grants to States of Rs. 7,735 crore for nutrition in FY-2020-21. The Commission has recommended that the nutrition grants should not be substituted for either the State share or Union share and are additionality.' The Explanatory Memorandum mentioned that* ***"The Commission may review its recommendation as a part of its overall proposal of measurable performance-based incentives for States as per ToR in the main Report."***

3. India has a higher percentage of children under five years who are underweight, stunted and wasted compared to even other South Asian countries. There are vast inter-State disparities in the nutritional status of children on these parameters. The major issue of concern is that even some better-off States like Maharashtra, Karnataka and Goa lag behind the all-India average on some of these indicators. Some of the key areas of reform are listed below:

(i) **Reforms in Integrated Child Development Scheme:** (a) The report of the Standing Committee on Human Resource Development (2018) mentions large gaps between the number of sanctioned and operational anganwadi centres in Bihar and the erstwhile state of Jammu and Kashmir to the extent of 20 per cent and 7.3 per cent, respectively. Thus, there is an urgent need to fix such physical infrastructure gaps on a priority basis. (b) There is a need to ensure 100 per cent coverage of eligible beneficiaries under the ICDS scheme, which does not seem to be the case currently despite the universalisation of the scheme. (c) The anganwadi centres should be modernised so as to monitor the delivery of services and the progress of each beneficiary on real-time basis.

(ii) **POSHAN Abhiyaan:** In 2017-18, the Government of India had launched the POSHAN Abhiyaan to reduce the level of stunting, under-nutrition, anaemia and low birth weight babies. However, the scheme is yet to achieve the desired scale and there is a need to expedite the roll-out of different components of the scheme on a war footing. Outcomes need to be closely monitored and targeted intervention is required to improve such nutrition outcome. We reiterate the urgent need to allocate higher resources to address persisting under-nutrition and hunger and recommend that the nutrition of children and pregnant and lactating mothers be accorded the highest priority.

(iii) **Targeted Intervention in Aspirational Districts and Tribal Areas for Improving Child Nutrition:** There is a need to target tribal areas for targeted intervention in view of malnutrition among tribal children being more than non-tribal children as identified by the Expert Committee on Tribal Health (2018).

(iv) **Women Empowerment:** There is a need to improve labour market outcomes for women by promoting flexible working-time arrangements, access to maternity leaves and child care, provision of safe and accessible transport. There is also a need to ensure higher resource allocation for the establishment of additional courts for crime against women. Better functioning is also required for speedy disposal of these cases. The Ministry may push States more vigorously to raise the representation of women in the police force to at least 33 per cent, in line with the 4 September 2009 advisory of the Ministry of Home Affairs.

F. Ministry of Electronics and Information Technology

1. The fast-growing electronics industry contributes to almost every field of economic

activity – space exploration, defence equipment, medical diagnosis, communication, information technology and computer systems. Information technology improves the overall productivity of businesses by leaps and bounds. The Ministry of Electronics and Information Technology envisages the e-development of India to propel it into the ranks of developed nations. The suggested reforms for the sector are:

(i) **Electronics Manufacturing:** It is important to develop manufacturing capacities in all sub-sectors of electronics, including semiconductor facilities and display fabrication facilities. Building a semiconductor manufacturing ecosystem is essential for strategic reasons. The bottlenecks hampering the growth of electronics manufacturing should be removed expeditiously to enable India to become part of the global supply chain of electronics manufacturing.

(ii) **Index for Electronics Manufacturing:** As mentioned in the National Policy on Electronics, 2019, there is a need to create an index for capturing the status and growth of the electronics manufacturing industry in the States. This would also spark off competition among States.

(iii) **IT/ITeS:** It is imperative to develop India as the global software hub, driven by innovation, improved commercialisation, sustainable intellectual property rights, promotion of technology start-ups and specialised skill-sets.

(iv) **Digital Economy:** According to a report, India's Trillion-Dollar Digital Opportunity, India can create up to $1 trillion of economic value from the digital economy in 2025, against $200 billion in 2017-18. For this, it is necessary that our own digital platforms are created which support our languages, run on our algorithms and solve our problems. Conducive regulations and policies are needed to enable this.

(v) **Cyber Security:** With the rising penetration of digital technologies across different sectors and sub-sectors of the economy, the inherent vulnerabilities of cyber space have come to the fore. Therefore, it is imperative to strengthen the cyber networks.

(vi) **Data Localisation:** To strengthen the internal and external security of the country, firms operating in India should be encouraged to store local data on Indian servers only. At the same time, it needs to be ensured that these requirements do not impose prohibitive costs on firms, creating significant barriers to digital trade.

(vii) **E-waste:** The large quantity of e-waste generated in the country is recycled in the informal sector in a crude manner, leading to pollution of groundwater and soil and also having an adverse impact on health. Therefore, there is a need to create awareness among the citizens about the ill effects of e-waste recycling in the informal sector and

create mechanisms for collecting e-waste for recycling in the formal sector.

(viii)**E-Governance:** There is a need to incorporate advanced technologies to facilitate government-to-government, government-to-citizens, and government-to-business interfaces. Such technological applications would also lead to elimination of dysfunctional procedures in administration.

G. Ministry of Tourism

1. The tourism industry has enormous spin-off benefits on employment and the overall economy. According to the Ministry of Tourism, the sector contributed close to 12.38 per cent to employment during 2017-18. The sector is also a major foreign exchange earner. Competition from neighbouring countries, high GST, non-integration of hotels in the Harmonised List of Infrastructure and weak tourism infrastructure are some of the key issues plaguing the sector.
2. There is need to increase tourist footfalls into India. For this it is necessary to extend the limit on the duration of stay in India by holders of e-tourist and e-business visas. Inter-convertibility of visas should be made easy and convenient. Multi-entry facility should be extended for all visas including e-medical visa and e-conference visa. Visa-on-arrival facility (currently available only to nationals of Japan and the Republic of Korea) should be extended to more countries. The Ministry could also explore the possibility of exemption/reduction of visa-fees during the off-season. The aim should also be to give long term tourist/business visas of at least ten-year validity.

H. Ministry of Tribal Affairs

1. The Ministry of Tribal Affairs has, since its establishment in 1999, played a pivotal role in the socio-economic development of tribals in the country. . It is responsible for the overall development and well-being of the scheduled tribes. The developmental interventions by the Ministry in vital sectors are meant to support the efforts of other Union Ministries and State Governments to promote the interests of scheduled tribes. The total allocation of the Ministry is around Rs. 7400 crore during 2020-21 (BE). The head wise percentage allocation of expenditure from 2015-16 to 2020-21 (BE) is given below in table 1.

Table. 1: Head-wise Allocation of Expenditure as a Percentage of Total Expenditure of Ministry

	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Establishment expenditure	0.5	0.6	0.6	0.7	0.6	0.7
Central sector schemes/projects	2.9	4.2	3.8	5.9	5.9	24.5*
Centrally sponsored schemes	65.5	68.9	67.2	63.1	57.1	56.5
Other grants/ loans/transfers	31.1	26.3	28.4	30.4	36.3	18.2

*- Revamped scheme of Eklavya Model Residential School.

2. The scheme wise share of Central sector schemes and Centrally sponsored schemes (CSS) implemented by the Ministry during 2018-19 are given in Figures1 and 2.

Central Sector Schemes and CSS of Ministry:

Figure. 1: Expenditure on Central Sector Schemes (in %, 2018-19)

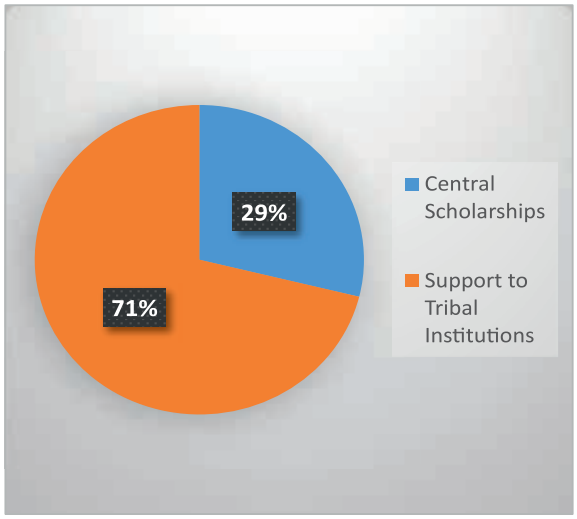
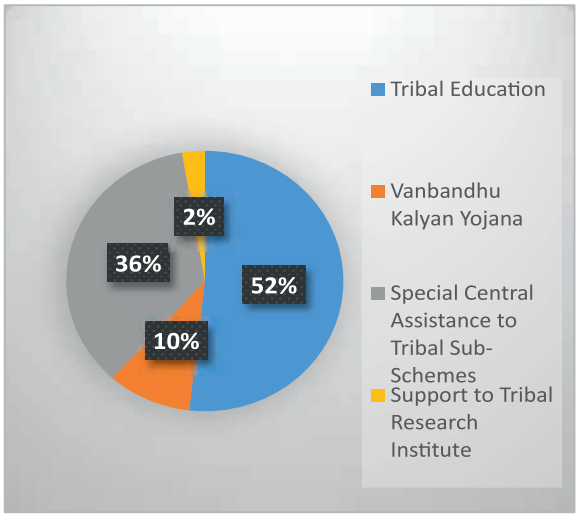


Figure. 2: Expenditure on CSS (in %, 2018-19)



3. Given the large-scale deprivation of tribals compared to other categories of the population, there is a need to adopt a holistic approach towards their development. Therefore, the Ministry may formulate a five-year agenda, with annual milestones, for the development of tribals.

4. Further, as recommended in the report of the Parliamentary Standing Committee on Science and Technology, Environment and Forests, there is a need to formulate a comprehensive, clear-cut and legally sustainable definition of forests. In line with what

the Expert Committee on Tribal Health (2018) recommended, we are of the view that a Tribal Health Index may be constructed to capture the status of tribal health. This index should be utilised for identifying the gaps in tribal health across States and for making more focused interventions to improve tribal health.

5. Health personnel see posting in tribal areas as a 'punishment' and this is one of the causes of the severe shortage of doctors, specialists, and other medical personnel in these areas. To overcome this problem, local tribal people should be trained in health services. Further, Maharashtra's model of recognising diplomas from the College of Physicians and Surgeons may be examined in order to have more doctors available in remote and tribal areas. Telemedicine facilities should also be promoted in these areas. Although these actions lie broadly within the domain of Ministry of Health and Family Welfare and others, the Ministry of Tribal Affairs may collaborate with all concerned stakeholders for initiating immediate action in these areas.
6. A robust procurement mechanism has been instituted during the pandemic in a way that State Government agencies would step in to procure the minor forest produce if the price falls below the minimum support price. This may be continued.
7. To give impetus to the economic development of tribals, special efforts should be made for adequate irrigation facilities in tribal areas, with special thrust on the promotion of micro-irrigation systems and rainwater harvesting. Ministry of Tribal Affairs may collaborate with the Ministry of Agriculture to take this forward.
8. The Ministry may coordinate with Ministry of Skill Development and Entrepreneurship for imparting advanced skills to tribal population.
9. In the light of the majority of 117 aspirational districts, identified by NITI Aayog, being either tribal-dominated or having a substantial presence of tribals, the current focus on convergence of developmental programs, if backed by adequate financial incentives for such districts, can generate transformational outcomes.

I. Ministry of Culture

1. Culture enhances our quality of life and increases overall well-being for both individuals and communities. India has a long, rich and diverse cultural heritage that is deeply rooted in its pluralistic ethos. The country occupies an important place on the cultural map of the world. This is also an expression of its 'soft power'.
2. A robust policy needs to be implemented for the development of infrastructure like the creation of cultural zones where art, artists and people in the creative sector could

interact and be nurtured. Indian participation in all major art and culture platforms across the world should be encouraged, so as to generate greater mileage for Indian art, culture and tourism.

3. To provide sustenance to, and showcase the richness of India's diverse cultural traditions, a National Network Centre on India's Intangible Cultural Heritage should be set up for mapping and documenting tangible and intangible cultural assets in different eco-cultural zones. The Union Government may seek international technical assistance wherever necessary, for designing such a system based on best international practice.
4. Further, the Union Government should devise a mechanism to promote cultural competitiveness among cities. Based on performance, a centrally monitored cultural index should be devised for these cities.
5. There is a need to create centres of excellence, with a marketplace, which will act as think tanks to nurture artists. Initiatives such as the formation of trusts with the objective of conserving and protecting India's natural heritage, like the Indian National Trust for Art and Cultural Heritage (INTACH), could be taken up. There is a need to bring in greater private sector involvement and explore innovative public-private partnership models. This could include measures such as the creation of crowd-funding platforms to raise funds for conservation of heritage sites, monuments and art galleries.

J. Ministry of Skill Development and Entrepreneurship

1. A confident and competent workforce can spur economic growth. In order for 'Make in India' to be effective, there is need to adopt a framework that supports the holistic development of the youth. With one of the youngest populations in the world, India can realise the demographic dividend through a workforce that is trained in 'employable skills' and is 'industry-ready'.
2. It is extremely important for the Ministry of Skill Development and Entrepreneurship to collaborate with all the stakeholders including the Union Ministries, State Governments, industries, academia and the non-profit sector to accelerate skilling efforts. India is one of the fastest growing economies and there is a need to expand the service sector and to integrate training courses with apprenticeship. There is vast employment potential within the health and education sectors and a dedicated focus is also required for the varied manpower needs of these sectors.

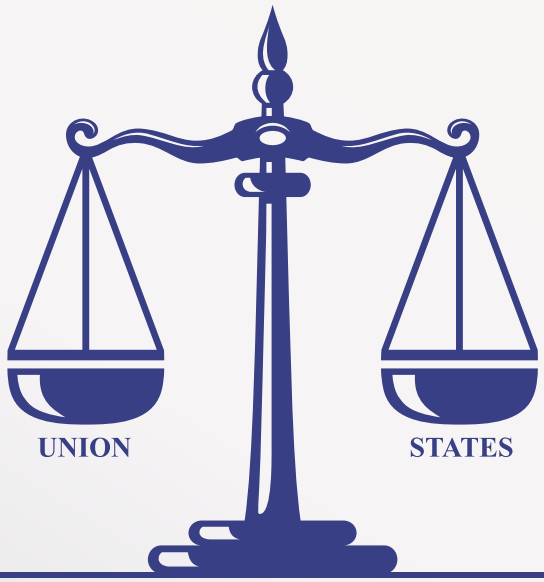
3. We are of the view that skill development alone will not suffice unless it is complemented with employment generation. There is also a need to focus on industries that are labour-intensive and not merely capital-intensive or technology-driven. Skill mapping and training would also be required for the labour-intensive service sector.

Report of Fifteenth Finance Commission

सत्यमेव जयते

FINANCE COMMISSION IN COVID TIMES

Report For 2021-26



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Volume-IV The States
October 2020

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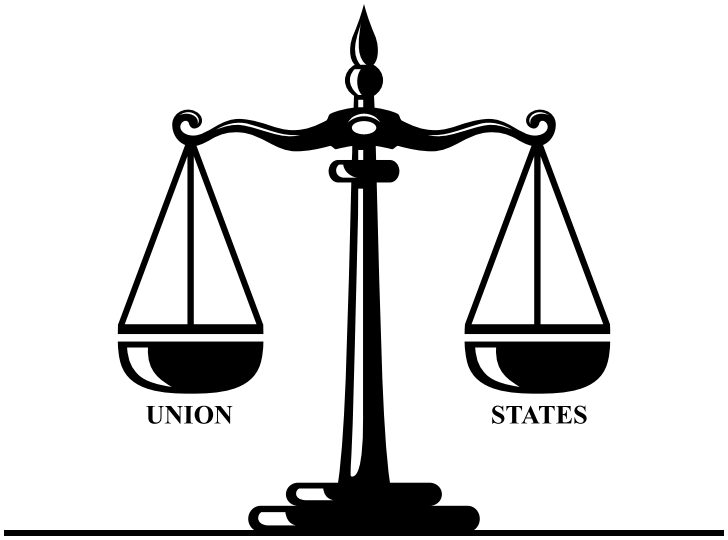

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ABBREVIATIONS AND ACRONYMS

ACS	Average Cost of Supply
ADC	Autonomous District Council
AG	Accountant General
AMC	Aizawl Municipal Corporation
ARR	Average Revenue Realised
AT&C Losses	Aggregate Technical and Commercial Losses
ATR	Action Taken Report
BMI	Body Mass Index
BOOT	Build, Own, Operate, Transfer
BPL	Below Poverty Line
CAG	Comptroller and Auditor General of India
CAGR	Compounded Annual Growth Rate
CGST	Central Goods and Services Tax
CHC	Community Health Centre
DBT	Direct Benefit Transfer
DISCOM	Distribution Company
DLFA	Directorate of Local Fund Audit
DMF	District Mineral Foundation
DT Metering	Distribution Transformer Metering (Rural/ Urban)
ELFA	Examiner, Local Fund and Accounts
EoDB	Ease of Doing Business
ES	Economic Services
EWR	Eco-Spiritual, Wellness and Religious hotspots
FC	Finance Commission
FC-XII	Twelfth Finance Commission
FC-XIII	Thirteenth Finance Commission
FC-XIV	Fourteenth Finance Commission
FC-XV	Fifteenth Finance Commission
FD	Fiscal Deficit
FDI	Foreign Direct Investment
FRBM	Fiscal Responsibility and Budget Management
FYXXXX	FY XXXX denotes a financial year with 31 March XXXX as the closing of a full one year period starting from 1 April of the previous year.
G2B	Government to Business
GS	General State(s)
GIA	Grants-in-aid
GOI	Government of India
GP	Gram Panchayat
GS	General Services

GSDP	Gross State Domestic Product
GST	Goods and Services Tax
GSVA	Gross State Value Added
GW	Giga Watt
IFMS	Integrated Financial Management System
IGST	Integrated Goods and Services Tax
IMFL	Indian made foreign liquor
IMR	Infant Mortality Rate
IPP	Independent Power Producer
kWH	Kilo Watt Hour
LFAD	Local Fund Audit Department
LFPR	Labour force participation rate
LSG	Local self-government
LSGI	Local self-government institutions
LWE	Left Wing Extremism
MFP	Minor Forest Produce
MOPR	Ministry of Panchayati Raj
MoU	Memorandum of Understanding
MSMEs	Micro, Small, and Medium Enterprises
MSP	Minimum Support Price
NAMP	National Air Quality Monitoring Programme
NCA	Normal Central Assistance
NEHS	North Eastern and Himalayan States
NER	Northeast Region
NFHS	National Family Health Survey
NTR	Non-Tax Revenue
O&M	Operations and Maintenance
OD	Outstanding Debt
ODF	Open Defecation Free
ORR	Own Revenue Receipts
OTR	Own Tax Revenue
PDS	Public Distribution System
PFMS	Public Finance Management System
PHC	Primary Health Centre
PPP	Public Private Partnership
PRIs	Panchayati Raj Institutions
PSU	Public Sector Undertaking
PTB	Property Tax Board

PWS	Piped Water Supply
RBI	Reserve Bank of India
RD	Revenue Deficit
RDG	Revenue Deficit Grants
RE	Revenue Expenditure
RES	Renewable Energy Systems
RLBs	Rural Local Bodies
SC	Scheduled Caste
SCA	Special Central Assistance
SDG	Sustainable Development Goal
SECC	Socio-Economic and Caste Census
SERC	State Electricity Regulatory Commission
SFC	State Finance Commission
SGST	State Goods and Services Tax
SOTR	State Own Tax Revenue
SPA	Special Plan Assistance
sq km	square kilometres
SRS	Sample Registration System
SS	Social Service
ST	Scheduled Tribe
STSB	State Treasury Savings Bank
T&D	Transmission & Distribution Losses
TE	Total Expenditure (Revenue Plus Capital)
TFR	Total Fertility Rate
TGR	Trend Growth Rate
TGS	Technical Guidance and Support
ToR	Terms of Reference
TR	Tax Revenue
TRE	Total Revenue Expenditure
TRR	Total Revenue Receipts
TSEC	Tripura State Electricity Corporation
TTAADC	Tripura Tribal Areas Autonomous District Council
UA	Urban Agglomeration
UDAY	Ujjwal DISCOM Assurance Yojana
ULBs	Urban Local Bodies
UT	Union Territory
VC	Village Council
VDB	Village Development Board

INTRODUCTION

THE CONTEXT

1. The Fifteenth Finance Commission has placed special emphasis on the finer strands of fiscal reform for the States—devolving down to the third tier of local governance—while understanding the aspirations of each State, offering dynamic perspectives on relevant financial levers, and advising the States as they plan ahead.

Terms of Reference (Para 6)

While making recommendations, FC-XV shall take into consideration (among others):

i) the demand on the resources of the State Governments, particularly on account of financing socioeconomic development and critical infrastructure, assets maintenance expenditure, balanced regional development and impact of the debt and liabilities of their public utilities;

ii) the impact of the GST, including payment of compensation for possible loss of revenues for 5 years, and abolition of a number of cesses, earmarking thereof for compensation and other structural reforms programme, on the finances of Centre and States.

2. In the current context, expenditure efficiency is now even more critical to creating fiscal space for addressing the prevailing public health crisis, protecting human capital, and building economic recovery. These hinge on the States being able to carefully reprioritise and monitor expenditures in the context of economic reform. In pursuit of the above objectives, FC-XV was motivated to prepare a volume dedicated to the in-depth analysis of States.

3. Volume IV is thus entirely devoted to States. Each State economy is analysed in great detail to draw disaggregated and specific conclusions and recommendations to address its challenges and leverage its opportunities. Given the diversity of challenges, each state has been viewed as a separate entity and context-specific reforms have been suggested.

THE PROCESS

Consultations with the Accountants General of States

4. The Accountants General provided objective assessments of the strengths and weaknesses of the public finances of their respective States—in particular fiscal and financial health, efficiency in resource mobilisation, and expenditure. They also provided insights into the performance of various sectors, financial health of public sector enterprises and the local bodies in these States.

Consultations with the State Governments

5. Consultations with the State Governments and other stakeholders in the States are an essential and enduring part of the process followed by all previous Finance Commissions. FC-XV covered all 28 States and held at least four meetings in each of them. The meeting with the Chief Minister, Ministers, and officers of the State Government was integral to the State visits. Separate meetings were also held with elected representatives of panchayats and municipalities, representatives of trade and industry, and representatives of recognised national and State political parties.

Research and Analysis

6. In developing this volume, we have included inputs from CAG Audit Reports for States, NITI Aayog,

Ministry of Power (specifically for UDAY barometers), the Ministry of Panchayati Raj (Devolution Index), and fiscal data compiled by the Commission from Finance Accounts.

REPORT STRUCTURE

7. The States were divided in two groups: 18 General States (GS) and 10 North East and Himalayan States (NEHS). The report devotes one chapter to each State, summing to 28 chapters in all.
   a. An attempt was been made to understand each State—through its geographic, demographic, macroeconomic, socioeconomic, and fiscal indicators in the initial section. This includes a detailed analysis of health infrastructure of each State which is especially pertinent to the context of the pandemic.
   b. Information on the devolution and functioning of the third tier of governance—the rural and urban local bodies forms the next section
   c. This is followed by a snapshot of the crucial power sector in terms of the debt, losses, and performance on the basis of the UDAY barometers.
   d. The next section summarises the proposal of the State on vertical and horizontal devolution.
   e. The section analysing the strengths is intended to suggest to the State, available opportunities to create the fiscal space they need to pursue their own charter of development and other policy goals.
   f. Its corollary that follows, in terms of recognising the specific challenges they may face—especially in the context of the current health emergency that is having an asymmetric impact across States—forewarns the State on the various risks and implications.
   g. The conclusions emanating from each chapter are analysed in the context of the fiscal space available to each State as well as the reform initiatives which could significantly contribute to its growth momentum. No doubt, adherence to fiscal rectitude and debt sustainability form part of the analytical assessment.These are based upon intensive deliberations with domain experts and extensive visits to the States.

HIGHLIGHTS

8. Though the issues pertaining to States converge at a few points, they mostly remain differentiated and diversified. For example, though significant progress has been made by Uttar Pradesh and Bihar in improving social indicators, they are still the poorest performers among the GS on broader parameters of overall development. However, both the States have been relatively fiscally prudent. On the other hand, Kerala, a role model on human capital development and other social indicators, faces structural revenue deficit risks.
9. Compared to GS, the NEHS are characterised by a higher dependence on Union transfers, higher Debt–GSDP ratio, and higher committed expenditure as a proportion of revenue expenditure. Among NEHS, States that are net consumers like Arunachal Pradesh, Manipur, Mizoram, and Meghalaya have done well in terms of GST revenues, while manufacturing States like Himachal Pradesh and Uttarakhand are facing significant structural and related challenges.
10. State finances have been repeatedly hit by the implementation of UDAY, Pay Commission awards, and farm-loan waivers, with wider moral hazard implications.
    a. Reform of the power sector generally remains a major concern and a challenge.
    b. States have witnessed high volatility in GST collections with differential impact on their finances. The cushion of GST compensation till June 2022, the details of which are currently being decided by the GST Council, has eased the process of their transition.
    c. The policy of giving periodic farm-loan waivers and subsidies carries the risk of building a wider

deleterious impact on the credit culture of States by incentivising wilful default, demoralising the conscientious borrowers who regularly serviced their loans, besides increasing the reluctance of banks in lending to farmers.

IN CONCLUSION

11. As the current health emergency is being tackled and even as fiscal space to manoeuvre is being asymmetrically tightened, it has been the endeavour of the Commission to understand the aspirations and circumstances of the States, make the recommendations, provide reform signposts, and also support them with enabling guidance. The Commission hopes that these will act as lighthouses for States to navigate the high seas of uncertainties and challenges through the next five years in improving the State's finances and find the necessary fiscal space to foster development and growth. We believe that their implementation will improve growth trends and confer wider multiplier benefits over the period of the award.

ACKNOWLEDGEMENTS

1. Volume IV has been conceptualised by the Chairman, XV Finance Commission and prepared under the guidance of the Commission.
2. We would like to especially thank Dr Indira Rajaraman for providing guidance and valuable suggestions in putting it together. We acknowledge and thank the outstanding editorial and publishing support provided by Sudipto Patra and his team at Lucid Solutions.
3. A highly professional and cohesive team of the Commission's Secretariat worked diligently and tirelessly in contributing to and assembling this volume. Its members are: Manish Dev, Joint Director; Sweta Satya, Joint Director; Aditi Pathak, Joint Director; Shikha Dahiya, Joint Director; Nitish Saini, Deputy Director; Sandeep Kumar, Deputy Director; Ritesh Kumar, Deputy Director; Mahesh Kumar, Assistant Director; and Sushant Kumar, Data Entry Operator. The overall effort was coordinated by Mukhmeet Bhatia, Additional Secretary and Dr Ravi Kota, Joint Secretary.

STATES INCLUDED IN THE VOLUME IV

		General States (GS)
1	AP	Andhra Pradesh
2	BH	Bihar
3	CH	Chhattisgarh
4	GO	Goa
5	GJ	Gujarat
6	HR	Haryana
7	JH	Jharkhand
8	KR	Karnataka
9	KL	Kerala
10	MP	Madhya Pradesh
11	MH	Maharashtra
12	OD	Odisha
13	PB	Punjab
14	RJ	Rajasthan
15	TN	Tamil Nadu
16	TL	Telangana
17	UP	Uttar Pradesh
18	WB	West Bengal
		• Comparisons of fiscal indicators before 2015–16 have been drawn with reference to 16 GS (excluding Andhra Pradesh and Telangana) as fiscal data is only available for the Undivided Andhra Pradesh before its bifurcation into Telangana and Andhra Pradesh in June 2014. • Comparisons of fiscal indicators 2015–16 onwards have been drawn with reference to all 18 GS. • In Exhibit 1.D of every state, GS includes all 18 States because Ministry of Statistics and Programme Implementation, Government of India released disaggregated GSDP for Telangana and Andhra Pradesh from 2011–12.
		North East and Himalayan States (NEHS)
1	ArP	Arunachal Pradesh
2	AS	Assam
3	HP	Himachal Pradesh
4	MG	Meghalaya
5	MN	Manipur
6	MZ	Mizoram
7	NG	Nagaland
8	SK	Sikkim
9	TR	Tripura
10	UK	Uttarakhand
		Special Mention
1	AI	All India
2	JK	Erstwhile State of Jammu and Kashmir Comparisons across NEHS indicators include the erstwhile State of Jammu and Kashmir because data has been analysed for the period 2011–12 to 2018–19, during which the erstwhile State of Jammu and Kashmir was in existence.
3	PD	Puducherry

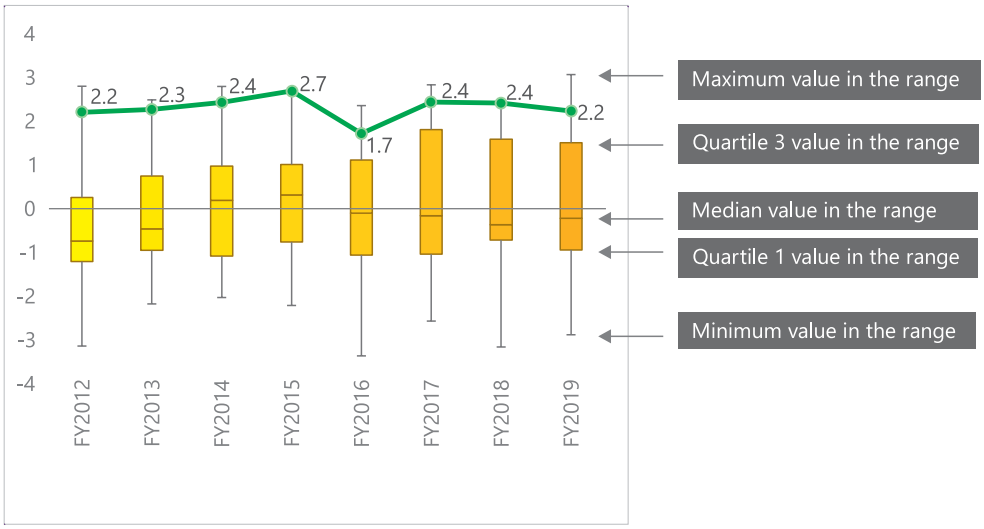
Macroeconomic Indicators	
Sectoral contribution to GSDP (at current prices)	Contribution of primary, secondary, and tertiary sectors to GSDP at current prices (net of subsidies)
Decadal growth of population	Decadal population growth calculated from the Census data (various years)
Total Fertility Rate	The number of children that would be born per woman (or per 1,000 women) if she/they were to pass through the child-bearing years, bearing children according to the current schedule of age-specific fertility rates.
Socioeconomic, Education, and Health Indicators	
SDG Index	SDG India Index 2.0 (SDGII 2.0) is based on the framework of 17 SDGs for which 169 indicators have been identified. The SDGII 2.0 estimation is based on data related to the indicators for the first 16 goals and a qualitative assessment for the 17th. The score ranges between 0 and 100.
	SDG-1: No Poverty
	SDG-2: Zero Hunger
	SDG-3: Good Health and Well-Being
	SDG-4: Quality Education
	SDG-5: Gender Equality
	SDG-6: Clean Water and Sanitation
	SDG-7: Affordable and Clean Energy
	SDG-8: Decent Work and Economic Growth
	SDG-9: Industry, Innovation and Infrastructure
	SDG-10: Reduced Inequality
	SDG-11: Sustainable Cities and Communities
	SDG-12: Sustainable Consumption and Production
	SDG-13: Climate Action
	SDG-14: Life Below Water
	SDG-15: Life on Land
	SDG-16: Peace Justice and Strong Institutions
	SDG-17: Partnerships for the Goals
Underweight children under five years of age (based on weight-for-age scores)	• Weight-for-age is a composite index of height-for-age and weight-for-height. • It takes into account both acute and chronic under-nutrition. • Children whose weight-for-age z-score is below minus two standard deviations (–2sd) from the median of the reference population are classified as underweight. • Children whose weight-for-age z-score is below minus three standard deviations (–3sd) from the median are considered severely underweight.
Infant mortality rate	• Number of infant deaths during the year X 1000 • Number of live births during the year
Stunting in children under five years of age (based on height-for-age scores)	• Height-for-age is a measure of linear growth retardation and cumulative growth deficits. • Children whose height-for-age z-score is below minus two standard deviations (–2sd) from the median of the reference population are considered short for their age (stunted), or chronically undernourished. • Children whose height-for-age z-score is below minus three standard deviations (–3sd) from the median of the reference population) are considered severely stunted.
Household (%) with toilet facility	Improved toilet facilities include non-shared toilets of the following types—flush/pour flush toilets to piped sewer systems, septic tanks, and pit latrines; ventilated improved pit (VIP)/biogas latrines; pit latrines with slabs; and twin pit/composting toilets.

Deprived households (%)	SECC 2011 is a study of socioeconomic status of rural and urban households and allows ranking of households based on predefined parameters. The percentage of deprived households is based on the cumulative performance on the following parameters: • Households with one or less room, kuchcha walls and kuchcha roof • No adult member in household aged 18–59 years • Female-headed households with no adult male member 16–59 years of age • Households with differently-abled members with no other able bodied adult member • Scheduled Caste and Scheduled Tribe households • Households with no literate adult above age 25 years • Landless households deriving a major part of their income from manual labour
Fiscal Indicators	
Central Transfers	Tax Devolution + Grants-In-Aid (Both Finance Commission and Non-Finance Commission Grants)
Buoyancy	Percentage growth of tax revenue / Percentage growth of GSDP
Fiscal / Revenue Deficit	Positive data values denote deficit and negative data values denote surplus

STRUCTURE OF STATE CHAPTERS

State Overview and Macroeconomic Indicators
1.A: Overview
1.B: Growth rate of GSDP (at current prices, %)
1.C: Per capita GSDP (at current prices)
1.D: GSDP Current, 2011–12 series (Rs crore)
1.E: Sectoral Contribution to GSDP (at current prices, %)
Socioeconomic Indicators
2.A: Decadal Growth in Population (%)
2.B: Total Fertility Rate (children per woman)
2.C: SDG Index of NITI Aayog (2019)
2.D: Key Social Indicators
2.E: Poverty Reduction (percentage points) between FY2005 and FY2012
Health Infrastructure
3.A: Persons (’000s) per Allopathic and AYUSH Doctor
3.B: Persons (’000s) per Sub-centre/PHC/CHC
3.C: Persons (’000s) per Nurse/ Pharmacist
3.D: Persons (lakh) per Government Hospital and Persons (’000s) per Bed
Fiscal Indicators
4.A: Revenue Deficit as % of GSDP
4.B: Fiscal Deficit as % of GSDP
4.C: Outstanding Debt as % of GSDP
4.D: Committed Expenditure as a % of Revenue Expenditure
4.E: OTR as % of GSDP
4.F: NTR as % of GSDP
4.G: Capital Expenditure to GSDP Ratio
4.H: Key Fiscal Indicators—State vs GS / NEHS
4.I: TRE and ORR Gap
4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR
Local Bodies
Power Sector
Proposal from State
Strengths and Opportunities
Risks and Challenges
Reform Roadmap

INTERPRETING BOX PLOTS



ANDHRA PRADESH

AP-1.A: Overview

POPULATION
49.6 million
4.2%
Of population across all States

AREA
1,62,923 sq km
5.0%
Of area across all States

4.1%
Of forest area across all States

FOREST COVER
29,137 sq km
17.9%
Of the State's own area is under forest

3.5% ↑
Forest cover changed from 2017 to 2019

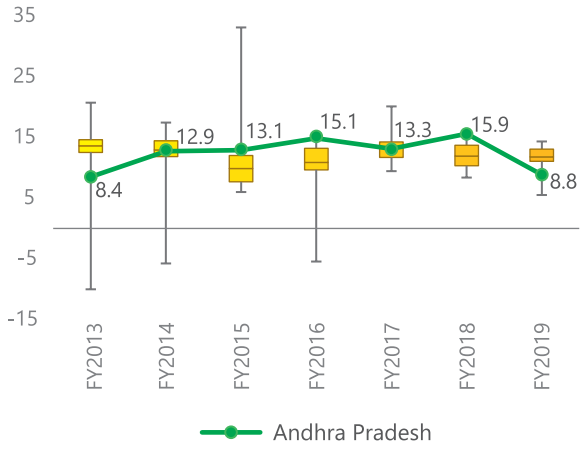
PER CAPITA GSDP
Rs 1,68,083
Rs 1,40,422
Average across all States

TAX TO GSDP
6.7%
6.3%
Average across all States

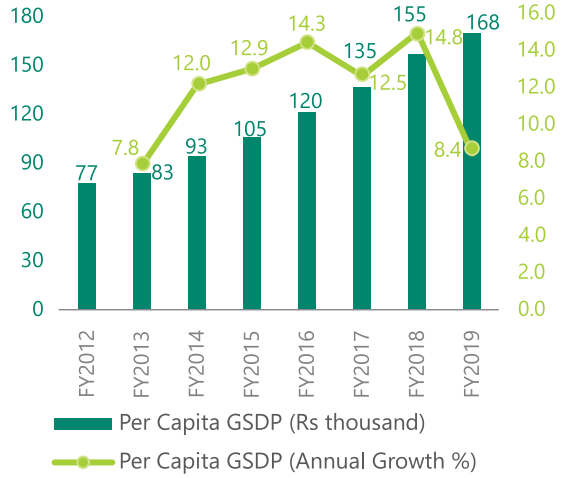
CHILDREN PER WOMAN
1.8
2.2
Average across all States

URBANISATION RATE
33.5%
31.1%
All India average

AP-1.B: Growth rate of GSDP (at current prices, %)



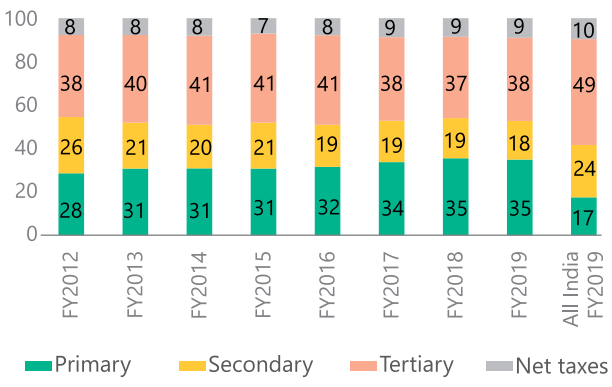
AP-1.C: Per capita GSDP (at current prices)



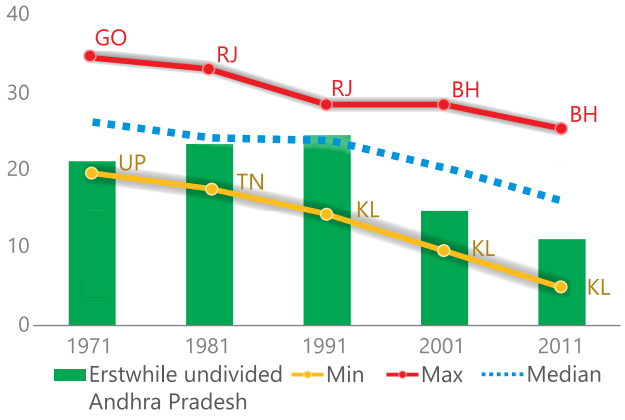
AP-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	3,79,402	77,44,945	4.9
2012–13	4,11,404	88,27,195	4.7
2013–14	4,64,272	1,00,07,392	4.6
2014–15	5,24,976	1,09,93,257	4.8
2015–16	6,04,229	1,21,91,256	5.0
2016–17	6,84,416	1,37,80,737	5.0
2017–18	7,93,186	1,54,20,126	5.1
2018–19	8,62,957	1,72,83,813	5.0

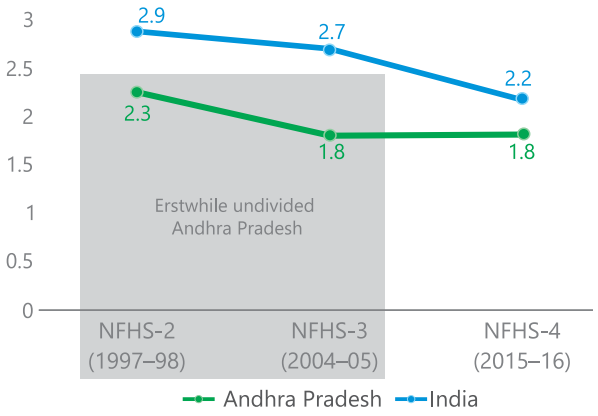
AP-1.E: Sectoral Contribution to GSDP (at current prices, %)



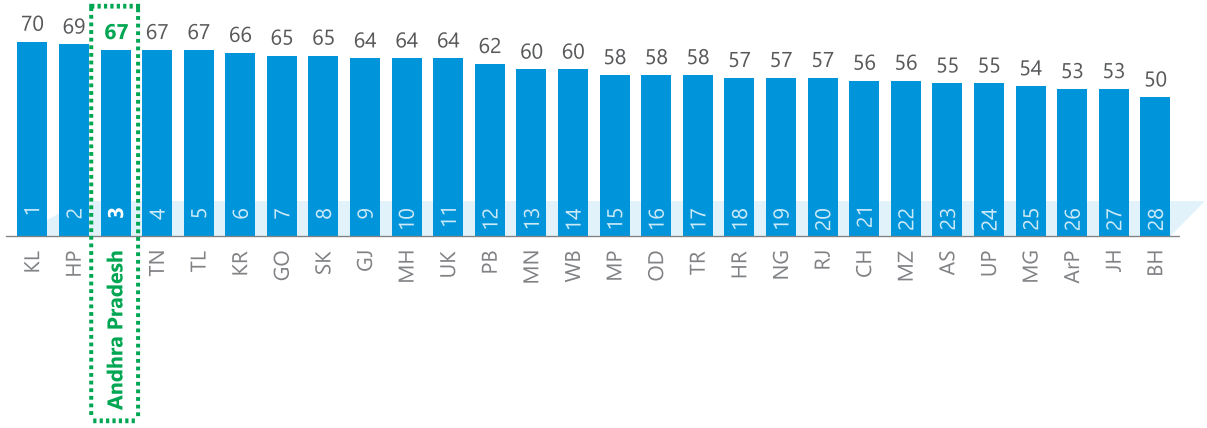
AP-2.A: Decadal Growth in Population (%)



AP-2.B: Total Fertility Rate (children per woman)



AP-2.C: SDG Index of NITI Aayog (2019)



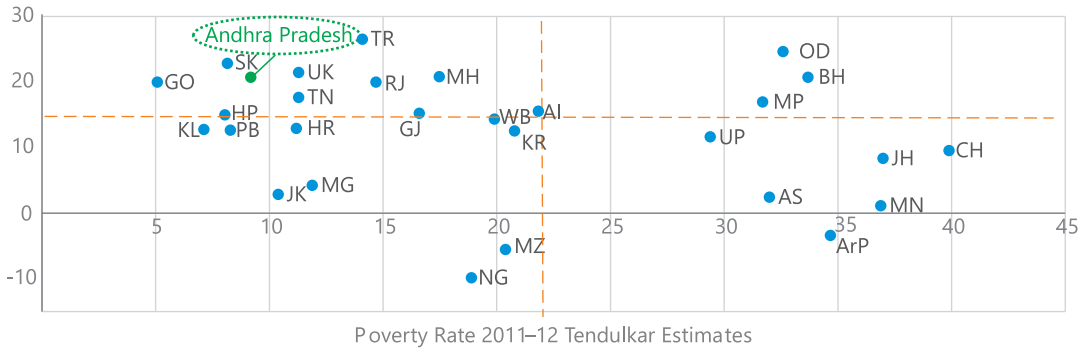
AP-2.D: Key Social Indicators

	AP	INDIA
EDUCATION		
Literacy rate (%)[a]	67.0	73.0
Pupil–Teacher ratio[b] (in Primary)	22.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	60.6	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	72.7	89.9
Availability of toilets[d] (household %)	61.3	61.1

	AP	INDIA
HEALTH		
Life expectancy (years)[g]	69.7	69.0
Sex ratio (♀ per 1000 ♂)[a]	993	943
Underweight children (%)[d]	31.9	35.8
Stunting among children (%)[d]	31.4	38.4
Anaemia among children (%)[d]	58.6	58.6
Women with below normal BMI (%)[e,d]	17.6	22.9
Anaemia among Women (%)[d]	60.0	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	29.0	32.0
Institutional Deliveries (%)[d]	91.5	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	4.9	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,441	1,218 *(All States)*

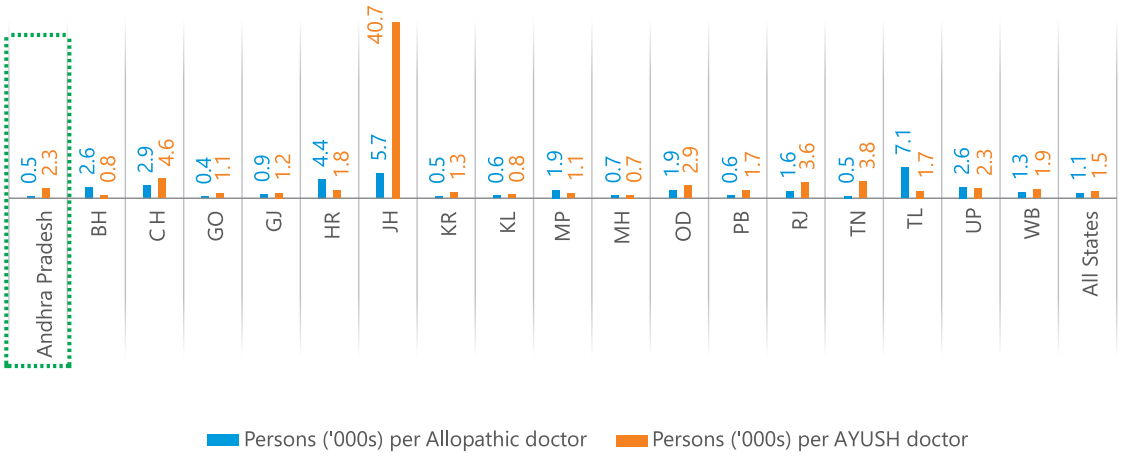
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

AP-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



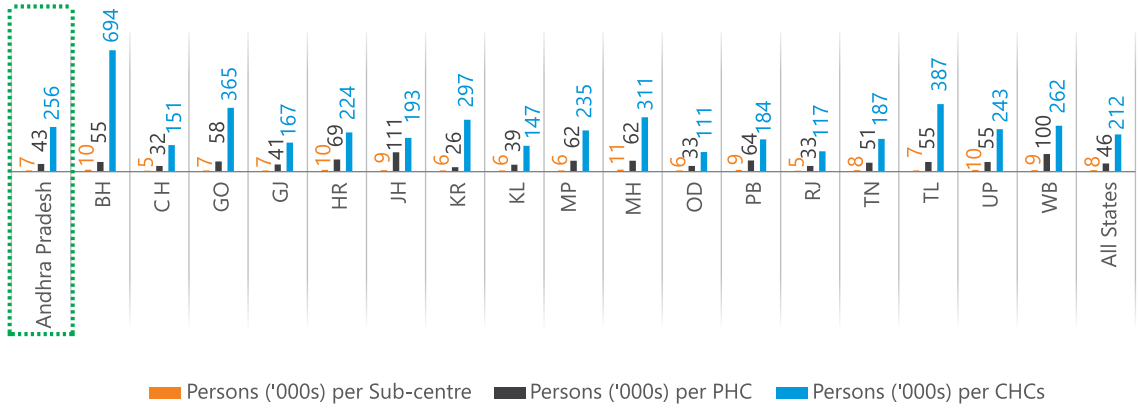
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

AP-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



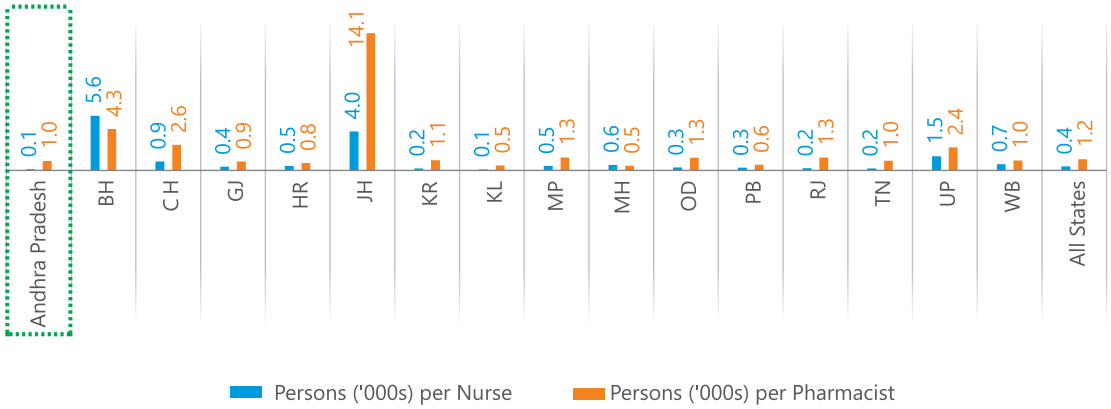
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

AP-3.B: Persons ('000s) per Sub-centre/PHC/CHC



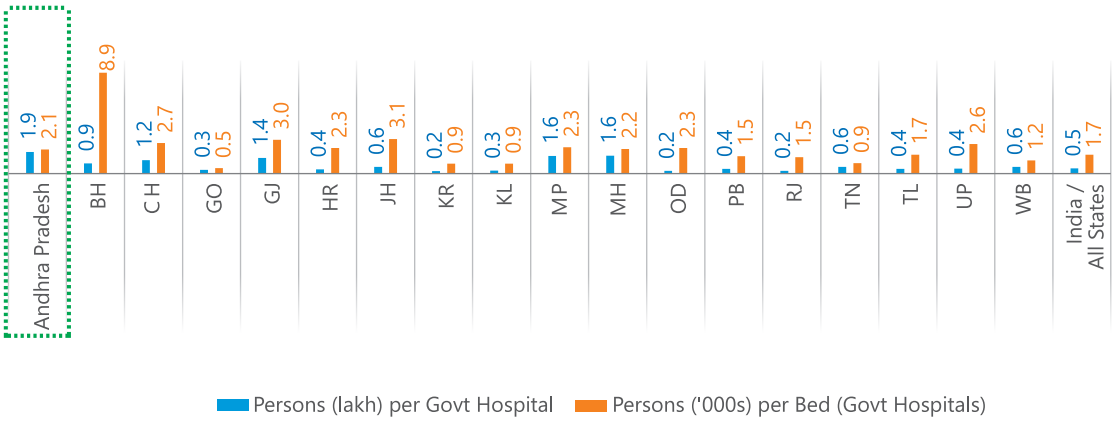
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

AP-3.C: Persons ('000s) per Nurse/ Pharmacist



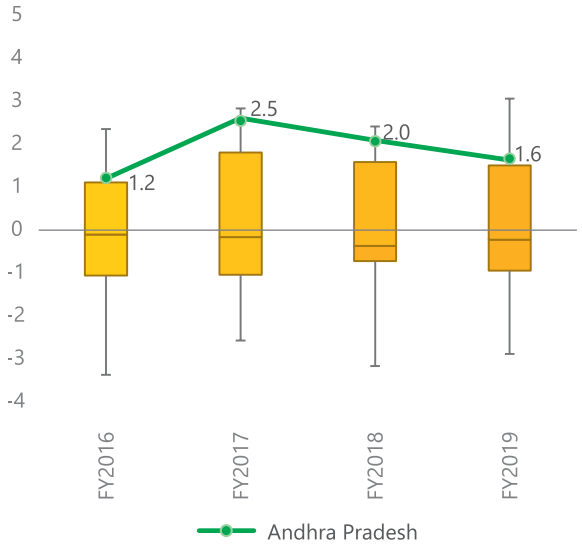
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

AP-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

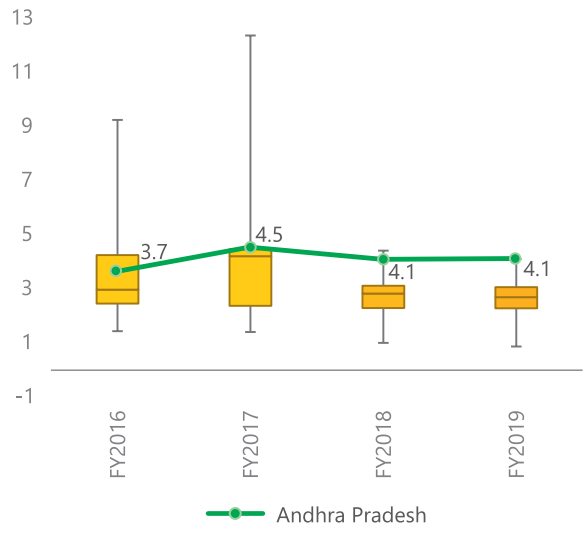


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

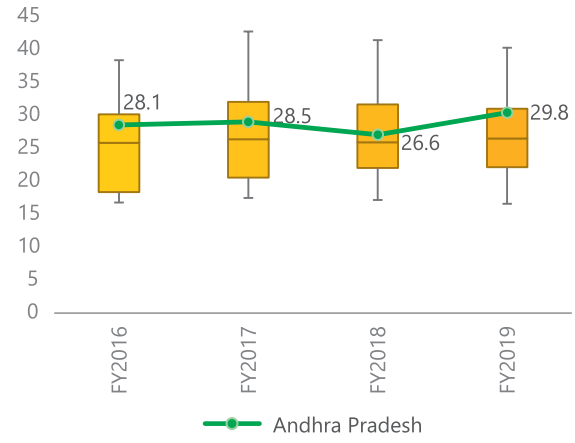
AP-4.A: Revenue Deficit as % of GSDP



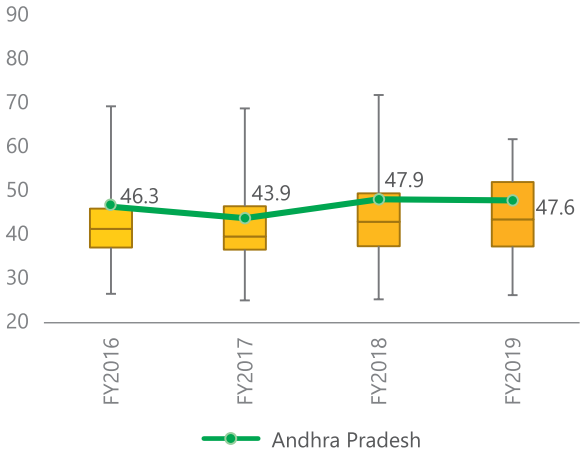
AP-4.B: Fiscal Deficit as % of GSDP



AP-4.C: Outstanding Debt as % of GSDP

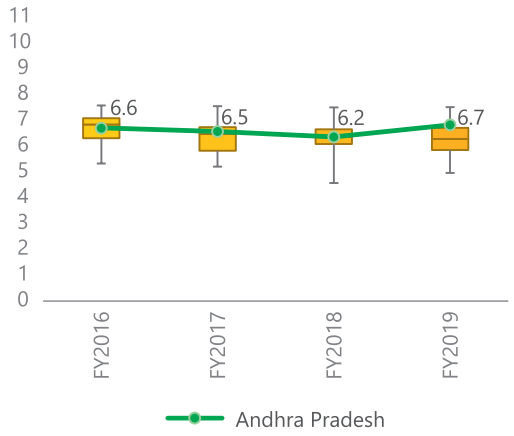


AP-4.D: Committed Expenditure as a % of Revenue Expenditure



Note: Committed expenditure includes salaries, interest payments, and pensions

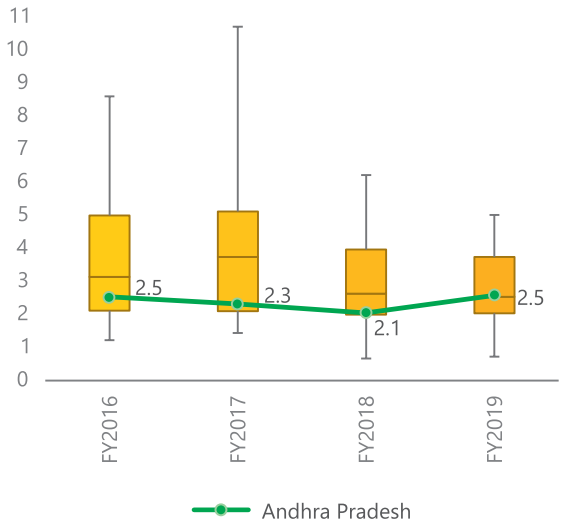
AP-4.E: OTR as % of GSDP



AP-4.F: NTR as % of GSDP



AP-4.G: Capital Expenditure to GSDP Ratio



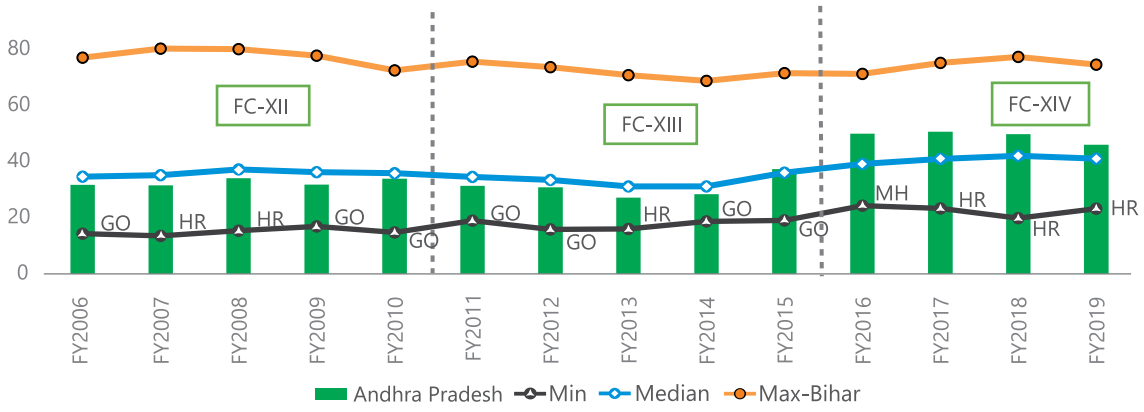
AP-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	1,68,083	1,41,099
Indicators as a percentage of GSDP		
TRR	13.3	13.4
OTR	6.7	6.4
NTR	0.5	1.1
TE	17.4	16.1
ES	2.7	3.1
SS	7.5	5.4
GS	4.7	4.7
Committed Expenditure	7.1	5.8
Capital Expenditure	2.5	2.5
FD	4.1	2.5
RD	1.6	0.2
OD	29.8	25.0

AP-4.I: TRE and ORR Gap

TGR %, 2015–2019	*TRE*	*TRR*	*ORR*
Andhra Pradesh	9.6	8.7	11.3
GS Average	11.9	11.8	11.1

AP-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions envisaged in the Eleventh Schedule of the Constitution, 10 have been devolved to RLBs.
- Of the 18 functions envisaged in the Twelfth Schedule of the Constitution, 17 have been devolved to ULBs.

Auditing Status

- Audit of accounts of RLBs and ULBs has been completed till 2016–17.

Property Tax Board

- Government of erstwhile undivided Andhra Pradesh set up its PTB in 2010 and it has been functioning since 2011.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
10	10	16	13

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Third SFC

- Third SFC recommended devolution to local bodies by way of per capita grants and assignments. This worked out to be 6.77% of total tax and non-tax revenues of the State including share of central taxes for 2004–05.
- The Government accepted the recommendations related to total devolution.

Fourth SFC

- Fourth SFC constituted in 2015 was re-constituted in 2018. However, the report is yet to be submitted.
- The State Government is not strictly complying with the constitutional provisions for constituting SFCs and implementing their recommendations.

Debt and Losses

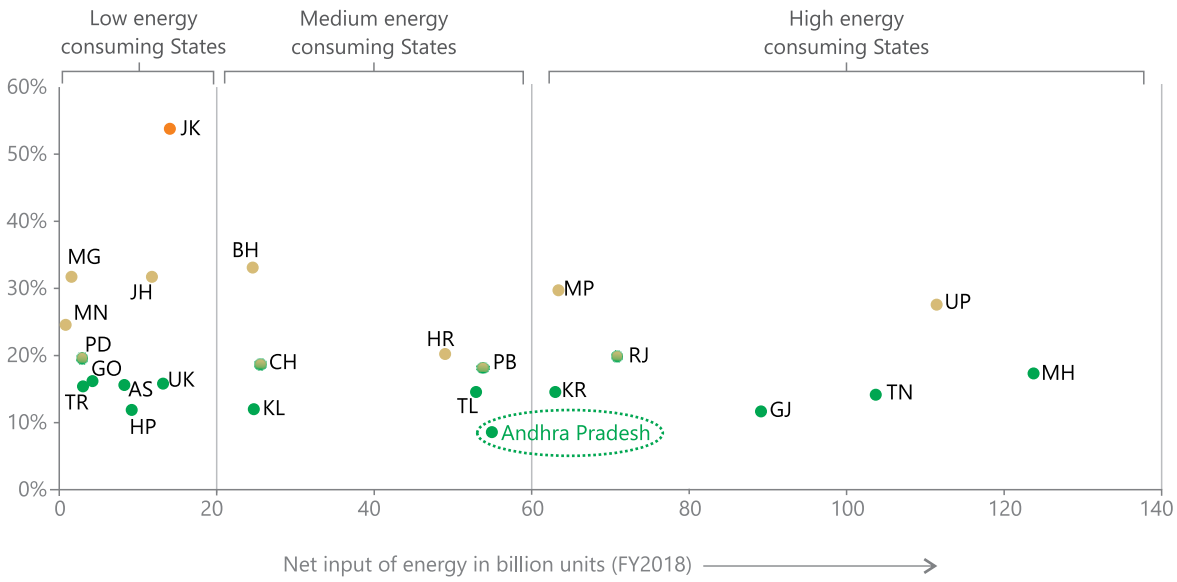
- Total borrowings of DISCOMs as on 31 March 2019 are Rs 18,023 crore of which State Government borrowings are Rs 9 crore.
- AP neither achieved the UDAY AT&C losses target nor the ACS–ARR gap target in 2018–19.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	25.7	9.0
ACS–ARR Gap (Rs per unit)	2.7	–0.03

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India.

- The State needs to substantially improve its performance on UDAY barometers to avoid future fiscal risk.

AP-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Andhra Pradesh proposed that the share of States in divisible pool be increased to 50%.

Formula for Horizontal Devolution

S. no.	*Criteria*	*Weights (%)*
i)	Population	5
ii)	Area	15
iii)	Income Distance	40
iv)	Population Growth Distance	25
v)	Renewable Energy Capacity	10
vi)	Contribution of Primary Sector to GSDP	5

Ranking on the SDG Index of NITI Aayog (2019)

- The State ranked 3rd (after Himachal Pradesh and Kerala) among the Indian States according to the *SDG India Index and Dashboard*, *2019–20* of the NITI Aayog.
- Further, the State has achieved 5th rank on SDG–1 (i.e., No Poverty). In fact, undivided AP had poverty rate in single digit, i.e., 9.2% in 2011–12, which was much lower than the all India poverty rate of 21.9% in the same year (as per Tendulkar methodology).
- Paradoxically, the State did not perform well on SDG–2 (i.e., Zero Hunger), attaining 18th rank amongst all States.
- The State should sustain efforts towards enhancing social outcomes.

Composite Water Management Index

- As per the Composite Water Management Index, 2019 released by NITI Aayog, AP ranked 2nd in water management amongst the 17 GS in 2017–18 (improving from 3rd rank in 2016–17).
- AP is well placed to become torchbearer of good water management practices for other States provided it continues to improve and sustain its efficient water management practices.

Unemployment Rate

- Incidence of unemployment (usual principal and subsidiary status) among persons aged 15 years and above was third lowest in AP (across GS) in 2017–18.[1]
- AP should consolidate the apex position it won in Ease of Doing Business in 2019, along with the low unemployment rate, by continuing its investment friendly policies and generating more employment for its people.

Female Labour Force Participation Rate

- In GS, AP had the second highest female LFPR (usual principal and subsidiary status) of 42.5% among workers aged 15 years in 2017–18.[2]
- The State Government should adopt policies to further enhance the participation of women, especially at the managerial level.

Million-Plus Cities

- There are two million-plus cities in AP, Vijayawada and Vishakhapatnam, which could act as engines of economic growth with the right mix of investment in infrastructure and logistics to ensure better quality of life.

Second Longest Coastline

- The State has a 974 km long coastline with 9 of the 13 districts along the coast.
- Therefore, the State can generate revenue through port-led development to serve the industries of proximate landlocked States.

Fiscal Discipline

- There has been a rise in the FD–GSDP ratio of the State from 3.7% in 2015–16, rising to 4.5% in 2016–17, and 4.1% in 2018–19.
- At the same time, the Debt–GSDP ratio has remained elevated at the level of 28.1% in 2015–16 to 29.8% in 2018–19.
- In view of the above, the State needs to bring down its deficits and debt to sustainable levels.

FRBM Compliance

- The State passed its FRBM Act in 2005 and amended it in 2011.
- Adherence to FRBM targets by AP from 2015–16 to 2017–18 could not be ascertained in the absence of requisite targets fixed by the State Government.

Ratios as %	*2015–16*[a]	*2016–17*[a]	*2017–18*[a]
Debt–GSDP			
As prescribed by the State FRBM	N.A.	N.A.	N.A.
Actually achieved	28.1	28.5	26.6
FD–GSDP			
As prescribed by the State FRBM	N.A.	N.A.	N.A.
Actually achieved	3.7	4.5	4.1

Not Applicable (N.A.): According to the communication from the Government of Andhra Pradesh, no FRBM targets were fixed for these years.

Source: Government of Andhra Pradesh.

High Dependence on Central Transfers

- In 2016–17, Central transfers constituted more than 50% of AP's TRR. However, in 2018–19 it decreased to 45.6%.
- The State needs to keep taking steps to generate more revenue from its own sources (both tax and non-tax).

High and Rising Dependence on Agriculture and Allied Sectors

- The share of agriculture, forestry and fishing sectors in GSVA (at current prices) is both large and rising—increasing from 31% in 2015–16 to 35% in 2018–19).
- This is contrary to expected structural transformation of developing economies away from primary to secondary and tertiary sectors.
- Therefore, the State needs to diversify its economic base and strengthen other sectors including food processing industry, which would also generate more skilled jobs.

Low Per Capita Expenditure in Important Sectors, 2016–17

- Per capita spending by AP in key sectors crucial for nation building has been lower than both GS and all States averages.

Per capita expenditure in key sectors per annum in Rs

	Roads, Bridges and Buildings	*Forestry, Ecology, and Environment*	*Water Supply and Sanitation*
Andhra Pradesh	240	53	223
General States	318	98	253
All States	365	114	276

Education

- Educational outcomes in AP are either poorer than the national average (such as reading abilities) or have substantially deteriorated over a period of time (such as arithmetic abilities).

	Learning outcome I[a]		*Learning outcome II*[b]	
	2016	*2018*	*2016*	*2018*
Andhra Pradesh	22.6	22.6	48.3	38.5
India	25.2	27.3	27.7	28.2

a Percentage Children in Class III (of government and private schools) who can read Class II Text (2018)
b Percentage Children in Class III (of government and private schools) who can at least do subtraction (2018)
Source: ASER (2018), *Annual Survey of Education Report, 2018*, ASER Centre.

- AP should focus on improving educational outcomes.

Backwardness

- Of the 13 districts of AP, three are identified as aspirational.
- Of these, one district figures among the 35 districts in the country most severely affected by left-wing extremism, creating serious obstacles in its development path.
- The State may like to target the development of bottom 20% blocks as aspirational blocks, on the lines of aspirational districts.

Power Sector

- AT&C losses have increased from 14.26% (against the target of 9%) in 2017–18 to 25.7% (against the target of 9.0%) in 2018–19.
- The State needs to substantially improve its performance on key UDAY barometers (including smart metering) to avoid fiscal risk.
- Robust systemic reforms are required to ensure that the power subsidy reaches intended beneficiaries without leakage.

Local Bodies

- Measures need to be taken to devolve the remaining functions to local bodies.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Public Sector Undertakings[3]

- There were 64 working PSUs in the State, out of which 37 PSUs finalised their accounts (covering different reporting periods) between October 2016 and September 2017. Fifteen of

the working PSUs earned a profit of Rs 1,164.2 crore and 20 PSUs incurred a loss of Rs 3,240.5 crore. One PSU (Andhra Pradesh Power Finance Corporation Limited) prepared its accounts on no profit–no loss basis and another PSU (Bhogapuram International Airport Corporation Limited) had not started its operations.

- Nine PSUs had accumulated losses of Rs 25,367.9 crore—eroding public wealth—which is a cause for serious concern.
- The non-auditing of accounts could pose serious downside risks given the substantial budgetary support.

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Andhra Pradesh is part of the group which includes West Bengal, Rajasthan, Chhattisgarh, and Punjab.
- In June 2014, the erstwhile State of Andhra Pradesh was re-organised (bifurcated) into Telangana and present-day Andhra Pradesh. Hence, disaggregated revenue and expenditure figures were not available pre-2014 for comparison with other middle income States. While the overall evaluation has been done for the entire period from 2011–12 to 2018–19, the fiscal numbers for TL and AP were analysed 2015–16 onward.

Reform Signposts

- Post-bifurcation, residual AP is highly agri-dependent (35% share in GSVA).
- Its GSDP is the lowest, after Kerala in South India.
- Compared to undivided AP and the new State (Telangana), AP's current fiscal parameters are inferior.
- **AP needs to improve its ORR/TRR (55%) (compared to Telangana at 74%).**
- **Excise revenue is underperforming (10.72% of OTR compared to 16.45% in Telangana) and needs streamlining.**
- **State needs to rationalise its TRE in the short term, as it is one of the highest in the country at about 86% of total expenditure (against Telengana 76%).**
- In the last four years, the State's revenue expenditure started increasing rapidly at the cost of its capital expenditure. This is highly unsustainable for a new State. **Capital investment in irrigation, drinking water, and power should be linked to cost recovery**.
- It faces serious cash flow issues and resorts to frequent ways and means advances with occasional overdraft.
- Though FD and OD are well within limits, debt repayment presents cause of concern as its ORR is low.
- **The State needs to focus on improving revenue streams from excise, stamp duty, and royalty from minerals.**

Notes

1 GOI (2019), *Annual Report of Periodic Labour Force Survey, 2017–18*, Ministry of Statistics and Programme Implementation, Government of India.

2 Ibid.

3 CAG (2018), *Report No. 3 of 2018: Report of the Comptroller and Auditor General of India on Public Sector Undertakings for the year ended March 2017*, Government of Andhra Pradesh.

ARUNACHAL PRADESH

ArP-1.A: Overview

POPULATION
1.4 million
0.1%
Of population across all States

AREA
83,743 sq km
2.6%
Of area across all States

9.5%
Of forest area across all States

FOREST COVER
66,668 sq km
79.6%
Of the State's own area is under forest

0.4% ↓
Forest cover changed from 2017 to 2019

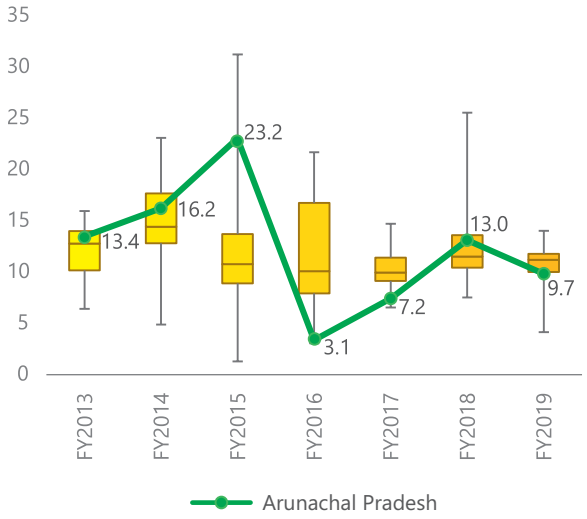
PER CAPITA GSDP
Rs 1,52,718
Rs 1,40,422
Average across all States

TAX TO GSDP
4.3%
6.3%
Average across all States

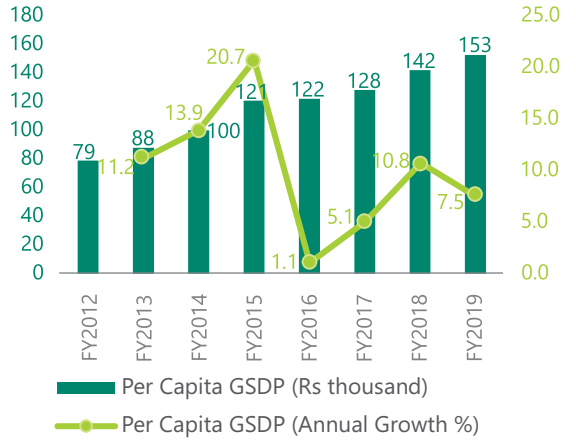
CHILDREN PER WOMAN
2.1
2.2
Average across all States

URBANISATION RATE
22.7%
31.1%
All India average

ArP-1.B: Growth rate of GSDP (at current prices, %)



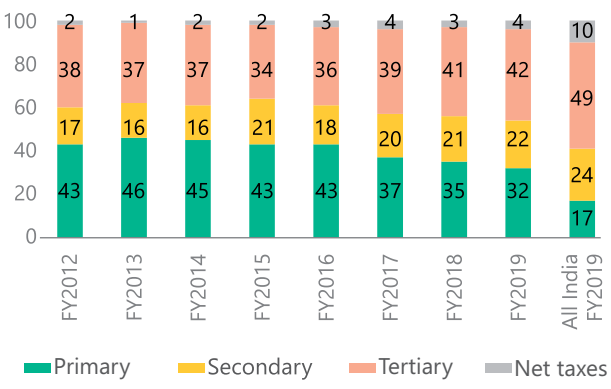
ArP-1.C: Per capita GSDP (at current prices)



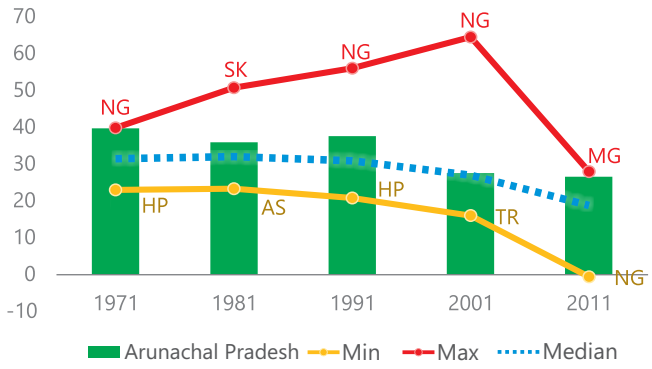
ArP-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All NEHS*	*Share (%) of State in NEHS*
2011–12	11,063	5,03,182	2.2
2012–13	12,547	5,63,081	2.2
2013–14	14,581	6,37,264	2.3
2014–15	17,959	6,95,474	2.6
2015–16	18,509	7,88,321	2.4
2016–17	19,845	8,67,648	2.3
2017–18	22,432	9,74,240	2.3
2018–19	24,603	10,82,901	2.3

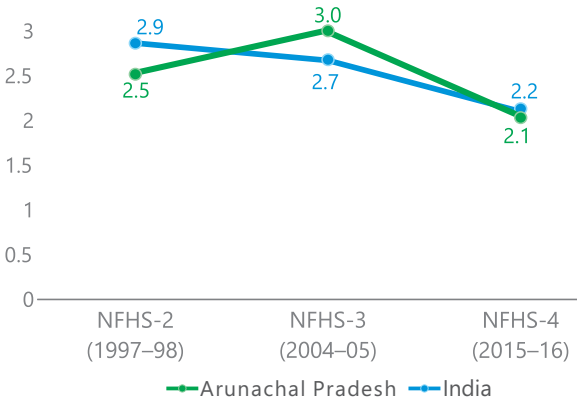
ArP-1.E: Sectoral Contribution to GSDP (at current prices, %)



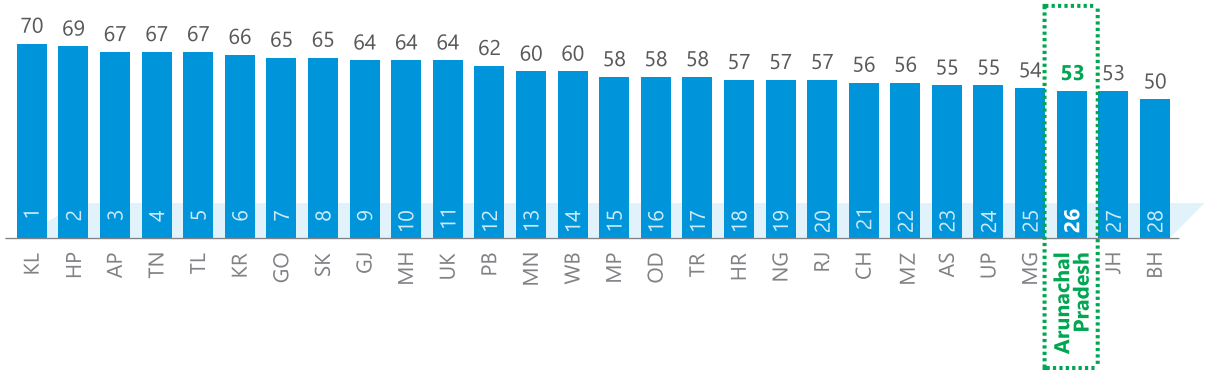
ArP-2.A: Decadal Growth in Population (%)



ArP-2.B: Total Fertility Rate (children per woman)



ArP-2.C: SDG Index of NITI Aayog (2019)



ArP-2.D: Key Social Indicators

EDUCATION

	ArP	INDIA
Literacy rate (%)[a]	65.4	73.0
Pupil–Teacher ratio[b] (in Primary)	12.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	51.2	55.4

WATER & SANITATION

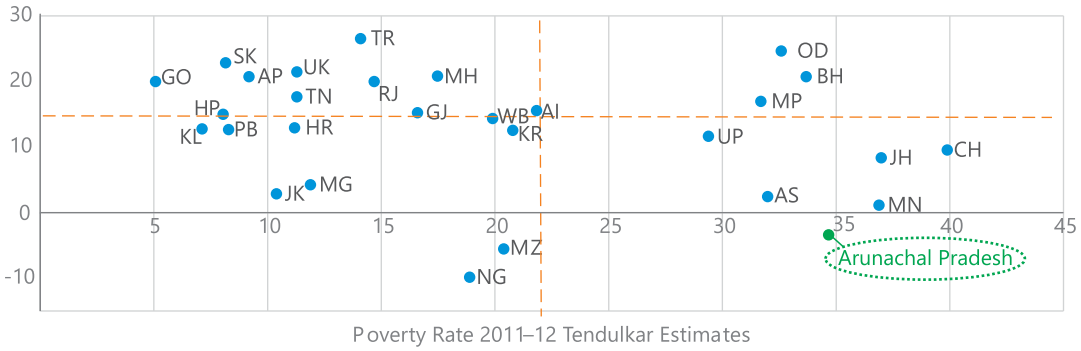
	ArP	INDIA
Availability of safe drinking water[d] (household %)	87.5	89.9
Availability of toilets[d] (household %)	90.8	61.1

HEALTH

	ArP	INDIA
Sex ratio[a] (females per 1000 males)	938	943
Underweight children (%)[d]	19.4	35.8
Stunting among children (%)[d]	29.4	38.4
Anaemia among children (%)[d]	54.2	58.6
Women with below normal BMI (%)[e,d]	8.5	22.9
Anaemia among Women (%)[d]	43.2	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	37.0	32.0
Institutional Deliveries (%)[d]	52.2	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	6.2	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	6,937	1,218 *(All States)*

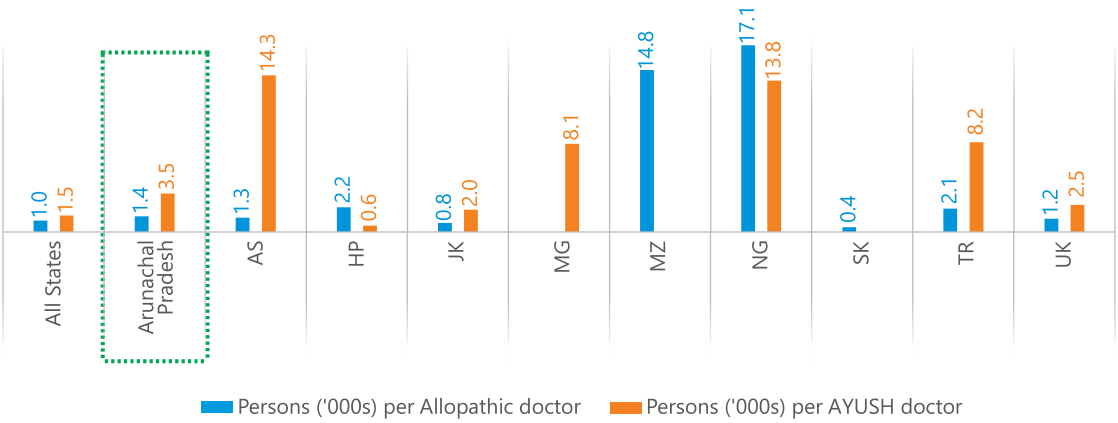
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018

ArP-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



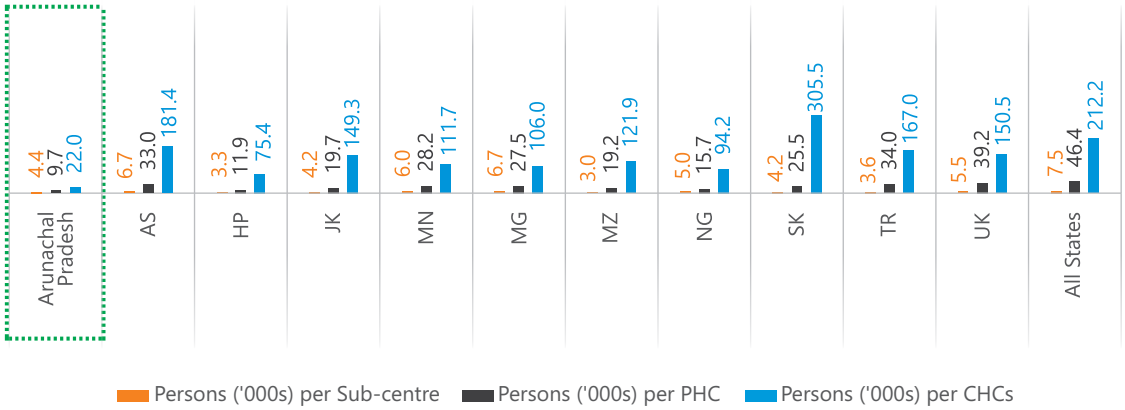
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

ArP-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



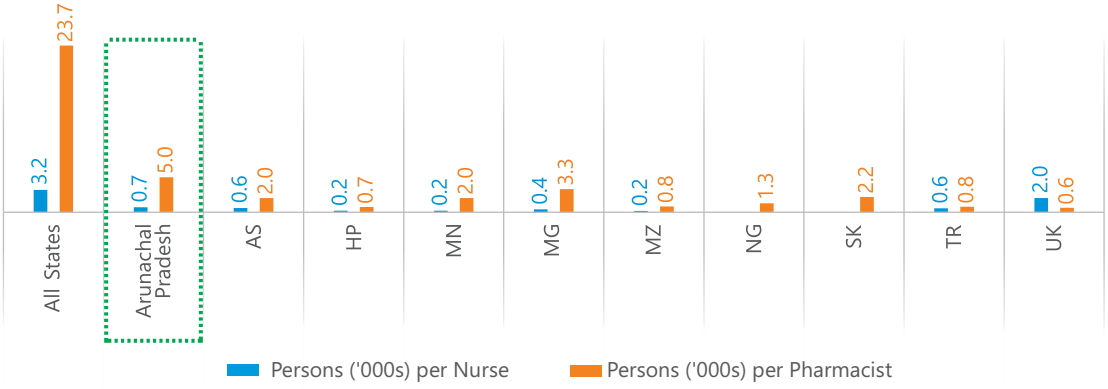
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

ArP-3.B: Persons ('000s) per Sub-centre/PHC/CHC



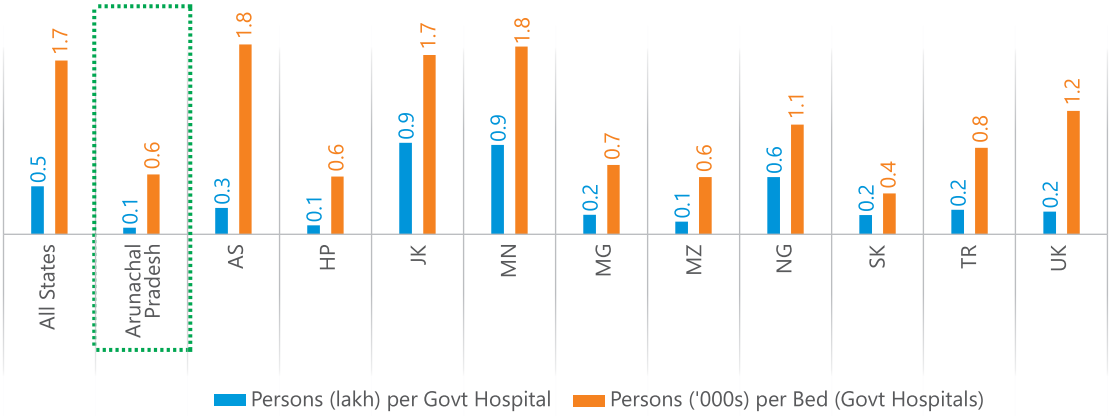
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

ArP-3.C: Persons ('000s) per Nurse/ Pharmacist



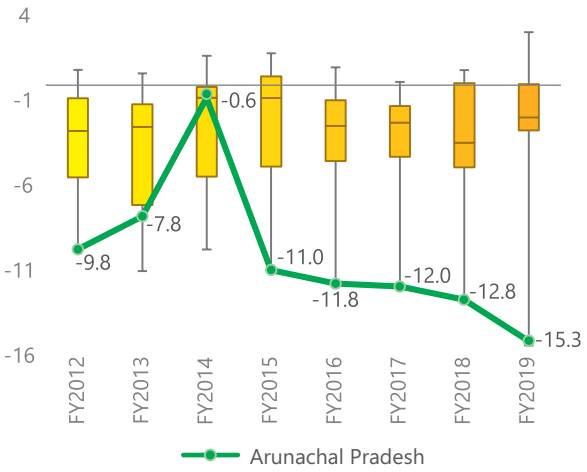
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

ArP-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

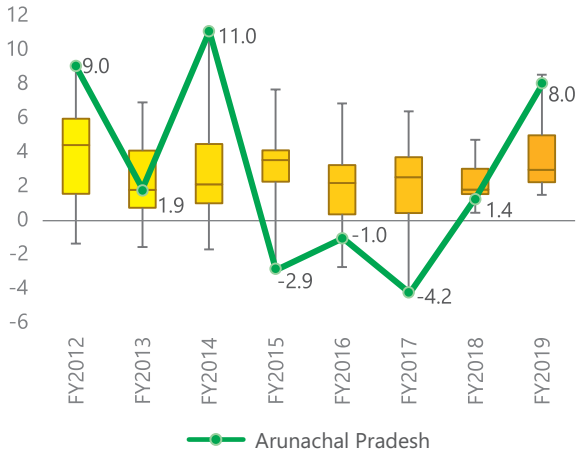


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

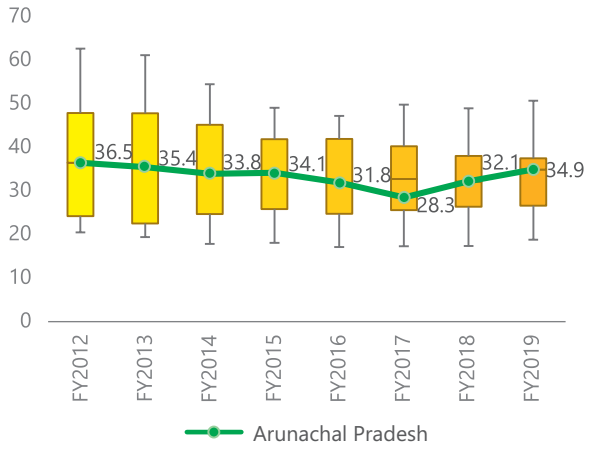
ArP-4.A: Revenue Deficit as % of GSDP



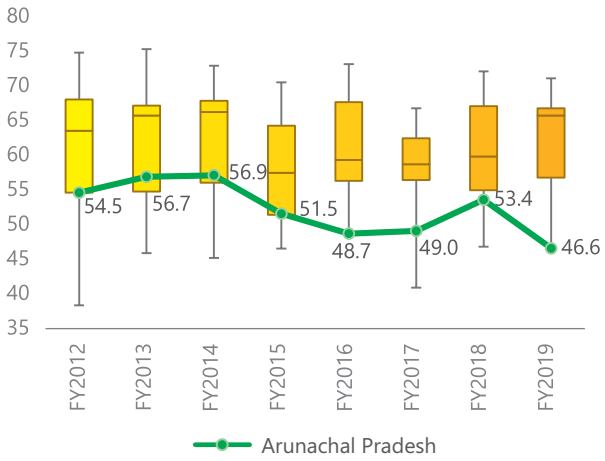
ArP-4.B: Fiscal Deficit as % of GSDP



ArP-4.C: Outstanding Debt as % of GSDP

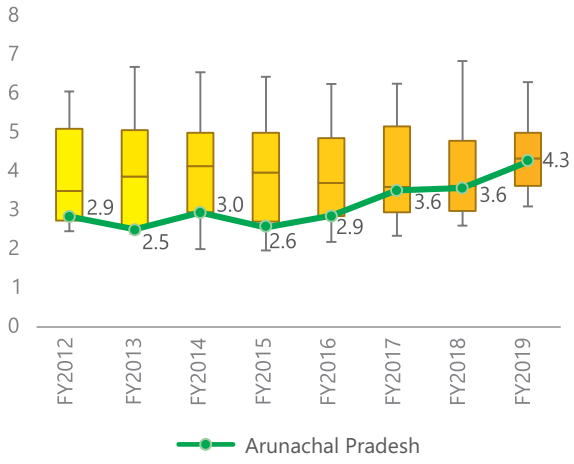


ArP-4.D: Committed Expenditure as a % of Revenue Expenditure

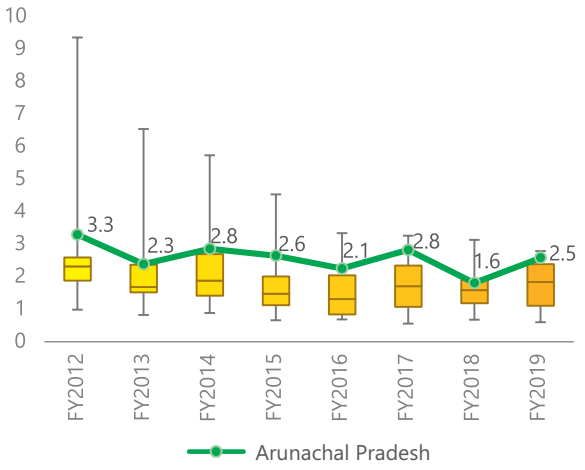


Note: Committed expenditure includes salaries, interest payments, and pensions

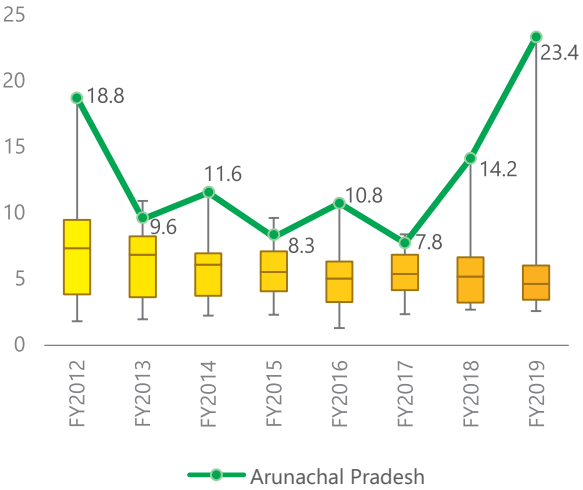
ArP-4.E: OTR as % of GSDP



ArP-4.F: NTR as % of GSDP



ArP-4.G: Capital Expenditure to GSDP Ratio



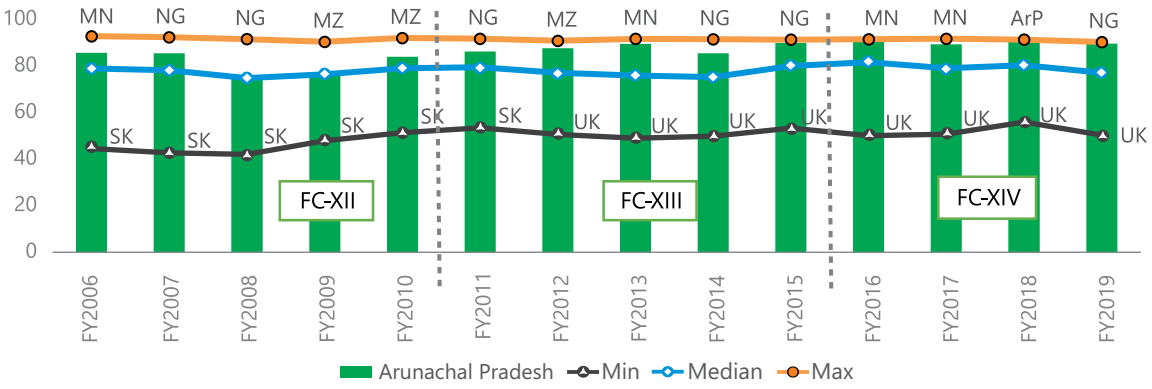
ArP-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	1,52,718	1,30,427
Indicators as a percentage of GSDP		
TRR	65.8	23.3
OTR	4.3	5.0
NTR	2.5	2.0
TE	73.9	26.7
ES	16.8	5.0
SS	19.3	8.7
GS	14.4	8.5
Committed Expenditure	23.5	14.4
Capital Expenditure	23.4	4.3
FD	8.0	3.4
RD	–15.3	–0.9
OD	34.9	29.6

ArP-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Arunachal Pradesh	16.7	18.4	13.9
NEHS	12.6	12.1	10.7

ArP-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- All 29 functions envisaged in the Eleventh Schedule of the Constitution have been devolved to RLBs.
- Of the 18 functions envisaged in the Twelfth Schedule of the Constitution, 13 have been devolved to ULBs .

Auditing Status

- The accounts of ULBs have been audited till 2017–18 and RLBs till 2014–15.

Property Tax Board

- Property Tax Board has not been set up by State Government yet.
- However, the State Cabinet has decided to introduce property tax in urban areas and survey of property in 30 urban areas has started.
- Property tax rules have been drafted and shall be notified on completion of property tax survey.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
16	6	16	21

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

State Finance Commissions

- No SFC is under implementation.
- The First SFC report was rejected by the Government.
- The Second SFC report was submitted during June 2014 but its ATR was not tabled in the assembly.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Debt and Losses

- While the State is a signatory to the UDAY agreement for operational efficiency, it has not taken over any DISCOM debt under the scheme.
- AT&C losses and ACS–ARR gap are both much higher than UDAY targets for the year 2018–19.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	55.5	39.0
ACS–ARR Gap (Rs per unit)	4.27	0.0

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

Vertical Devolution

- Arunachal Pradesh has recommended that State share in overall divisible pool of taxes be increased to 50%.
- It has also recommended that 10% of the devolved taxes be earmarked for the Northeast in the vertical devolution formula.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population and its compositions	20
ii)	Infrastructure Deficit	5
iii)	Deficit in Human Development	10
iv)	Income Distance (without agriculture)	30
v)	Forest area	10
vi)	Area	20
vii)	Performance based on criteria like GST, sanitation, Public Financial Management System, etc.	5

Tourism

- Measures to boost tourism (and thus generate revenues for the State) are listed below.
  - » Air connectivity and road network should be improved to save time and money for the tourist.
  - » Heli-taxi services to offbeat hill-stations may be started on PPP mode.
  - » Eco-tourism and adventure sports may be encouraged through incentives or PPP mode.
  - » Homestays, individual as well as community-based, may be promoted. Since homestays are primarily run by women, they are instrumental for their economic empowerment. The State Government may take active measures to link homestays with e-commerce players.

Hydropower

- The State has hydropower potential of 58,160 MW, of which only a part has been tapped so far.
- The State needs to find ways to exploit the potential and increase the revenue earnings.

Low OTR and High Dependence on Transfers

- The State's OTR contributed only 6.6% of TRR and NTR contributed about 3.8% of TRR in 2018–19.
- The Union's transfers contribute 89.6% of its TRR.
- The positive aspect though is that OTR has been growing at a good TGR of 19.3% (against NEHS average of 11%) from 2011–12 to 2018–19. This is mainly because of good GST collections by the State.
- Collections of VAT/GST increased at a TGR of 21.2% in Arunchal Pradesh (NEHS average 11%) from 2011–12 to 2018–19.
- The State has also made good progress in collections from Stamp Duty and Registration, posting a TGR of 22.4% against the average of 6.73% for NEHS from 2011–12 to 2018–19.
- However, OTR/GSDP remains lower than NEHS average.
- Hence, further attempts should be made by the State Government to enhance revenues and reduce dependence on Union Government.

Revenue Receipts of Arunachal Pradesh vs NEHS

Particular	*As percentage of GSDP in 2018–19*		*TGR from 2011–12 to 2018–19*	
	Arunachal Pradesh	*NEHS*	*Arunachal Pradesh*	*NEHS*
Total Revenue Receipts	65.8	23.3	18.4	12.1
Own Tax Revenue	4.3	5.0	19.3	11.0
VAT/GST	3.5	3.5	21.2	11.1
Stamp Duty & Registration	0.0	0.2	22.4	6.7
State Excise	0.6	0.7	21.0	14.8
Electricity Duty	–	0.1	–	9.9
Other Taxes	0.2	0.5	4.8	8.2
Non Tax Revenue	2.5	2.0	7.0	10.0
Share in Central Taxes	42.4	8.1	55.5	22.8
Grant in Aid	16.6	8.2	–4.4	6.7

High Debt to GSDP Ratio

- Debt–GSDP ratio of Arunachal Pradesh is very high at 34.9% against NEHS average of 29.6%.
- However, the State's debt has increased at a relatively slower TGR of 10.1% (against 11% NEHS average) from 2011–12 to 2018–19.
- The State should take further measures to align its debt to the new FRBM Act.
- The State also has abnormally high fiscal deficit of 8% in 2018–19.
- This is in spite of large revenue surplus emanating from huge transfers from Union since 2015–16. This needs to be strictly curtailed.

High Committed Expenditure

- Overall committed expenditure (including GIA Salary) (consisting of interest payments, salaries and pensions) increased by TGR of 13.8% (NEHS average 12.1%) between 2011–12 and 2018–19.
- Committed expenditure (including GIA salary) during 2018–19 constituted 54.5% of the revenue expenditure.
- The State needs to rationalise its expenditure and reduce its share of committed expenditure so that fiscal space is eased up for development expenditure.

Economy Driven by Public Expenditure

- Total expenditure of the State Government was about 73.88% of the GSDP in 2018–19 —indicating that its economy is driven almost entirely by government spending.
- The State gets no FDI and negligible private investment.
- Share of secondary sector in the State is also very low.
- The State Government needs to take measures to propel growth through tourism and other services.

Increasing Poverty

- The State witnessed an increase in poverty rate from 31.1% in 2004–05 to 34.7% in 2011–12 as per Tendulkar estimates of poverty.
- This trend needs to be reversed immediately.

Low Literacy

- Government of Arunachal Pradesh needs to focus on improving educational attainments.
- Arunachal Pradesh has second lowest literacy rate in the country after Bihar (see ArP-2.D).
- Only 18.7% of Grade III students could read Grade II text (27.3% all India).[1]

Long International Border

- The State has an international border of about 1,863 km with many of the villages along the international border suffering from "stress migration".
- People living in the border villages frequently move to interior areas in search of employment.
- It is essential to expeditiously fill the infrastructure gap in the border areas and provide source of employment so that villagers do not abandon their homes.

Inadequate Infrastructure

- The State Government needs to follow a medium-term focused approach for improving its physical connectivity.
- Arunachal Pradesh has very low density of roads.
- There are no State Highways.
- The State Government needs to prioritise building of roads and provide for their maintenance.
- Arunachal Pradesh has no airport. This is hampering the growth of tourism.

Public Sector Undertakings[2]

- The number of accounts in arrears has increased from 28 in 2012–13 to 35 in 2016–17 with the extent of arrears ranging from 1 to 17 years in the five working PSUs.
- The State Government had extended budgetary support of Rs 4.1 crore to PSUs in 2016–17.
- Although the budgetary support is not significant, maintenance of accounts and auditing should be ensured by the State Government.

High Power Sector Losses

- AT&C losses in the power sector were as high as 55.5% (in 2018–19) and ACS–ARR gap, Rs 4.27 per unit. This is much higher than the targets assigned to the State under UDAY.
- The receipt–expenditure mismatch in the power sector has increased over the last few years.
- The State Government has not yet unbundled the power sector.

- It should take measures to corporatise its power sector to allow it to run on sound economic principles.
- The State also needs to follow the operational targets of UDAY including 100% metering of consumers.

Local Bodies

- The State needs to constitute SFCs on time and act upon its recommendations after tabling its report in the legislature.
- Local bodies in the State have low own revenues. The State government may help the local bodies to use market fees, parking space, etc. for improving their own revenues.
- The State Government should immediately set-up a PTB as was recommended by FC-XIII.
- Remaining functions of RLBs may be immediately devolved.

Reform Signposts

- Arunachal Pradesh is highly dependent upon the Union Government as it receives 89.6% of its resources from the Centre Union. Its OTR to GSDP ratio is also very low as compared to the NEHS average. **The State needs to find innovative ways including hydel power generation and tourism to enhance its revenues.**
- **The State needs to reduce its debt–GSDP ratio and FD–GSDP ratio for fiscal sustainability.**
- Arunachal Pradesh has very high committed expenditure. **The State needs to reduce, re-prioritise, and revamp its expenditure (including salaries, interest payments, and pensions) to create fiscal space for development spends.**
- **The State needs to enhance efficiency of the power sector by reducing its AT&C losses and ACS–ARR gap.**
- **It should ensure timely audit of accounts of all PSUs.**

Notes

1 ASER (2018), *Annual Survey of Education Report 2018*, ASER Centre.

2 CAG (2018), *Report on Public Sector Units in Arunachal Pradesh* by the Comptroller and Auditor General of India for the Government of Arunachal Pradesh.

AS-1.A: Overview

POPULATION
31.2 million
2.6%
Of population across all States

AREA
78,438 sq km
2.4%
Of area across all States

4.0%
Of forest area across all States

FOREST COVER
28,327 sq km
36.1%
Of the State's own area is under forest

0.8% ↑
Forest cover changed from 2017 to 2019

PER CAPITA GSDP
Rs 92,533
Rs 1,40,422
Average across all States

TAX TO GSDP
5.0%
6.3%
Average across all States

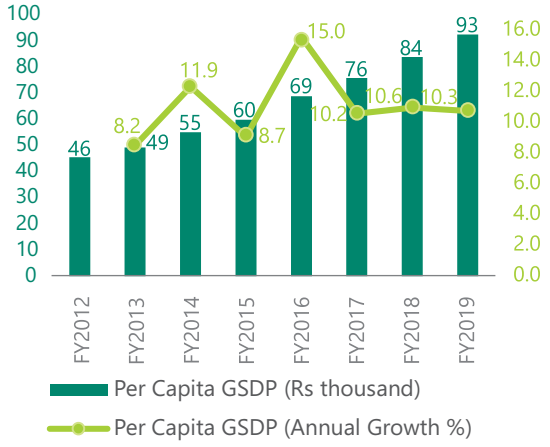
CHILDREN PER WOMAN
2.2
2.2
Average across all States

URBANISATION RATE
14.1%
31.1%
All India average

AS-1.B: Growth rate of GSDP (at current prices, %)



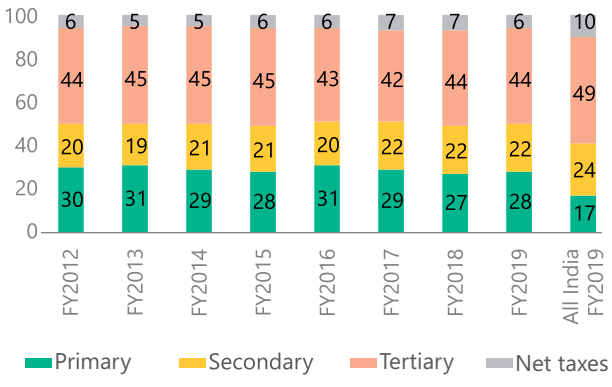
AS-1.C: Per capita GSDP (at current prices)



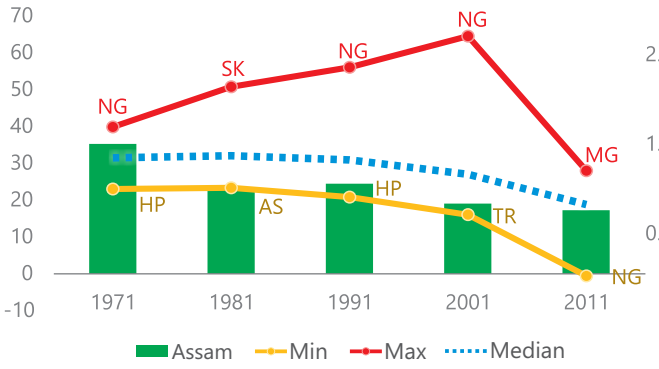
AS-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All NEHS*	*Share (%) of State in NEHS*
2011–12	1,43,175	5,03,182	28.5
2012–13	1,56,864	5,63,081	27.9
2013–14	1,77,745	6,37,264	27.9
2014–15	1,95,723	6,95,474	28.1
2015–16	2,27,959	7,88,321	28.9
2016–17	2,54,382	8,67,648	29.3
2017–18	2,83,165	9,74,240	29.1
2018–19	3,15,881	10,82,901	29.2

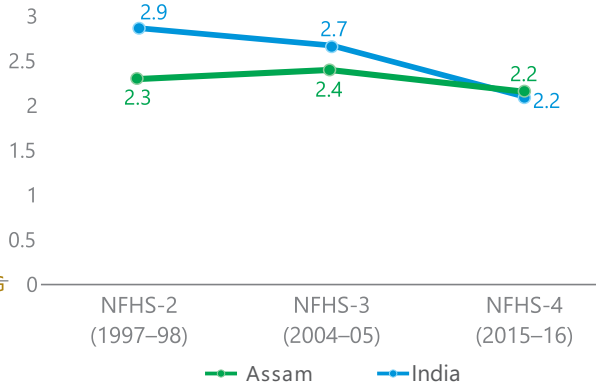
AS-1.E: Sectoral Contribution to GSDP (at current prices, %)



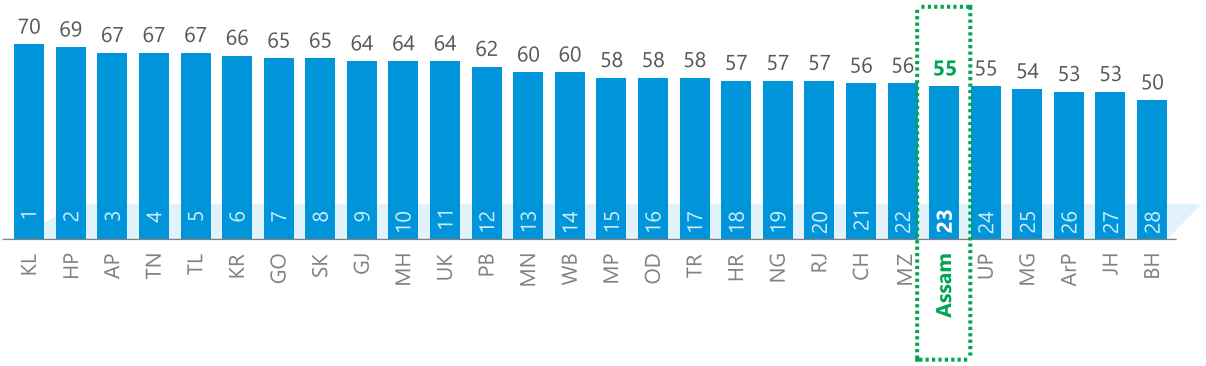
AS-2.A: Decadal Growth in Population (%)



AS-2.B: Total Fertility Rate (children per woman)



AS-2.C: SDG Index of NITI Aayog (2019)



AS-2.D: Key Social Indicators

EDUCATION

	AS	INDIA
Literacy rate (%)[a]	72.2	73.0
Pupil–Teacher ratio[b] (in Primary)	24.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	39.7	55.4

WATER & SANITATION

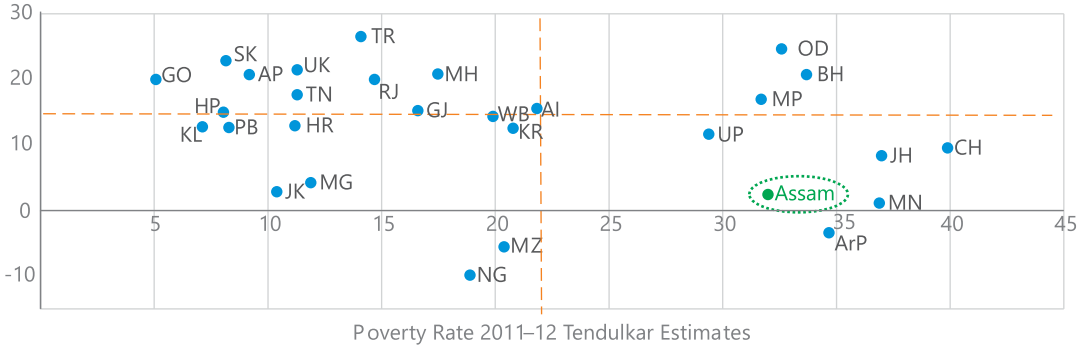
	AS	INDIA
Availability of safe drinking water[d] (household %)	83.8	89.9
Availability of toilets[d] (household %)	88.9	61.1

HEALTH

	AS	INDIA
Life expectancy (years)[g]	66.2	69.0
Sex ratio (♀ per 1000 ♂)[a]	958	943
Underweight children (%)[d]	29.8	35.8
Stunting among children (%)[d]	36.4	38.4
Anaemia among children (%)[d]	35.7	58.6
Women with below normal BMI (%)[e,d]	25.7	22.9
Anaemia among Women (%)[d]	46.0	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	41.0	32.0
Institutional Deliveries (%)[d]	70.6	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	6.8	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,360	1,218 *(All States)*

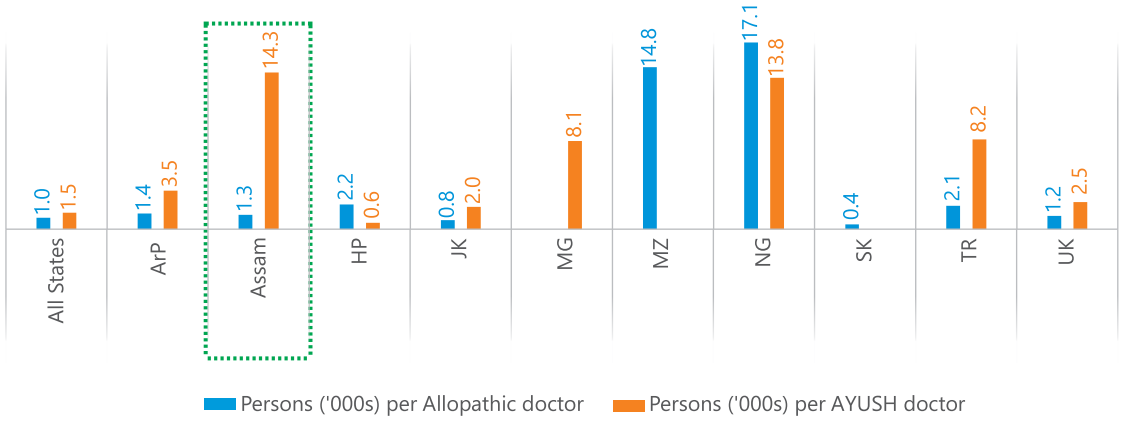
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

AS-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



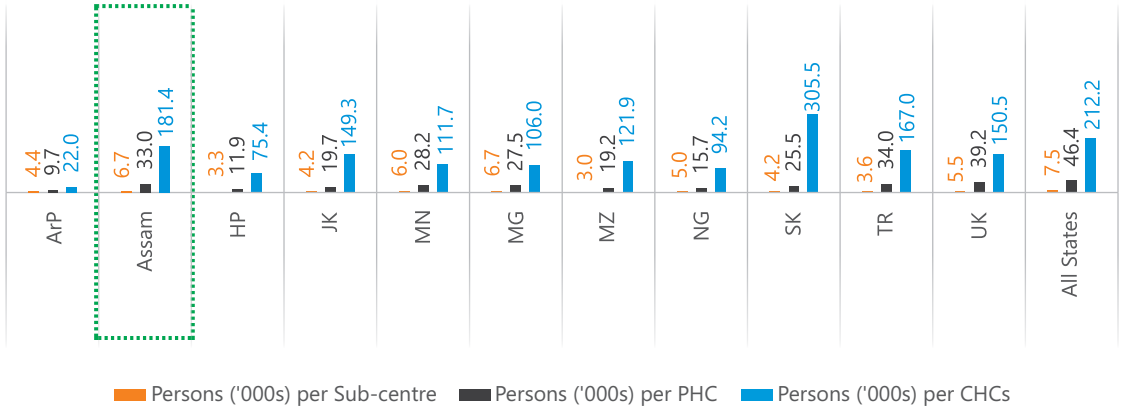
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

AS-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



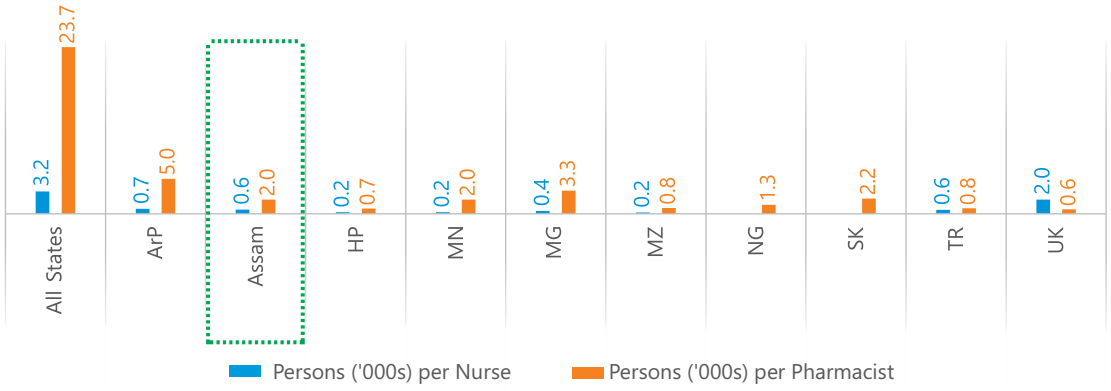
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

AS-3.B: Persons ('000s) per Sub-centre/PHC/CHC



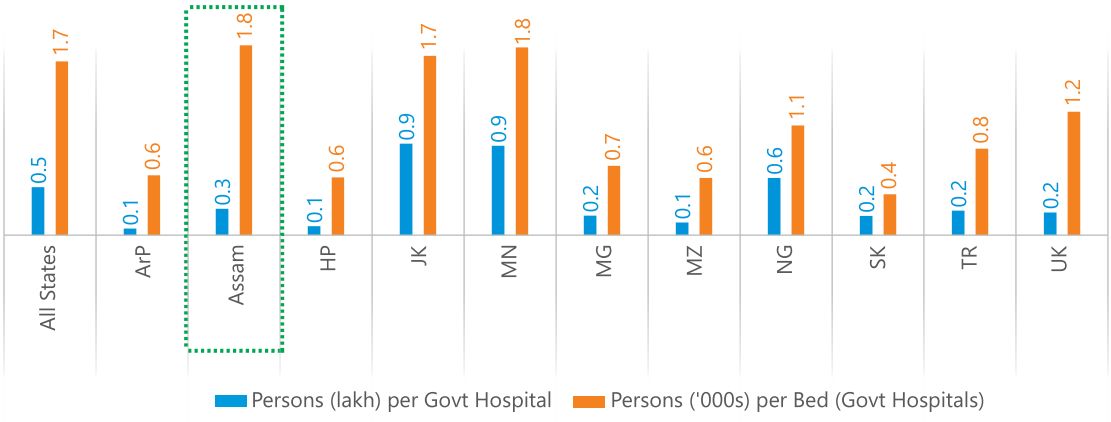
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

AS-3.C: Persons ('000s) per Nurse/ Pharmacist



Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

AS-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

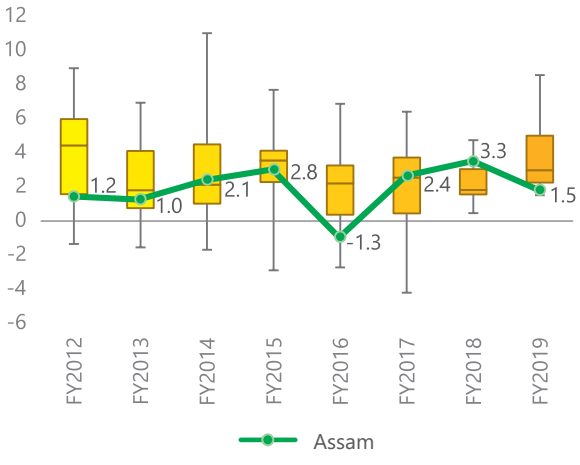


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

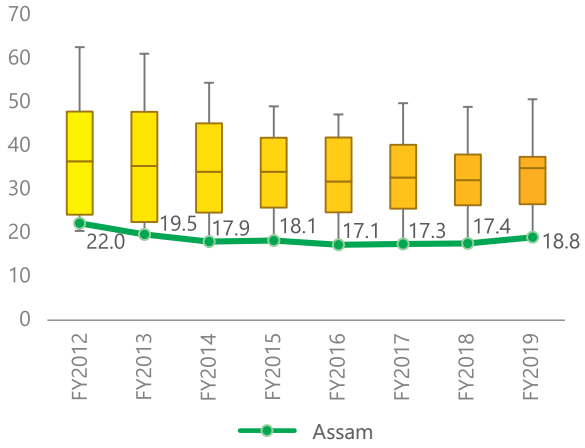
AS-4.A: Revenue Deficit as % of GSDP



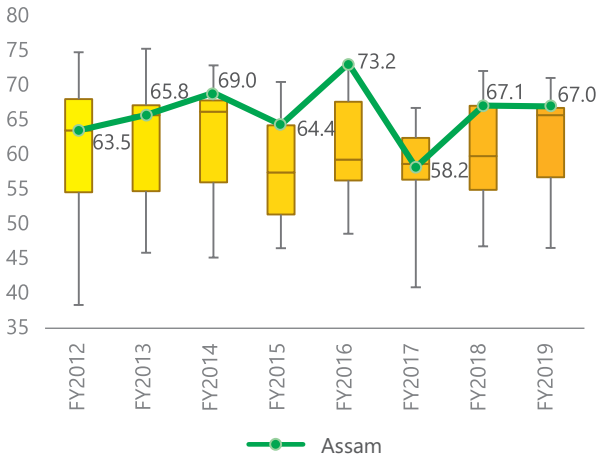
AS-4.B: Fiscal Deficit as % of GSDP



AS-4.C: Outstanding Debt as % of GSDP

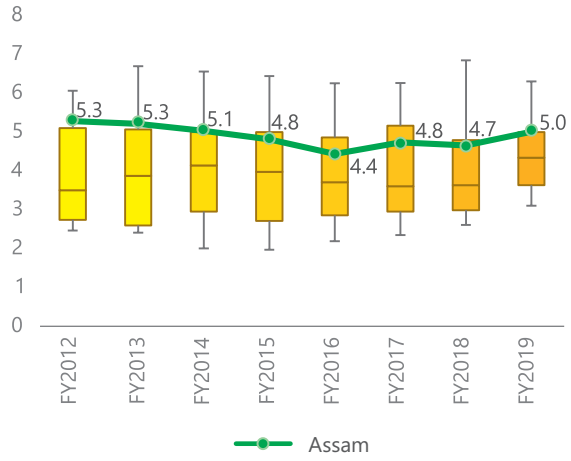


AS-4.D: Committed Expenditure as a % of Revenue Expenditure

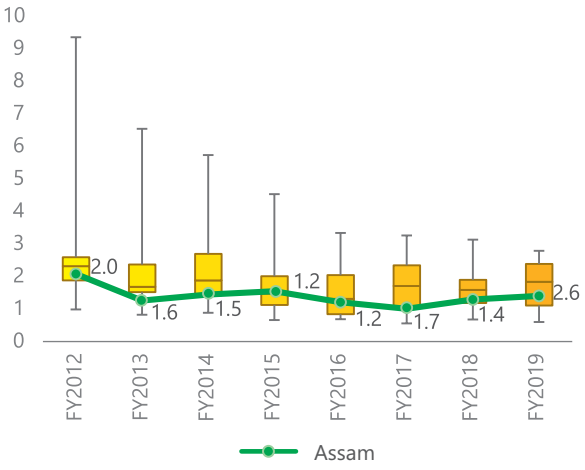


Note: Committed expenditure includes salaries, interest payments, and pensions

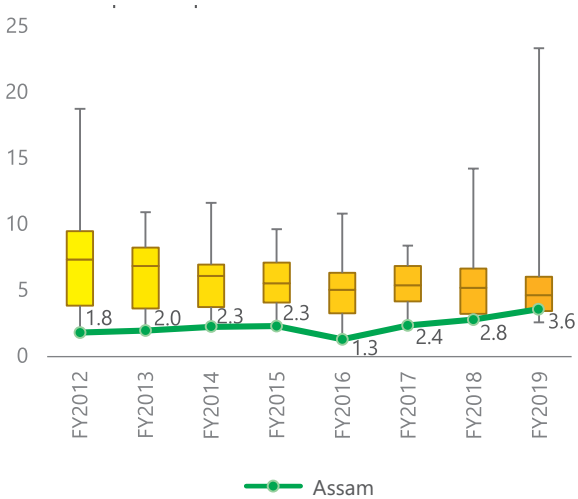
AS-4.E: OTR as % of GSDP



AS-4.F: NTR as % of GSDP



AS-4.G: Capital Expenditure to GSDP Ratio



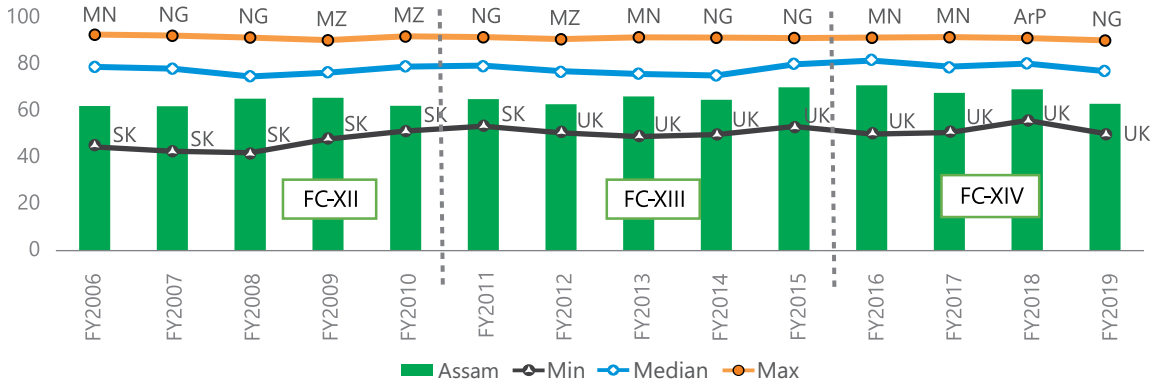
AS-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	92,533	1,30,427
Indicators as a percentage of GSDP		
TRR	20.1	23.3
OTR	5.0	5.0
NTR	2.6	2.0
TE	21.6	26.7
ES	3.2	5.0
SS	8.1	8.7
GS	6.6	8.5
Committed Expenditure	12.1	14.4
Capital Expenditure	3.6	4.3
FD	1.5	3.4
RD	–2.1	–0.9
OD	18.8	29.6

AS-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Assam	12.4	12.8	11.7
NEHS	12.6	12.1	10.7

AS-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions envisaged in the Eleventh Schedule of the Constitution, only 7 have been devolved to PRI.
- The State Government has not undertaken the devolution of functions, functionaries and funds to the municipalities as per the Twelfth Schedule of the Constitution.
- Of the 18 functions envisaged in the Twelfth Schedule, 13 are covered within the ambit of their current traditional functions hence no separate activity mapping is required for these subjects. No activity mapping has been done for the remaining subjects.

Auditing Status

- Auditing of accounts of RLBs, ULBs, and ADCs has been completed till 2017–18.

Property Tax Board

- The State set up its PTB (recommended by FC-XIII) in March 2011. It is functional in Golaghat, Silchar, Bongaigaon, Satapgram, Lala, Dergaon, Hojai, and Jorhat Municipal Board.
- It is in the process of being operationalised in Dhakuakhana and Silipathar Municipal Board.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
12	17	15	14

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

Fifth SFC (2016–17 to 2019-20):

- Fifth SFC submitted its interim report on 30 September 2014 and final report on 30 November 2016. The ATR was tabled on 20 June 2017.
- It recommended that 14% of the net proceeds of taxes and duties levied and collected by the State Government (Rs 6,679.87 crore) be allocated as grants and untied funds during the award period (2016–17 to 2019–20).

- Of the amount, Rs 4,748.70 crore be allocated to the General Areas—Rs 3,356.8 crore as earmarked grant and Rs 1,391.9 crore as Untied Fund.
- Further, Rs 1,931.2 crore be allocated to the Excluded Areas—Rs 1,880.3 crore as earmarked grant and Rs 50.9 crore as Untied Fund.
- SFC recommended that distribution between RLBs and ULBs be based on population (weight 80%) and density (weight 20%).
- Allocation within PRIs be the weighted average of population (50%), geographical area (25%), and inverse per capita rural district domestic product (25%).
- Allocation with ULBs should be based upon population (50%), area (25%), index of infrastructure (12.5%), and per capita tax collection (12.5%).

Debt and Losses

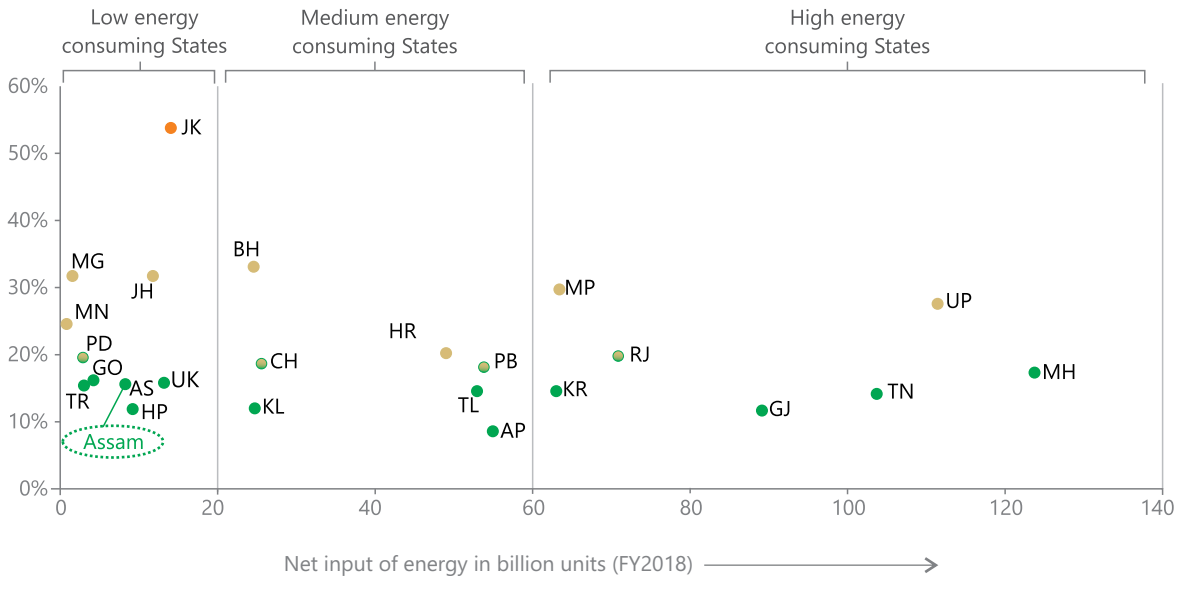
- Assam Government took over the debt of the power sector amounting to Rs 1,133 crore.
- The State failed to achieve the targets of AT&C losses but was able to achieve the ACS–ARR gap target.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	19.87	16.0
ACS–ARR Gap (Rs per unit)	0.02	0.19

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

AS-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Assam has recommended that the State share in overall divisible pool of taxes be increased to 50% from 42%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Income Distance	50
ii)	Forest Cover	10
iii)	Area	5
iv)	Population	20
v)	Socio-economic Infrastructure Gap	15

Sound Macro-Deficit Indicators

- Fiscal Deficit, Revenue Deficit and Primary Deficit remained at modest levels. Fiscal Deficit remained below 3% from 2011–12 to 2018–19, except in 2017–18 when it reached 3.3%.

FRBM Compliance

- The State implemented its FRBM Act in 2005 and amended it in 2005, 2007, 2009, 2011, and 2017.
- A perceptible change in the fiscal management was seen after the enactment of the FRBM Act.
- Outstanding Debt as a percentage of GSDP decreased from 22% in 2011–12 to 18.8% in 2018–19.
- The State has adhered to its FRBM limit in the recent years.
- The State should continue to adhere to the debt path as per the new FRBM Act.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	28.3	28.4	28.4	28.5	28.5	28.5	28.5
Actually achieved	22.0	19.5	17.9	18.1	17.1	17.3	17.4
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Actually achieved	1.2	1.0	2.1	2.8	–1.3	2.4	3.3

Source: Government of Assam

Gateway to the Northeast Region (NER) of India and South-East Asia

- Assam borders Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, and Tripura, and shares international boundaries stretching to 533 km.
- Assam's physical infrastructure (particularly the road network) is used extensively by neighbouring states. The maintenance of the transportation networks in Assam is important not only for the State but also for the entire NER and also for strategic defence interests of the country.

- Improvement and maintenance of road, rail, air and waterways connectivity of Assam is important for overall development of the NER.

Natural Resources

- Assam has one of the richest biodiversity zones in the world and consists of tropical rainforests, deciduous forests, riverine grasslands, bamboo orchards and numerous wetland ecosystems.
- It has abundant mineral resources—coal, petroleum; limestone and natural gas.
- Other minor minerals include magnetic quartzite, kaolin, sillimanites, iron ore, clay and feldspar, etc.
- It is also the largest producer of crude oil in India. Oil India Limited (OIL) is the second largest hydrocarbon exploration and production Indian public sector company with its operational headquarters in Duliajan, Assam. These resources have the potential to develop more upstream and downstream industries.

Tourism

- Assam has a rich mix of history, culture, and natural beauty, which may be leveraged for tourism.
- Better infrastructure and connectivity is needed to further promote tourism.
- Various festivals and events may be promoted.
- Eco-tourism and adventure sports may be encouraged through incentives or PPP mode.
- Homestays, individual as well as community based, may be promoted as alternate source of income for local people. The State Government may take active measures to link homestays with e-commerce players.

Low Collections from Excise and Stamp Duty and Registration

- While overall OTR–GSDP ratio of Assam (5.04%) is marginally better than the NEHS average (4.95%), its Excise collections (0.44% as compared to the NEHS average of 0.73%) and Stamp Duty and Registration proceeds (0.08% as compared to the NEHS average of 0.18%) are comparatively low.
- Assam may be losing excise from liquor due to its porous borders with seven States.
- The State's subdued Stamp and Registration fees is due to a low urbanisation rate (14%) along with poor land records.

High Committed Liabilities

- Committed liabilities (including GIA Salary) of Assam at 67.8% of TRE in 2018–19 while at par with NEHS (67.6%) compares poorly with the All States average of 50.6%.
- State Government needs to rationalise and restructure its expenditure.
- Measures should be taken to reduce burden of salaries so that resources are freed up for other development expenditure.

Low Spending by State Government

- Assam's per capita revenue expenditure, capital expenditure, and total expenditure is very low compared to NEHS and all States. Its expenditure (as percentage of GSDP) is also low as compared to NEHS.

Spending by State

2018–19	*Assam*	*NEHS*	*All States*
Revenue Expenditure			
As % of GSDP	18.0	22.4	14.1
Per capita (Rs)	16,668	29,220	19,842
Capital Expenditure			
As % of GSDP	3.6	4.3	2.6
Per capita (Rs)	3,328	5,610	3,677
Total Expenditure			
As % of GSDP	21.6	26.7	16.7
Per capita (Rs)	19,996	34,830	23,519

- Assam has lowest per capita spending across all NEHS. Per capita revenue expenditure of Uttarakhand (second lowest in NEHS) is 1.7 times that of Assam.
- Poor budget marksmanship along with prolonged monsoon and limited working months in a year are main reasons for low spending.

Pending Utilisation Certificates

- The report of the Accountant General dated March 2018, stated that the 'State Government's compliance with various rules, procedures and directives was unsatisfactory as 9,370 Utilisation Certificates (UCs) in respect of grants aggregating Rs 17,935.10 crore paid to 53 departments of the State Government during the period from 2001–02 to 2016–17 were in arrears. Non-submission of Utilisation Certificates is fraught with the risk of misappropriation.'
- The State needs to utilise its fiscal space to increase expenditure on economic and social services.

Slow Economic Growth with Poor Per Capita Income

- Prone to natural calamities, the State suffers from lack of basic infrastructure, has a poor banking network with low credit availability and lacks significant private investment in any sector.
- Assam's per capita GSDP (Rs 92,533 in 2018–19) is very low as compared to the all States' average (Rs 1,40,422) and also substantially lower than the NEHS average (Rs 1,30,427).
- 31.98% of the population lives below the poverty line as against the India average of 21% (Tendulkar poverty estimates).
- The rank of Assam has been second lowest after Manipur since 2011–12 in terms of per capita GSDP among NEHS.
- The State has low industrial and manufacturing base and FDI has remained elusive in spite of a good natural resource base. The State's GSDP share from secondary sector is a mere 22% against Uttarakhand's 44% and Himachal Pradesh's 41%.
- The World Bank Report on the Ease of Doing Business dated September 2015 ranked Assam 22nd in India. The State Government should expedite the work of digitalizing transaction processes through a single centralized web based application.
- The growth rate needs massive boost with accelerated investment in the social and economic sectors.

Excessive Rains and Flooding

- Due to prolonged monsoon Assam receives a very high average annual rainfall of 2,297.4 mm and floods are a perennial problem for the State.

- Rivers Brahmaputra, Barak, and their tributaries cause massive erosion during high floods as well as in the receding stages.
- Approximately 8,000 hectare of land has been eroded every year since 1954.
- Assam has lost more than 4.27 lakh hectares of land to erosion since then, constituting about 7.4% of its geographical area affecting 9 lakh people and displacing more than 1.25 lakh families.[1]

High Cost of Capital Assets

- Restoring functionality of areas damaged by extended monsoon and flooding for the brief working season of 6 months is expensive.
- Assets deteriorate prematurely and need to be replaced frequently. This imposes heavy capital costs on the State.
- The norms for maintenance of capital assets need to be strengthened.

Local Bodies

- The State Government should immediately devolve the remaining functions to local bodies.
- PRIs and ULBs have meagre resources of their own. Local bodies need to increase own revenues by through parking fees, revision of property tax, market fee, etc.
- According to CAG report, 2018, Utilisation Certificates (UCs) for Rs 533.24 crore were pending from 2011–2017 in 20 Zilla Parishads (ZPs) which indicated lack of financial discipline and monitoring by RLBs.
- Non-submission of UCs deprived the ZPs of subsequent release of funds. Local bodies need to ensure that UCs are submitted in timely manner.

Power Sector

- The State needs to address its AT&C losses (currently, higher than the prescribed UDAY targets).

Inadequate Banking Activities

- During 2016–17, the Credit–Deposit ratio of all scheduled commercial banks in Assam was 39.9% (compared to national average of 73.7%).
- There is a need to broaden the banking network as the average population covered per bank branch in Assam is 13,710 as on March 2017 compared to All India average of 8,800 during the same period.[2]

Poor Social and Human Development Indicators

- Assam ranks 23rd among All States in SDG ranking by NITI Aayog (2019).
- Its human development indicators like IMR, proportion of literacy rate, institutional deliveries are worse than national average (see AS-2.D).
- Its per annum per capita revenue expenditure on health (Rs 1,245) and education (Rs 4,516) is lower than NEHS average (Rs 1,987 and Rs 5,970 respectively).
- The State needs to focus on improving its human development indicators.

Social, Cultural, and Ethnic Diversity

- Assam is uniquely diverse in its demography, with 26 Scheduled Tribes, accounting for 12.44% of the population and 22 categories of Scheduled Castes accounting for 7.15% of the population.

- It is also home to a substantial population of religious minorities—118 development blocks spread across 17 of 33 districts, have been categorised as minority blocks.
- Demographic diversities give rise to myriad social-cultural conditions posing development challenges of various forms.

Public Sector Undertakings[3]

- As on 30 September 2018, of the 30 working PSUs, 26 had arrears in 183 accounts with the extent of arrears ranging up to 25 years.
- Further, of the 16 non-working PSUs, 15 had arrears ranging up to 35 years.
- The Assam Government needs to expedite the liquidation of the non-working PSUs.
- The non-auditing of accounts could pose serious downside risks given the substantial budgetary support.

Reform Signposts

- In spite of being rich in natural resources, the State has relatively low base of secondary sector as compared to States like Himachal Pradesh and Uttarakhand.
- The State's OTR–GSDP ratio is slightly better than NEHS average. However, its collections from excise, stamp and registration are relatively low. **The State needs to tighten its revenue administration, increase the base of secondary sector, and find innovative ways to enhance revenue earning.**
- As seen earlier, the State has high committed expenditure as a proportion of GSDP. **State Government needs to rationalise and restructure its expenditure. Measures should be taken to reduce burden of committed expenditure so that resources are freed up for development expenditure.**
- The State has very low per capita expenditure as compared to NEHS. This is in spite of having revenue surplus. **The State needs to utilise its fiscal space to increase expenditure on economic and social services**.

Notes

1 Government of Assam memorandum.

2 Ibid.

3 CAG (2018), *Report of the Comptroller and Auditor General of India on Public Sector Undertakings*, Report No. 1 of 2018, Government of Assam.

BH-1.A: Overview

POPULATION
104.1 million
8.7%
Of population across all States

AREA
94,163 sq km
2.9%
Of area across all States

FOREST COVER
7,306 sq km
1.0%
Of forest area across all States
7.8%
Of the State's own area is under forest
0.1% ↑
Forest cover changed from 2017 to 2019

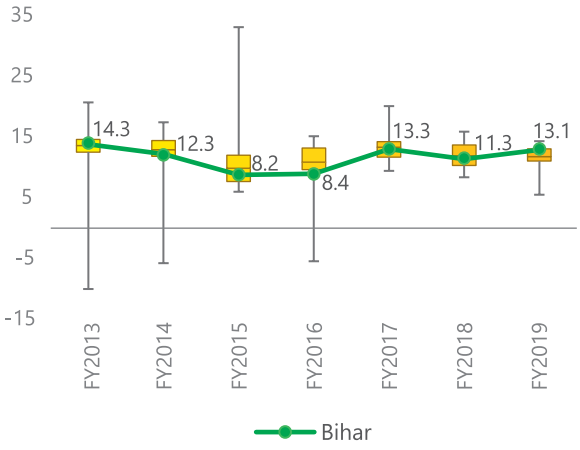
PER CAPITA GSDP
Rs 44,652
Rs 1,40,422
Average across all States
(FY2019)

TAX TO GSDP
5.5%
6.3%
Average across all States
(FY2019)

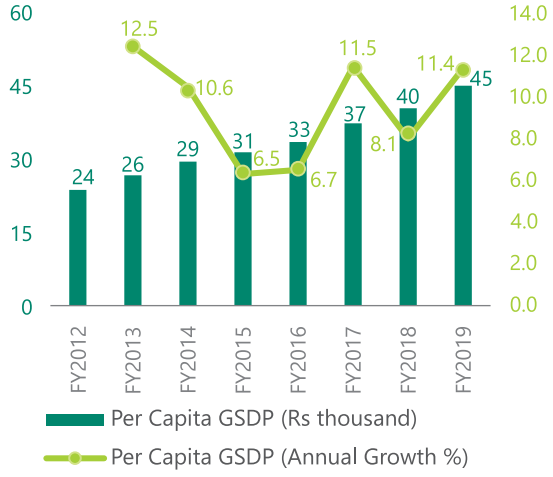
CHILDREN PER WOMAN
3.4
2.2
Average across all States
TFR

URBANISATION RATE
11.3%
31.1%
All India average

BH-1.B: Growth rate of GSDP (at current prices, %)



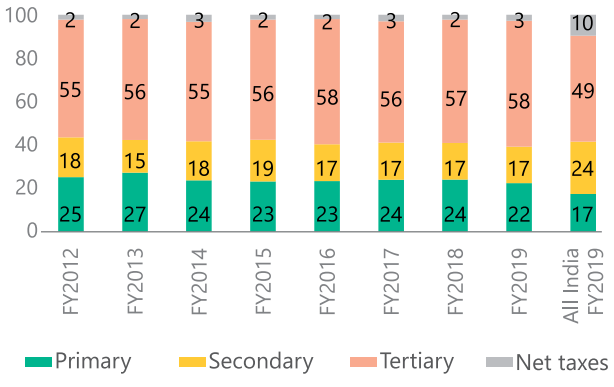
BH-1.C: Per capita GSDP (at current prices)



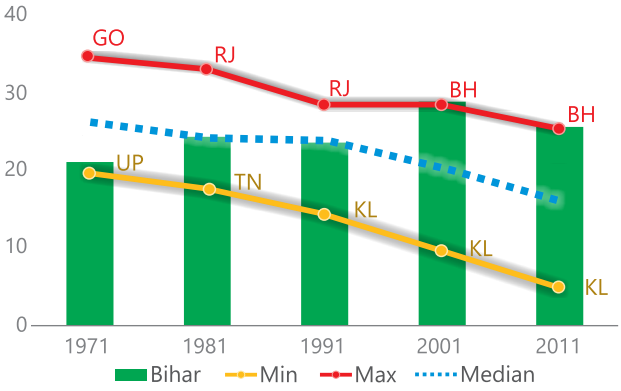
BH-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	2,47,144	77,44,945	3.2
2012–13	2,82,368	88,27,195	3.2
2013–14	3,17,101	1,00,07,392	3.2
2014–15	3,42,951	1,09,93,257	3.1
2015–16	3,71,602	1,21,91,256	3.0
2016–17	4,21,052	1,37,80,737	3.1
2017–18	4,68,746	1,54,20,126	3.0
2018–19	5,30,363	1,72,83,813	3.1

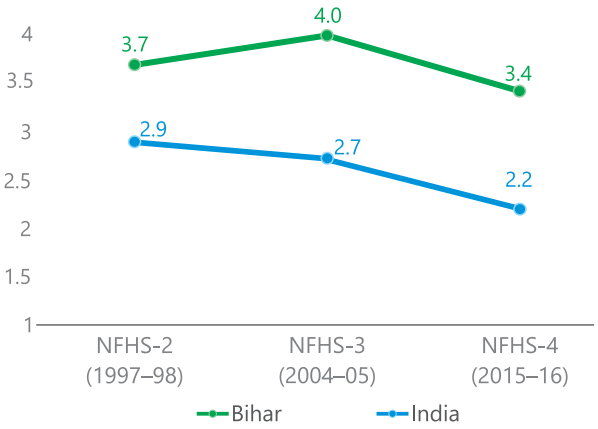
BH-1.E: Sectoral Contribution to GSDP (at current prices, %)



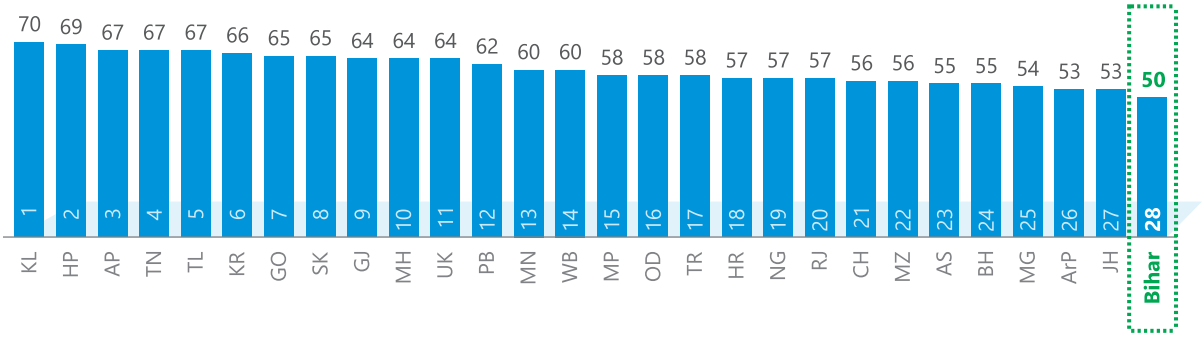
BH-2.A: Decadal Growth in Population (%)



BH-2.B: Total Fertility Rate (children per woman)



BH-2.C: SDG Index of NITI Aayog (2019)



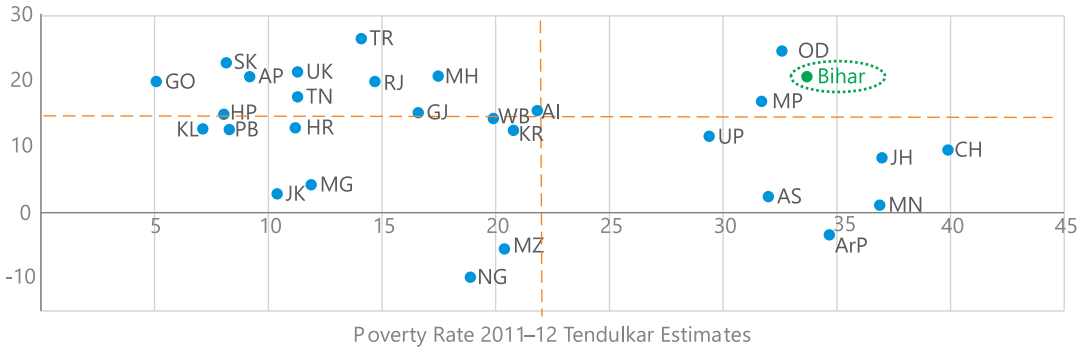
BH-2.D: Key Social Indicators

	BH	INDIA
EDUCATION		
Literacy rate (%)[a]	61.8	73.0
Pupil–Teacher ratio[b] (in Primary)	44.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	28.8	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	98.2	89.9
Availability of toilets[d] (household %)	33.5	61.1

	BH	INDIA
HEALTH		
Life expectancy (years)[g]	68.9	69.0
Sex ratio (♀ per 1000 ♂)[a]	918	943
Underweight children (%)[d]	43.9	35.8
Stunting among children (%)[d]	48.3	38.4
Anaemia among children (%)[d]	63.5	58.6
Women with below normal BMI (%)[e,d]	30.4	22.9
Anaemia among Women (%)[d]	60.3	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	32.0	32.0
Institutional Deliveries (%)[d]	63.8	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	5.0	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	616	1,218 *(All States)*

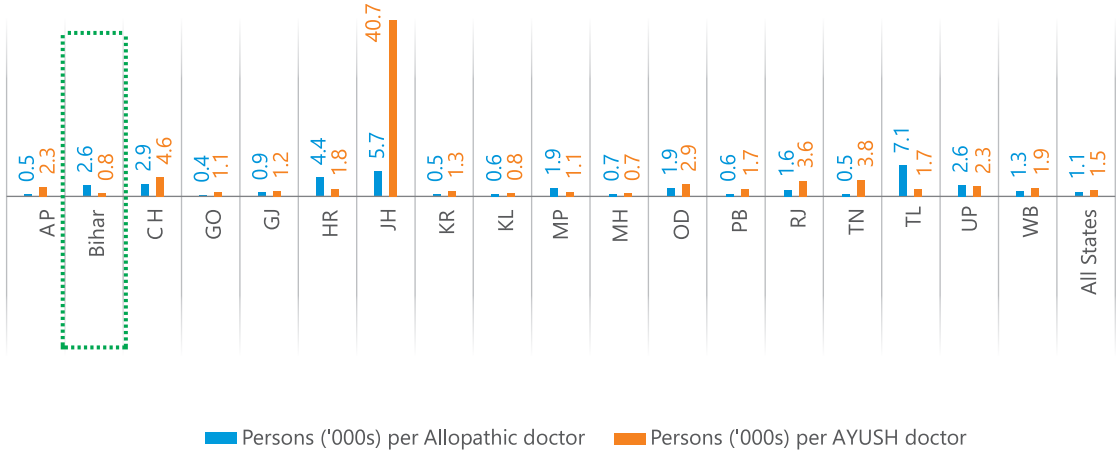
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

BH-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



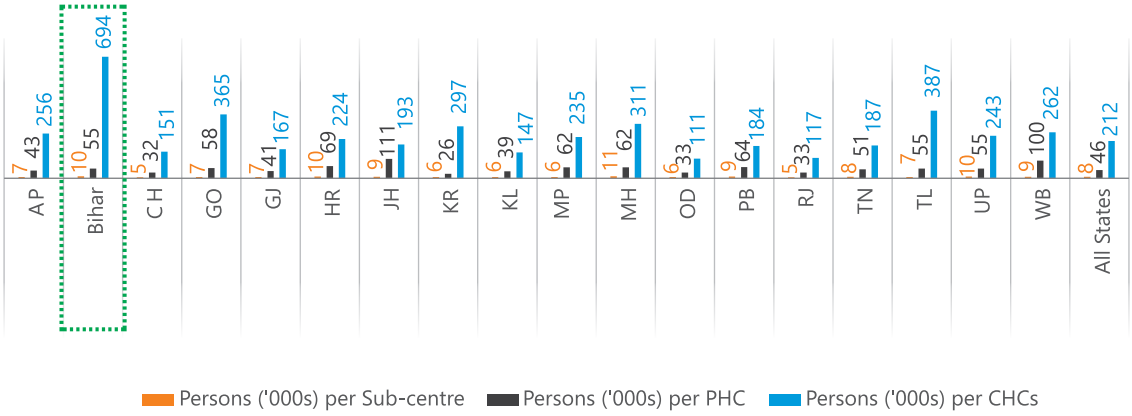
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

BH-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



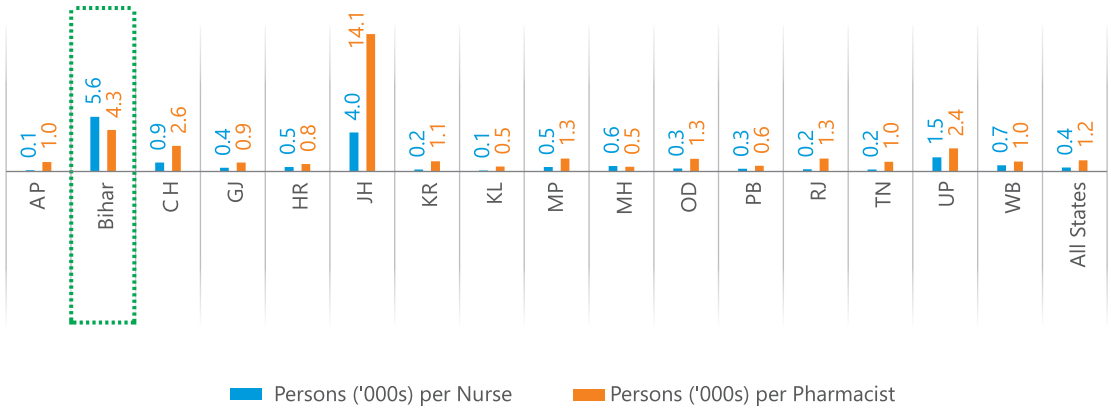
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

BH-3.B: Persons ('000s) per Sub-centre/PHC/CHC



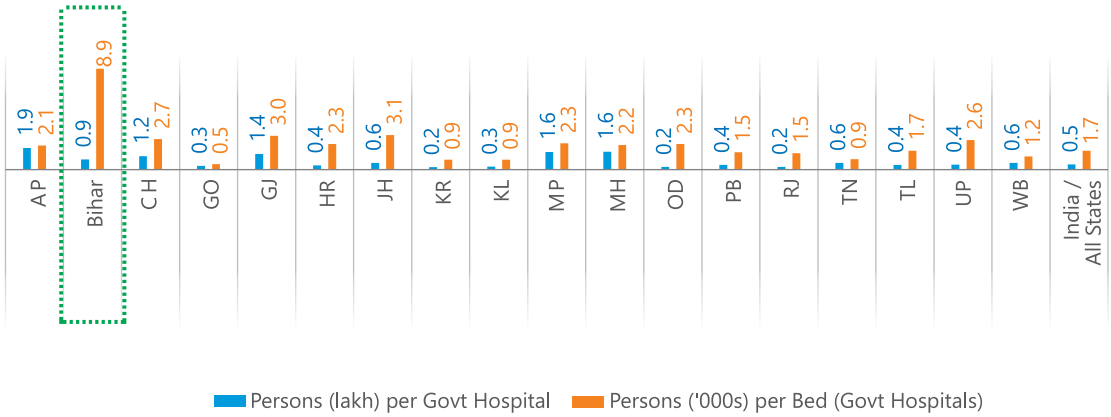
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

BH-3.C: Persons ('000s) per Nurse/ Pharmacist



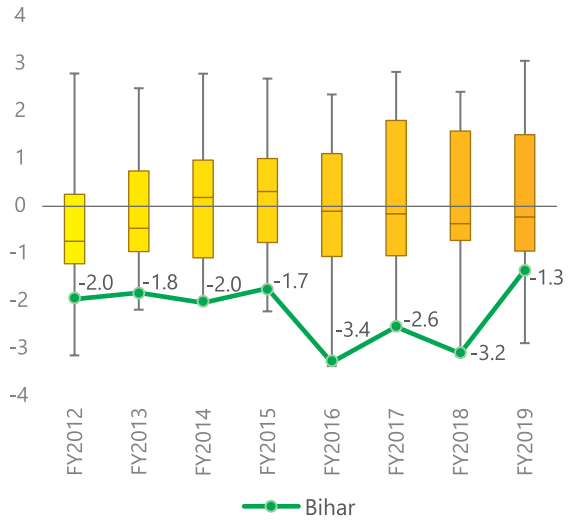
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

BH-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

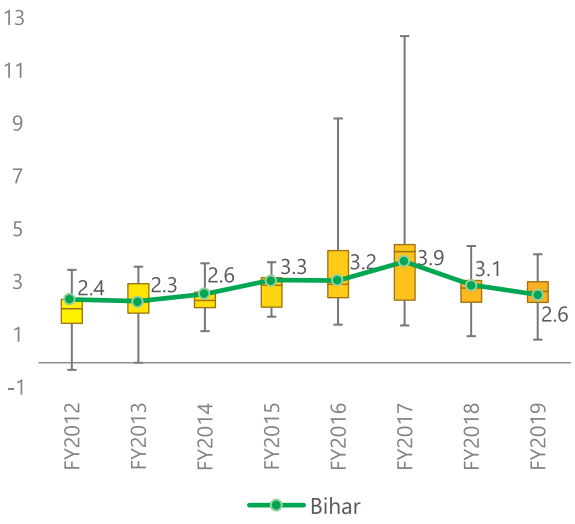


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

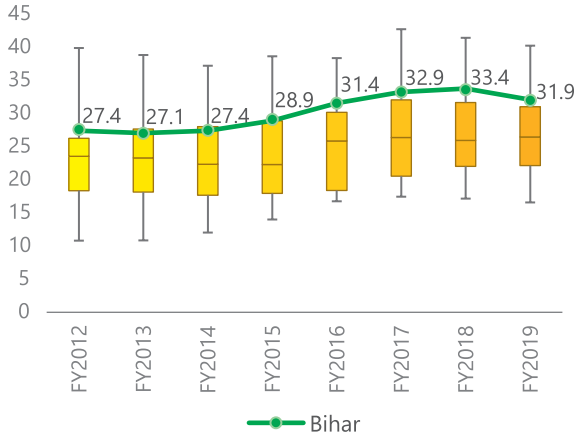
BH-4.A: Revenue Deficit as % of GSDP



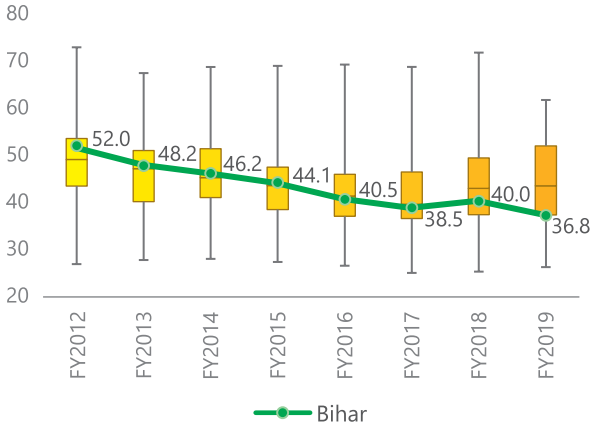
BH-4.B: Fiscal Deficit as % of GSDP



BH-4.C: Outstanding Debt as % of GSDP

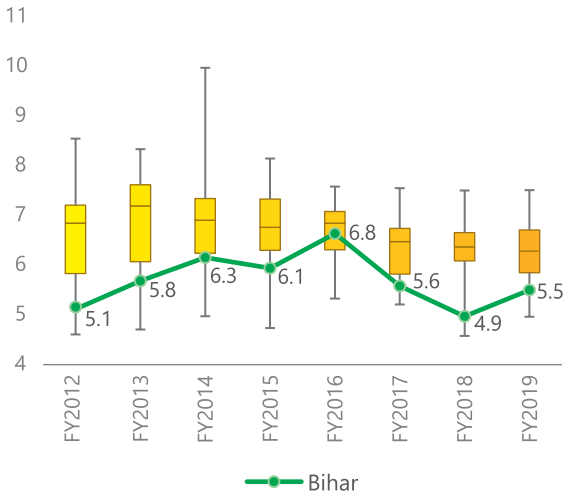


BH-4.D: Committed Expenditure as % of Revenue Expenditure

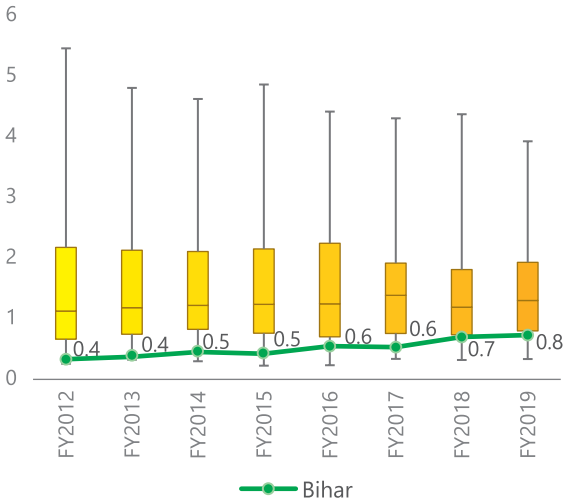


Note: Committed expenditure includes salaries, interest payments, and pensions

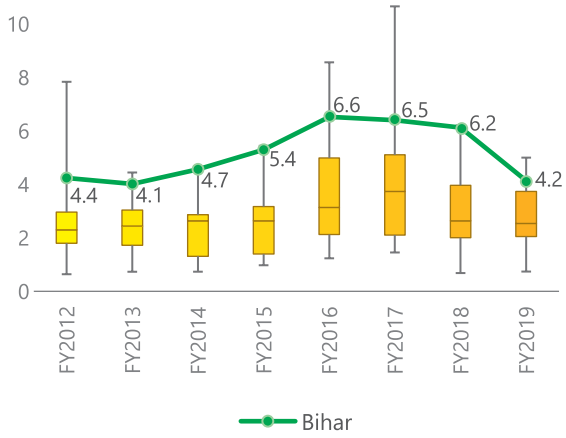
BH-4.E: OTR as % of GSDP



BH-4.F: NTR as % of GSDP



BH-4.G: Capital Expenditure to GSDP Ratio



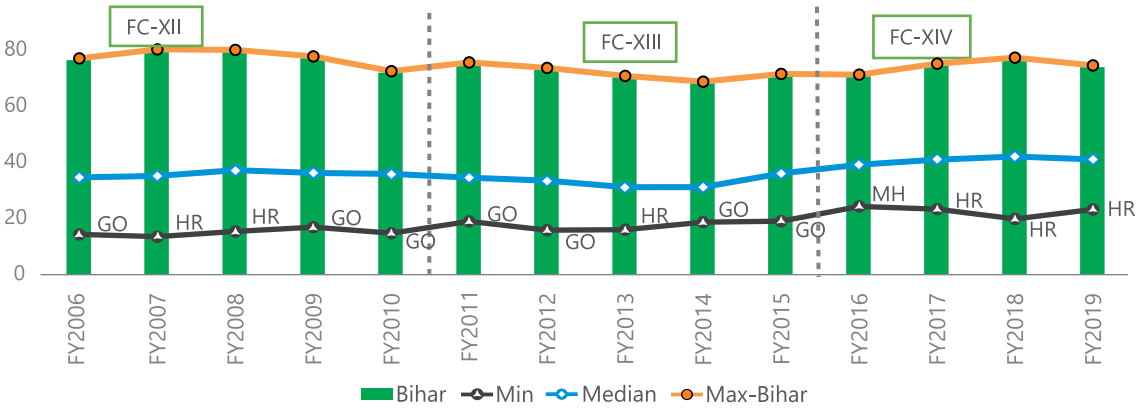
BH-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	44,652	1,41,099
Indicators as a percentage of GSDP		
TRR	24.8	13.4
OTR	5.5	6.4
NTR	0.8	1.1
TE	27.8	16.1
ES	5.3	3.1
SS	11.1	5.4
GS	7.2	4.7
Committed Expenditure	8.7	5.8
Capital Expenditure	4.2	2.5
FD	2.6	2.5
RD	–1.3	0.2
OD	31.9	25.0

BH-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Bihar	14.6	14.6	11.7
GS average	13.6	13.1	10.3

BH-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Only 17 of the 29 functions of the Eleventh Schedule of the Constitution were devolved to PRIs.
- However, 17 of 18 functions of the Twelfth Schedule of the Constitution (barring Fire Services) were devolved to ULBs.

Auditing Status

- Accounts of both PRIs and ULBs were audited till 2017–18.

Property Tax Board

- The State has set up the PTB recommended by the FC-XIII.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
15	15	16	20

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

Fifth SFC (2015–16 to 2019–20)

- According to the *Overview of State Finance Commission Reports* by the National Institute of Public Finance and Policy, Bihar has constituted its Sixth SFC.
- Key recommendations of Fifth SFC under implementation are as follows:
  - » Divisible pool be 8.5% of State's net OTR for the period 2015–16 to 2019–20.
  - » The rural–urban ratio of local body grants be 70:30.
  - » PRIs to spend on water supply, sanitation, Smart Panchayat, e-governance, and Panchayat Sarkar Bhawan.

Debt and Losses

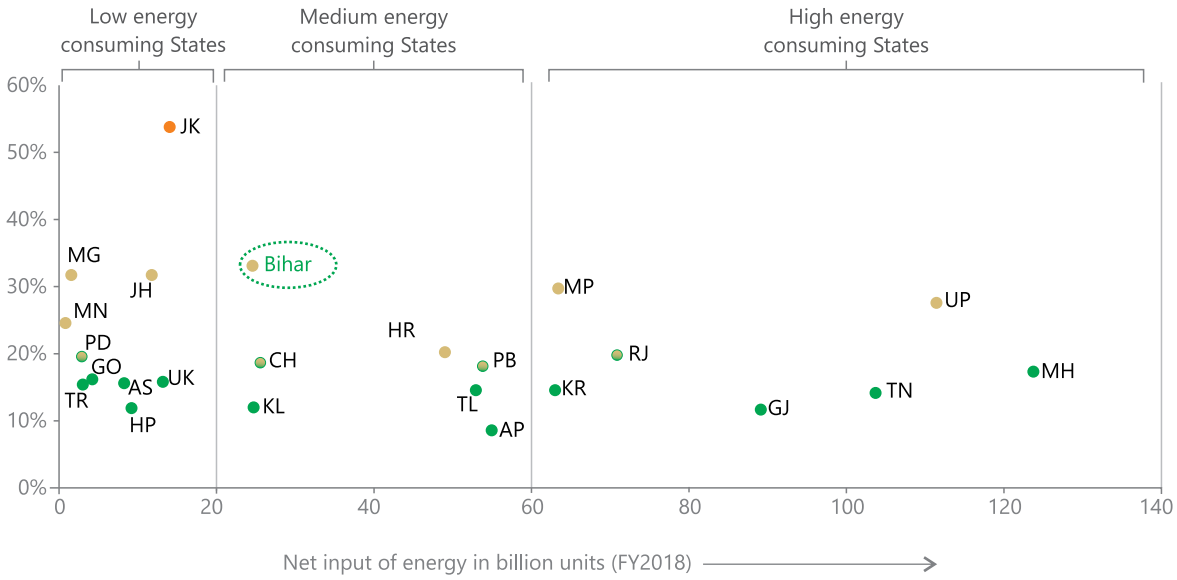
- The State has taken over outstanding DISCOM debt under UDAY to the tune of Rs 2,331.79 crore during 2016–17.
- As on 31 March 2019, the total borrowings by DISCOMs at Rs 5,052 crore (amounting to 1.1% of the total DISCOM borrowing of all States) include borrowing of Rs 386 crore from the State Government.
- While the State achieved its target for ACS–ARR gap, the target for AT&C losses was not achieved in 2018–19.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	30.94	21.0
ACS–ARR Gap (Rs per unit)	0.39	0.41

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

BH-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Bihar recommended that the State share in the overall divisible pool of taxes be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Income Distance as equalisation criterion	50.0
ii)	Population (2011)	17.5
iii)	Deprived households according to the Index of Household Deprivation computed from the Socio-Economic Caste Census (SECC)	10.0
iv)	Population density (as a measure of the stress on social and physical infrastructure.)	10.0
v)	Incremental green cover	7.5
vi)	Fiscal efficiency based on 'comprehensive' index of efficiency	5.0

Fiscal Indicators

- Bihar has been a revenue surplus State with enough fiscal space for capital expenditure.
- Though capital expenditure by Bihar has improved in recent years both as a percentage of total expenditure as well as GSDP , these ratios have deteriorated in 2018–19.
- However, it has recently exhibited a rise in the Debt–GSDP ratio from 27.1% in 2012–13 to 31.9% in 2018–19.

FRBM Compliance

- The State implemented its FRBM Act in 2006, and amended it in 2009, 2010, and 2016.
- It has not set FRBM targets since 2015–16.
- It deviated from the FD–GSDP target in 2015–16 and 2016–17, but returned to it in 2017–18.
- According to the debt path prescribed by the FC-XV, the State has to reach a reasonable Debt–GSDP target by 2025–26 aligned with the national target.
- Hence, the State needs a credible debt path and careful calibration of expenditure for generating future streams of income.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	46.4	44.6	43	41.6	Not Set	Not Set	Not Set
Actually achieved	27.4	27.1	27.4	28.9	31.4	32.9	33.4
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Actually achieved	2.4	2.3	2.6	3.2	3.2	3.9	3.0

Source: Government of Bihar

Education of the Girl Child

- According to the State Government Memorandum, Bihar has pioneered the provisioning of free bicycles to girls who continue secondary education.
- It has opened more secondary schools at the Panchayat level.
- Secondary school enrolment of girls has increased by 30% through this initiative.
- Between 2005–06 and 2015–16, the proportion of women to have completed at least 10 years of schooling also increased from 13.2% as per NHFS-3 to 22.8% in NFHS-4.

Reservation for Women

- The Bihar Panchayati Raj Act, 2006, provides for reservation of 50% of Gram Panchayat seats for women and backward communities.
- In 2016, the State also reserved 35% seats for women in government jobs.

Tourism

- Attracting 3.5% of all foreign tourist visits to various Indian States in 2019, Bihar ranked 9th among States, according to *India Tourism Statistics at a Glance 2020*.[1]
- Bihar has pilgrimages of all major religions of India—Hinduism, Buddhism, Jainism, Sikhism, and Islam.
- The rich cultural heritage of Bihar is evident from the innumerable ancient monuments dotting the State.
- The State needs to protect, conserve, restore, and develop these centres of artistic excellence for boosting tourism.

Improving Quality of Expenditure to Save Resources

- According to the State's AG, Bihar needs to arrest wasteful expenditure and losses by improving the performance of critical sectors like power.
- This combined with less than satisfactory performance in the key barometers of UDAY presents cause of concern.
- If the State can do better with regard to spends on power, it may gainfully deploy the resources freed up in critical social sectors and capital assets.

Parameters	*Target period as per MoU*	*Target*		*Achievement (2017–18)*	
		NBPDCL[a]	*SBPDCL*[b]	*NBPDCL*	*SBPDCL*
Financial					
Reduction of Aggregate Transmission & Commercial Loss (%)	2016–17	<34	<38	32.9 (achieved)	42.8 (not achieved)
	2017–18	<28	<30	34.3 (not achieved)	38.4 (not achieved)
Billing Efficiency (%)	2016–17	>72	>66	70.7 (not achieved)	60.4 (not achieved)
	2017–18	>76	>70	76.0 (not achieved)	71.6 (achieved)
Collection Efficiency (%)	2016–17	>92	>94	95.4 (achieved)	88.9 (not achieved)
	2017–18	>95	100	86.5 (not achieved)	86.1 (not achieved)

Parameters	*Target period as per MoU*	*Target*		*Achievement (2017–18)*	
		NBPDCL[a]	*SBPDCL*[b]	*NBPDCL*	*SBPDCL*
Operational					
Feeder Metering (Rural) (nos.)	30 June 2016	650	240	310 (not achieved)	332 (achieved)
Electricity Access to Un-connected Households (nos.)	2019–20	46.66 lakh	39.14 lakh	23.8 lakh (not achieved)	28.1 lakh (not achieved)

[a] North Bihar Power Distribution Company Limited | [b] South Bihar Power Distribution Company Limited.
Source: AG, Bihar, Presentation to FC-XV.

Social Indicators

- All health and education indicators are adverse as compared to national average (see BH-2.D).
- Bihar's per capita spending on education and health is below that of the class average of States with comparable per capita incomes (see table below).
- There is a definite need to channelise more funds into these sectors.

Per Capita Revenue Expenditure in 2018–19 (Rs)

State	*Health*	*Education*
Bihar	520	2,267
Jharkhand	840	2,093
Madhya Pradesh	798	3,161
Odisha	1,166	3,624
Uttar Pradesh	707	2,113

Health Infrastructure

- The State needs to improve basic health capacities.
- Availability of doctors, nurses, pharmacists, health centres, and hospital beds are all below average (see BH-3.A to 3.D).

Ranking on the SDG Index of NITI Aayog (2019)

- The State has an SDG Index value of 50 (as compared to the national average of 60) and ranks 28th (lowest) among the Indian States.
- However, it has shown good progress in SDG–10 (Reduced Inequality) and needs to keep up its momentum.
- It needs to focus on SDG–1 No Poverty, SDG–2 Zero Hunger, SDG–3 Good Health and Well Being, SDG –4 Quality Education, SDG–5 Gender Equality, SDG–12 Sustainable Consumption and Production, and SDG–13 Climate Action.
- It is required to re-orient its investments and closely monitor the outcomes.

Public Sector Undertakings[2]

- It is disturbing to note that 65 out of 74 SPSUs had arrears in accounts, some from as far back as 1977–78.
- This issue needs priority attention with a definite time bound plan to audit them all.

- As on 31 March 2017, the State Government provided capital and long-term loans of Rs 53,892 crore for 74 SPSUs.
- Of this, Rs 39,492 crore was invested in power SPSUs during the last five years (after the State Electricity Board was unbundled into five companies in 2012).
- Bihar has not completed the division of assets and liabilities of seven SPSUs between Bihar and Jharkhand even after two decades since the reorganisation of the States.
- Given the outstanding liabilities, substantial budgetary support to SPSUs, and huge arrears in accounts, the State needs to be cautious about contingent liabilities, which could impose additional fiscal burden.
- A time bound programme of restructuring the SPSUs should be adopted to tackle the major hurdles in their performance.

Digitisation of Land Records

- According to information available from Digital India Land Records Modernisation Programme, Bihar is yet to accomplish the completion and integration of land records with property registration, updation of Record of Rights (RoR) and its integration with cadastral maps.
- Without digitisation of land records, the State cannot attract private investment.

Local Bodies

- According to the State Government Memorandum, the total funds devolved and transferred to RLBs during 2011–2016, Rs 8,175 crore (38%) remained unutilised.
- Of the total funds devolved and transferred to ULBs during 2011–2016, Rs 4,637 crore (38.6%) remained unutilised.
- The 28 ULBs in Bihar utilised less than 40% of the available funds in the recent years. This indicates the weak administrative capacity of local bodies in resource utilisation.[3]
- This indicates the weak administrative capacity of the local bodies. The State, therefore, needs to focus on easing capacity constraints and meeting human resource requirements of local bodies in the next five years.
- The State needs to effectively devolve taxation powers like professional tax, land holdings, levy tolls, and user fees to local bodies for their effective empowerment. As per Bihar Panchayati Raj Act 2006, the PRIs may impose taxes on holdings, professions and levy tolls and fees. However, it appears that PRIs are not yet authorised to raise these revenues nor has the State government notified any rates of taxes, fees, etc.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Strengthening Administrative Machinery

- While the Government of Bihar did not share the number of employees on its rolls with the FC-XV, the Labour Bureau's Annual Report on Employment and Unemployment Survey (2015) indicated that the Government of Bihar employs less staff members per lakh population than States like Kerala and Tamil Nadu.
- There is a need to strengthen administrative systems and effective service delivery.

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Bihar is part of the group which includes UP, Jharkhand, MP, and Odisha.

Reform Signposts

- TGR of TRE of Bihar was 14.6% from 2011 to 2019 against an ORR TGR of 11.7% for the same period. This is unsustainable for the State fiscally.
- Bihar has not been successful in mobilising other sources of revenue (barring excise) like electricity duty. Odisha on the other hand, sources 10.7% of its OTR (in 2018–19) through a special electricity duty on captive power plants in exchange for a commitment to spend the revenue so generated as capital investment in the power sector. Such streams of revenue should be explored by all such mineral producing States, including Bihar.
- A snapshot of various components of ORR of Bihar vis-à-vis other States in its class is presented below:

States	*As percentage of GSDP (2018–19)*					*As percentage of OTR (2018–19)*				
	VAT/ GST	*Stamp Duty*	*Excise*	*Electricity Duty*	*Others*	*VAT/ GST*	*Stamp Duty*	*Excise*	*Electricity Duty*	*Others*
Bihar	4.1	0.8	0.0	0.1	0.6	74.4	14.2	0.0	0.9	10.5
Jharkhand	3.9	0.2	0.4	0.1	0.4	79.1	3.1	7.3	1.4	9.0
Madhya Pradesh	3.5	0.7	1.2	0.3	0.6	55.9	10.4	18.7	5.1	9.9
Odisha	3.9	0.3	0.8	0.7	0.5	63.5	4.1	12.9	10.7	8.7
Uttar Pradesh	4.2	0.9	1.4	0.2	0.5	58.2	13.1	19.9	2.5	6.3
Average	**3.9**	**0.7**	**1.0**	**0.2**	**0.5**	**61.6**	**10.9**	**15.7**	**3.8**	**8.0**
All States	**4.1**	**0.7**	**0.8**	**0.2**	**0.5**	**65.8**	**10.4**	**12.4**	**3.5**	**7.7**

- With 74.6% of Bihar's TRR in 2018–19 coming from the Government of India, the obligation of the State to reform its resource base and improve its ORR several-fold is high.
- Bihar lags behind in social indicators not only vis-à-vis national performance but also when compared to other States in its class.
- **It needs to spend more on social sector and with greater efficiency to ensure best outcomes in the shortest possible time.**
- **Accordingly, the State may prepare a roadmap with annual targets and earmarked financial allocations during the five-year award period of FC-XV.**
- **Thus, FC-XV recommends that Bihar comprehensively consider these issues along with fiscal reforms to ensure sustainable streams of improved resources.**
- **Investments in durable capital infrastructure should be suitably matched with investments in critical social sectors to bring Bihar's social and economic indicators close to the national average in the next five years.**
- **Bihar needs to arrest wasteful expenditure and losses by improving the performance of critical sectors like power.**

Notes

1 CAG (2018), *Report of the Comptroller and Auditor General of India on Public Sector Undertakings for the year ended 31 March 2017*, Report No.1 of the year 2018, Government of Bihar.

2 GOI (2020), *India Tourism Statistics at a Glance - 2020*, Ministry of Tourism, Government of India.

3 CAG (2017), *Report of the Comptroller and Auditor General of India on Local Bodies for the year ended 31 March 2016*, Report No.4 2017, Government of Bihar.

CH-1.A: Overview

POPULATION
25.6 million
2.2%
Of population across all States

AREA
1,35,192 sq km
4.1%
Of area across all States

FOREST COVER
55,611 sq km
7.9%
Of forest area across all States
41.1%
Of the State's own area is under forest

0.1% ↑
Forest cover changed from 2017 to 2019

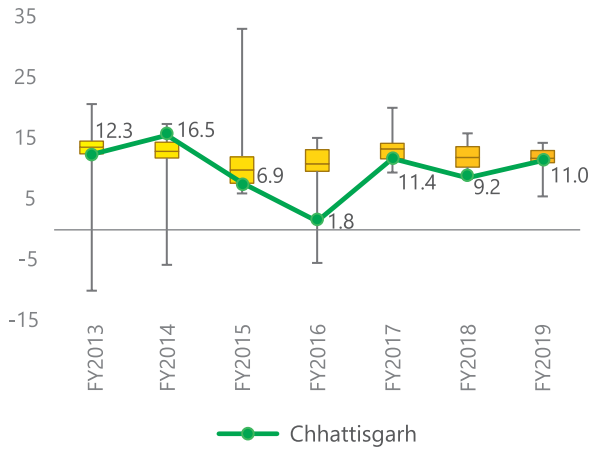
PER CAPITA GSDP
Rs 1,05,424
Rs 1,40,422
Average across all States
(FY2019)

TAX TO GSDP
7.1%
6.3%
Average across all States
(FY2019)

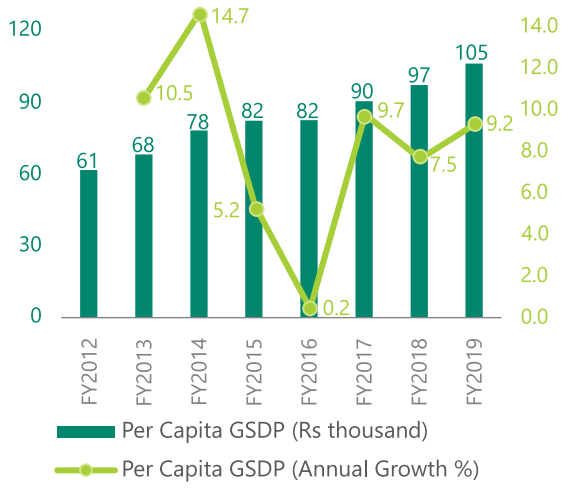
CHILDREN PER WOMAN
2.2
2.2
Average across all States
TFR

URBANISATION RATE
23.2%
31.1%
All India average

CH-1.B: Growth rate of GSDP (at current prices, %)



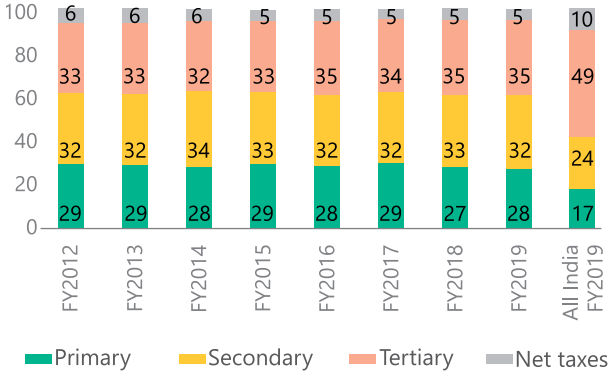
CH-1.C: Per capita GSDP (at current prices)



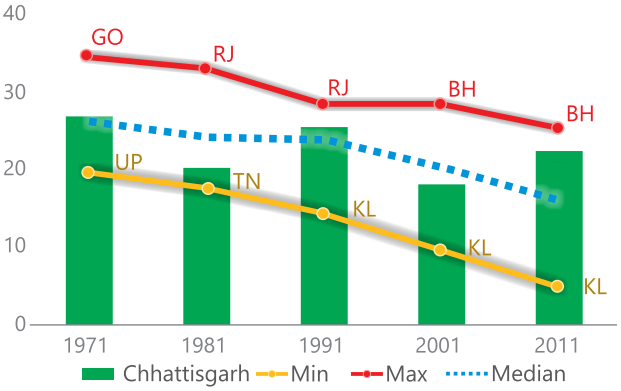
CH-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	All GS	Share (%) of State in GS
2011–12	1,58,074	77,44,945	2.0
2012–13	1,77,511	88,27,195	2.0
2013–14	2,06,833	1,00,07,392	2.1
2014–15	2,21,118	1,09,93,257	2.0
2015–16	2,25,163	1,21,91,256	1.9
2016–17	2,50,882	1,37,80,737	1.8
2017–18	2,74,042	1,54,20,126	1.8
2018–19	3,04,063	1,72,83,813	1.8

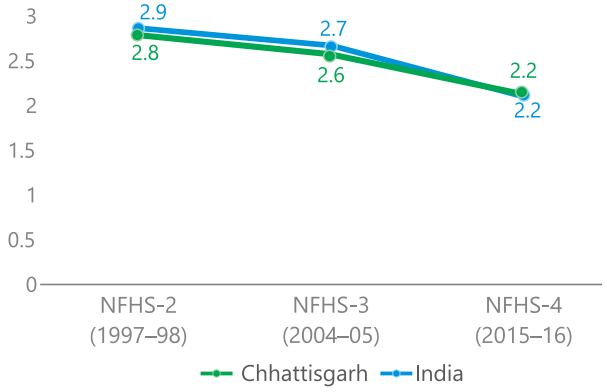
CH-1.E: Sectoral Contribution to GSDP (at current prices, %)



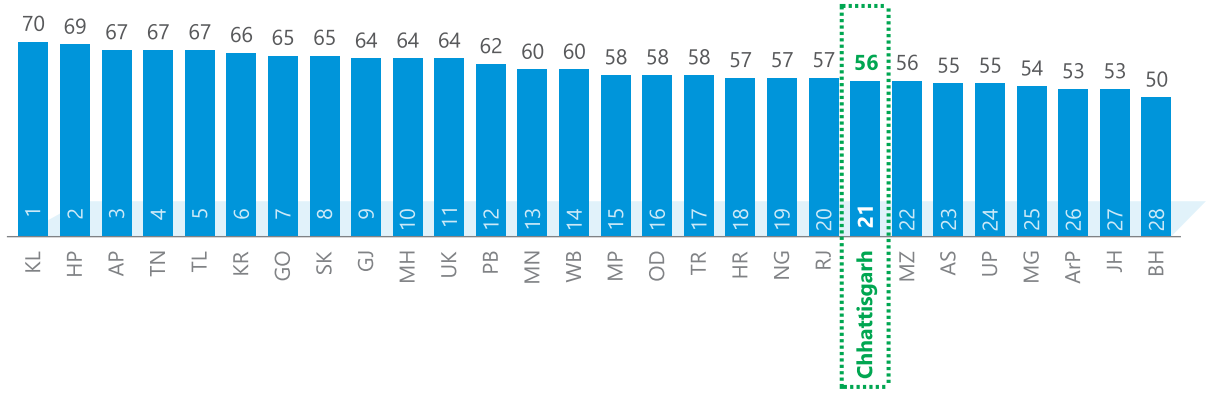
CH-2.A: Decadal Growth in Population (%)



CH-2.B: Total Fertility Rate (children per woman)



CH-2.C: SDG Index of NITI Aayog (2019)



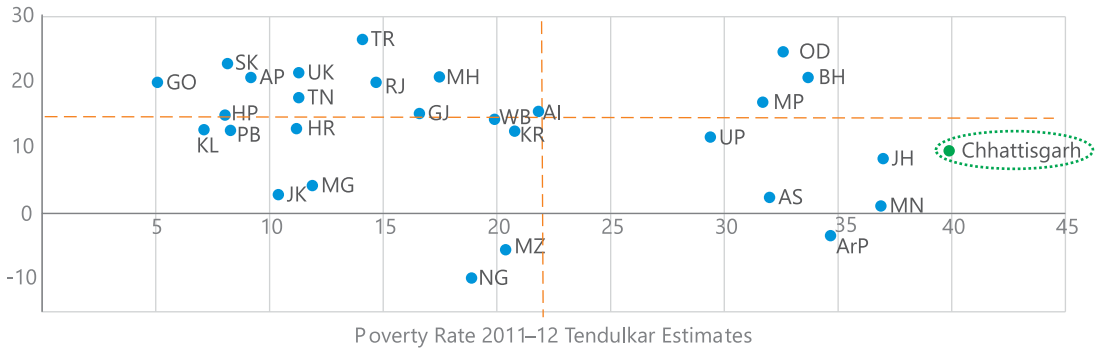
CH-2.D: Key Social Indicators

	CH	INDIA
EDUCATION		
Literacy rate (%)[a]	70.3	73.0
Pupil–Teacher ratio[b] (in Primary)	20.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	54.5	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	91.1	89.9
Availability of toilets[d] (household %)	41.3	61.1

	CH	INDIA
HEALTH		
Life expectancy (years)[g]	65.2	69.0
Sex ratio (♀ per 1000 ♂)[a]	991	943
Underweight children (%)[d]	37.7	35.8
Stunting among children (%)[d]	37.6	38.4
Anaemia among children (%)[d]	41.6	58.6
Women with below normal BMI (%)[e,d]	26.7	22.9
Anaemia among Women (%)[d]	47.0	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	41.0	32.0
Institutional Deliveries (%)[d]	70.2	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	5.1	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,303	1,218 *(All States)*

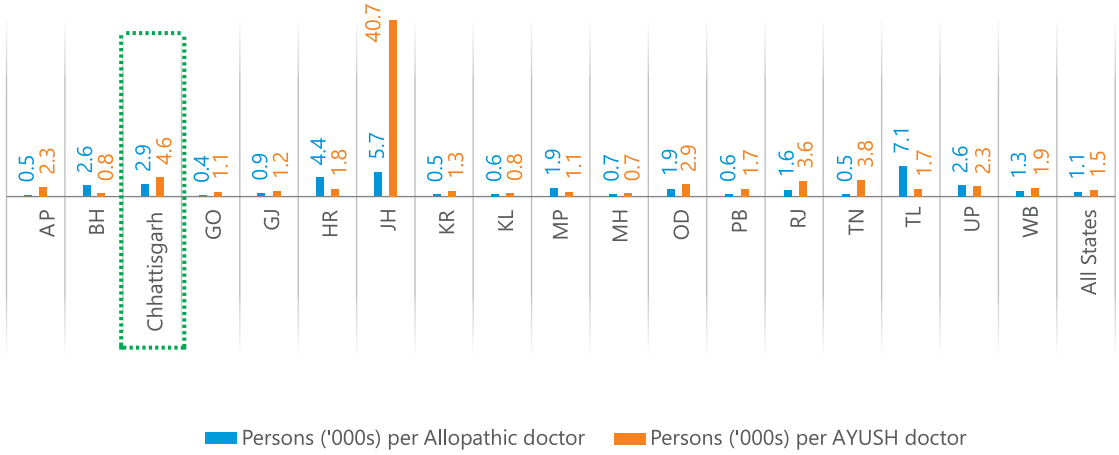
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

CH-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



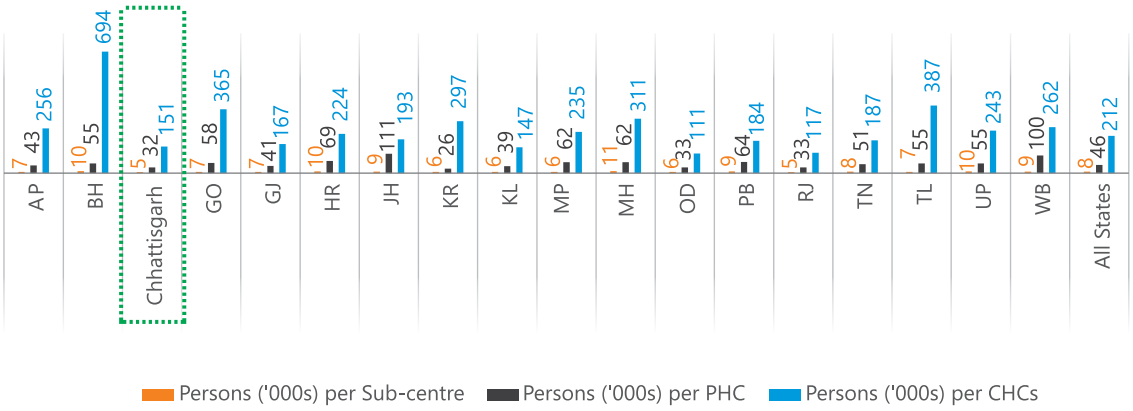
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

CH-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



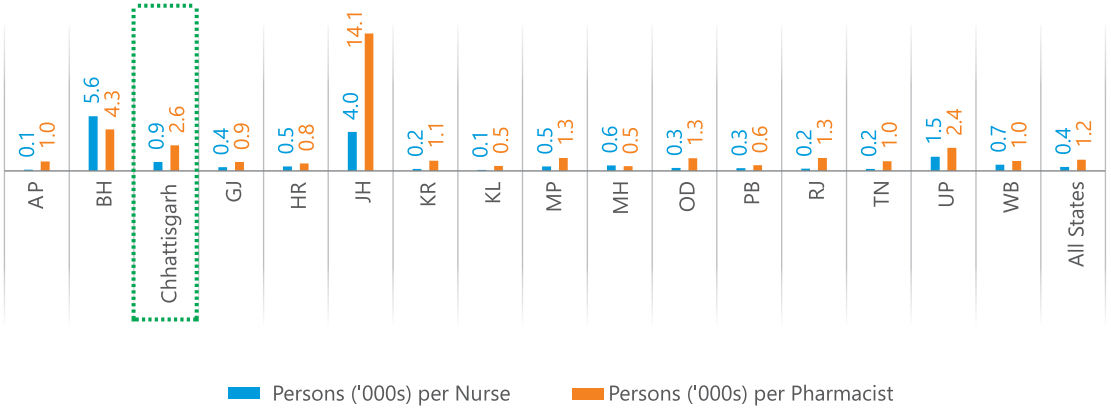
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

CH-3.B: Persons ('000s) per Sub-centre/PHC/CHC



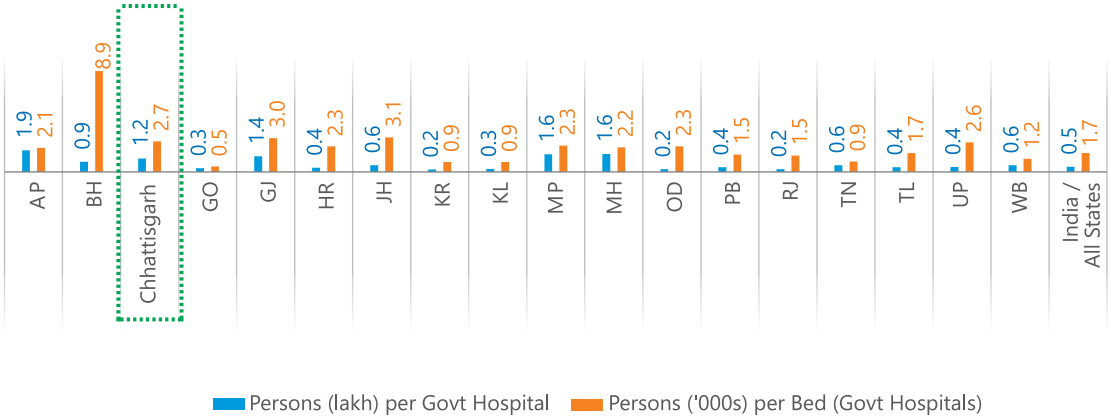
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

CH-3.C: Persons ('000s) per Nurse/ Pharmacist



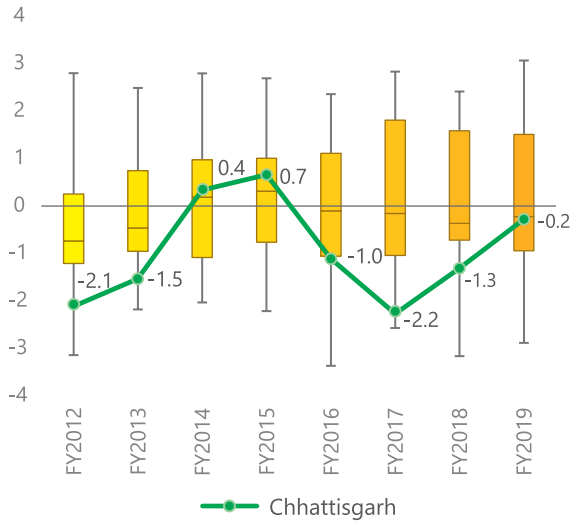
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

CH-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

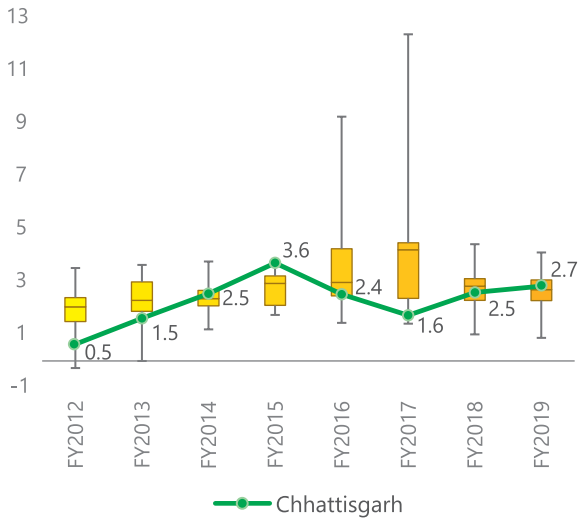


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

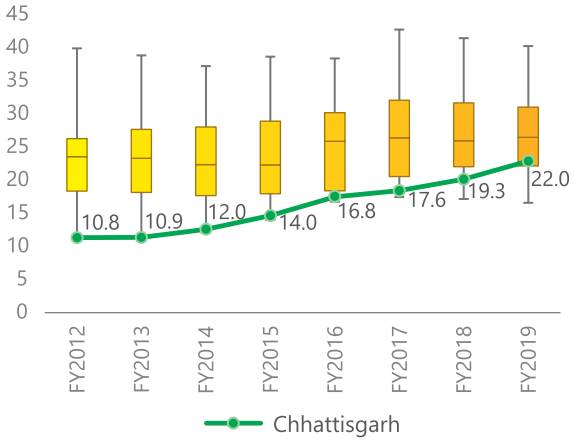
CH-4.A: Revenue Deficit as % of GSDP



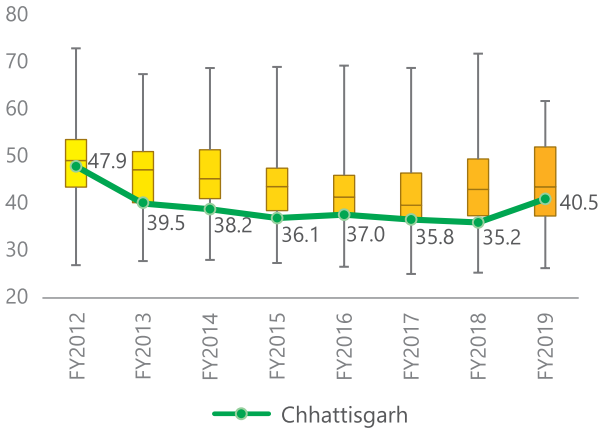
CH-4.B: Fiscal Deficit as % of GSDP



CH-4.C: Outstanding Debt as % of GSDP

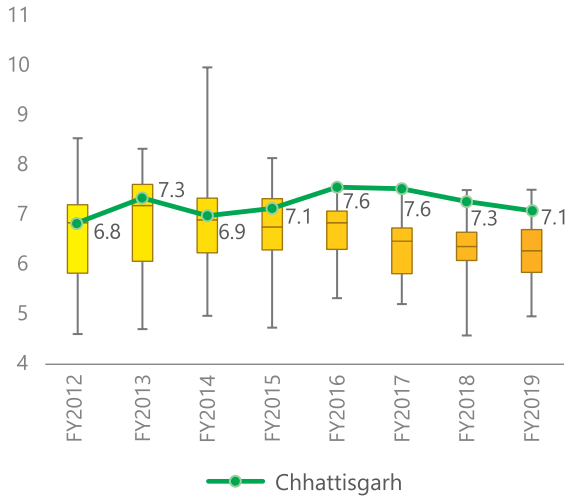


CH-4.D: Committed Expenditure as a % of Revenue Expenditure

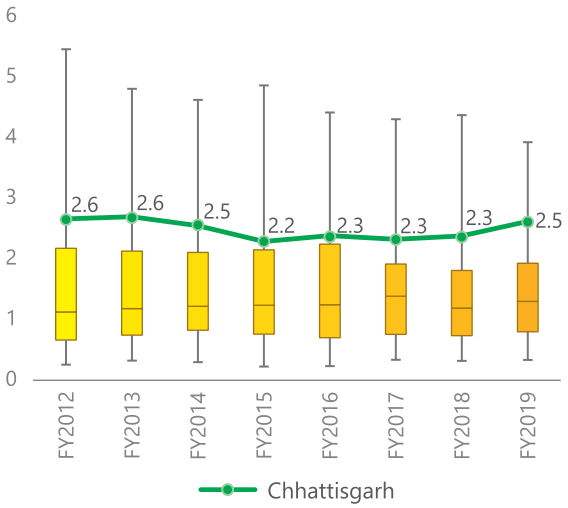


Note: Committed expenditure includes salaries, interest payments, and pensions

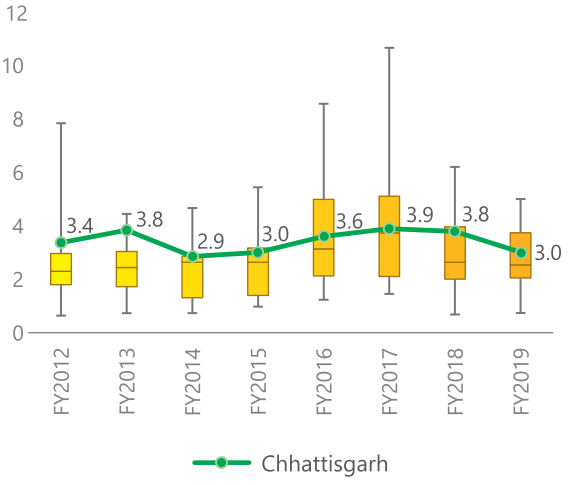
CH-4.E: OTR as % of GSDP



CH-4.F: NTR as % of GSDP



CH-4.G: Capital Expenditure to GSDP Ratio



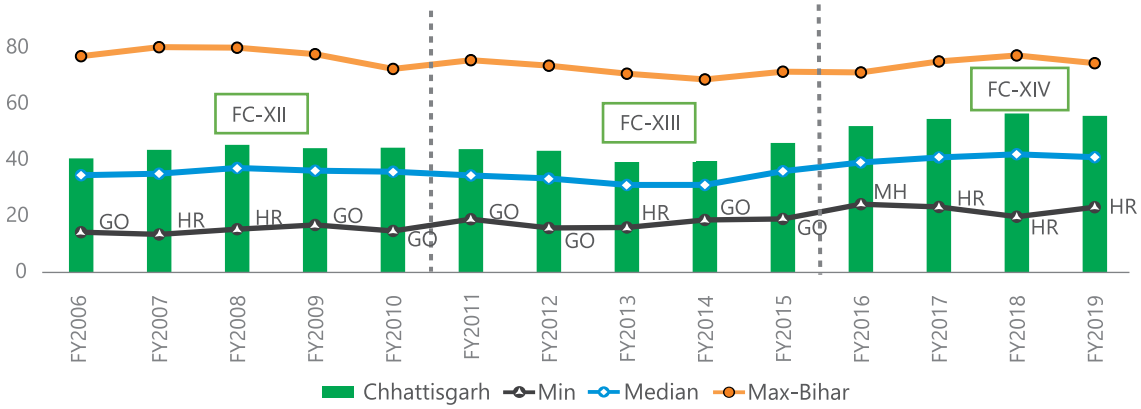
CH-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	1,05,424	1,41,099
Indicators as a percentage of GSDP		
TRR	21.4	13.4
OTR	7.1	6.4
NTR	2.5	1.1
TE	24.2	16.1
ES	8.2	3.1
SS	7.9	5.4
GS	4.9	4.7
Committed Expenditure	8.6	5.8
Capital Expenditure	3.0	2.5
FD	2.7	2.5
RD	–0.2	0.2
OD	22.0	25.0

CH-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Chhattisgarh	15.7	15.0	9.4
GS average	13.6	13.1	10.3

CH-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- All 29 functions envisaged in the Eleventh Schedule of the Constitution have been devolved to RLBs.
- Of 18 functions envisaged in the Twelfth Schedule of the Constitution, 15 have been devolved to ULBs.

Auditing Status

- Accounts of RLBs and ULBs have been audited up to 2016–17.

Property Tax Board

- The State Government is yet to set up PTB despite the recommendation from FC-XIII.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
16	8	16	16

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Second SFC (2012–2017)

- Second SFC recommended that 8% of net tax revenues of the State be devolved to local bodies.
- The share of RLBs in the divisible pool was recommended to be 6.2% and that of ULBs 1.9%.
- The State Government accepted the recommendations related to devolution.

Third SFC (2017–2022)

- Third SFC constituted in 2016 submitted its report in September 2018. However, the ATR is yet to be presented in the Assembly.
- The State Government did not share information on the norms of resource devolution being followed currently.
- The State Government is not strictly complying with the relevant constitutional provisions regarding SFCs and the timely implementation of recommendations.

Debt and Losses

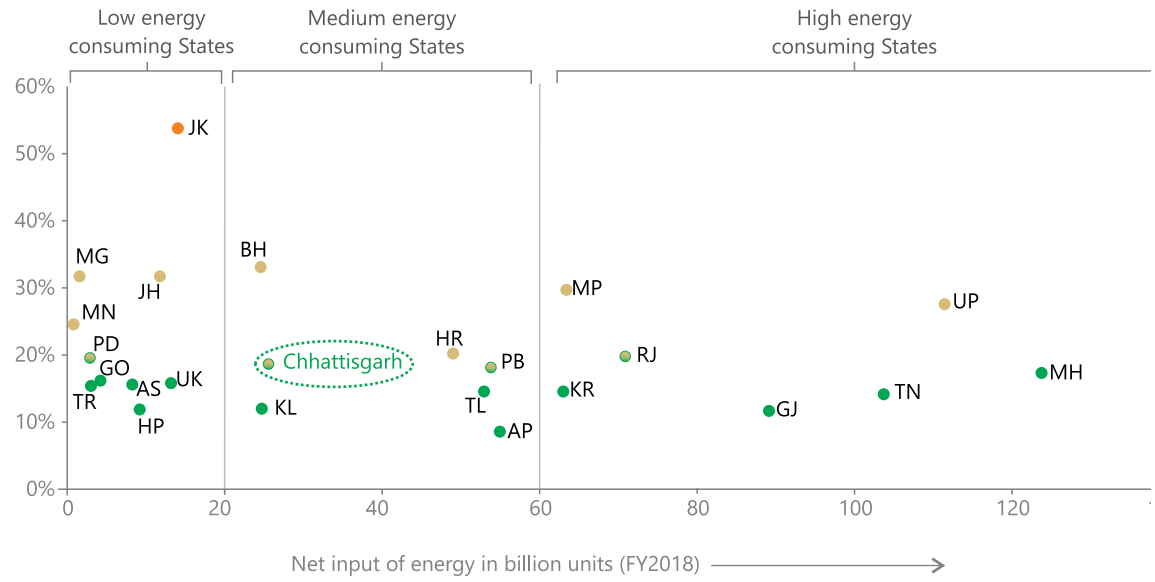
- Total borrowings of DISCOMs as on 31 March 2019 are Rs 4,167 crore of which State Government borrowing is Rs 86 crore.
- Robust systemic reforms are required to ensure that the power subsidy reaches the intended beneficiary without leakage.
- The State needs to improve performance on UDAY barometers to avoid fiscal risk.
- The State could not achieve the UDAY targets of either AT&C losses or ACS–ARR gap in 2018–19.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	27.3	15.0
ACS–ARR Gap (Rs per unit)	0.4	–0.5

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

CH-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Chhattisgarh proposed that the State share in the divisible pool be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Weights (%)*
i)	Income Distance	35
ii)	Deprived Households (as per SECC 2011)	15
iii)	Area	15
iv)	Population	15
v)	Forest Cover	10
vi)	Contribution of Mining to National GSVA	10

Fiscal Discipline

- Fiscal discipline pursued by the Government of Chhattisgarh led to a decline in FD–GSDP ratio from 3.6% in 2014–15 to 2.7% in 2018–19.
- Chhattisgarh achieved lowest Debt–GSDP ratio (across all States) at 16.8% in 2015–16, rising to 22.0% in 2018–19.

FRBM Compliance

- The State enacted the FRBM Act in 2005 and amended it in 2011 and 2016.
- The State, more or less, adhered to all FRBM targets between 2011–12 and 2014–15 barring FD–GSDP ratio in 2014–15.
- However, during the period 2015–16 to 2017–18, the Debt–GSDP ratio was above the target.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	22.5	23	23.5	23.9	13.7(*)	15.5(*)	17.1(*)
Actually achieved	10.8	10.9	12.0	14.0	16.8	17.6	22.0
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.5(*)	3.5(*)	3.5(*)
Actually achieved	0.5	1.5	2.4	3.6	2.4	1.6	2.5

* Based on the recommendations of FC-XIV as mentioned in the State's FRBM Amendment Act, 2016. The State Government did not provide targets fixed under the FRBM Act.

Source: Government of Chhattisgarh

Public Distribution System

- Chhattisgarh is hailed for a model PDS.
- It has made optimal use of information and communication technology to plug the leakages

and inefficiency in the distribution of ration to the public.

- The State should continue to undertake measures to strengthen the gains achieved in the functioning of the PDS.

District Mineral Foundation

- Government of Chhattisgarh received Rs 4,246.62 crore under DMF across all 27 districts (status as on June 2019).
- These funds should be utilised for the prescribed purposes within the fiscal year of disbursement.
- If they lie idle in fixed deposits it indicates that substantial fiscal space, though indirectly available, is underutilised.
- The State Government should put a mechanism in place to ensure their expeditious utilisation within the fiscal year.

Forests and Tourism

- Around 41% of Chhattigarh is under forests.
- The State needs to devise strategies to promote eco-tourism, thereby generating greater resources from this sector.

Minimum Support Price Scheme for Minor Forest Produce

- The Ministry of Tribal Affairs, Government of India had introduced an MSP scheme for MFP in 2013–14 to support Scheduled Tribes and other forest dwellers.
- However, the scheme remained a non-starter, due to an ineffective procurement mechanism.
- Therefore, the State Government should use electronic platforms and other existing programmes such as e-NAM to create a robust procurement mechanism and implement the scheme.

Building Up of Fiscal Pressure

- Although the Debt–GSDP ratio at 16.8% in 2015–16 was lowest among all States, it was still an increase from 10.8% in 2011–12, indicating a gradual building up of pressure.
- In 2018–19, the State resorted to additional borrowings of 0.49% over the 3% limit on FD–GSDP ratio under Article 293(3) of the Constitution.[1]

Low Agricultural Productivity

- Despite being counted among "the rice bowls of India", the yield of paddy in Chhattisgarh was only 31.88 quintal per hectare (ha) in 2015–16 (compared to the national average of 37.90 quintal per ha).[2]
- Government of Chhattisgarh offered a bonus of Rs 750 to paddy farmers over and above the MSP of Rs 1,750 per quintal (2018–19) to incentivise farmers. It should back this up with facilitation of modern agricultural technology to raise paddy productivity sustainably in the long term.
- Further, the State needs to make concerted effort to raise the area under irrigation.

Education

- Literacy rate in Chhattisgarh in Census 2011 was 70.3% against all India literacy of 73%.
- According to ASER 2018, the percentage of children in Grade III who could at least do subtractions in the State was 19.3% (compared to 28.2%, all India) across government and private schools.[3]
- Hence, the State needs to take effective measures to improve its educational outcomes.

Health

- The State needs robust initiatives to improve key health indicators, which are inferior to the national average, such as maternal mortality of 173 per 100,000 live births (2016) as opposed to 130 all-India (for others, see CH-2.D).
- Chhattisgarh has been facing severe shortage of healthcare professionals with:[4]
  - 595 vacancies (91.2%) of specialists in CHCs against the sanctioned strength of 652,
  - 434 vacancies (54.7%) of doctors in PHCs against the sanctioned strength of 793.
- To tackle the situation, the State may explore Maharashtra's model of recognising diplomas from the College of Physicians and Surgeons to convert MBBS doctors into specialists, in order to meet the demand in remote and tribal areas.
- Besides, telemedicine could be used to fill the gap in the availability of health services in such areas.

Ranking on the SDG Index of NITI Aayog (2019)

- The State ranks 21st among the Indian States.
- The State is a front-runner in SDG–5 Gender Equality, SDG–6 Clean Water and Sanitation, SDG–11 Sustainable Cities and Communities, and SDG–15 Life on Land.
- The State needs to improve on SDG–1 No Poverty, SDG–2 Zero Hunger, SDG–3 Good Health and Well-being, SDG–7 Affordable and Clean Energy, SDG–8 Decent Work and Economic Growth.

Backwardness

- Of the 27 districts of Chhattisgarh, 10 are recognised as aspirational.
- Further, the State had the highest poverty rate (39.9%) amongst all States in 2011–12 (as per Tendulkar methodology).
- The State Government needs to formulate a holistic strategy to come out of the low-income trap and improve social outcomes.
- In addition, the State may like to target the development of the bottom 20% blocks as aspirational blocks, on the lines of aspirational districts monitored by NITI Aayog.

Left Wing Extremism

- Of the 27 districts of the State, 14 are LWE affected.[5]
- Moreover, 8 of the 10 aspirational districts feature among the worst 35 LWE-affected districts of the country, creating serious obstacles in their development path.
- A concerted and coordinated approach involving the Central Government and neighbouring States is very critical for resolving the situation.

Piped Water Supply

- Only 9% of rural households in Chhattisgarh have PWS connections (less than half the national average of 18.3%).
- The State needs to invest resources into cost-effective and innovative approaches such as rain water harvesting and end-to-end value chain management of drinking water.

Large Vulnerable Population

- Scheduled Tribes (STs) have poorer socioeconomic indicators than not just the general population of India but also many other vulnerable population groups.

- STs constitute more than 30% of the population of Chhattisgarh (highest among GS), indicating large developmental gaps that the State Government is tasked with bridging.

Power Sector

- The DISCOM has not been able to achieve targeted reduction in AT&C losses between 2016 and 2019. Hence, effective measures are needed to reduce AT&C losses on priority basis.
- The DISCOM needs to substantially improve performance on UDAY barometers such as DT Metering (Urban) (5% progress), DT Metering (Rural) (7% progress), feeder segregation (13% progress), smart metering (0% progress), and ACS–ARR gap (0% progress).[6]

Local Bodies

- Measures need to be taken to devolve the remaining 3 of the 18 functions to ULBs.
- The Third SFC constituted in 2016 submitted its Report in September, 2018. However, the ATR is yet to be laid in the Legislative Assembly.
- The State is yet to set up the PTB despite the recommendations of FC-XIII.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Public Sector Undertakings[7]

- As on 31 December 2018, nine working PSUs in the State had arrears across 15 accounts ranging from 1 to 4 years. Additionally, an account of a non-working PSU was also in arrears.
- The State Government provided Rs 2,597.3 crore (Rs 302.4 crore as grant and Rs 2,294.9 crore as subsidy) for five of the 10 State PSUs, whose books of accounts were yet to be finalised as on 31 December 2018.
- The profit of Rs 120.8 crore in the year 2015–16 from 13 functional PSUs decreased to Rs 93.9 crore in 2017–18. Ten of these earned an aggregate profit of Rs 94.3 crore while three PSUs incurred losses. Eight of them enjoying monopolistic advantage, assured income from budgetary support, centage, commission, interest on bank deposits, etc., were responsible for 97.4% profit (Rs 91.8 crore).

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Chhattisgarh is part of the group which includes Andhra Pradesh, West Bengal, Rajasthan, and Punjab.

Reform Signposts

- The State seems to have taken significant steps in the last few years to boost revenues, particularly through reforms in Stamp Duty and Registration, Excise, and compliance. The State Government should strive to maintain the pace of reform and revenue generation even during the award period of the FC-XV.
- Chhattisgarh has been consistently investing in roads, irrigation, and water supply and sanitation besides power. This trend is healthy and would augur well in the long run.
- **Among States in the class, Chhattisgarh (minerals) and Rajasthan (oil) received the**

maximum income from royalties. The States should maintain the pace of progress in the future too.

- **Hailed as the State with a model PDS, the State should continue to consolidate the gains achieved in PDS.**
- **The State Government also needs to focus on making modern agricultural technology available to farmers in order to raise paddy productivity on a sustainable basis over the long term.**
- **Further, the State needs to make concerted efforts to raise its area under irrigation from 31.2% to at least the national average of 48.6%.**

Notes

1 Ministry of Finance, Government of India.

2 GOI (2018), *Agricultural Statistics, 2018*, Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India.

3 ASER (2018), *Annual Survey of Education Report 2018*, ASER Centre.

4 GOI (2018), *Rural Health Statistics 2018*, Ministry of Health and Family Welfare, Government of India.

5 As shared by the Ministry of Home Affairs in February 2019.

6 Status as on 31 March 2019 as displayed on the UDAY website.

7 CAG (2020), *Report of the Comptroller and Auditor General of India on Public Sector Undertakings for the year ended 31 March 2018*, Report No. 01 of the year 2020, Government of Chhattisgarh.

GO-1.A: Overview

POPULATION
1.5 million
0.1%
Of population across all States

AREA
3,702 sq km
0.1%
Of area across all States

0.3%
Of forest area across all States

FOREST COVER
2,237 sq km
60.4%
Of the State's own area is under forest

0.4% ↑
Forest cover changed from 2017 to 2019

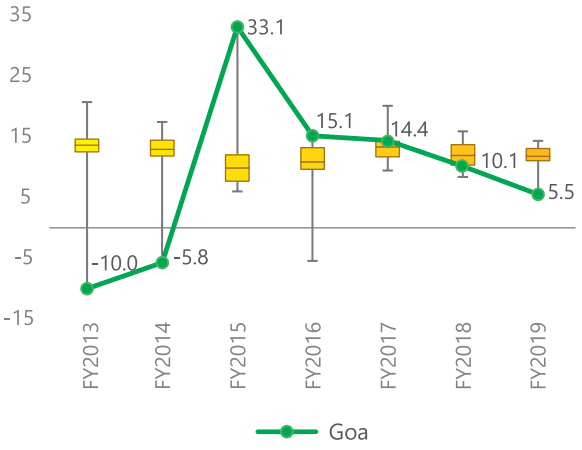
PER CAPITA GSDP
Rs 4,76,370
Rs 1,40,422
Average across all States

TAX TO GSDP
6.7%
6.3%
Average across all States

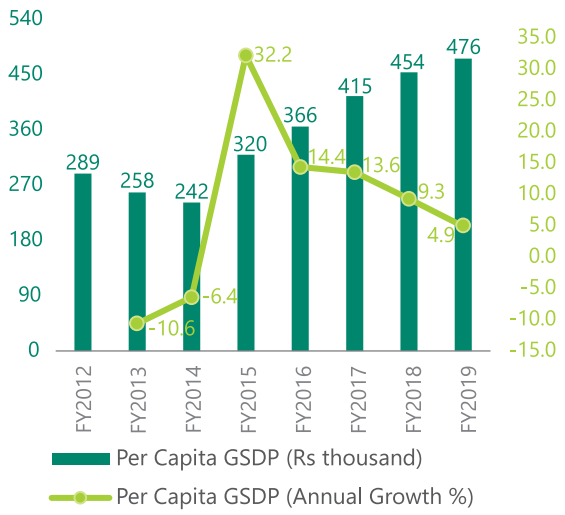
CHILDREN PER WOMAN
1.7
2.2
Average across all States

URBANISATION RATE
62.2%
31.1%
All India average

GO-1.B: Growth rate of GSDP (at current prices, %)



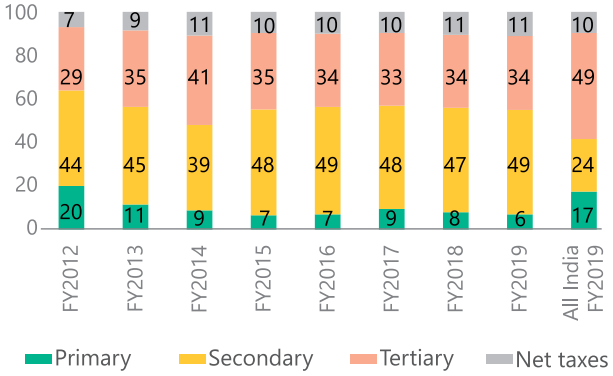
GO-1.C: Per capita GSDP (at current prices)



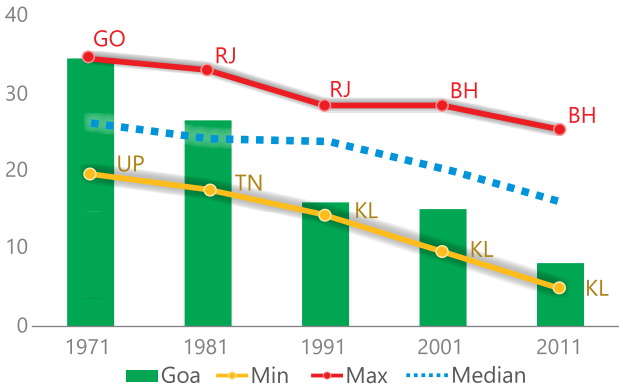
GO-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	42,367	77,44,945	0.6
2012–13	38,120	88,27,195	0.4
2013–14	35,921	1,00,07,392	0.4
2014–15	47,814	1,09,93,257	0.4
2015–16	55,054	1,21,91,256	0.5
2016–17	62,976	1,37,80,737	0.5
2017–18	69,352	1,54,20,126	0.5
2018–19	73,170	1,72,83,813	0.4

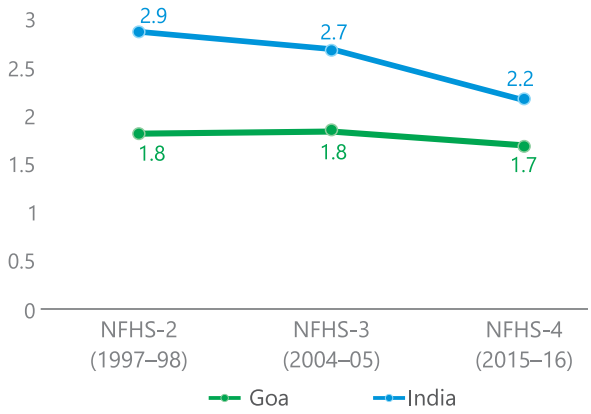
GO-1.E: Sectoral Contribution to GSDP (at current prices, %)



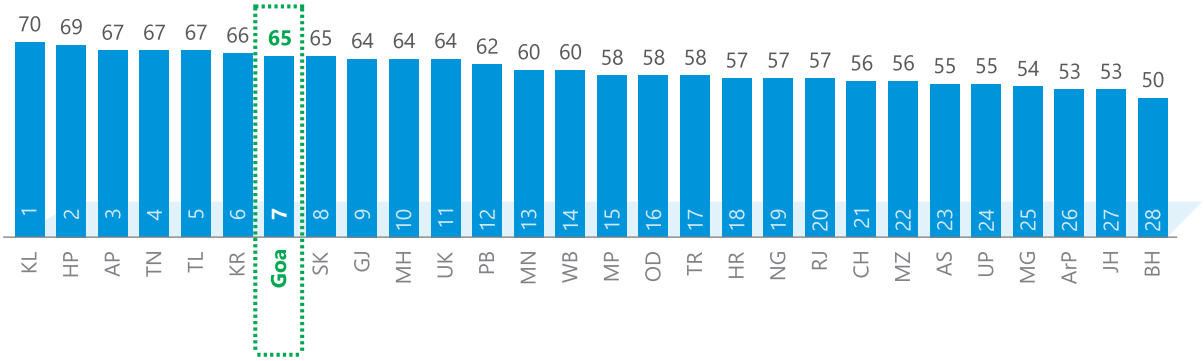
GO-2.A: Decadal Growth in Population (%)



GO-2.B: Total Fertility Rate (children per woman)



GO-2.C: SDG Index of NITI Aayog (2019)



GO-2.D: Key Social Indicators

EDUCATION

	GO	INDIA
Literacy rate (%)[a]	88.7	73.0
Pupil–Teacher ratio[b] (in Primary)	19.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	78.7	55.4

WATER & SANITATION

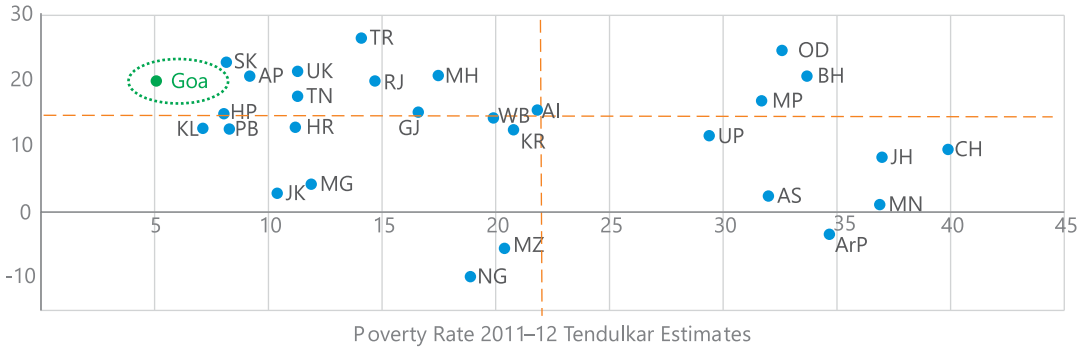
	GO	INDIA
Availability of safe drinking water[d] (household %)	96.3	89.9
Availability of toilets[d] (household %)	89.1	61.1

HEALTH

	GO	INDIA
Sex ratio[a] (females per 1000 males)	973	943
Underweight children (%)[d]	23.8	35.8
Stunting among children (%)[d]	20.1	38.4
Anaemia among children (%)[d]	48.3	58.6
Women with below normal BMI (%)[e,d]	14.7	22.9
Anaemia among Women (%)[d]	31.3	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	7.0	32.0
Institutional Deliveries (%)[d]	96.9	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	7.2	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	6,207	1,218 *(All States)*

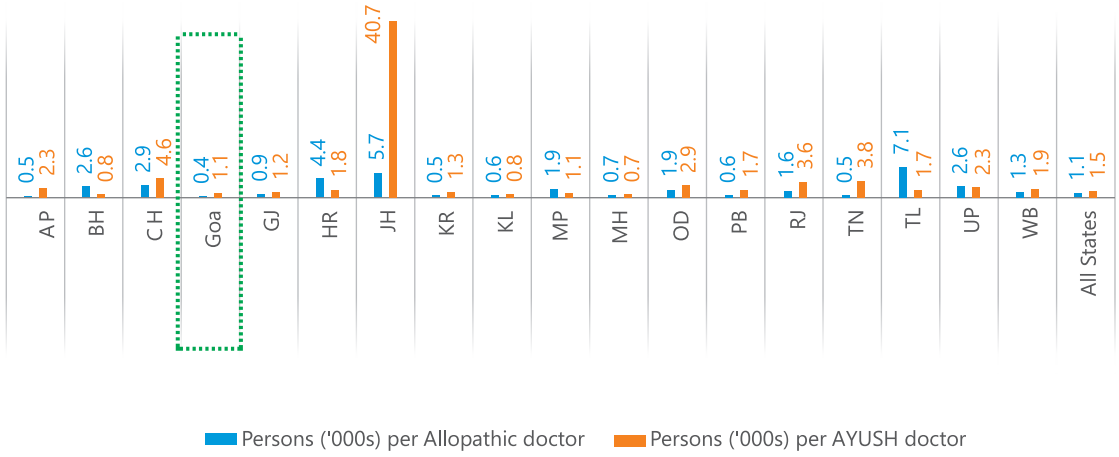
Sources: [a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018

GO-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



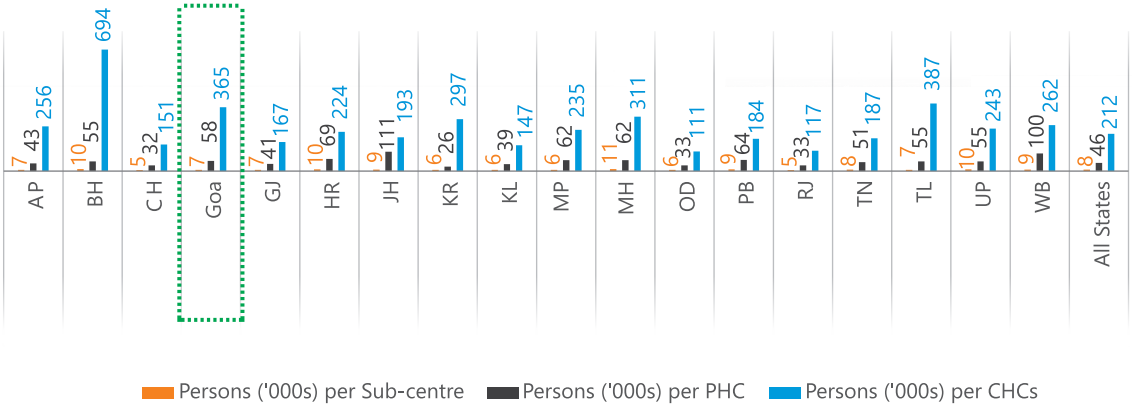
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

GO-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



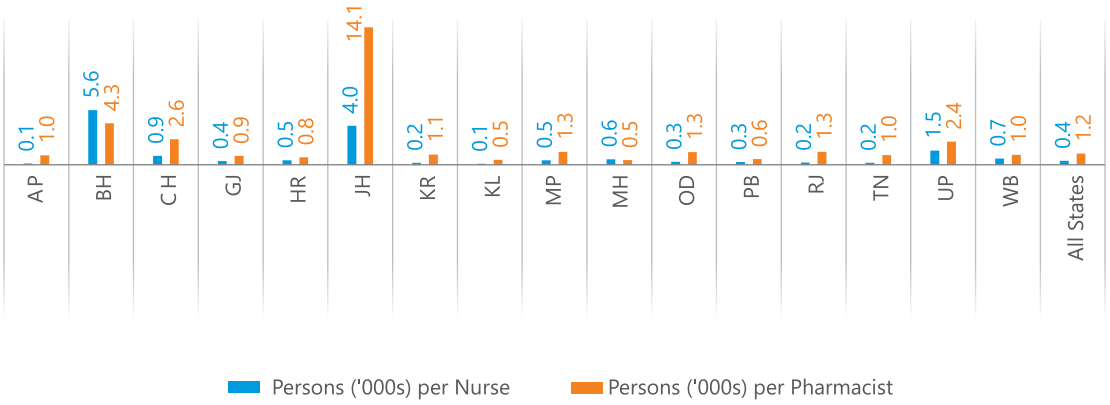
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

GO-3.B: Persons ('000s) per Sub-centre/PHC/CHC



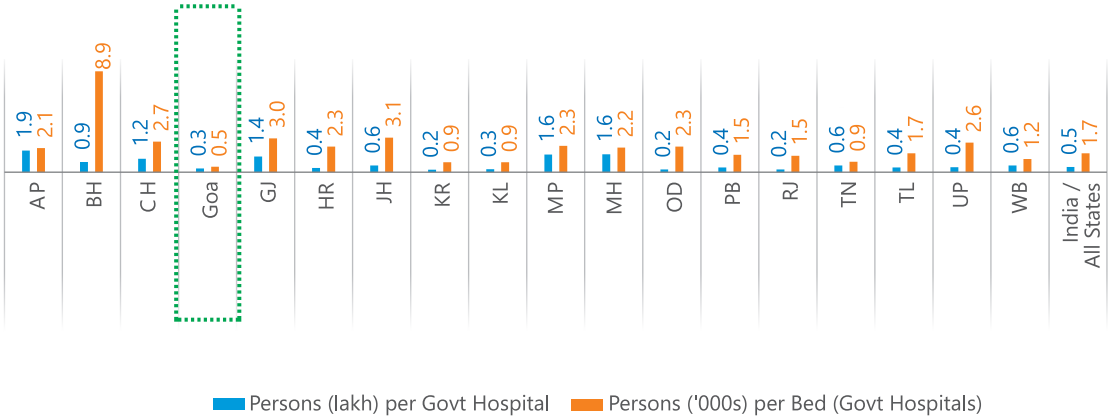
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

GO-3.C: Persons ('000s) per Nurse/ Pharmacist (Information not available for Goa)



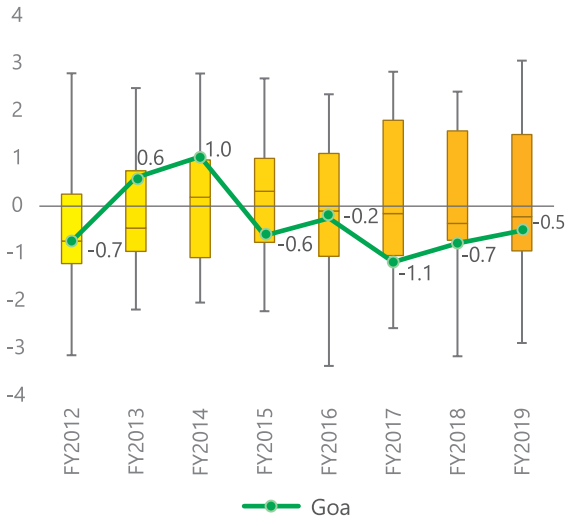
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

GO-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

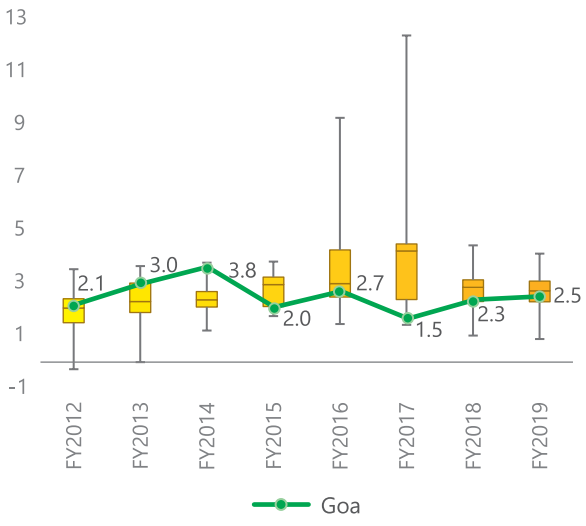


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

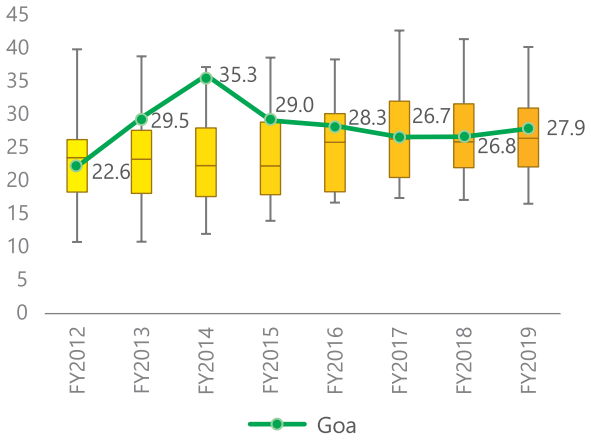
GO-4.A: Revenue Deficit as % of GSDP



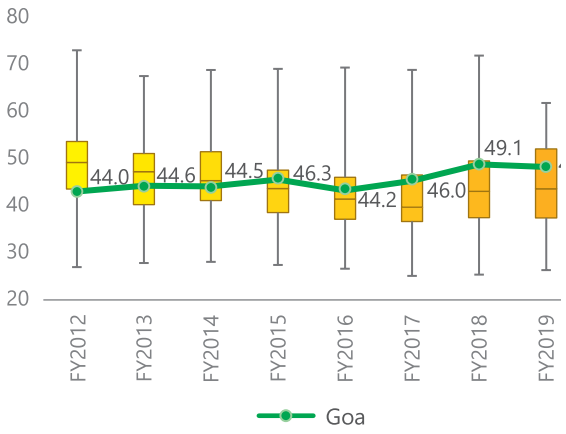
GO-4.B: Fiscal Deficit as % of GSDP



GO-4.C: Outstanding Debt as % of GSDP

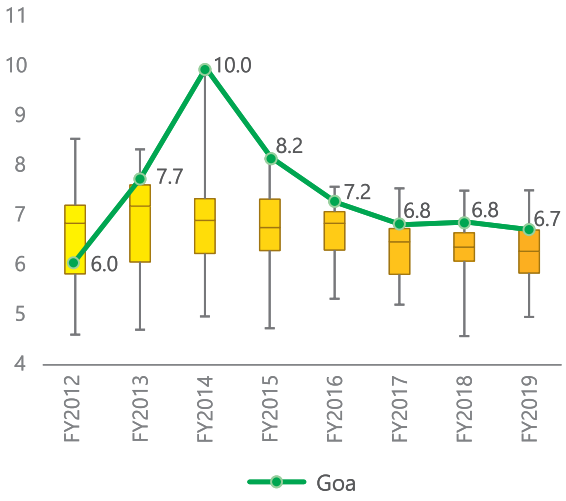


GO-4.D: Committed Expenditure as a % of Revenue Expenditure

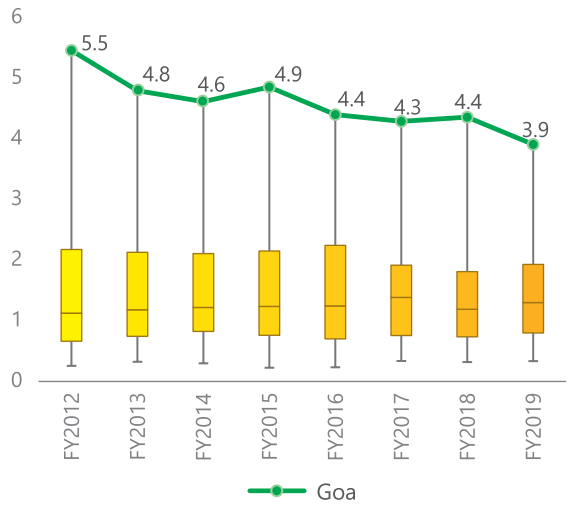


Note: Committed expenditure includes salaries, interest payments, and pensions

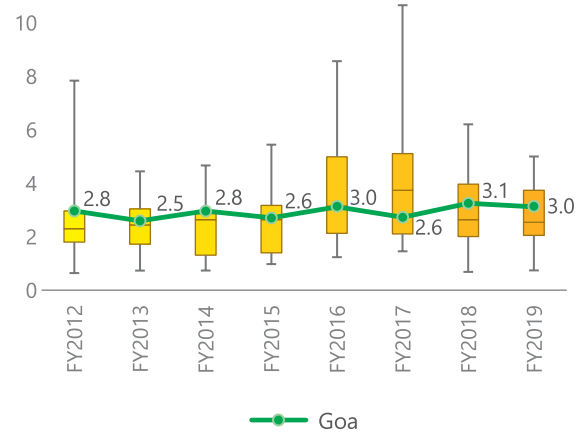
GO-4.E: OTR as % of GSDP



GO-4.F: NTR as % of GSDP



GO-4.G: Capital Expenditure to GSDP Ratio



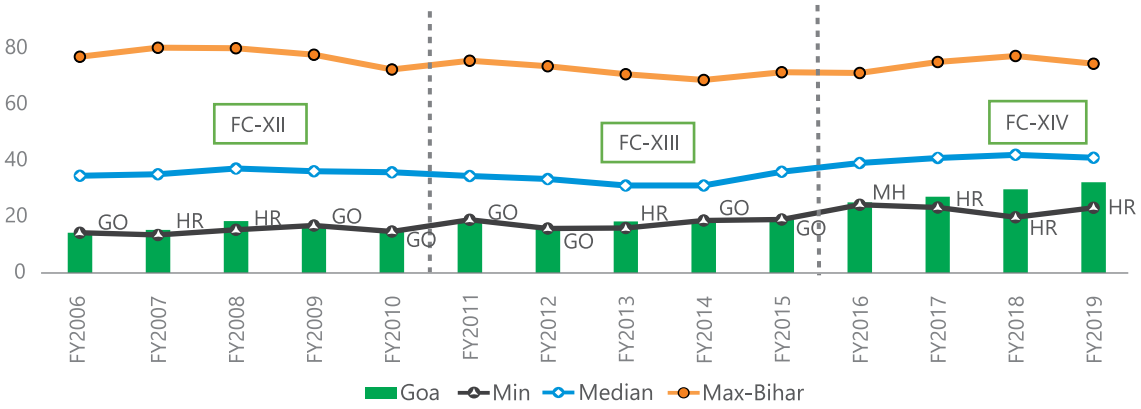
GO-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	4,76,370	1,41,099
Indicators as a percentage of GSDP		
TRR	15.6	13.4
OTR	6.7	6.4
NTR	3.9	1.1
TE	18.1	16.1
ES	4.2	3.1
SS	5.9	5.4
GS	5.0	4.7
Committed Expenditure	7.4	5.8
Capital Expenditure	3.0	2.5
FD	2.5	2.5
RD	–0.5	0.2
OD	27.9	25.0

GO-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Goa	10.8	11.6	8.1
GS average	13.6	13.1	10.3

GO-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



The Third Tier

- According the State Government, Goa has only one tier of PRIs in the form of 191 Village Panchayats. This is because the Constitution vide Article 243B(2) provides that Panchayats at the intermediate level need not be constituted if the State is below 20 lakh and Goa population was 14.59 lakh in 2011.
- The FC-XV however recommends that District Panchayats be constituted in Goa for better governance even though it is not a constitutional imperative.

Functions Devolved

- Of the 18 functions envisaged in Twelfth Schedule of the Constitution, 8 have been devolved completely and 2 partially to ULBs.
- The State Government did not provide the information on functions devolved to RLBs.

Auditing Status

- Audit of accounts of ULBs have been completed till 2017–18 and RLBs till 2016–17.

Property Tax Board

- The PTB recommended by FC-XIII is yet to be set up in Goa.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
16	12	16	17

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

First SFC

- First SFC was constituted in April 1999 and ATR submitted in November 2001.

Second SFC

- The Second SFC was constituted in August 2005 and the report submitted in December 2007.

Assignment of tax revenue to ULBs shall mainly be a percentage of land revenue and royalties of mines and minerals.

- For PRIs, the assigned devolution shall be 2% of own revenues of the State.
- The ATR of Second SFC is yet to be laid in the Legislative Assembly.

Third SFC

- Third SFC was constituted in January 2017. However, its report has not been submitted till date. Ideally, Fifth SFC should have been set up by now.

Other Observations

- According to the memorandum of the Government of Goa to FC-XV, the Directorate of Panchayats, Government of Goa has sought to constitute a committee to study the detailed report of the Second SFC and submit the Third SFC report accordingly. The State Government did not provide the information on the norms being followed currently to devolve resources to local bodies.
- The State Government is not strictly complying with the relevant constitutional provisions in constituting the SFC and implementing recommendations.

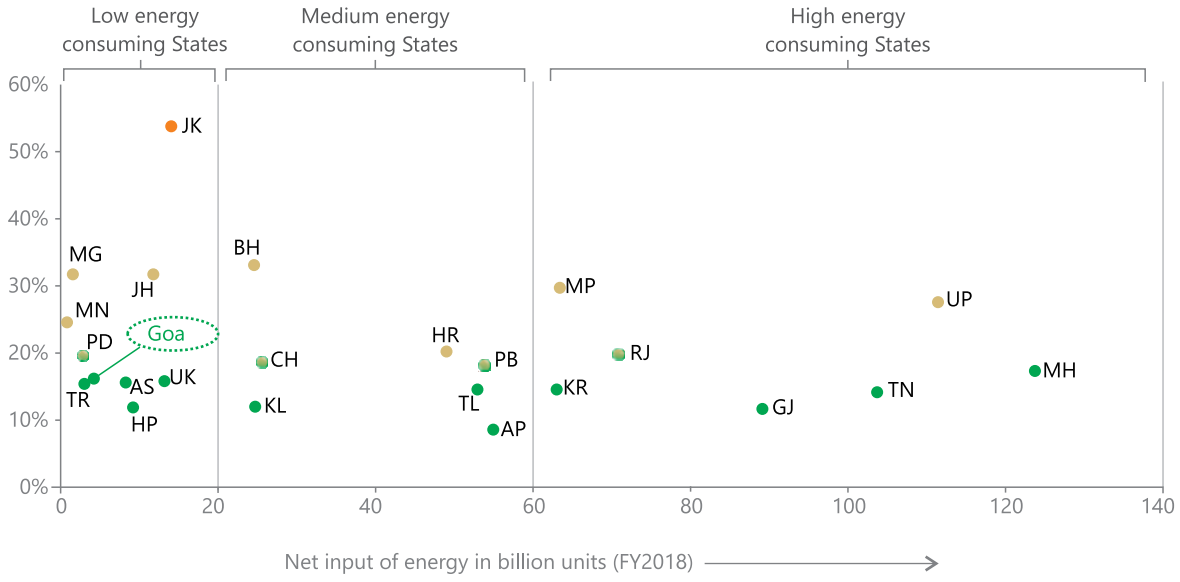
Debt and Losses

- The State could not achieve UDAY target of ACS–ARR gap in 2018–19. AT&C losses % came close to the target but could not be achieved either.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	15.7	15.0
ACS–ARR Gap (Rs per unit)	0.4	–0.2

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India.

GO-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Goa proposed that the share of States in divisible pool be increased to 50%.

Formula for Horizontal Devolution

S. no.	*Criteria*	*Weights (%)*
i)	Population (2011) and Demographic Change (subject to 1971)	25.0
ii)	Income Distance	45.0
iii)	Fiscal Discipline	5.0
iv)	Measurable Performance	10.0
v)	Area	7.5
vi)	Forest Cover	7.5

Low Dependence on Central Transfers

- In 2018–19, the central transfers constituted less than 33% of Goa's TRR (GS average 44%).
- The State achieved highest non-tax revenue to GSDP ratio amongst all States consistently from 2011–12 to 2016–17.
- This indicates greater reliance on State's own resources, a trend that the State should continue to sustain.

Highest Per Capita GSDP

- Goa has been able to achieve highest per capita GSDP across all States consistently from 2011–12 to 2018–19. The State should continue to implement policies which sustain this trend.

Ranking on the SDG Index of NITI Aayog (2019)

- The State ranked 7th among the Indian States according to the *SDG India Index and Dashboard, 2019–20* of the NITI Aayog.
- Further, the State had achieved lowest poverty rate of 5.1% amongst all States in 2011–12, compared to all India poverty rate of 21.9% in the same year (Tendulkar methodology).
- The State is a front-runner on SDG–2 Zero Hunger, SDG–8 Decent Work and Economic Growth, SDG–11 Sustainable Cities and Communities, SDG–15 Life on Land, and SDG–16 Peace, Justice and Strong Institutions.
- The State should continue to implement policy action that leads to such enhanced social outcomes.

Composite Water Management Index

- As per the Composite Water Management Index, 2019 released by NITI Aayog, Goa ranked 4th among 17 Non-Himalayan States in 2017–18.
- The State has substantially improved its rank from 11 in 2016–17.
- Hence, it is important that the State continues its efficient water management practices.

Piped Water Supply

- Goa has performed remarkably well on this parameter as it has third highest percentage of rural households with PWS connections at 78%, as against the all India coverage of only 18.3%.

Promotion of Tourism

- Goa is recognised as one of the most popular tourism destinations in the country.
- However, enhanced efforts to promote the State as an international tourist destination, would increase the footfall of high-end tourists and lead to generation of greater income and employment.

Fiscal Discipline

- The Debt–GSDP ratio of Goa is currently at an unsustainable level despite declining from 35.3% in 2013–14 to 27.9% in 2018–19.

FRBM Compliance

- The State enacted the FRBM Act in 2006 and amended it in 2014.
- Goa deviated from FRBM targets of Debt–GSDP ratio in 2013–14 and 2015–16, and FD–GSDP ratio in 2013–14.
- Further, the Debt–GSDP ratio was only marginally below the FRBM targets during the years 2016–17 and 2017–18.

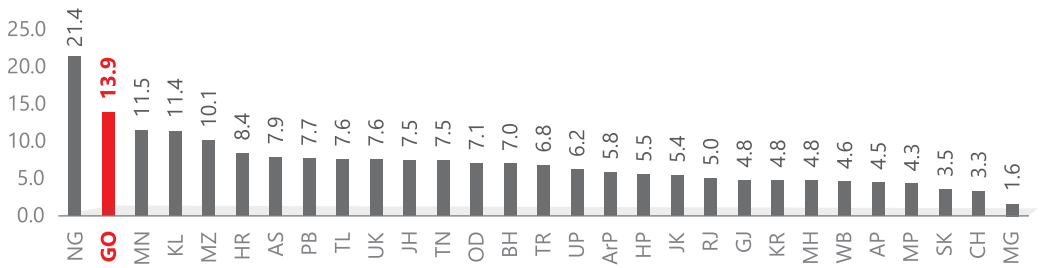
Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	30.0	30.0	30.0	30.0	27.0	27.0	27.0
Actually achieved	22.6	29.5	35.3	29.0	28.3	26.7	26.8
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Actually achieved	2.1	3.0	3.8	2.0	2.7	1.5	2.3

Source: Government of Goa

Unemployment Rate

- Goa had second highest unemployment rate among all States for persons 15 years and above, according to the usual status (principal and subsidiary), in 2017–18.[1]
- Thus, labour intensive sectors in the State need to be developed in order to generate higher employment.

GO-5.B: Unemployment rate in major States in India, Usual Principal Status Approach, in %



Source: GOI (2018), *Annual Report of Periodic Labour Force Survey, 2017–18*, Ministry of Statistics and Programme Implementation, Government of India.

Power Sector

- The State Government has not unbundled the electricity department till date. Appropriate measures need to be taken in this regard.
- Though the State achieved targeted AT&C losses in 2016–17 and 2017–18, the gains made till then seem to have reversed as AT&C losses rose to 15.7% in 2018–19 (against the target of 15% in the same year).
- The State needs to substantially improve its performance on vital UDAY barometers to avoid future fiscal risk.

Local Bodies

- Measures need to be taken to devolve remaining functions to local bodies.
- SFCs are not constituted regularly. The recommendations of Second SFC constituted in 2005 are still under consideration by the State Government. The Third SFC constituted in 2016 has not submitted its report till date.
- The State has yet to set up its PTB even though the recommendations of FC-XIII should have been implemented by 2014–15.
- As per Article 280(3) (bb) and (c) of the Constitution, the Finance Commission recommends grants for local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Public Sector Undertakings[2]

- Of the 15 working PSUs of Goa, 13 had arrears across 46 accounts (as on 31 October 2017) with the extent of arrears ranging from 1 to 11 years.
- The State Government had provided budgetary support of Rs 441.90 crore to 15 PSUs during the years for which accounts have not been finalised.
- Non-auditing of accounts could adversely impact the exchequer and encourage non-achievement of objectives for which the financial support has been extended.

Reform Roadmap

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Goa is part of the group which includes Gujarat, Tamil Nadu, Telangana, Maharashtra, Kerala, Karnataka, and Haryana.

Reform Signposts

- Goa's TRE TGR between 2011 and 2019 at 10.8% outpaces ORR TGR at 8.1% creating a situation which is fiscally untenable in the long run. **The State, therefore, needs to improve its ORR substantially.**
- **Goa has a great scope to improve its revenue as percentage of OTR, particularly in Excise, Registration and Stamp Duties, and Electricity Duty.**
- **The State needs to look for alternate sources of revenue if mining is ecologically unsustainable.**

Notes

1 GOI (2018), *Annual Report of Periodic Labour Force Survey, 2017–18*, Ministry of Statistics and Programme Implementation, Government of India.

2 CAG (2016), 'Chapter-III PSUs and Government Commercial & Trading Activities', *Audit Report for the year ended 31 March 2016*, report by the Comptroller and Auditor General of India, published by the Government of Goa.

GJ-1.A: Overview

POPULATION
60.4 million
5.1%
Of population across all States

AREA
1,96,244 sq km
6.0%
Of area across all States

2.1%
Of forest area across all States

FOREST COVER
14,857 sq km
7.6%
Of the State's own area is under forest

0.7% ↑
Forest cover changed from 2017 to 2019

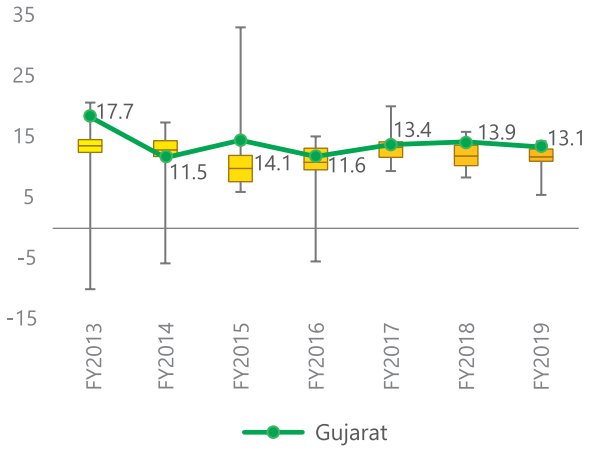
PER CAPITA GSDP
Rs 2,22,487
Rs 1,40,422
Average across all States

TAX TO GSDP
5.3%
6.3%
Average across all States

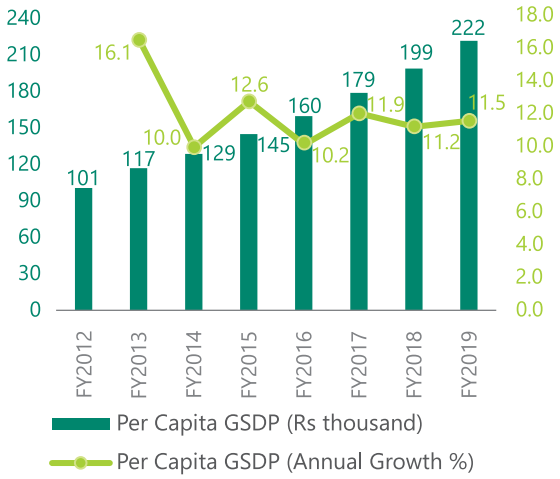
CHILDREN PER WOMAN
2.0
2.2
Average across all States

URBANISATION RATE
42.6%
31.1%
All India average

GJ-1.B: Growth rate of GSDP (at current prices, %)



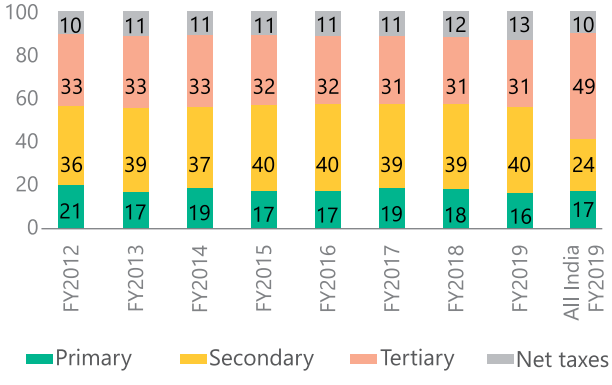
GJ-1.C: Per capita GSDP (at current prices)



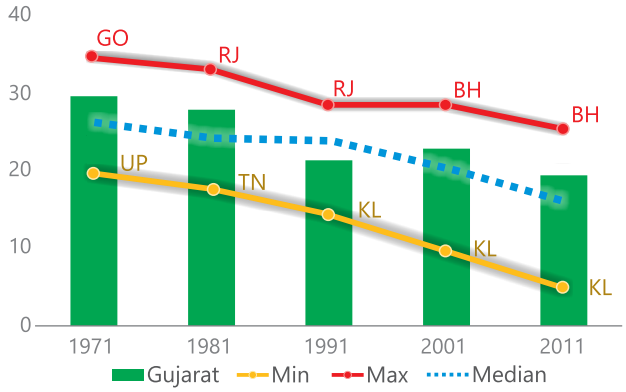
GJ-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	6,15,606	77,44,945	8.0
2012–13	7,24,495	88,27,195	8.2
2013–14	8,07,623	1,00,07,392	8.1
2014–15	9,21,773	1,09,93,257	8.4
2015–16	10,29,010	1,21,91,256	8.4
2016–17	11,67,156	1,37,80,737	8.5
2017–18	13,29,095	1,54,20,126	8.6
2018–19	15,02,899	1,72,83,813	8.7

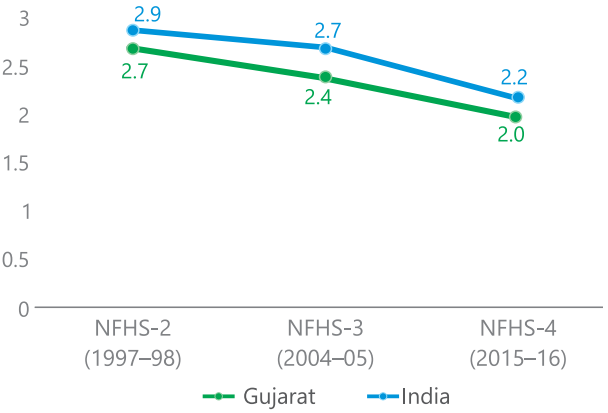
GJ-1.E: Sectoral Contribution to GSDP (at current prices, %)



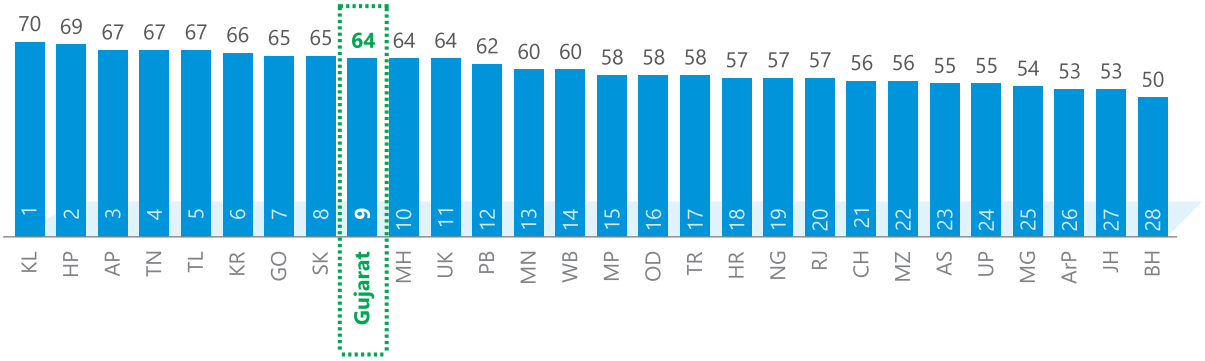
GJ-2.A: Decadal Growth in Population (%)



GJ-2.B: Total Fertility Rate (children per woman)



GJ-2.C: SDG Index of NITI Aayog (2019)



GJ-2.D: Key Social Indicators

EDUCATION

	GJ	INDIA
Literacy rate (%)[a]	78.0	73.0
Pupil–Teacher ratio[b] (in Primary)	22.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	43.2	55.4

WATER & SANITATION

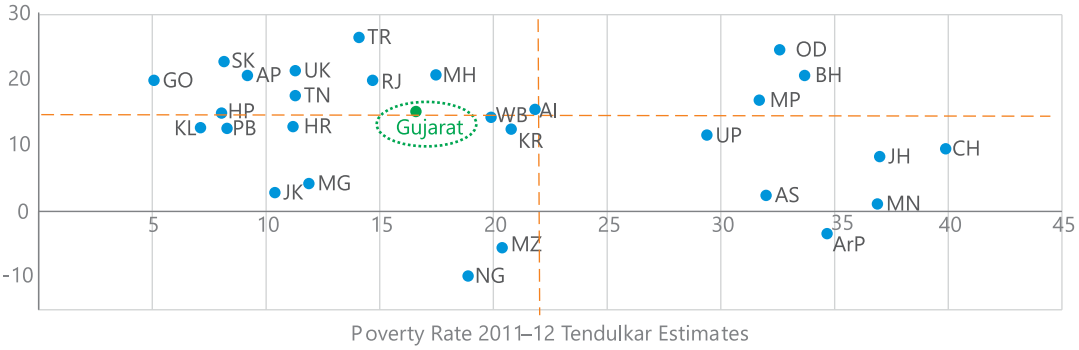
	GJ	INDIA
Availability of safe drinking water[d] (household %)	90.9	89.9
Availability of toilets[d] (household %)	71.0	61.1

HEALTH

	GJ	INDIA
Life expectancy (years)[g]	69.7	69.0
Sex ratio (♀ per 1000 ♂)[a]	919	943
Underweight children (%)[d]	39.3	35.8
Stunting among children (%)[d]	38.5	38.4
Anaemia among children (%)[d]	62.6	58.6
Women with below normal BMI (%)[e,d]	27.2	22.9
Anaemia among Women (%)[d]	54.9	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	28.0	32.0
Institutional Deliveries (%)[d]	88.5	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	6.1	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,478	1,218 *(All States)*

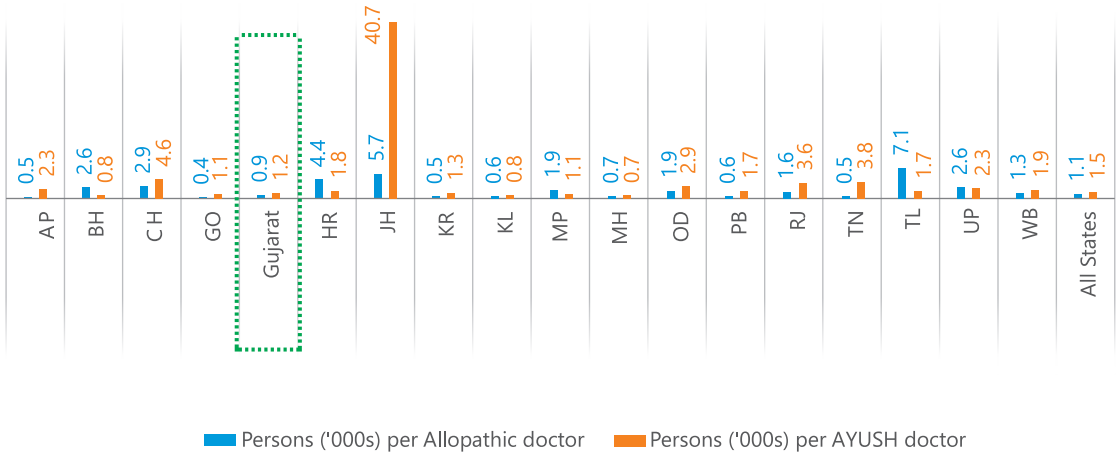
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

GJ-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



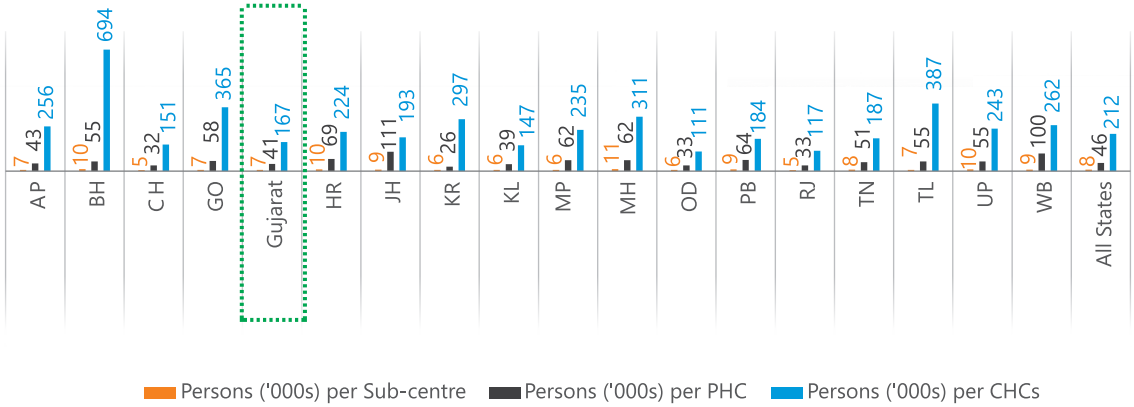
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

GJ-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



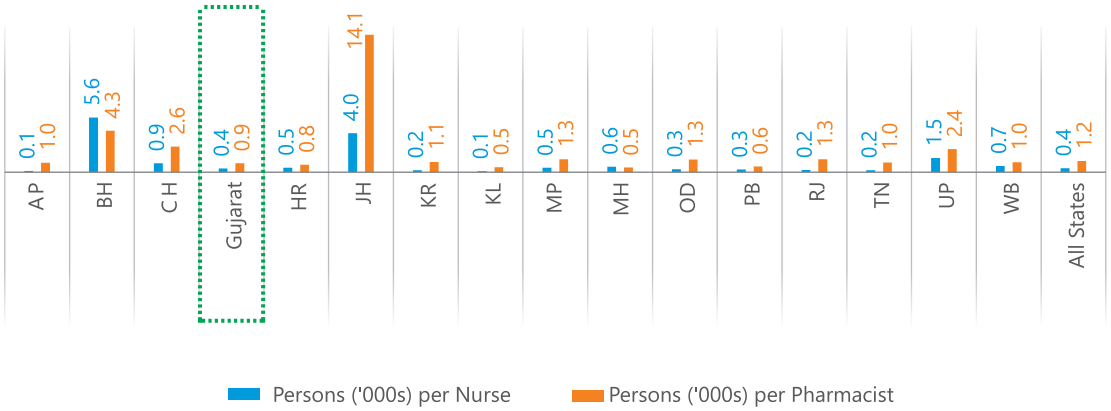
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

GJ-3.B: Persons ('000s) per Sub-centre/PHC/CHC



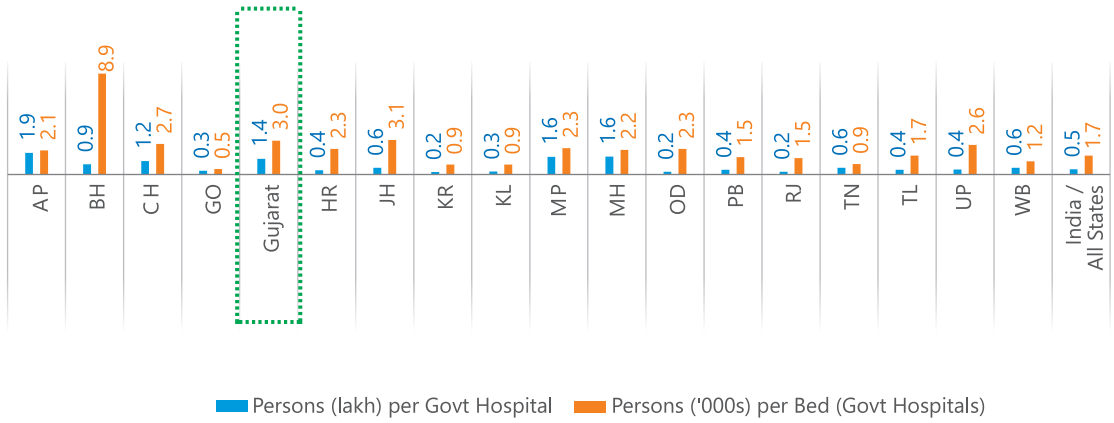
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

GJ-3.C: Persons ('000s) per Nurse/ Pharmacist



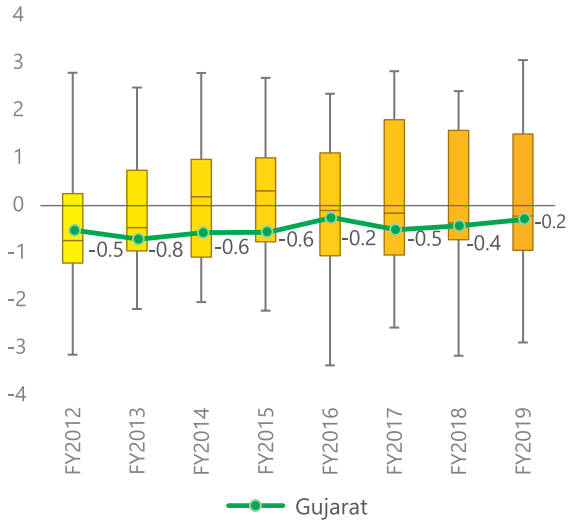
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

GJ-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

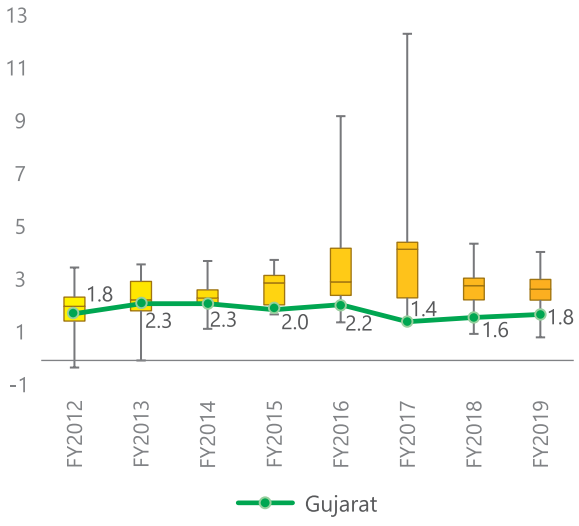


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

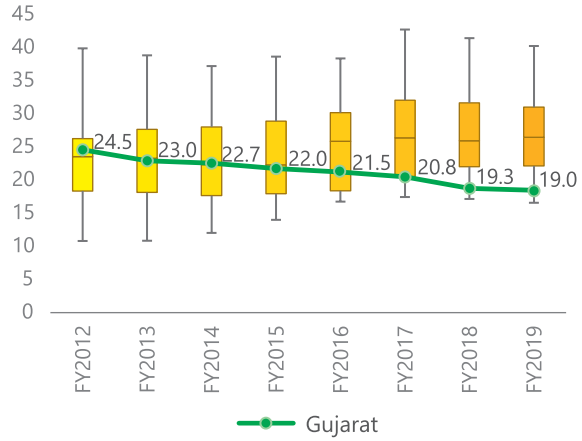
GJ-4.A: Revenue Deficit as % of GSDP



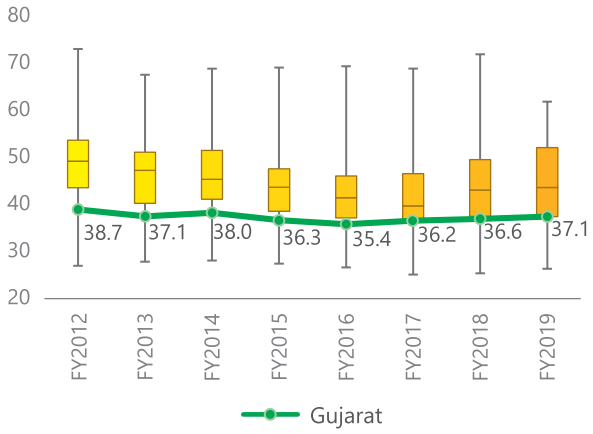
GJ-4.B: Fiscal Deficit as % of GSDP



GJ-4.C: Outstanding Debt as % of GSDP

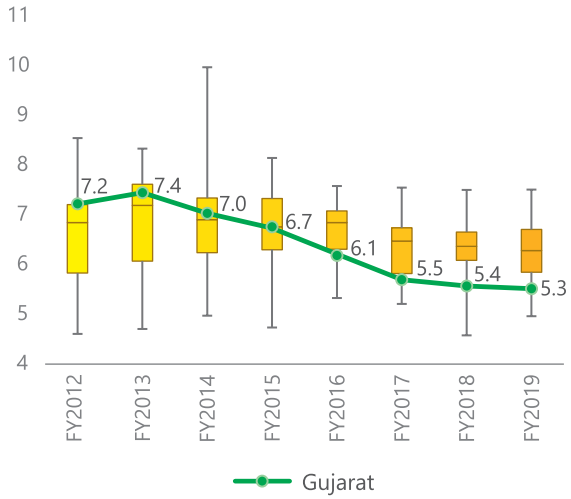


GJ-4.D: Committed Expenditure as a % of Revenue Expenditure

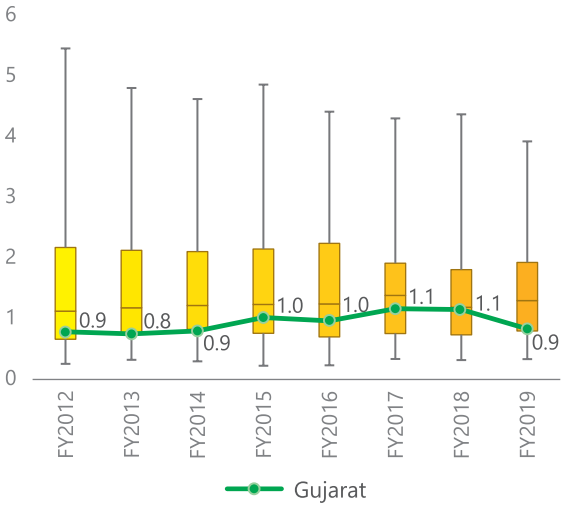


Note: Committed expenditure includes salaries, interest payments, and pensions

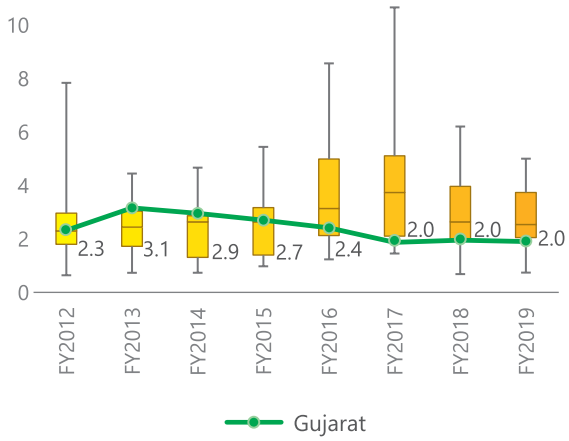
GJ-4.E: OTR as % of GSDP



GJ-4.F: NTR as % of GSDP



GJ-4.G: Capital Expenditure to GSDP Ratio



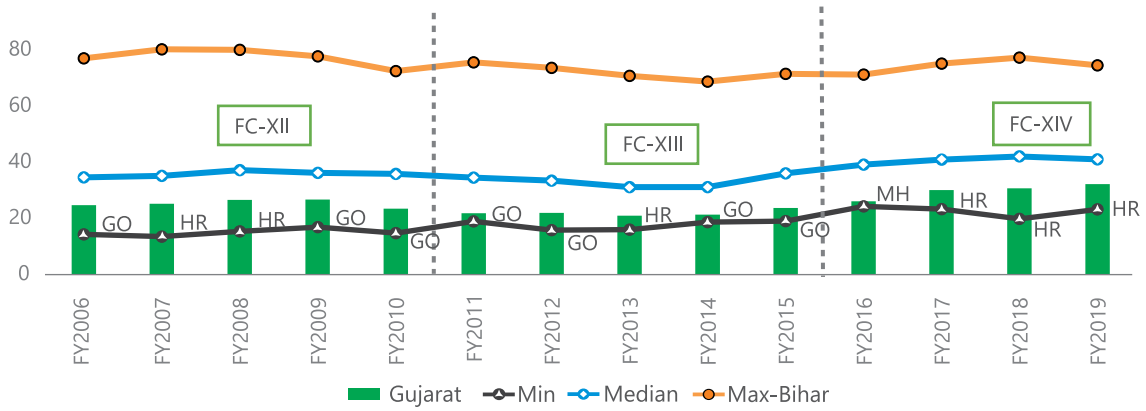
GJ-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	2,22,487	1,41,099
Indicators as a percentage of GSDP		
TRR	9.1	13.4
OTR	5.3	6.4
NTR	0.9	1.1
TE	10.8	16.1
ES	2.1	3.1
SS	3.6	5.4
GS	3.1	4.7
Committed Expenditure	3.3	5.8
Capital Expenditure	2.0	2.5
FD	1.8	2.5
RD	–0.2	0.2
OD	19.0	25.0

GJ-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Gujarat	11.7	11.1	8.6
GS average	13.6	13.1	10.3

GJ-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Out of 29 functions envisaged in Eleventh Schedule of the Constitution, the State devolved 19 functions to RLBs.
- All 18 functions envisaged in Twelfth Schedule of the Constitution were devolved to ULBs.

Auditing Status

- Audit of accounts of Municipal Corporations was completed up to 2013–14 and Municipalities up to 2016–17.
- Accounts of District Panchayats and Taluka Panchayats were audited up to 2016–17 and Village Panchayats up to 2015–16.

Property Tax Board

- In keeping with the recommendations of the FC-XIII, the State Government assigned the functions of PTB to the Gujarat Municipal Finance Board (GMFB), Gandhinagar in 2011.
- The Board has been carrying out the assigned functions as required.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
4	8	12	10

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Second SFC (2005–06 to 2009–10)

- As per the CAG report (2016–17), of the 41 recommendations of the Second SFC related to RLBs/PRIs, 20 (49%) were accepted by the State Government and finally, only 7 (17%) were implemented.
- Out of 42 recommendations of the Second SFC related to ULBs, 20 (48%) were accepted by the State Government and finally, only 14 (33%) were implemented.

Third SFC (2013–14 to 2019–20)

- Though the Third SFC submitted its report in December, 2015, the ATR is yet to be tabled in the Assembly.

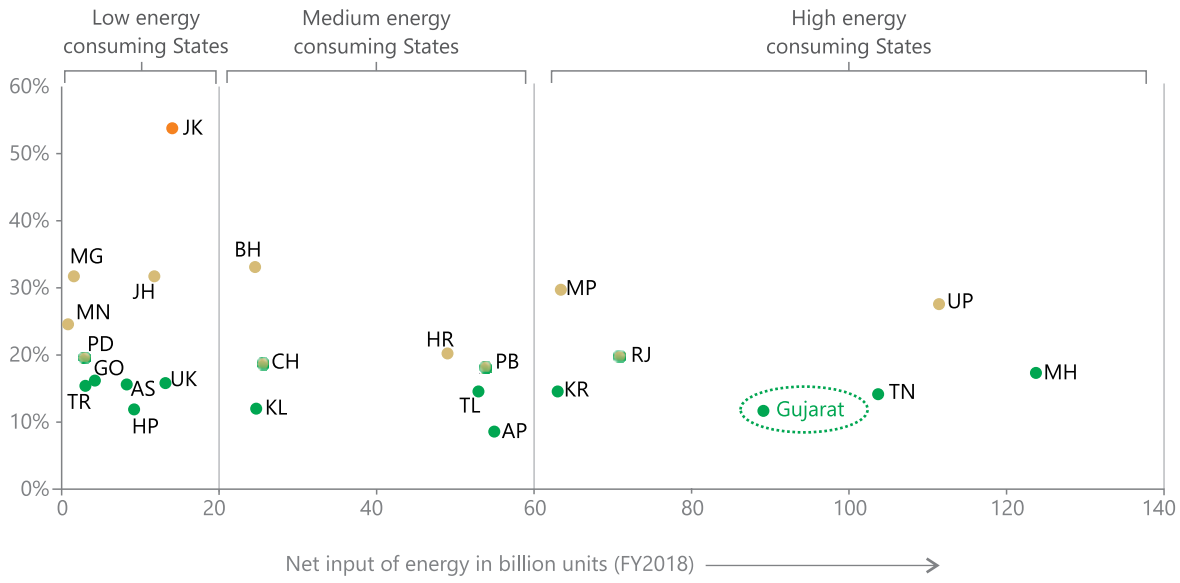
Debt and Losses

- Total equity and liabilities of DISCOMs as on 31 March 2019 stand at Rs 673 crore of which State Government borrowing is Rs 187 crore.
- Gujarat has very nearly achieved the target AT&C losses and the ACS–ARR target gap under UDAY in 2018–2019.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	14.0	13.0
ACS–ARR Gap (Rs per unit)	–0.02	–0.06

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India.

GJ-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Gujarat proposed that the share of States be increased to 50% of the divisible pool.

Formula for Horizontal Devolution

S. no.	*Criteria*	*Weights (%)*
i)	Population (2011)	25.0
ii)	Urbanisation	5.0
iii)	Area	15.0
iv)	Income Distance	35.0
v)	Social Depreviation	12.5
vi)	Fiscal Discipline	7.5

Fiscal Discipline

- The adherence to the path of fiscal discipline by Gujarat over the years led to decline in its FD–GSDP ratio from 2.3% in 2012–13 to 1.8% in 2018–19.
- The State has, therefore, not resorted to additional borrowings under Article 293(3) of the Constitution.
- The Debt–GSDP ratio of the State had also reduced from 23% to 19.0% during this period.
- While these trends indicate expanding fiscal space, capital expenditure–GSDP ratio is seen to be declining from 3.1% to 2.0% during this period.
- It would be prudent for the State to gainfully deploy available resources in the capital expenditure, to create streams of future revenue.

FRBM Compliance

- The State enacted the FRBM Act in 2005 and amended it in 2011.
- It adhered to FRBM targets of FD–GSDP ratio in the period between 2011–12 and 2017–18.
- However, the adherence Debt–GSDP ratio targets could not be ascertained as the State's FRBM Act provides for only Public Debt–GSDP ratio targets, thereby excluding the liabilities in the Public Account.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	25.3	22.0	20.6	19.8	18.2	18.2	18.0
Actually achieved	24.5	23.0	22.7	21.9	21.5	20.8	19.3
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	2.8	2.8	2.5	2.5	2.5
Actually achieved	1.8	2.3	2.3	2.0	2.2	1.4	1.6

Note: The State's FRBM Act provides for only Public Debt–GSDP ratio targets. Thus, the liabilities in the Public Account are not captured as targets in the State's FRBM Act.

Source: Government of Gujarat

High Reliance on Own Funds

- The OTR for Gujarat was 85.7% of ORR in 2018-19 and 58.9% of TRR compared to 84.3% and 45.2% respectively in case of all States (average) during the same period.

High Share of Non-Primary Sector in GSVA

- In 2015–16 and 2018–19, the share of primary sector was 17.6% and 16.4% respectively in GSDP, indicating healthy demand for skilled workers in secondary and tertiary sectors—comprising 80% of the State's economy.
- Many workers migrate to Gujarat from other States in search of remunerative work opportunities.

Port-Led Economy

- The State needs to continue its focus on the development and upgrading of ports in order to sustain its pace of economic development.

Ranking on the SDG Index of NITI Aayog (2019)

- The State ranked 9th among the Indian States according to the *SDG India Index and Dashboard, 2019–20* of the NITI Aayog.
- The State has done well on SDG–6 Clean Water and Sanitation, SDG–7 Affordable and Clean Energy, SDG–8 Decent Work and Economic Growth, and SDG–9 Industry, Innovation and Infrastructure.
- However, the State needs to improve its performance on SDG–1 No Poverty, SDG–2 Zero Hunger, SDG–3 Good Health and Wellbeing, SDG–5 Gender Equality, SDG–10 Reduced Inequalities, SDG–11 Sustainable Cities and Communities, and SDG–15 Life on Land.
- Gujarat should focus more on policies and actions that would lead to enhanced social outcomes.

Power Sector

- DISCOMs have done extremely well on targeted reduction of AT&C losses in 2016–17, 2017–18 and 2018–19 mainly on account of continuous efficiency improvement measures.
- All four DISCOMs of the State have consistently been making profits since 2010–11.
- The State is a lead performer on almost all the targets of the UDAY barometers (except smart metering) as on 31 March 2019.
- Robust systemic reforms are required to ensure that the power subsidy reaches intended beneficiaries without leakage.

Aspirational Districts

- Narmada and Dahod figure in the list of aspirational districts identified by the NITI Aayog for development focus and monitoring.

Piped Water Supply

- Gujarat has performed exceedingly well on this parameter, despite being water-scarce.
- It has the second highest percentage of rural households with PWS connections (79%) in the country against the all India coverage of only 18.3%.

Policy of Prohibition

- Government of Gujarat has reported that the annual revenue loss of about Rs 10,000 crore due to its policy of prohibition is far outweighed by the positive externalities of low crime rates, safety and security of women, etc., creating a thriving and healthy socioeconomic environment in the State.

Buoyancy of OTR

- Buoyancy of OTR at 0.53 when measured for the period 2011–2017 declines to 0.20 when measured for 2014–2017 (pre-GST era). This decline reflects the poorly on the ability of the State to generate tax resources for its growing economy.

Declining ORR

- Gujarat's ORR/TRR at 68.8% in 2018–19 is way behind Haryana (76.7%) though their per capita incomes levels are comparable.

Interest Payments

- Between 2011–12 and 2016–17, interest payments by Gujarat have consistently ranged at 17%–18% of RE.
- Gujarat ranks among the top three States of India in terms of interest costs.
- The State needs to take firm steps to reduce interest payments to free up resources for capital and social sector investment.

Transport Sector

- The Gujarat State Road Transport Corporation (GSRTC) has been consistently making losses since 2011–12, burdening the State Government.
- The accumulated losses of GSRTC are Rs 2,722 crore (2014–15).
- Its net worth has been negative in three years between 2012–13 and 2014–15.[1]

Health

- Gujarat lags behind the national average on some of the key health indicators (see GJ-2.D).
  - For example, according to NFHS–4 (2015–16), more than 26.4% of children in Gujarat are wasted as compared to the national average of 21% respectively, a figure that is expected to be far worse for children belonging to Scheduled Tribes.
  - Though the immunisation coverage in the State has improved to 50.4% in 2015–16 (national average 62%) from 45.2% as per NFHS–3 (2005–06), Gujarat still ranks 26 among 28 States.
- In 2016–17, the expenditure on health as a percentage of GSDP 0.7% against GS average of 0.8%.

Education

- Gujarat's needs to improve its performance on number of educational parameters:
  - In 2016–17, secondary Net Enrolment Ratio (NER) was 47.9% (national average 51.8%) and higher secondary NER was 27.1% (national average 31.0%) (as per U-DISE 2016–17).
  - As per U-DISE, 2016–17, the Gross Enrolment Ratio (GER) of girls to boys (captured by Gender Parity Index) was lower Gujarat than the national average for all levels of education.

Level	*Gender Parity Index, Gujarat*	*Gender Parity Index, India*
Elementary	1.0	1.1
Secondary	0.9	1.0
Higher secondary	0.9	1.0

Source: U-DISE, 2016–17

- » In 2016–17, the percentage dropout at upper primary in Gujarat was 6.5 (against national average of 5.7). The same for secondary level was 24.1 (against national average of 19.9) and higher secondary level was 6.56 (against national average of 6.0).
- » The percentage of children in Grade III in the State who can at least do subtraction was 25.7 in 2018 compared to 28.2 all-India.[2]

- The State needs to make efforts to reduce the gap between education indicators of Gujarat and India.
- In 2016–17, the expenditure on education as a percentage of Gujarat GSDP was 1.7 against GS average of 2.6.

Local Bodies

- Of the 29 functions envisaged in the Eleventh Schedule of the Constitution, 10 are yet to be devolved to PRIs. Measures should be taken to complete the devolution.
- Gujarat has not been regular in constituting the SFC after every five years.
- The Third SFC submitted its report in 2015, four years after its constitution. The ATR is yet to be tabled in the Legislative Assembly.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Public Sector Undertakings[3]

- During 2018–19 (as per latest finalised financial statements) out of 61 active SPSUs, 44 earned profit of Rs 2,487.28 crore and 15 incurred loss of Rs 2,569.64 crore. Of the 61 active SPSUs, 39 had 67 financial statements in arrears, which ranged between 1 and 4 years.
- As on 31 March 2019, investment in 10 SPSUs was Rs 1,06,844.09 crore. Government of Gujarat provided budgetary assistance to three power sector SPSUs ranging between Rs 6,144.63 crore in 2014–15 and Rs 10,223.10 crore in 2018–19. No funds were infused in the remaining seven SPSUs.
- During 2018–19, budgetary assistance of Rs 10,223.10 crore to power sector PSUs included Rs 2,813.37 crore as equity and Rs. 7,409.73 crore as grants/ subsidy.

High Pollution (PM10) as Monitored under NAMP

- There are four Million-plus cities in Gujarat—Ahmedabad, Surat, Vadodara, and Rajkot, which are engines of growth. However, their rising air pollution (as monitored under NAMP) unless tackled proactively, could impede their growth in future.

PM10 Micrograms Per Cubic Metre

City	*2016*	*2017*	*2018*	*Average*
Ahmedabad	108	120	236	154.7
Rajkot	92	106	203	133.7
Surat	92	106	176	124.7
Vadodara	92	108	188	129.3

Note: NAMP has set a PM_{10} limit of 90 micro grams per cubic metre.

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Gujarat is part of the group which includes Goa, Tamil Nadu, Telangana, Maharashtra, Kerala, Karnataka, and Haryana.
- Critical fiscal parameters of Gujarat have been compared to others in its class (barring Goa, which is too small).

Reform Signposts

- Though Gujarat is known as the manufacturing hub of India, its per capita income is the lowest in its class.
- Its OTR buoyancy of 0.55 (2011–12 to 2018–19) is the lowest in the class (which Maharashtra leads at 0.99).
- The OTR TGR at 7% (2011–12 to 2018–19) compares poorly to the class average of 11.5%.
- **Hence, the State should analyse its OTR in depth and devise strategies to increase its buoyancy to at least the class average of 0.83 within the award period of FC-XV.**
- While the State's TRE has been growing at 11.7% (2011–12 to 2018–19), the ORR TGR is only 8.6% during that period creating a situation that is fiscally untenable.
- The share of VAT/GST, Stamp Duty and Registration, and Excise in TRR has been decreasing between 2014 and 2018. The revenue from VAT on petroleum remained significant at around 25% of OTR while the growth rate in VAT collection on petroleum went down (unlike Maharashtra, Karnataka, and Kerala in its class that reported significant improvements). **Government of Gujarat may like to review these revenue streams to improve overall buoyancy.**
- While Gujarat has been reporting low committed expenditure, issues in its budgeting and accounting system have emerged. For instance, salaries reported in 2018–19 were only Rs 11,650 crore while grants-in-aid (GIA) during the same period stood at whopping Rs 58,000 crore. **Though GIA may contain both salary and non-salary components, this is part of TRE and should be accounted for.**
- Gujarat is revenue surplus and its RD–FD ratio is healthy. Nevertheless, its capital expenditure has declined over the years from 3.1% (2012–13) to 2% (2018–19). **This requires immediate attention so as to secure future stream of revenue sustainably.**
- Expenditure on social services in Gujarat is 3.6% of GSDP against the class average of 4.2%, 4.9% in Kerala, and the all State average of 5.5%. **There is a need to focus in this area especially in the backward districts.**

Notes

1 CAG (2017), *Report No 1 of 2017 - Public Sector Undertakings Gujarat*, report by the Comptroller and Auditor General of India, published by Government of Gujarat.

2 ASER (2018), *Annual Survey of Education Report 2018*, ASER Centre.

3 CAG (2020), *Report of the Comptroller and Auditor General of India on Public Sector Undertakings for the year ended 31 March 2019.* Report No 4 of 2020, Government of Goa.

HR-1.A: Overview

POPULATION
25.4 million
2.1%
Of population across all States

AREA
44,212 sq km
1.4%
Of area across all States

FOREST COVER
1,602 sq km
0.2%
Of forest area across all States
3.6%
Of the State's own area is under forest
0.9% ↑
Forest cover changed from 2017 to 2019

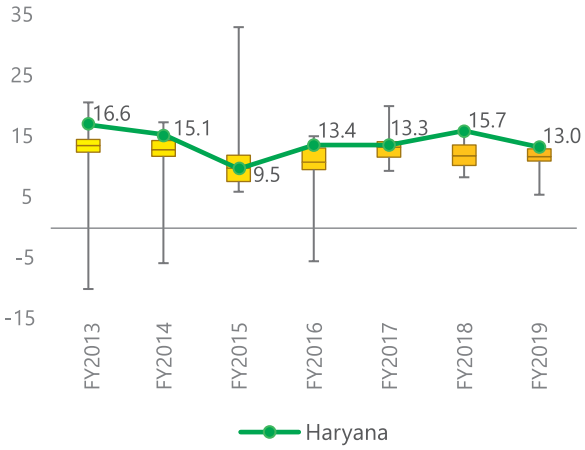
PER CAPITA GSDP
Rs 2,60,286
Rs 1,40,422
Average across all States

TAX TO GSDP
5.8%
6.3%
Average across all States

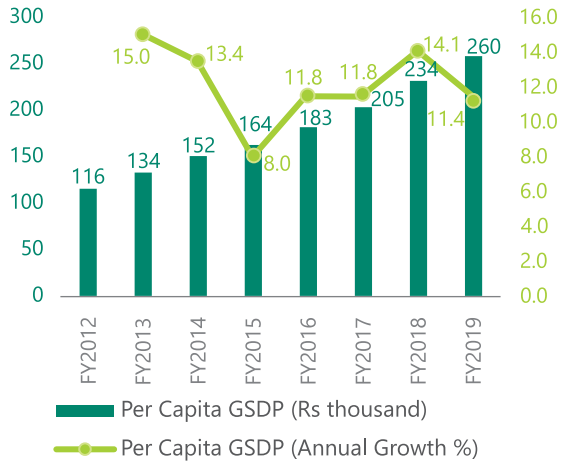
CHILDREN PER WOMAN
2.1
2.2
Average across all States

URBANISATION RATE
34.8%
31.1%
All India average

HR-1.B: Growth rate of GSDP (at current prices, %)



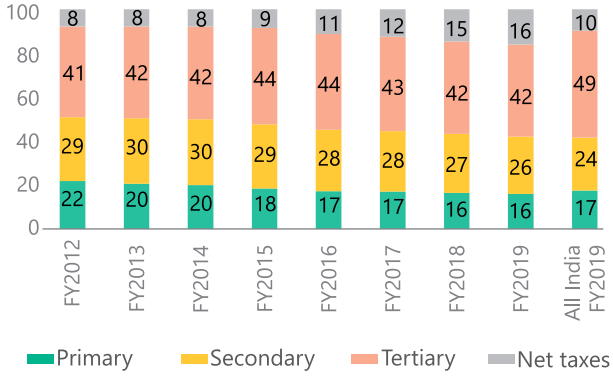
HR-1.C: Per capita GSDP (at current prices)



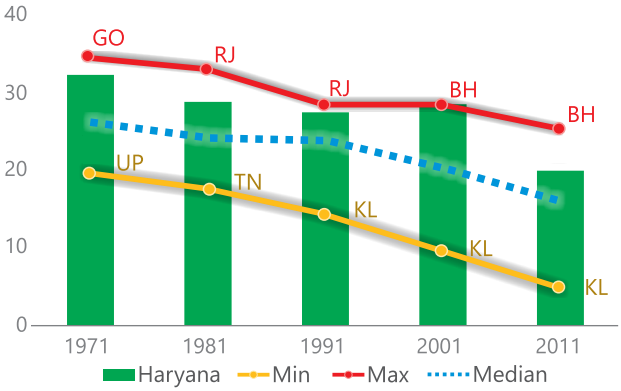
HR-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	2,97,539	77,44,945	3.8
2012–13	3,47,032	88,27,195	3.9
2013–14	3,99,268	1,00,07,392	4.0
2014–15	4,37,145	1,09,93,257	4.0
2015–16	4,95,504	1,21,91,256	4.1
2016–17	5,61,610	1,37,80,737	4.1
2017–18	6,49,592	1,54,20,126	4.2
2018–19	7,34,163	1,72,83,813	4.2

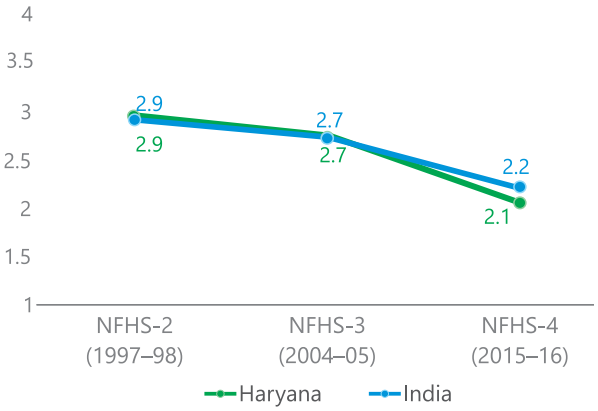
HR-1.E: Sectoral Contribution to GSDP (at current prices, %)



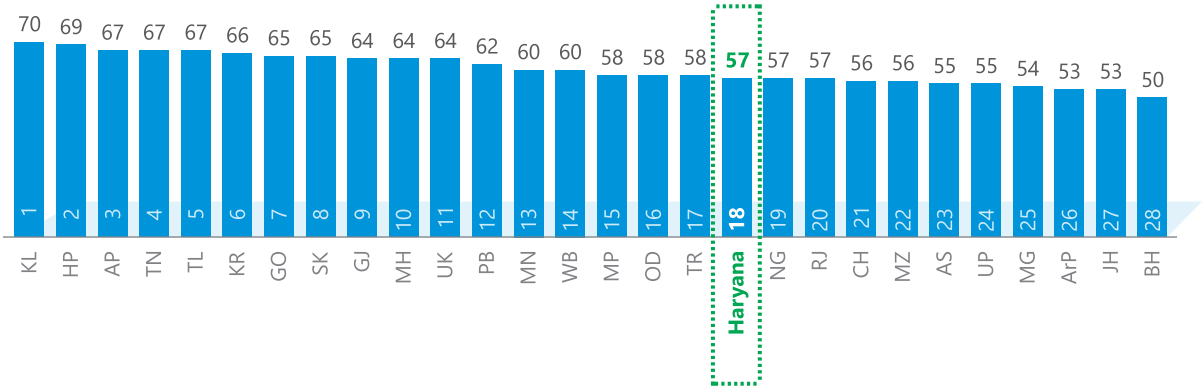
HR-2.A: Decadal Growth in Population (%)



HR-2.B: Total Fertility Rate (children per woman)



HR-2.C: SDG Index of NITI Aayog (2019)



HR-2.D: Key Social Indicators

EDUCATION

	HR	INDIA
Literacy rate (%)[a]	75.6	73.0
Pupil–Teacher ratio[b] (in Primary)	25.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	60.8	55.4

WATER & SANITATION

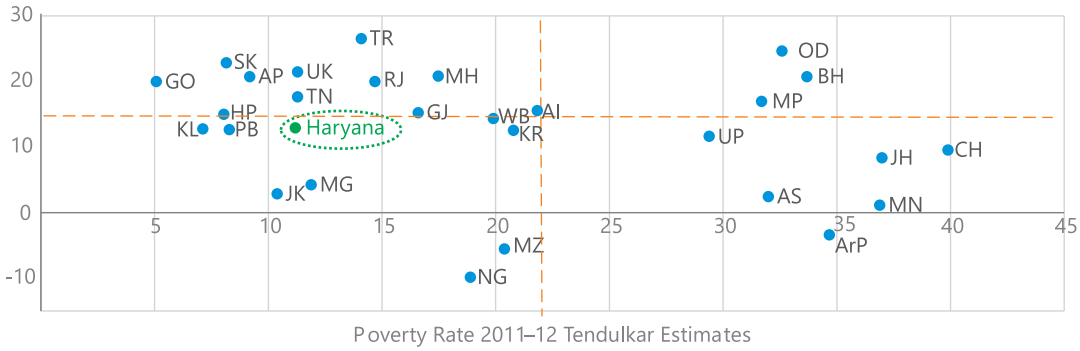
	HR	INDIA
Availability of safe drinking water[d] (household %)	91.6	89.9
Availability of toilets[d] (household %)	89.8	61.1

HEALTH

	HR	INDIA
Life expectancy (years)[g]	69.7	69.0
Sex ratio (♀ per 1000 ♂)[a]	879	943
Underweight children (%)[d]	29.4	35.8
Stunting among children (%)[d]	34.0	38.4
Anaemia among children (%)[d]	71.7	58.6
Women with below normal BMI (%)[e,d]	15.8	22.9
Anaemia among Women (%)[d]	62.7	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	30.0	32.0
Institutional Deliveries (%)[d]	80.4	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	4.3	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,422	1,218 *(All States)*

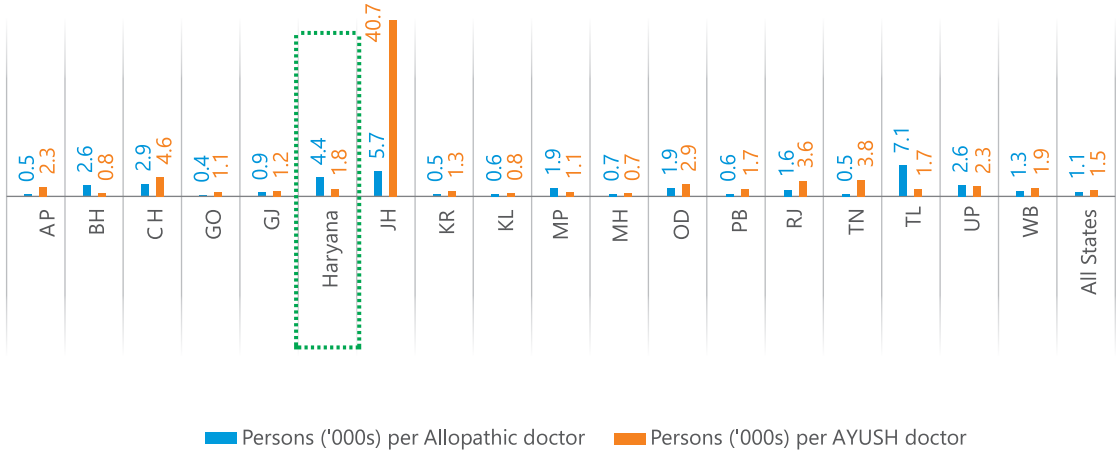
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

HR-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



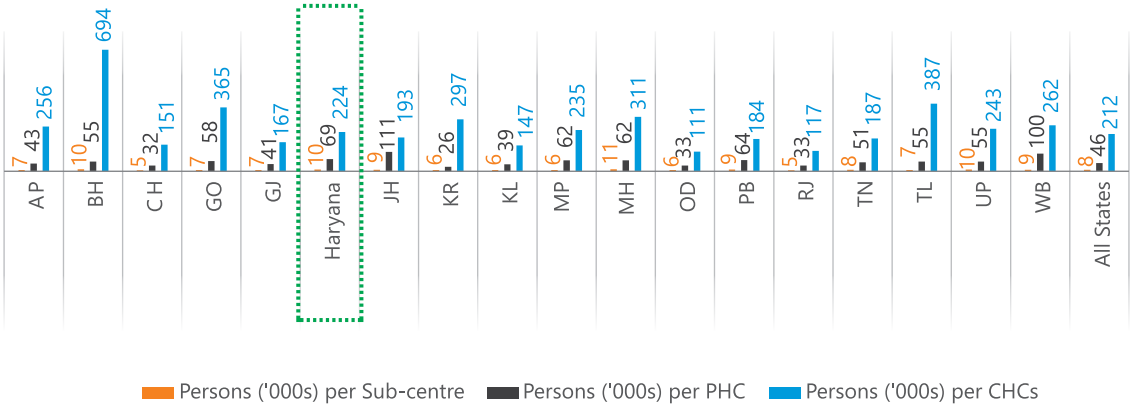
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

HR-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



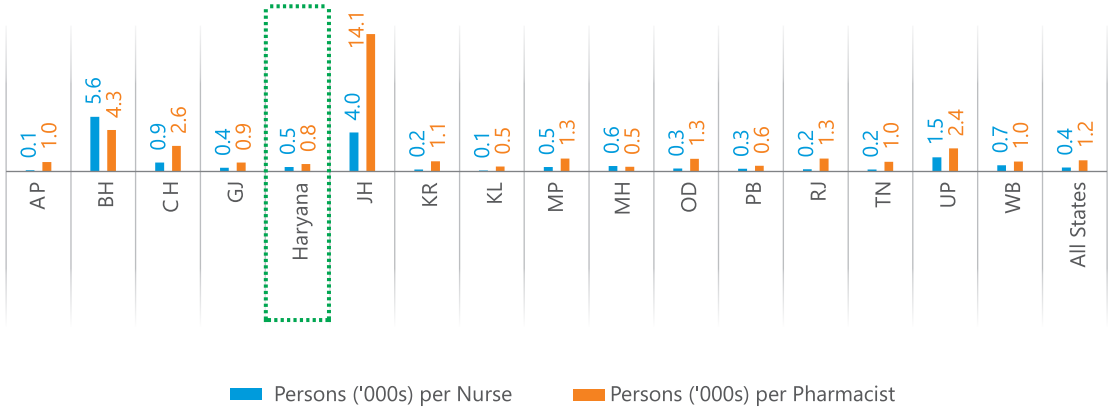
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

HR-3.B: Persons ('000s) per Sub-centre/PHC/CHC



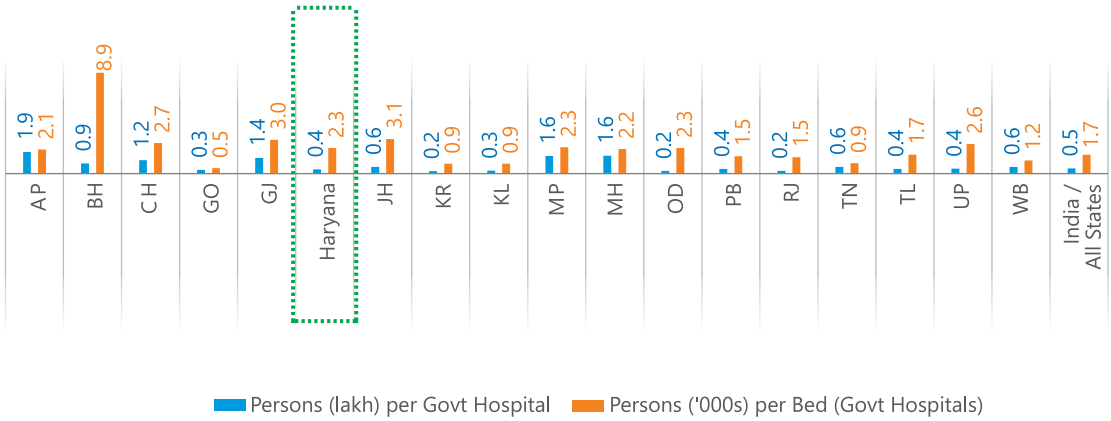
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

HR-3.C: Persons ('000s) per Nurse/ Pharmacist



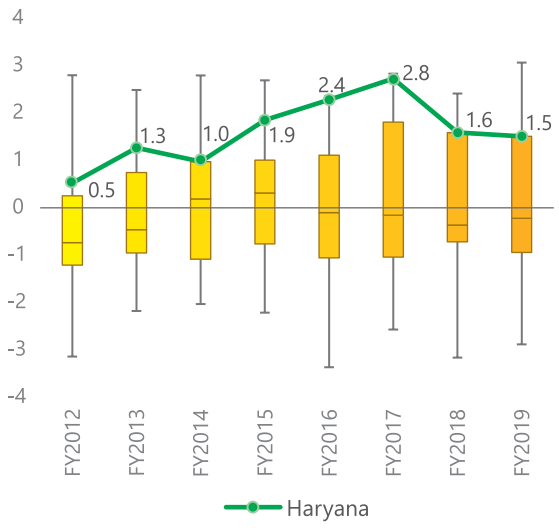
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

HR-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

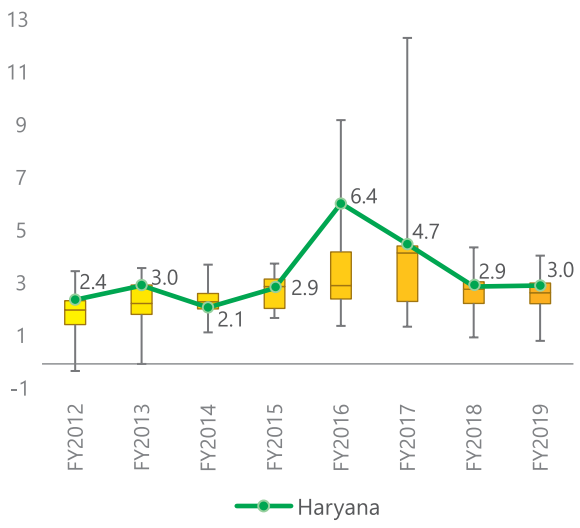


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

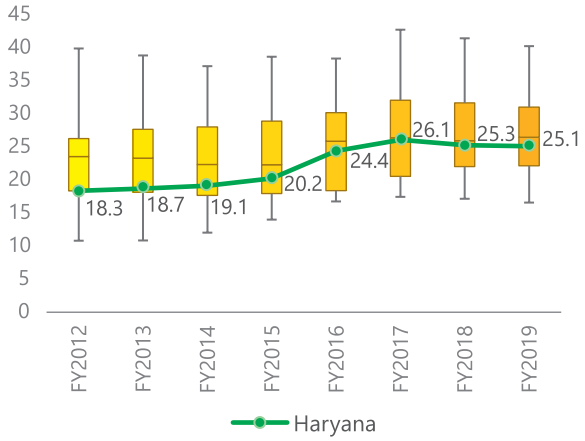
HR-4.A: Revenue Deficit as % of GSDP



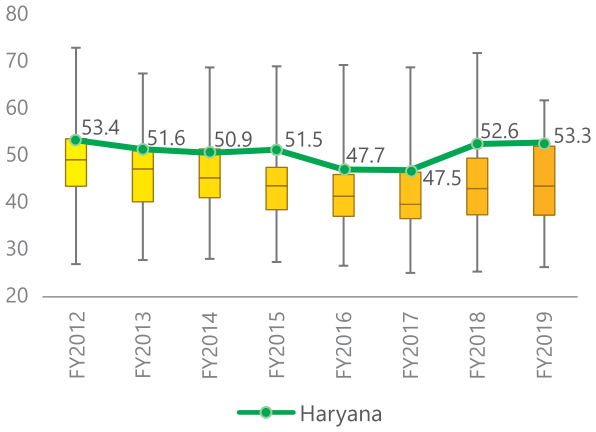
HR-4.B: Fiscal Deficit as % of GSDP



HR-4.C: Outstanding Debt as % of GSDP

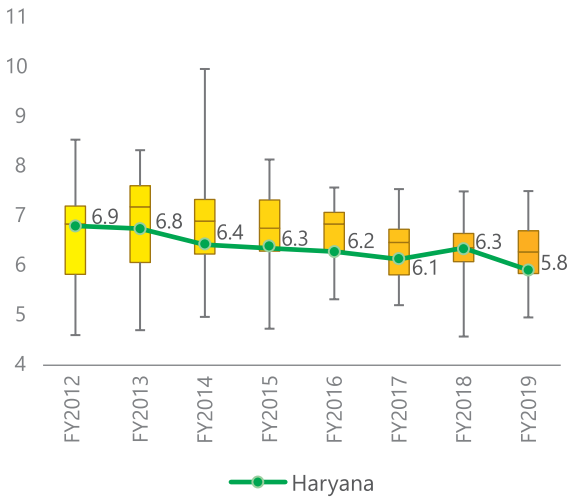


HR-4.D: Committed Expenditure as a % of Revenue Expenditure

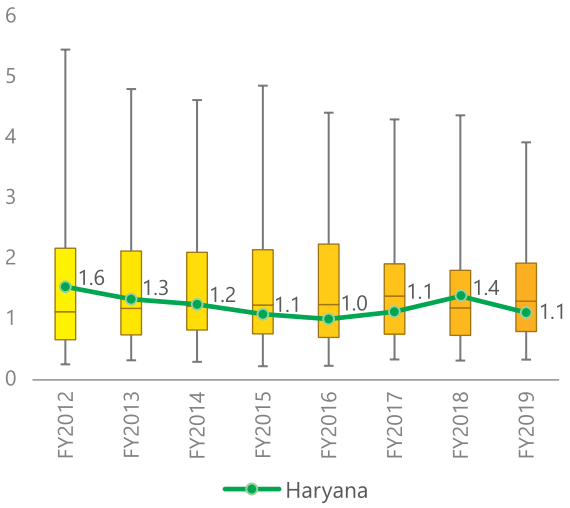


Note: Committed expenditure includes salaries, interest payments, and pensions

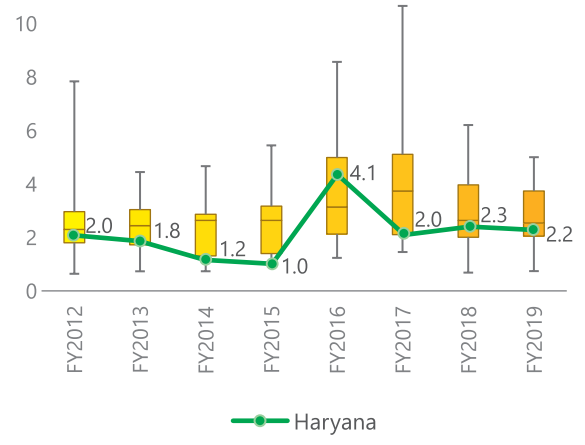
HR-4.E: OTR as % of GSDP



HR-4.F: NTR as % of GSDP



HR-4.G: Capital Expenditure to GSDP Ratio



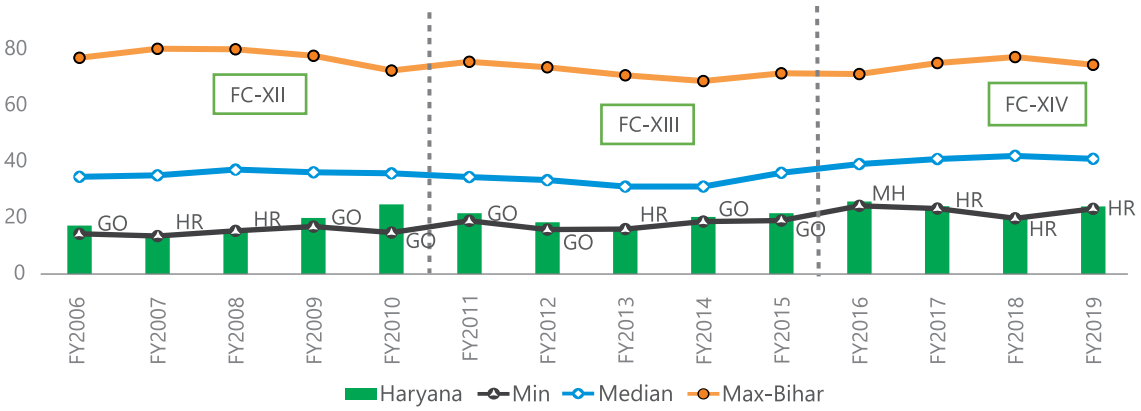
HR-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	2,60,286	1,41,099
Indicators as a percentage of GSDP		
TRR	9.0	13.4
OTR	5.8	6.4
NTR	1.1	1.1
TE	12.7	16.1
ES	2.6	3.1
SS	4.1	5.4
GS	3.8	4.7
Committed Expenditure	5.6	5.8
Capital Expenditure	2.2	2.5
FD	3.0	2.5
RD	1.5	0.2
OD	25.1	25.0

HR-4.I: TRE and ORR Gap

TGR % 2011–2019	*TRE*	*TRR*	*ORR*
Haryana	14.1	12.1	10.9
GS average	13.6	13.1	10.3

HR-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved[1]

- All the 29 functions envisaged in the Eleventh Schedule of the Constitution have been devolved to PRIs.
- All 18 functions envisaged in the Twelfth Schedule of the Constitution have been devolved to ULBs.

Auditing Status

- The Director, Local Audit, Haryana is responsible for conducting the audit of RLBs and ULBs.
- Accounts for PRIs and ULBs were audited up to 2016–17.

Property Tax Board

- As recommended by FC-XIII, the Government of Haryana set up its PTB in September 2012.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
13	18	11	11

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Fifth SFC (2016–17 to 2020–21)

According to the *Overview of State Finance Commission Reports* by the National Institute of Public Finance and Policy, recommendations of the Fifth SFC have been accepted by the Government of Haryana and are currently under implementation. These are:

- Of Haryana's OTR, 7% (1.5% collection cost) and net of VAT, and 2% of Stamp Duty and Registration Fees be collected on behalf of ULBs.
- Distribution between PRIs and ULBs be set at 55:45.
- Specific grants be provided for the establishment of State Level Urban Shared Service Centre (Rs 250 crore) and Swarna Jayanti Haryana Institute for Fiscal Management (SJHIFM) (Rs 70 crore).
- Given the absence of a robust database, a repository of the data and information about ULBs and RLBs be established at the SJHIFM.

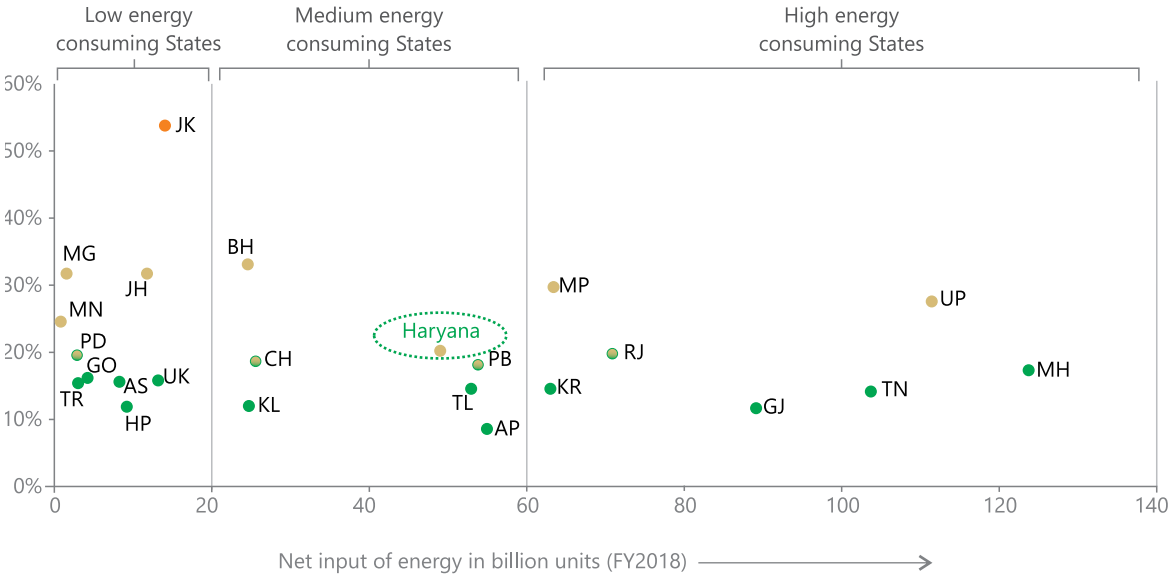
Debt and Losses

- The State has taken over of DISCOM debt under UDAY to the tune of Rs 25,950 crore during 2015–16 and 2016–17.
- As on 31st March 2019, the total borrowings by the DISCOMS (including borrowings from the State Government of Rs 3,294 crore) are Rs 13,020 crore, amounting to 2.7% of the total DISCOM borrowing of all States.
- The State achieved its ACS–ARR gap target but not the AT&C losses target 2018–19.
- The State needs to substantially improve its performance on UDAY barometers to avoid fiscal risk.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	18.08	15.0
ACS–ARR Gap (Rs per unit)	–0.05	0.12

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India.

HR-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- HR has recommended that the State share in the overall divisible pool of taxes be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Growth, equally divided between: • Income Distance (after per capita income of high income districts is deflated to double of average per capita income of rest of the State) • Capital Expenditure	20.0
ii)	Fiscal Efficiency and Discipline, equally divided between: • Resource Mobilisation • Adoption of Public Financial Management System (PFMS) and Direct Benefit Transfer (DBT)	20.0
iii)	Population, equally divided across: • Rural–urban ratio • Improvement in sex ratio • Younger demographic profile	17.5
iv)	Area, equally divided across: • Forest cover • Cropped area • Irrigated area	15.0
v)	Contribution to National Priorities, equally divided across: • Contribution to central pool of food grains • Armed Forces • Sports	27.5

FRBM Compliance

- The State implemented its FRBM Act in 2005, and revised it in 2006, 2009, 2010, and 2011.
- The State has been adhering to its FRBM limit in the recent years.
- However, it has been deviating from its FD–GSDP target in the recent years.
- Hence, it needs a credible debt path and careful calibration of expenditure for generating future streams of income.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	22.6	22.7	22.8	22.9	25.0	25.0	25.0
Actually achieved	18.3	18.7	19.1	20.2	24.4	26.1	25.3
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Actually achieved	2.4	3.0	2.1	2.9	6.4	4.7	2.9

Source: Government of Haryana

Foreign Direct Investment

- Delhi, along with parts of UP and Haryana (constituting the National Capital Region or NCR) currently attracts 20% of the total FDI in India.[1]
- The State was placed third in the Ease of Doing Business (EoDB) ranking released by the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India in 2017.
- The State has, however, slipped to 16th rank in 2019 indicating the need to devise a mechanism for restoring its past performance and attracting investment.

Other Areas

- The State made a tremendous progress in SDG–1, reducing poverty from 24.1% in 2004–05 to 11.2% in 2011–12.
- The State has the second highest per capita income amongst the GS (following Goa).
- Initiatives like e-auctions in House Allotments, Teacher Transfer Policy, Kerosene Free State, and significant improvements in tax monitoring and collection are encouraging to note.
- An Asset Management Cell has been created to identify government land/properties both within and outside the State to facilitate their development or monetisation.
- The Government of Haryana has also made considerable progress in Treasury Management by implementing Integrated Financial Management System (IFMS) and PFMS for real-time online monitoring of flow of funds from the government to the end-user.

Fiscal Indicators

- Interest payments are a huge liability for Haryana.
- Between 2011–12 and 2018–19, interest as a percentage of TRE has been in the range of 12.5% to 17.6% (among the highest in India).

Public Sector Undertakings[2]

- The State of Haryana had 28 working PSUs (26 companies and two Statutory corporations) and 4 inactive companies.
- As on 31 March 2018, the Government investment (paid-up, long-term loans and grant/subsidy under Ujwal DISCOM Assurance Yojana) in 32 PSUs was Rs 30,683 crore.
- The State Government contributed Rs 16,255 crore towards equity, loans and grants/subsidies in 14 PSUs during 2017–18.
- Of the 28 working PSUs, accounts of 21 PSUs are in arrears.
- Given the outstanding liabilities, substantial budgetary support to SPSUs, and huge arrears in accounts, the State needs to be cautious about contingent liabilities, which could impose additional fiscal burden.
- A time-bound programme of restructuring the SPSUs should be adopted to tackle the major hurdles in their performance.

Ranking on the SDG Index of NITI Aayog (2019)

- The State has an SDG Index value of 57 (as compared to the national average 60) and ranks 18th among the Indian States.
- The State is a front-runner in SDG–3 Good Health and Well-being, SDG–4 Quality Education, SDG–6 Clean Water and Sanitation, SDG–7 Affordable and Clean Energy, SDG–8 Decent

Work and Economic Growth, SDG–9 Industry, Innovation and Infrastructure, and SDG–16 Peace, Justice and Strong Institutions.

- The State needs to improve on SDG–2 Zero Hunger, SDG–5 Gender Equality, SDG–11 Sustainable Cities and Communities, SDG–12 Sustainable Consumption and Production, SDG–13 Climate Action, and SDG–15 Life on Land.

Gender Equality

- Sex Ratio (females per 1,000 males) in Haryana (ranging between 861 in Census 2001 and 879 in Census 2011) has been consistently below the national average (ranging between 933 in Census 2001 and 943 in Census 2011) over the past decades. The State needs to devise definite action plan to address this issue.
- As per *SDG India Index and Dashboard 2019–20* of the NITI Aayog, the State reports a female to male ratio of labour force participation rate (LFPR) of only 0.21 as compared to 0.32 all India.

Infrastructure

- Heavy commercial interstate traffic diverted from Delhi inflicts significant damage on Haryana's roads and environment.
- Haryana, being landlocked, incurs huge per unit transportation cost for imports and exports.
- Although Gurugram is a centre for excellence for information technology and enabled services, critical areas like power management, human resource development, and regulatory hurdles continue to be significant for the district as well as the rest of Haryana.

Local Bodies

- According to AG, Haryana, PRIs are not maintaining accounts in PRIAsoft properly. There are many incomplete entries.
- There is no system for the consolidation of PRIs accounts from village to block to district, and finally to the State level.
- The lack of an internal audit mechanism and professional municipal cadre is severely hampering the capacity of ULBs to deliver.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Power Sector

- The State has still not achieved its AT&C targets and needs to improve its performance on key UDAY barometers.
- Robust systemic reforms are required to ensure that power subsidies reach intended beneficiaries without leakage to improve the health of the power sector.

Aspirational Districts

- Improving the socioeconomic development indicators of the aspirational district of Nuh should be a policy imperative.

Reform Cohort of State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Haryana is part of the group which includes Gujarat, Tamil Nadu, Telangana, Maharashtra, Kerala, Karnataka, and Goa.

Reform Signposts

- Haryana is a small State with 1.35% of India's total area and a population of 2.53 crore persons.
- With only 0.2% of the forest cover of all States, Haryana has the least area (as a percentage of State area) under forest cover.
- The State has experienced transformational (though lopsided) shift in the economic structure with the contribution of primary sector to the GSDP reducing from 60% (1960–1980) to 20% (currently).
- This is owed to the advent of Gurugram district as a global hub of Business Process Management services (a major source of FDI flows).
- Furthermore, Haryana produces 66% of passenger cars, 50% tractors, and 60% of the motorcycles manufactured in the country.
- More than half the State (57%) Haryana falls in the NCR presenting both an opportunity and a challenge.
- Intra-state disparity between the most advanced district of Gurugram (part of NCR) and most backward Nuh district is staggering. Without Gurugram in the equation, Haryana's GSDP and per capita income would reduce drastically.
- A revenue surplus State till 2008–09, Haryana has consistently been in deficit since. Now it appears to be fiscally worst off in its class with very high TGR of expenditures (especially interest payments and salaries) and a huge debt burden (primarily due to the power sector).
  - UDAY has taken over Rs 25,950 crore of DISCOM debt during 2015–2017 in the form of grants (Rs 7,785 crore), loan (Rs 15,570 crore), and equity (Rs 2,595 crore). Further, the loan was converted into equity in 2017–18 and 2018–19.
  - Outstanding Debt has been increasing at a TGR of 20.2% between 2011–12 and 2018–19.
  - The debt–GSDP ratio also increased from 18.33% (2011–12) to 25.09% (2018–19).
  - The State's RD–FD ratio has been increasing over time and is currently 51.4% (2018–19) indicating that most of the State's borrowings have gone for financing its RD.
  - Subsidy constitutes around 12% of the TRE (of which power subsidy comprises 87%).
  - Social security and welfare constitutes about 10% of TRE with a significant part going to over 25 lakh pensioners under various flagship schemes for the elderly, widows, persons with disabilities, etc.
- Despite high per capita income, the State has a consistently adverse sex ratio and high incidence of anaemia. Yet, health expenditure is only 4.8% of TRE.
- The pandemic apart, availability of health infrastructure and healthcare professionals in the State is hardly enough to meet its regular needs.
- **Hence, Haryana needs to:**
  - **prioritise health investments,**
  - **reduce outstanding debt,**

- **devise a mechanism to recover the cost of investments in power in order to meet the corresponding interest burden,**
- **focus on critical capital expenditures (besides power) with cost-recovery principles, and**
- **focus on aspirational districts to reduce intra-state disparities.**

Notes

1 GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

2 GOI (2019), *Fact Sheet on Foreign Direct Investment (April 2000 to March 2019)*, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India.

3 CAG (2019), *Report No.2 of 2019 – Public Sector Undertakings, for the year ended 31 March 2018.* Report of the Comptroller and Auditor General of India published by the Government of Haryana.

HIMACHAL PRADESH

HP-1.A: Overview

POPULATION
6.9 million
0.6%
Of population across all States

AREA
55,673 sq km
1.7%
Of area across all States

2.2%
Of forest area across all States

FOREST COVER
15,434 sq km
27.7%
Of the State's own area is under forest

2.2% ↑
Forest cover changed from 2017 to 2019

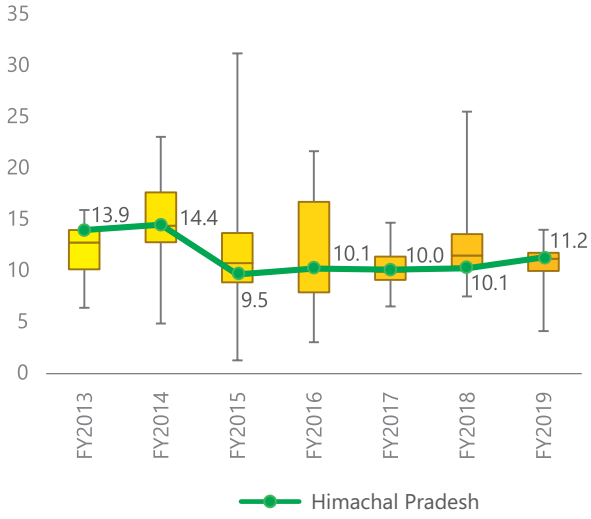
PER CAPITA GSDP
Rs 2,11,325
Rs 1,40,422
Average across all States

TAX TO GSDP
4.9%
6.3%
Average across all States

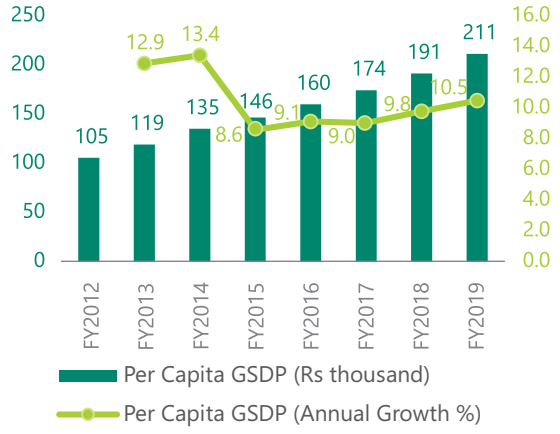
CHILDREN PER WOMAN
1.9
2.2
Average across all States

URBANISATION RATE
10.0%
31.1%
All India average

HP-1.B: Growth rate of GSDP (at current prices, %)



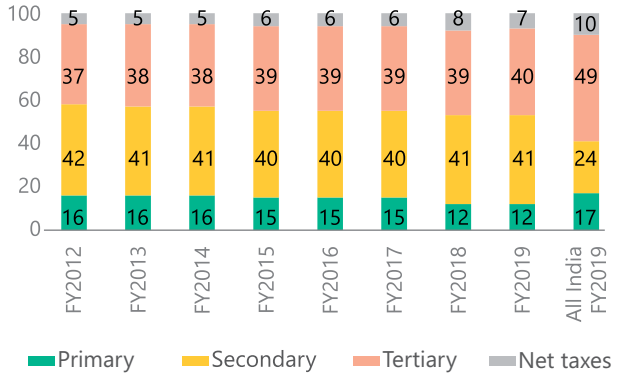
HP-1.C: Per capita GSDP (at current prices)



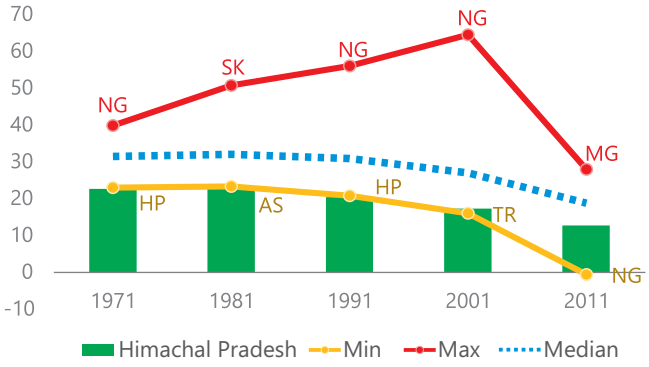
HP-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All NEHS*	*Share (%) of State in NEHS*
2011–12	72,720	5,03,182	14.5
2012–13	82,820	5,63,081	14.7
2013–14	94,764	6,37,264	14.9
2014–15	1,03,772	6,95,474	14.9
2015–16	1,14,239	7,88,321	14.5
2016–17	1,25,634	8,67,648	14.5
2017–18	1,38,351	9,74,240	14.2
2018–19	1,53,845	10,82,901	14.2

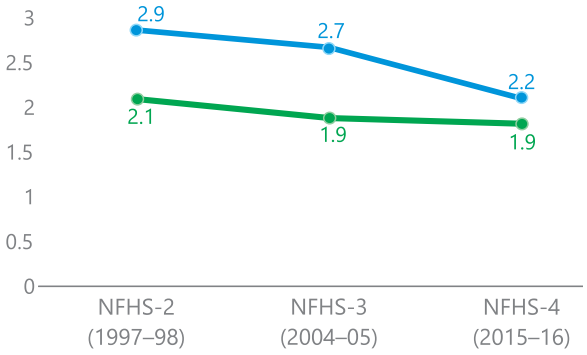
HP-1.E: Sectoral Contribution to GSDP (at current prices, %)



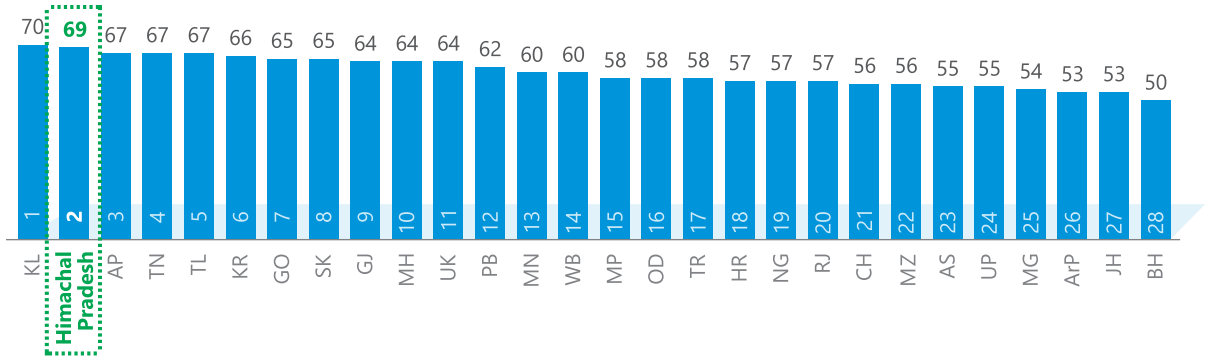
HP-2.A: Decadal Growth in Population (%)



HP-2.B: Total Fertility Rate (children per woman)



HP-2.C: SDG Index of NITI Aayog (2019)



HP-2.D: Key Social Indicators

EDUCATION

	HP	INDIA
Literacy rate (%)[a]	82.8	73.0
Pupil–Teacher ratio[b] (in Primary)	12.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	91.8	55.4

WATER & SANITATION

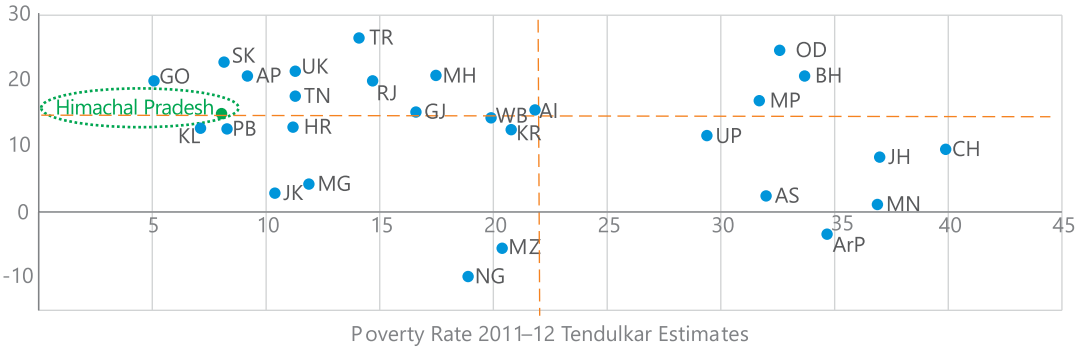
	HP	INDIA
Availability of safe drinking water[d] (household %)	94.9	89.9
Availability of toilets[d] (household %)	85.7	61.1

HEALTH

	HP	INDIA
Life expectancy (years)[g]	72.6	69.0
Sex ratio (♀ per 1000 ♂)[a]	972	943
Underweight children (%)[d]	21.2	35.8
Stunting among children (%)[d]	26.3	38.4
Anaemia among children (%)[d]	53.7	58.6
Women with below normal BMI (%)[e,d]	16.2	22.9
Anaemia among Women (%)[d]	53.5	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	19.0	32.0
Institutional Deliveries (%)[d]	76.4	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	6.5	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	3,074	1,218 *(All States)*

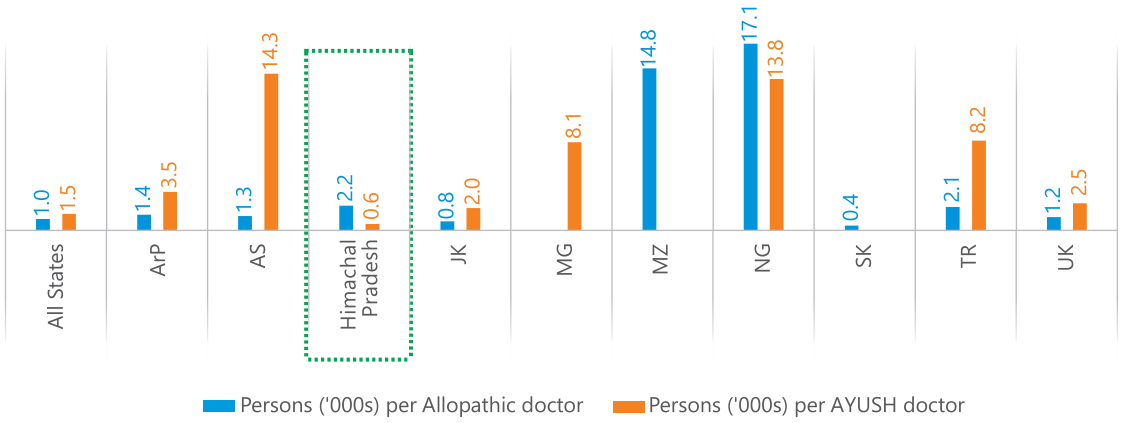
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

HP-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



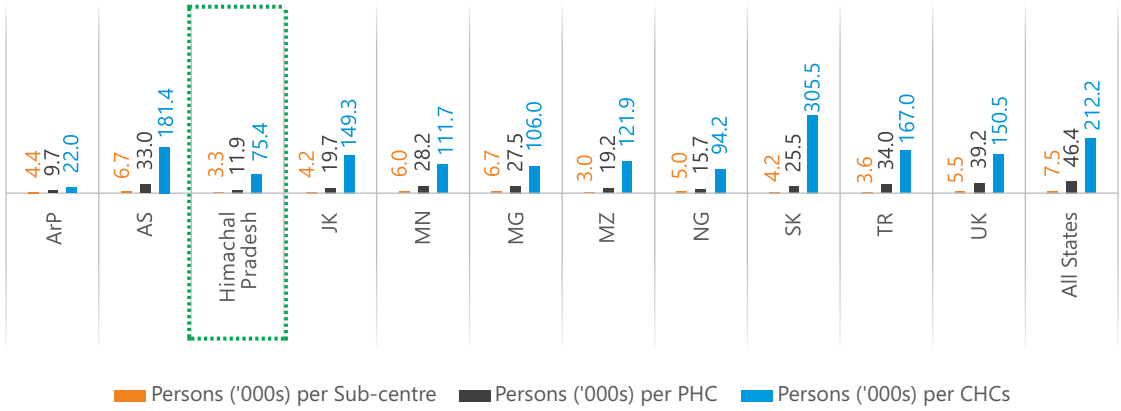
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

HP-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



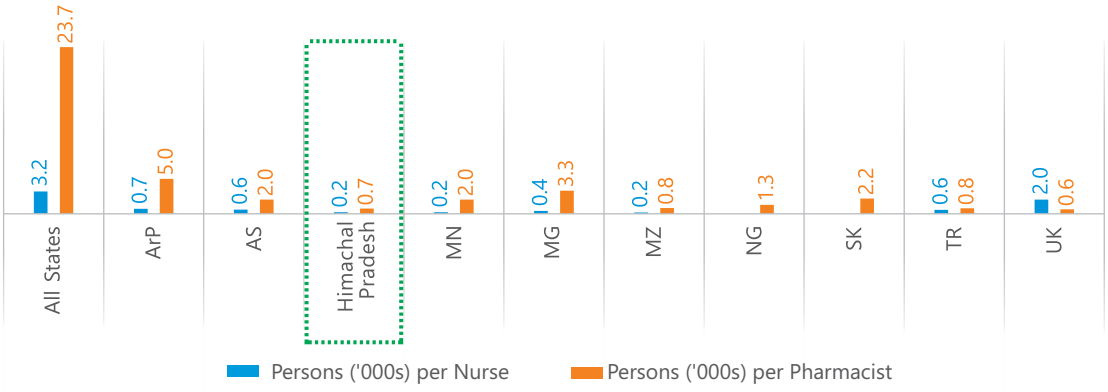
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

HP-3.B: Persons ('000s) per Sub-centre/PHC/CHC



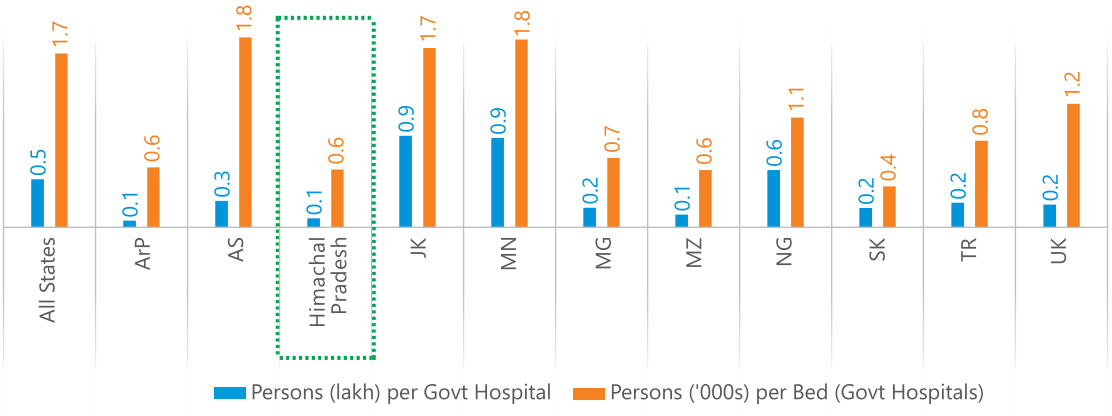
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

HP-3.C: Persons ('000s) per Nurse/ Pharmacist



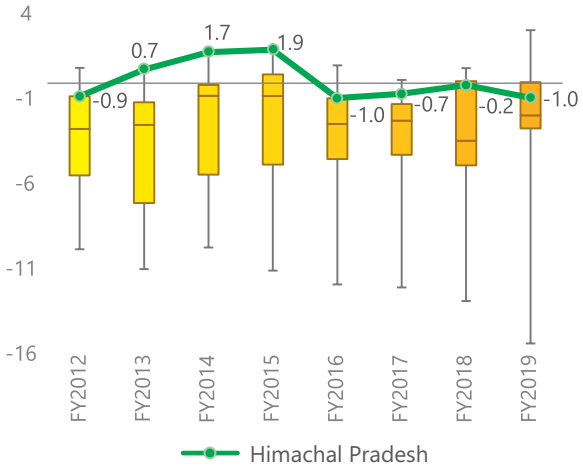
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

HP-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed



Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

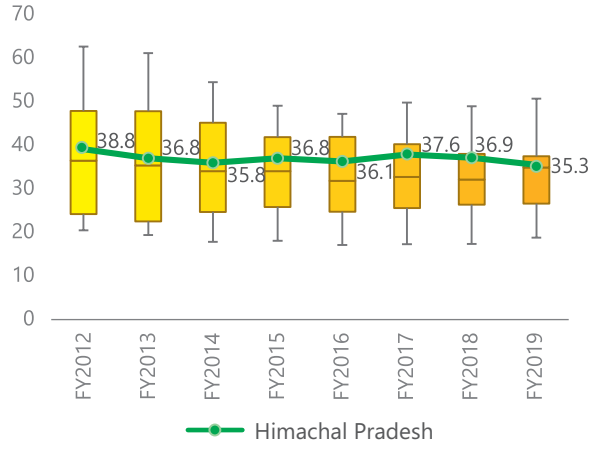
HP-4.A: Revenue Deficit as % of GSDP



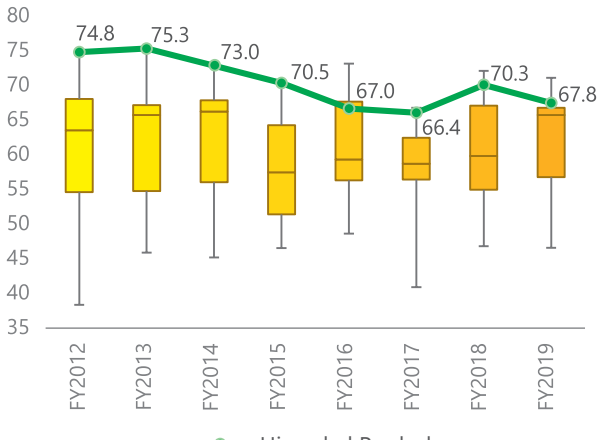
HP-4.B: Fiscal Deficit as % of GSDP



HP-4.C: Outstanding Debt as % of GSDP

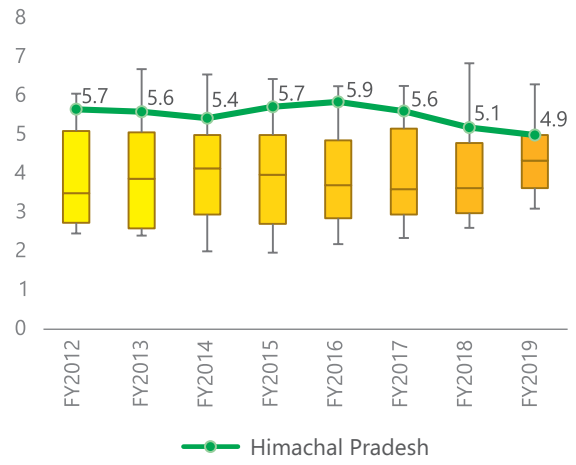


HP-4.D: Committed Expenditure as a % of Revenue Expenditure

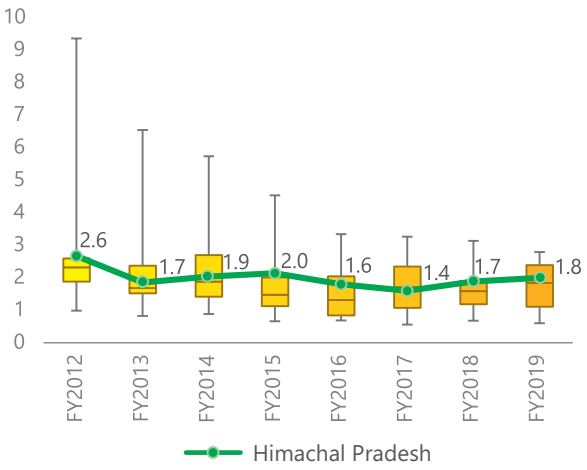


Note: Committed expenditure includes salaries, interest payments, and pensions

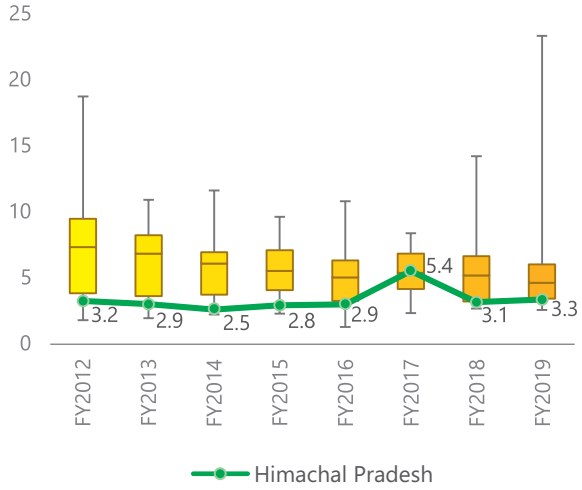
HP-4.E: OTR as % of GSDP



HP-4.F: NTR as % of GSDP



HP-4.G: Capital Expenditure to GSDP Ratio



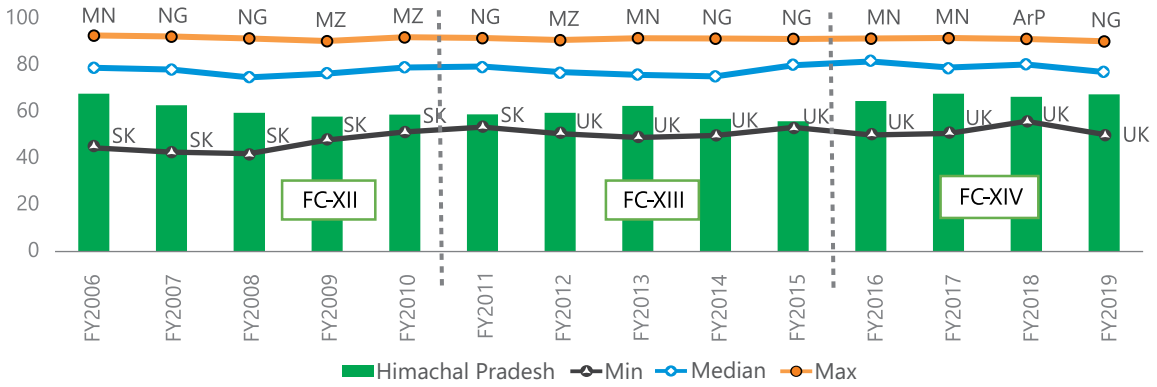
HP-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	2,11,325	1,30,427
Indicators as a percentage of GSDP		
TRR	20.1	23.3
OTR	4.9	5.0
NTR	1.8	2.0
TE	22.4	26.7
ES	4.2	5.0
SS	7.6	8.7
GS	7.3	8.5
Committed Expenditure	13.0	14.4
Capital Expenditure	3.3	4.3
FD	2.3	3.4
RD	–1.0	–0.9
OD	35.3	29.6

HP-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Himachal Pradesh	11.4	12.5	8.5
NEHS	12.6	12.1	10.7

HP-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions envisaged in the Eleventh Schedule of the Constitution, 26 have been devolved to RLBs.
- Of the 18 functions envisaged in Twelfth Schedule of the Constitution, 17 have been devolved to ULBs.

Auditing Status

- Auditing of accounts of RLBs and ULBs completed till 2017–18.

Property Tax Board

- As recommended by FC-XIII, the State set up its PTB in 2011.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
16	4	14	15

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Fifth SFC (2017–18 to 2021–22)

- The Fifth SFC report was submitted on 19 January 2018 and the ATR tabled on 23 Aug 2018.
- The Fifth SFC adopted a gap filling approach for devolution, including salaries of staff, honorarium of members, office expenses, travel allowance and daily allowance, etc., in its calculations.
- It recommended Rs 1,705.84 crore for devolution over five years.
- In 2016–17, the total amount devolved to local bodies by the State was 2.7% of its ORR.

Debt and Losses

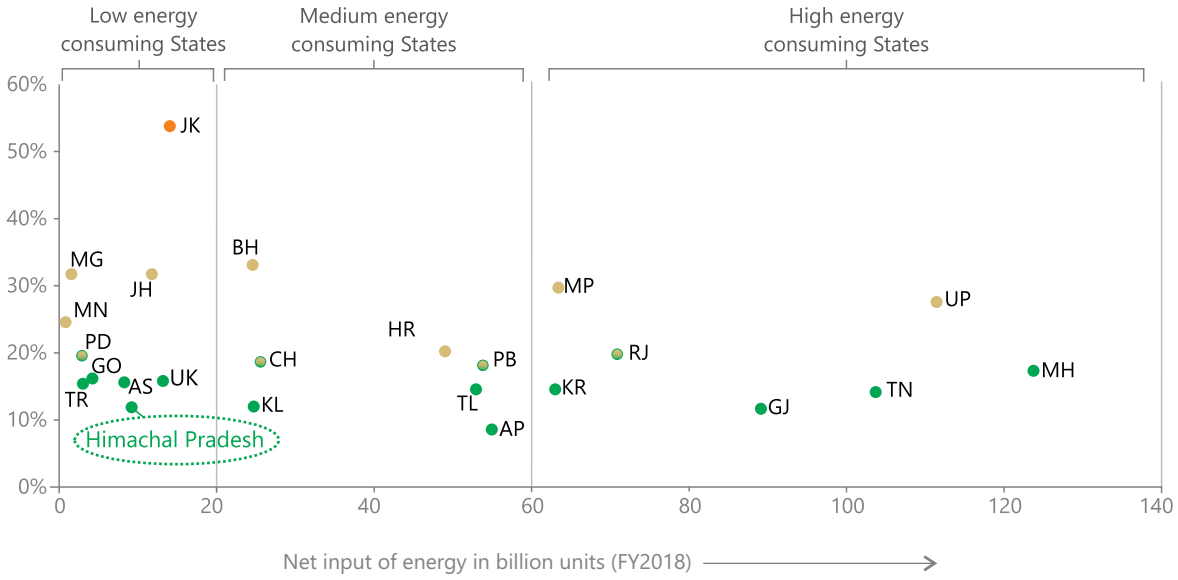
- The State took over DISCOM debt amounting to Rs 2,891 crore under UDAY in 2016–17.
- The State was able to achieve the targets of 2018–19 of AT&C losses and ACS–ARR gap.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	11.39	13.0
ACS–ARR Gap (Rs per unit)	–0.07	–0.05

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

HP-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- HP has recommended that the States' share in overall divisible pool of taxes remain constant at 42%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Fiscal Capacity Distance (as calculated by FC-XIII)	47.5
ii)	Area (with floor ceiling of 2% area)	15.0
iii)	Population and its composition as per 2011 Census (15% on Census 2011 population and 5% on the basis of SC/ST population ratio)	20.0
iv)	Forest area	10.0
v)	State Performance on National Priorities / Indicators as per TOR	7.5

Declining Committed Expenditure

- Committed expenditure (including GIA Salary) of the State came down from 80% of TRE in 2012–13 to 72.7% in 2018–19.
- TGR of committed expenditure in HP from 2011–12 to 2018–19 is 9.9% (compared to 12.1% for NEHS).
- Similarly, TGR of salaries is 9.1% in HP from 2011–12 to 2018–19 (compared to 11.5% in NEHS).
- This is mainly because HP is reducing the burden of salaries by moving away from regular employees towards contractual staff.
- In 2001, about 4.5% of the population of HP was employed by the State Government. This reduced to 3.7% in 2017.[1]
- Although its committed expenditure has declined over last few years, further restructuring to reduce interest burden is recommended.

Tourism

- The State may enhance GSDP and revenue earnings by boosting tourism through the measures listed below.
  - » Air connectivity and road network should be improved to reduce the cost of travel. Airports like Gaggal and Kullu need to be expanded and a green field airport in Mandi fit for landing wide bodied aircraft may be constructed.
  - » As the popular hill-stations like Shimla and Manali have become saturated, new offbeat hill-stations like Chamba and Lahaul-Spiti should be developed in terms of infrastructure and services.
  - » Heli-taxi services to remote hill-stations may be started on PPP mode.
  - » Eco-tourism and adventure sports may be encouraged through incentives or PPP mode.
  - » Homestays, individual as well as community based, may be promoted as viable alternate source of income for local people. Since homestays are primarily run by women, they are also instrumental in their economic empowerment. The State Government may take active measures to link homestays with e-commerce players.

Power Sector

- HP is blessed with a potential of about 27 GW of hydel power, out of which 10.5 GW has already been harnessed.
- Projects with the capacity of about 22 GW have already been allocated.
- The State should speed up the execution of the ongoing hydel projects so as to exploit the potential and increase revenue earnings.

Human Development and Social Indicators

- Indicators relating to education, health, and water and sanitation are better for HP than national averages.
- Himachal Pradesh is the second State in the country to be declared Open Defecation Free.
- It is placed Number 2 in the SDG ranking done by NITI Aayog, 2019.
- Only 8% of the State's population lives below the poverty line (among the lowest in the country). The State's annual per capita revenue expenditure on health (Rs 2,599) and education (Rs 7,901) is much higher than the NEHS averages (Rs 1,987 and Rs 5,970, respectively).

Declining OTR/GSDP and Low Collections from GST

- OTR–GSDP ratio in the State declined from 5.6% in 2012–13 to 4.9% in 2018–19.
- HP's ORR buoyancy was 0.8 during the period 2011–12 to 2018–19 (0.9 for NEHS).
- Collections from GST/VAT at 2.94% of GSDP are very low as compared to NEHS average of 3.47% in 2018–19.
- Collections from GST/VAT declined from 3.5% of GSDP in 2016–17 to 3.2% in 2017–18 with the introduction of GST.
- HP received a GST compensation of Rs 2,037 crore in year 2018–19 (highest across NEHS).
- The State is receiving only 59.8% of its OTR from GST while the NEHS average is 70%.

FRBM Compliance

- The State debt of HP is very high at 35.3% of GSDP in 2018–19.
- The State implemented its FRBM Act in 2005 and amended it subsequently in 2005 and 2011.
- The State has not been able to adhere to its FRBM limit in the recent years.
- The State has to reach a Debt to GSDP target prescribed by the FC-XV and the new FRBM Act.
- Government guaranteed borrowings to PSUs should be restrained.
- Measures should be taken to reduce burden of salaries so that more fiscal space is left for development expenditure.

Ratios in %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	43.7	40.1	38.0	37.6	33.8	32.8	32.9
Actually achieved	38.8	36.8	35.8	36.8	36.1	37.6	36.9
FD–GSDP							
As prescribed by the State FRBM	2.7	2.9	2.9	5.7	2.9	3.2	3.5
Actually achieved	2.3	3.6	4.2	4.1	1.9	4.7	2.8

Source: Government of Himachal Pradesh

- HP has very high committed expenditure (including GIA Salary) of 72.7% of TRE, in spite of its efforts to reduce the burden of salaries and pensions.
- Interest payment in HP is 2.6% of GSDP against average of 2% for NEHS. High debt of the State contributes to high interest rates. Interest payment is 13.7% of TRE which is higher than the NEHS average of 9%.
- Pension constitutes 16.9% of TRE (14.3% for NEHS).
- The State needs to take further measures to restructure and rationalise its expenditure by reducing the burden of committed expenditure.

Road Network

- HP has lower road density than the national average.
- Since the scope for railways and inland water transport is negligible in a hill State, roads are its only lifeline. Inadequate road network leads to heavy head-load cost of providing public services.
- HP still needs to connect 7,628 Census Villages located in difficult terrain.

- Maintenance of roads may also be further improved.
- Deep breasting of roads is recommended.

Low Credit–Deposit Ratio

- HP's Credit–Deposit ratio is just 30.9, compared to neighbouring Haryana at 59.4 and Punjab at 63.17.

Agriculture

- According to the State Government Memorandum, per capita agriculture GSDP in HP is only Rs 49,000 per cultivator, the third lowest in the country.
- Production of high value crops like spices, essential herbs, horticulture and floriculture should be promoted in the State.
- Incentives may also be provided for establishing cold storages.

Local Bodies

- Local bodies have low own revenue. In 2017–18, own revenue (Tax + Non-tax) of Gram Panchayats was only 11.37% of their total expenditure.
- Measures like upward revision of property tax rates and user charges may be introduced.
- Remaining functions should be immediately devolved to RLBs and ULBs.

Public Sector Undertakings[2]

- The number of accounts in arrears has increased from 20 in 2012–13 to 27 in 2016–17 (as on 30 September 2017) with arrears of accounts ranging from 1 to 4 years.
- Out of 23 PSUs, accounts of nine have not been audited for one or more years. The State Government needs to chalk out an action plan to audit the accounts of these nine PSUs in a regular and time bound manner.
- The State Government had extended budgetary support of Rs 12,657.73 crore to PSUs in 2016–17 (as on 31 March 2017). The non-auditing of accounts could pose serious downside risks given the substantial budgetary support.

Reform Roadmap

Reform Signposts

- **The State has a very high debt to GSDP ratio. This needs to be consolidated in line with the new FRBM Act and FC-XV's recommendations.**
- **The State has not done well in terms of GST collections. It needs to find innovative ways to increase both its OTR and ONTR. The State should speed up the execution of the ongoing hydel projects and improve infrastructure for tourism to increase scope for greater revenue earnings.**
- **The State needs to take measures to restructure and rationalise its spends by reducing the burden of committed expenditure.**

Notes

1 Government of Himachal Pradesh Memorandum.

2. CAG (2018), *Report No 1 of 2018 - Public Sector Undertakings Himachal Pradesh*, report by the Comptroller and Auditor General of India, published by the Government of Himachal Pradesh.

JH-1.A: Overview

POPULATION
33.0 million
2.8%
Of population across all States

AREA
79,716 sq km
2.4%
Of area across all States

3.4%
Of forest area across all States

FOREST COVER
23,611 sq km
29.6%
Of the State's own area is under forest

0.3% ↑
Forest cover changed from 2017 to 2019

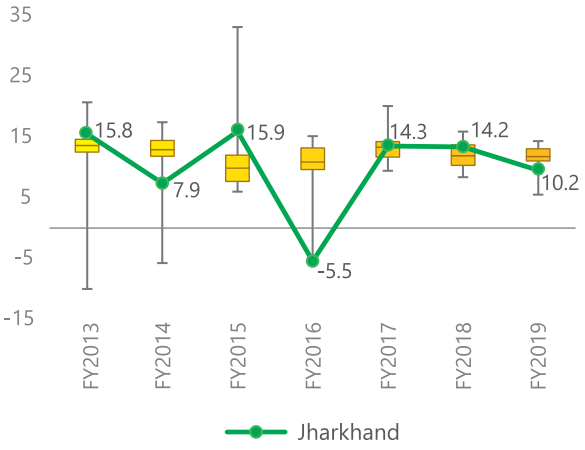
PER CAPITA GSDP
Rs 79,936
Rs 1,40,422
Average across all States

TAX TO GSDP
5.0%
6.3%
Average across all States

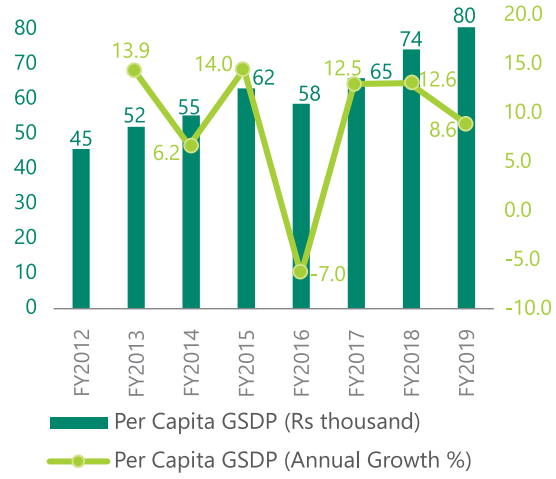
CHILDREN PER WOMAN
2.6
2.2
Average across all States

URBANISATION RATE
24.1%
31.1%
All India average

JH-1.B: Growth rate of GSDP (at current prices, %)



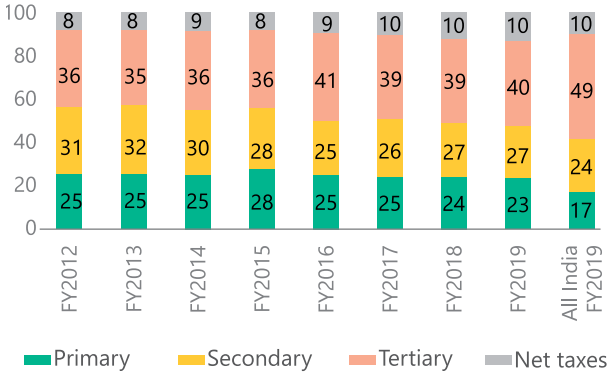
JH-1.C: Per capita GSDP (at current prices)



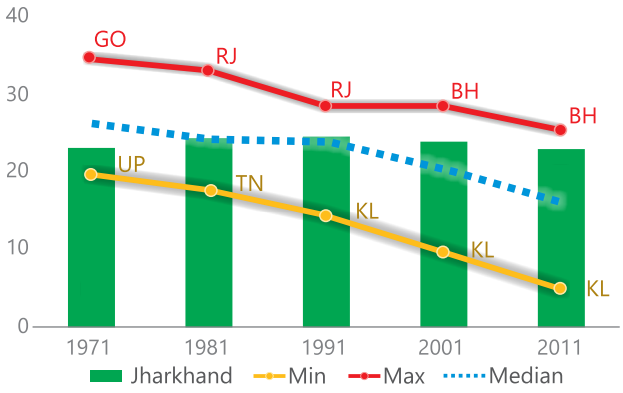
JH-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	1,50,918	77,44,945	2.0
2012–13	1,74,724	88,27,195	2.0
2013–14	1,88,567	1,00,07,392	1.9
2014–15	2,18,525	1,09,93,257	2.0
2015–16	2,06,613	1,21,91,256	1.7
2016–17	2,36,250	1,37,80,737	1.7
2017–18	2,69,816	1,54,20,126	1.8
2018–19	2,97,204	1,72,83,813	1.7

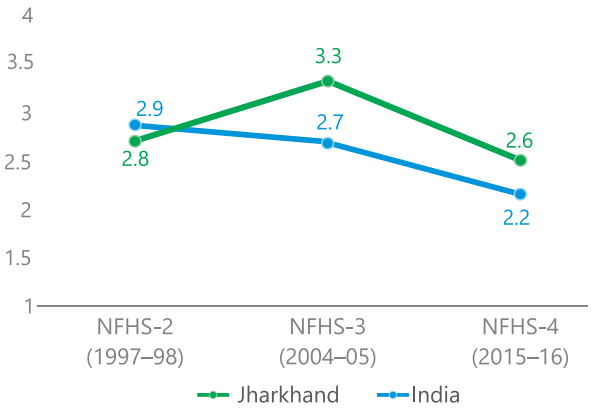
JH-1.E: Sectoral Contribution to GSDP (at current prices, %)



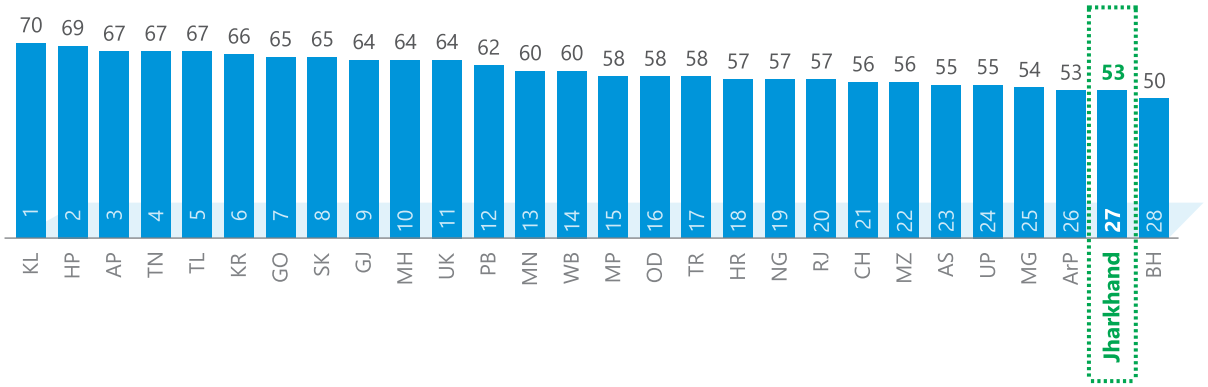
JH-2.A: Decadal Growth in Population (%)



JH-2.B: Total Fertility Rate (children per woman)



JH-2.C: SDG Index of NITI Aayog (2019)



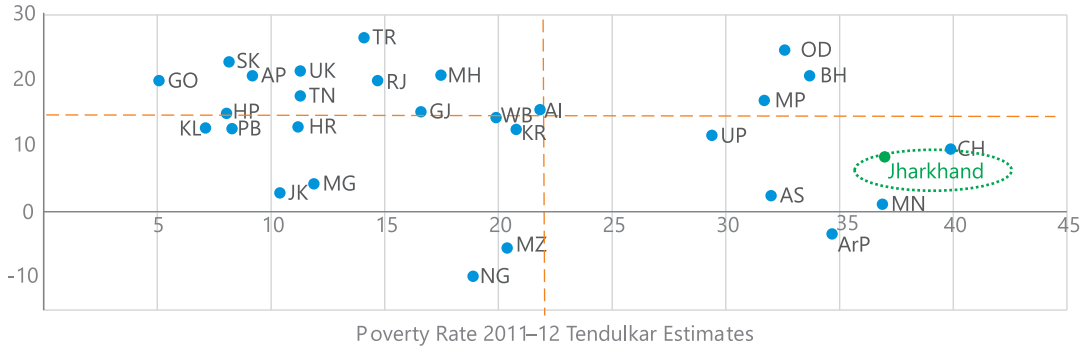
JH-2.D: Key Social Indicators

	JH	INDIA
EDUCATION		
Literacy rate (%)[a]	66.4	73.0
Pupil–Teacher ratio[b] (in Primary)	28.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	37.1	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	77.7	89.9
Availability of toilets[d] (household %)	30.0	61.1

	JH	INDIA
HEALTH		
Life expectancy (years)[g]	68.6	69.0
Sex ratio (♀ per 1000 ♂)[a]	949	943
Underweight children (%)[d]	47.8	35.8
Stunting among children (%)[d]	45.3	38.4
Anaemia among children (%)[d]	69.9	58.6
Women with below normal BMI (%)[e,d]	31.5	22.9
Anaemia among Women (%)[d]	65.2	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	30.0	32.0
Institutional Deliveries (%)[d]	61.9	78.9
Expenditure on Health Sector (revenue+capital) as % of total expenditure (FY2019)	5.4	5.2 (All States)
Per Capita Health Expenditure (FY2019 in Rs)	913	1,218 (All States)

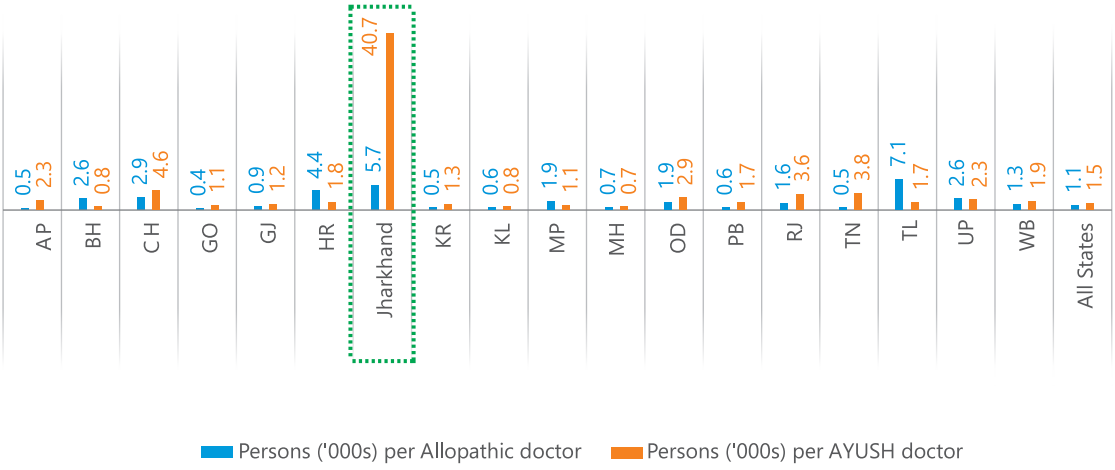
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

JH-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



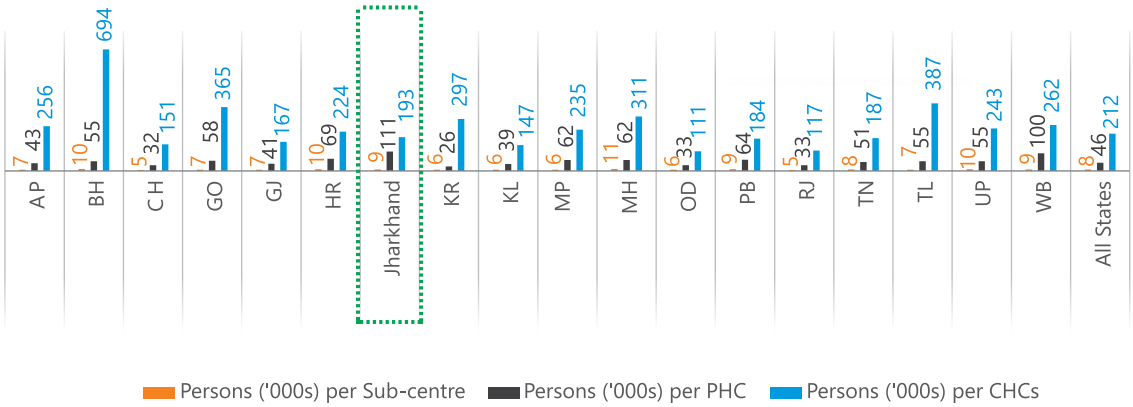
Note: Positive values on Y axis denotes reduction in poverty in FY2012 over FY2005

JH-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



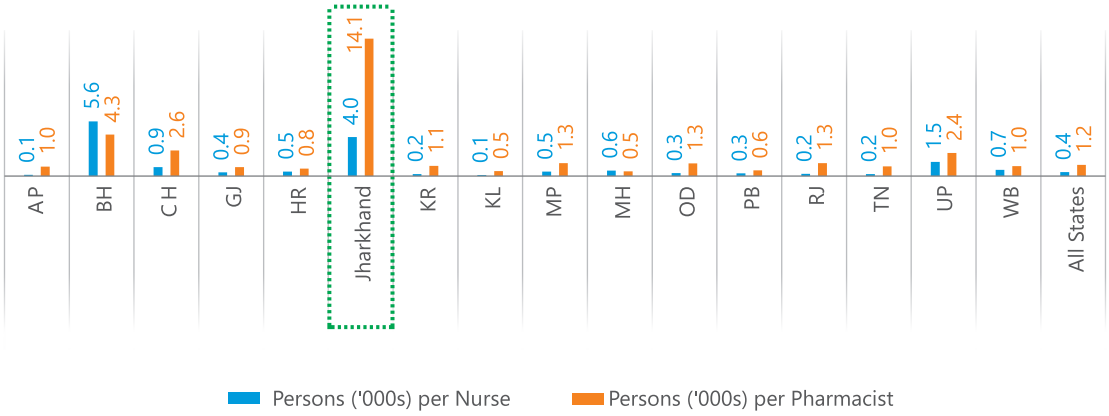
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

JH-3.B: Persons ('000s) per Sub-centre/PHC/CHC



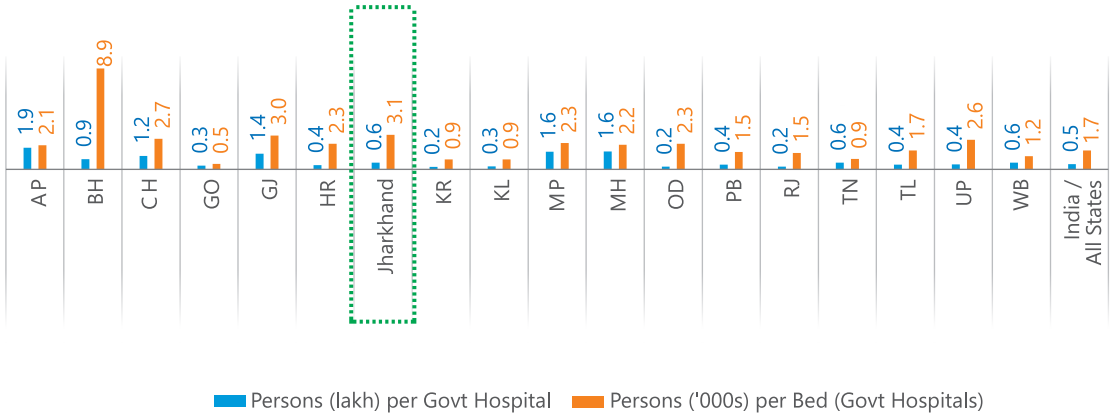
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

JH-3.C: Persons ('000s) per Nurse/ Pharmacist



Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

JH-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed



Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

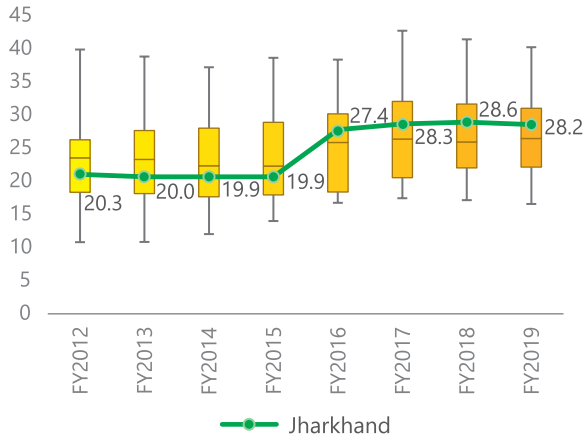
JH-4.A: Revenue Deficit as % of GSDP



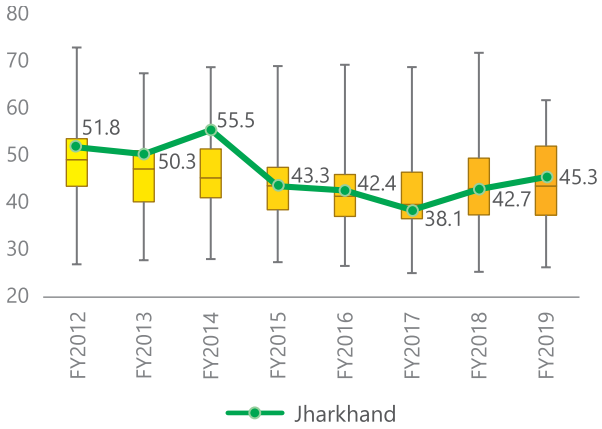
JH-4.B: Fiscal Deficit as % of GSDP



JH-4.C: Outstanding Debt as % of GSDP



JH-4.D: Committed Expenditure as a % of Revenue Expenditure

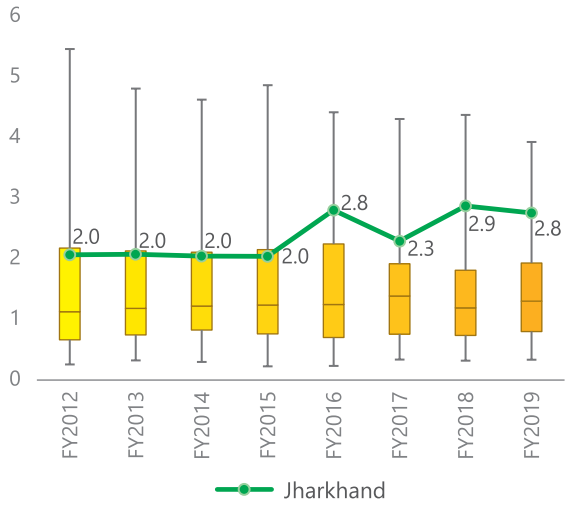


Note: Committed expenditure includes salaries, interest payments, and pensions

JH-4.E: OTR as % of GSDP



JH-4.F: NTR as % of GSDP



JH-4.G: Capital Expenditure to GSDP Ratio



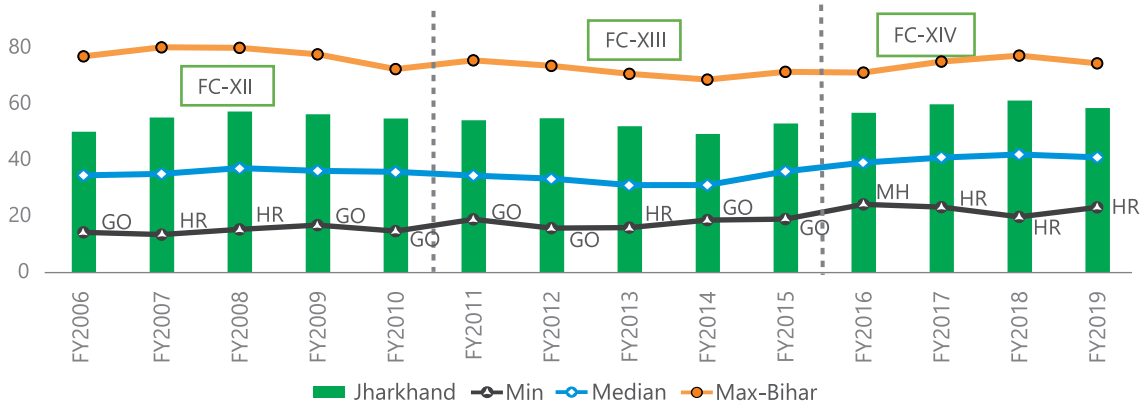
JH-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	79,936	1,41,099
Indicators as a percentage of GSDP		
TRR	18.9	13.4
OTR	5.0	6.4
NTR	2.8	1.1
TE	21.1	16.1
ES	4.8	3.1
SS	6.4	5.4
GS	5.9	4.7
Committed Expenditure	7.7	5.8
Capital Expenditure	4.1	2.5
FD	2.2	2.5
RD	–1.9	0.2
OD	28.2	25.0

JH-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Jharkhand	15.6	15.7	12.3
GS average	13.6	13.1	10.3

JH-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions envisaged in Eleventh Schedule of the Constitution, 18 have been devolved to RLBs.
- Of the 18 functions envisaged in Twelfth Schedule of the Constitution, 16 have been devolved to ULBs.

Auditing Status

- ULB accounts have been audited up to 2015–16 and RLB accounts till 2016–17.

Property Tax Board

- Government of Jharkhand has not yet set up its PTB, even though recommendations of FC-XIII were made as far back as 2011.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
14	14	16	17

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

First SFC (2003–04 to 2008–09)

- First SFC made recommendations pertaining to ULBs only.
- In pursuance of the recommendations Jharkhand Government:
  - » enacted the Jharkhand Municipal Act, 2011;
  - » created a suitable Municipal Cadre; and
  - » constituted an Urban Development Department to streamline administration.

Second SFC (2009–10 to 2013–14)

- Second SFC constituted in 2009 did not submit its Report.

Third SFC (2014–15 to 2019–20)

- Third SFC constituted in 2014 has not submitted the Report till date.
- The Fourth SFC is already due.
- Jharkhand Government is currently not following the recommendations of any SFC for allocating resources to local bodies.
- Jharkhand Government is not strictly complying with the relevant constitutional provisions of constituting SFCs and implementation recommendations efficiently.

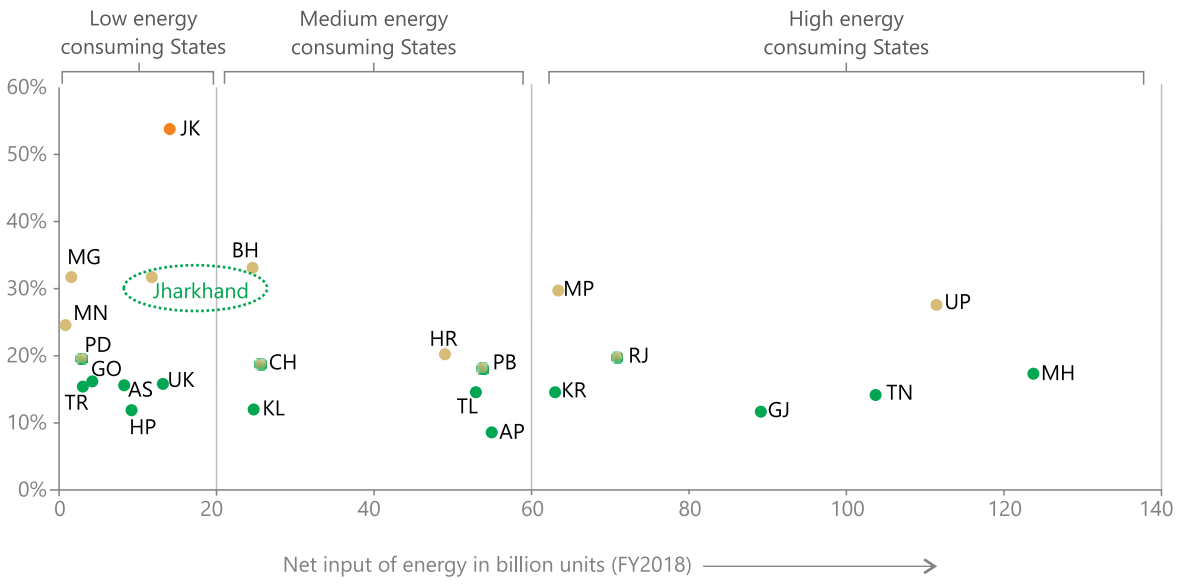
Debt and Losses

- Total equity and liabilities of DISCOMs as on 31 March 2019 is Rs 10,149 crore of which, State Government borrowing is Rs 9,863 crore.
- Jharkhand needs to substantially improve its performance on the UDAY barometers to avoid future fiscal risk.
- Both AT&C losses and ACS–ARR gap of Jharkhand were way above the targets set by UDAY for 2018–19.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	28.6	15.0
ACS–ARR Gap (Rs per unit)	0.6	0.0

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India.

JH-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Jharkhand proposed that the share of States in the divisible pool be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Weights (%)*
i)	Income distance	10
ii)	Population, 2011	50
iii)	Share in forest area (all types of forest)	10
iv)	Population weighted by share in ST population	10
v)	Modified Census area	10
vi)	Share in Mining GSVA	10

District Mineral Foundation

- According to the Union Ministry of Mines, the Government of Jharkhand received Rs 4,330.05 crore under DMF across 24 districts up to June, 2019.
- These funds need to be utilised for the prescribed purposes within the fiscal that they are received.
- If they idle as fixed deposits, substantial fiscal space for Jharkhand, though indirectly available, remains under-utilised.
- Jharkhand Government should put a mechanism in place to ensure their expeditious utilisation within the fiscal year.

Forests and Tourism

- Since almost 30% of Jharkhand is under forests, it needs to devise strategies to promote eco-tourism as a revenue generating sector.
- An MSP scheme for MFP was introduced by the Ministry of Tribal Affairs during 2013–14 to support STs and other forest dwellers.
- It is understood that the scheme has remained a non-starter, inter-alia, due to an ineffective procurement mechanism.
- Therefore, a robust procurement mechanism should be created by Jharkhand Government through its agencies by using electronic platforms and other existing programmes such as e-NAM.

Fiscal Discipline

- There has been a substantial jump in Debt–GSDP ratio of Jharkhand from 19.9% in 2013–14 to more than 28% in the past three years—28.3% (2016–17), 28.6% (2017–18), and 28.2% (2018–19).
- FD–GSDP ratio of Jharkhand increased from 1.2% in 2013–14 to the high levels of 5.6% in 2015–16 and 4.3% in 2016–17 and 4.4% in 2017–18 to soften to 2.2% in 2018–19.
- In 2017–18 and 2018–19, Jharkhand had resorted to 0.25% of additional borrowings under Article 293(3) of the Constitution.
- In view of the above, Jharkhand needs to bring down its deficit and debt from the current unsustainable levels.

- More so, in view of the FRBM Act (amended in 2018 by the Government of India), Jharkhand needs to work more seriously on fiscal consolidation.

FRBM Compliance

- Jharkhand enacted the FRBM Act in 2007 and amended it in 2010, 2011, 2012, and 2015.
- From 2015–16 to 2017–18, the Debt–GSDP ratio and FD–GSDP ratio of Jharkhand were way above the FRBM targets. The State, however, adhered to FRBM targets during the period 2011–12 to 2014–15.

Ration as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	28.5	27.8	27.3	26.9	24.2	25.2	25.8
Actually achieved	20.3	20.0	19.9	19.9	27.4	28.3	28.6
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.5	3.5	3.3
Actually achieved	1.3	1.9	1.2	3.0	5.6	4.3	4.4

Source: Targets under FRBM Act provided by Jharkhand Government. Further, State Government mentioned that Debt–GSDP targets from 2015–16 to 2017–18 were set according to the recommendations of FC-XIV.

GSDP

- The economy of Jharkhand is so heavily dependent on the primary sector that a drought in 2015–16, reduced its growth rate (at current prices) to (–) 5.5%.
- Given the rich mineral endowments of the State, it should focus on diversifying its economic base and strengthening other sectors.

Health

- Jharkhand lags behind national averages on several key health indicators (see JH-2.D).
- Some of the worst indicators are reported from tribal communities which constitute more than 26% of the population of Jharkhand (second highest among GS after Chhattisgarh).
- The State is facing severe shortage of healthcare professionals in tribal areas.
- For a sustainable solution, it may explore Maharashtra's model of recognising diplomas from the College of Physicians and Surgeons as adequate for converting MBBS doctors to specialists who may then serve in remote and tribal areas.
- Besides, telemedicine could be promoted to fill the need gap in such areas.

Education

- Jharkhand needs to improve its performance on a number of educational parameters (see JH-2.D). A couple of instances are listed below:
  - *Transition Rate:* Against the national transition rate from secondary to higher secondary stage of 66%, Jharkhand reported only 47% in 2016–17 (as per U-DISE, 2016–17). Furthermore, this transition rate is lower for girls at 45% (against national average of 67%) than boys at 49% (against national average of 66%), indicating widening gender disparity at higher levels of schooling.

» *Learning Outcomes:* As per ASER Report, 2018, only 19% children in Grade III could read Grade II text (against national average of 27%) and 23% children in Grade III in Jharkhand could at least do subtraction (against the national average of 28%).[1]

Ranking on the SDG Index of NITI Aayog (2019)

- The State ranked 27th among the Indian States according to the *SDG India Index and Dashboard, 2019–20* of the NITI Aayog.
- Jharkhand needs to improve its performance on SDG–1 No Poverty, SDG–2 Zero Hunger, SDG–3 Good Health and Wellbeing, SDG–4 Quality Education, SDG–5 Gender Equality, SDG–6 Clean Water and Sanitation, SDG–7 Affordable and Clean Energy, SDG–8 Decent Work and Economic Growth, SDG–10 Reduced Inequality, and SDG–16 Peace, Justice and Strong Institutions.

Backwardness

- Of the 24 districts of Jharkhand, 19 including Ranchi (capital city), are recognised as aspirational districts (by NITI Aayog).
- Further, Jharkhand had the second highest poverty rate (37%) after Chhattisgarh in 2011–12 (as per Tendulkar methodology).
- Jharkhand Government needs to take decisive steps to come out of the low-income trap, while targeting the development of bottom 20% blocks as aspirational blocks (like aspirational districts monitored by the NITI Aayog).

Left Wing Extremism

- Of the 19 aspirational districts in Jharkhand, 16 figure in the list of 35 worst Left Wing Extremism (LWE) affected districts of the country, creating serious challenges in their development.
- A concerted and coordinated approach involving the Central Government and neighbouring States is critical.

Piped Water Supply

- Only 6% of rural households have PWS connections in Jharkhand, which is less than one-third the national coverage of 18.3%.
- Jharkhand needs to invest its resources in cost-effective and innovative approaches such as rain water harvesting and end-to-end value chain management of drinking water.

Power Sector

- AT&C losses in Jharkhand State remained high between 2016 (34.7%) and 2019 (28.6%), far behind the targeted reduction for these years.
- Unless the State DISCOM substantially improves on UDAY barometers—feeder segregation (12% progress), smart metering (0% progress), RPOs (13% progress) as on 31 March 2019—future fiscal risk is imminent.
- Robust systemic reforms are required to ensure that power subsidy reaches intended beneficiaries without leakage.

Local Bodies

- Measures should be taken to devolve the remaining functions to RLBs and ULBs.
- Jharkhand needs to set up the PTB at the soonest.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs.

The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Public Sector Undertakings[2]

- Of the 21 working PSUs of Jharkhand, only two finalised their accounts for 2016–17.
- 19 PSUs had arrears of 54 accounts (as of 31 December 2017) with the extent of arrears ranging from 1 to 8 years.
- Jharkhand had provided budgetary support of Rs 2,659.56 crore to 12 working PSUs during the period for which accounts were in arrears.
- The non-auditing of accounts could pose serious downside risks since the State Government is extending substantial budgetary support.

High Pollution (PM10) as Monitored under NAMP

- There are three cities with a million-plus population in Jharkhand—Dhanbad, Jamshedpur and Ranchi—which are engines of growth. However, their rising air pollution (as monitored under NAMP) unless tackled proactively, could impede their growth in future.

PM10 Micrograms Per Cubic Metre

City	*2016*	*2017*	*2018*	*Average*
Dhanbad	226	238	264	242.7
Jamshedpur	136	131	128	131.7
Ranchi	196	142	122	153.3

Note: NAMP has set a PM10 limit of 90 micrograms per cubic metre.

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Jharkhand is part of the group which includes Bihar, Uttar Pradesh, Madhya Pradesh, and Odisha.
- Critical fiscal parameters of Jharkhand have been compared with these five States.

Reform Signposts

- Though Jharkhand is a mineral rich State, in terms of per capita income, it is placed third among the five States in its class.
- Also, according to NFHS 2015–16, Jharkhand performed poorly on key social indicators like incidence of underweight children, stunting among children, anaemia, women whose BMI is below normal, and households without access to safe drinking water and toilet facility.
- Jharkhand has high poverty rate (37%) with districts such as Sahibganj, Dumka, Pakur, and West Singhbhum reporting poverty rates that are even higher than 45%.
- Given that Jharkhand is a revenue surplus State, the excess of revenue can be used for meeting the essential social sector expenditures.
- Jharkhand has been comparatively less successful in mobilising revenue from power sector (1.4%). Odisha on the other hand, sources 10.7% of its OTR through a special electricity duty

on captive power plants in exchange for a commitment to spend the revenue so generated as capital investment in the power sector. Such streams of revenue should be explored by all mineral producing States, including Jharkhand.

- A snapshot of various components of ORR of Jharkhand vis-à-vis other States in its class is presented below:

States of Cohort	*As % of GSDP*					*As % of OTR*				
	VAT/ GST	*Stamp Duty*	*Excise*	*Elec. Duty*	*Others*	*VAT/ GST*	*Stamp Duty*	*Excise*	*Elec. Duty*	*Others*
Bihar	4.1	0.8	0	0	0.6	74.4	14.2	0	0.9	10.5
Jharkhand	3.9	0.1	0.4	0.1	0.4	79.1	3.1	7.3	1.4	9.0
Madhya Pradesh	3.5	0.7	1.2	0.3	0.6	55.9	10.4	18.7	5.1	9.9
Odisha	3.9	0.3	0.8	0.7	0.5	63.5	4.1	12.9	10.7	8.7
Uttar Pradesh	4.2	0.9	1.4	0.2	0.5	58.2	13.1	19.9	2.5	6.3
Cohort Average	**4.0**	**0.7**	**1.0**	**0.2**	**0.5**	**61.6**	**10.9**	**15.7**	**3.8**	**8.0**
All States	**4.2**	**0.7**	**0.8**	**0.2**	**0.5**	**66.0**	**10.4**	**12.4**	**3.5**	**8.0**

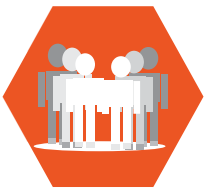
- Also, the ORR/TRR for the class is 41.1% (national average 53.4%) implying that these States are hugely dependent on Central Government transfers for their finances. Jharkhand has the second highest Central Transfer/ TRR in the class. Hence, intervention of the State in this direction is pertinent.
- Jharkhand's ORR TGR (12.3%) and buoyancy (1.31) for 2011–2019 are better than class averages of 11.2 and 0.9, respectively.
- However, the vast difference between revenue receipt (OTR and ORR) TGR and TRE TGR implies potential fiscal instability. **Hence, strengthening of OTR and ORR and streamlining the procedures play an important role for Jharkhand.** It is worth mentioning that OTR/ ORR for 2018–19 is 64.1 for Jharkhand (compared to class average of 77.8).
- Jharkhand performed very well under the VAT regime as the TGR was 12.81 between 2011 and 2016 (highest in its class). This could be attributed to tax on coal which reduced significantly under GST regime. Further a time series trend analysis on SGST can give a better picture of TGR across states.
- Jharkhand State DISCOM's outstanding to power transmission and generation companies is highest in the class at 4.01% (as of June 2020). **The State must address the rising AT&C losses and widening ACS–ARR gap and improve the performance on UDAY barometers.**
- **Besides, capital expenditure needs to be enhanced to drive a structural shift in the economy towards the tertiary and secondary sectors in the long run.**
- The revenues from Excise are very poor, an issue that the State needs to urgently address.
- **There is a need for strengthening the administrative systems and effective service delivery as Jharkhand is grappling with issues like lack of salaried jobs, inadequate technically trained and skilled workers and persisting poverty.**
- **Comprehensive re-prioritisation of expenditure and a focused approach on aspirational district/blocks is needed for social parameters to improve**.

Notes

1 ASER (2018), *Annual Survey of Education Report 2018*, ASER Centre.

2 CAG (2017), *Report No.2 of 2017, Public Sector Undertakings, Government of Jharkhand*, report of the Comptroller and Auditor General of India, published by Government of Jharkhand.

KR-1.A: Overview



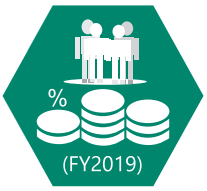
POPULATION
61.1 million
5.1%
Of population across all States



AREA
1,91,791 sq km
5.9%
Of area across all States



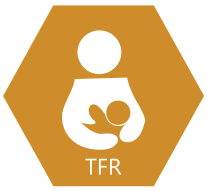
FOREST COVER
38,575 sq km
5.5%
Of forest area across all States
20.1%
Of the State's own area is under forest
2.7% ↑
Forest cover changed from 2017 to 2019



PER CAPITA GSDP
Rs 2,32,874
Rs 1,40,422
Average across all States



TAX TO GSDP
6.3%
6.3%
Average across all States

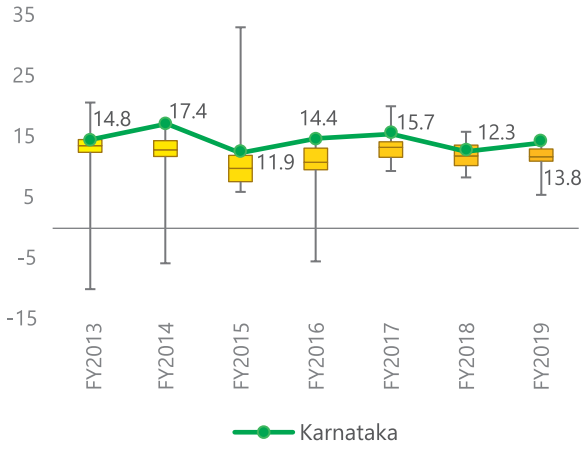


CHILDREN PER WOMAN
1.8
2.2
Average across all States

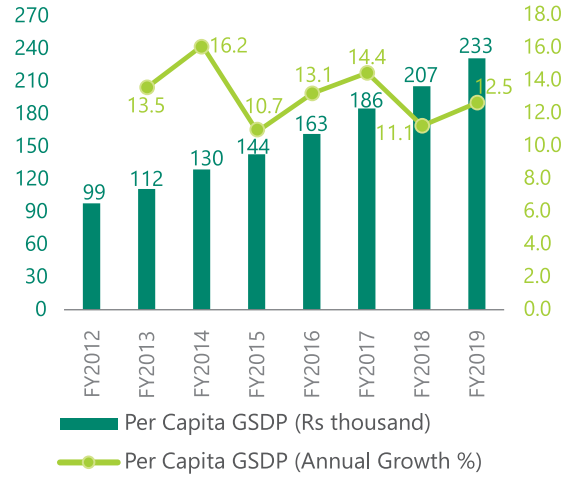


URBANISATION RATE
38.6%
31.1%
All India average

KR-1.B: Growth rate of GSDP (at current prices, %)



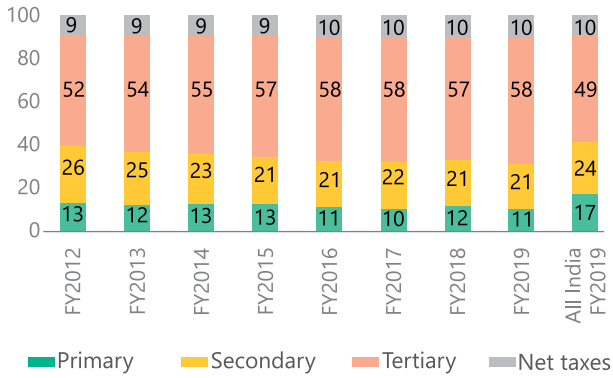
KR-1.C: Per capita GSDP (at current prices)



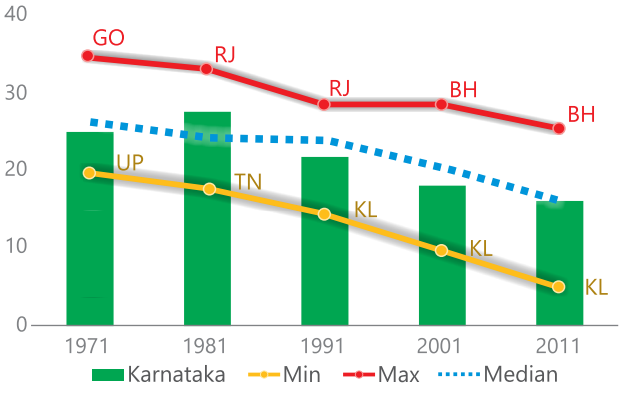
KR-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	6,06,010	77,44,945	7.8
2012–13	6,95,413	88,27,195	7.9
2013–14	8,16,666	1,00,07,392	8.2
2014–15	9,13,923	1,09,93,257	8.3
2015–16	10,45,168	1,21,91,256	8.6
2016–17	12,09,136	1,37,80,737	8.8
2017–18	13,57,579	1,54,20,126	8.8
2018–19	15,44,399	1,72,83,813	8.9

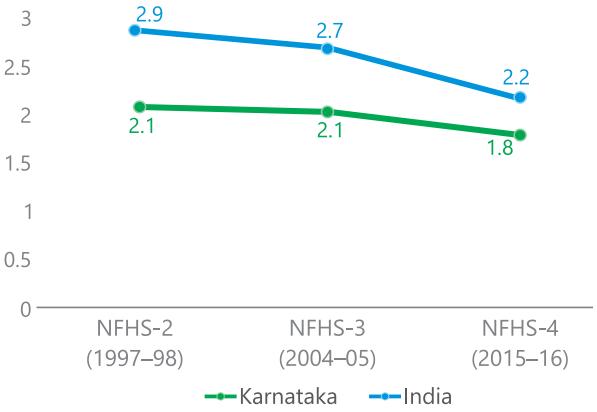
KR-1.E: Sectoral Contribution to GSDP (at current prices, %)



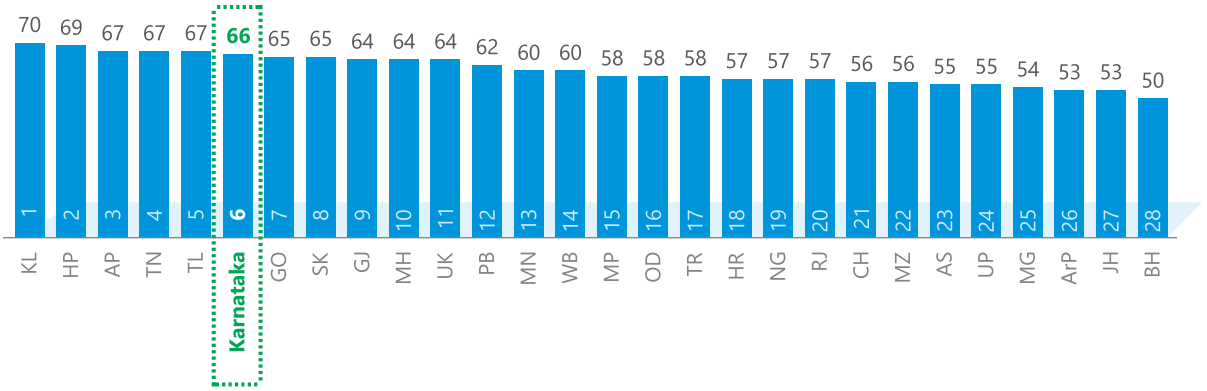
KR-2.A: Decadal Growth in Population (%)



KR-2.B: Total Fertility Rate (children per woman)



KR-2.C: SDG Index of NITI Aayog (2019)



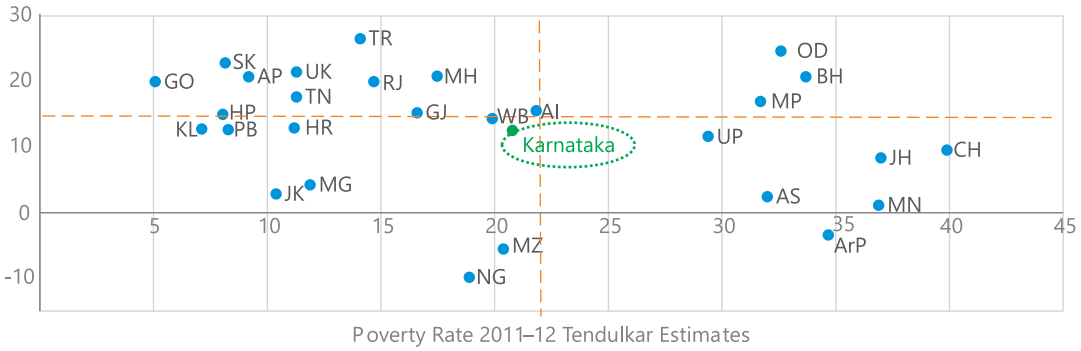
KR-2.D: Key Social Indicators

	KR	INDIA
EDUCATION		
Literacy rate (%)[a]	75.4	73.0
Pupil–Teacher ratio[b] (in Primary)	16.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	41.9	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	89.3	89.9
Availability of toilets[d] (household %)	65.8	61.1

	KR	INDIA
HEALTH		
Life expectancy (years)[g]	69.2	69.0
Sex ratio (♀ per 1000 ♂)[a]	973	943
Underweight children (%)[d]	35.2	35.8
Stunting among children (%)[d]	36.2	38.4
Anaemia among children (%)[d]	60.9	58.6
Women with below normal BMI (%)[e,d]	20.7	22.9
Anaemia among Women (%)[d]	44.8	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	23.0	32.0
Institutional Deliveries (%)[d]	94.0	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	4.7	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,429	1,218 *(All States)*

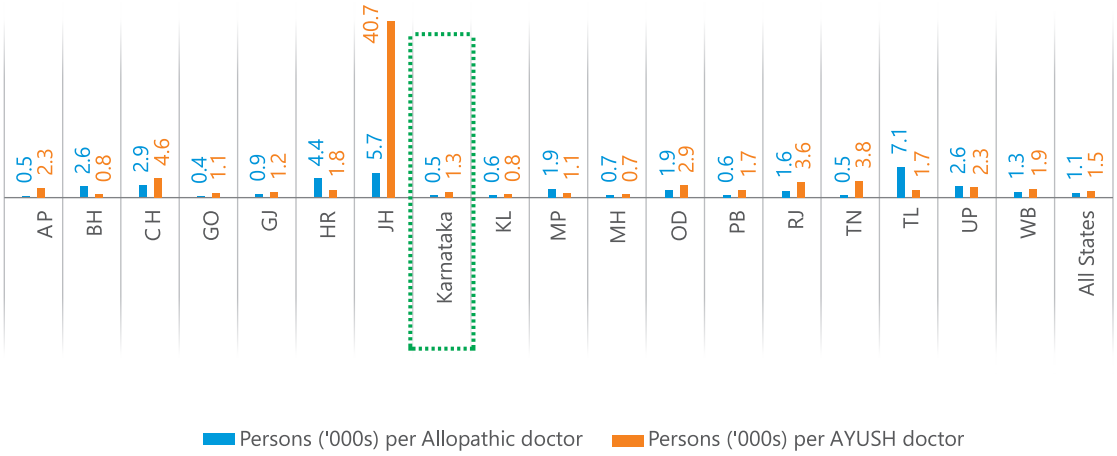
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

KR-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



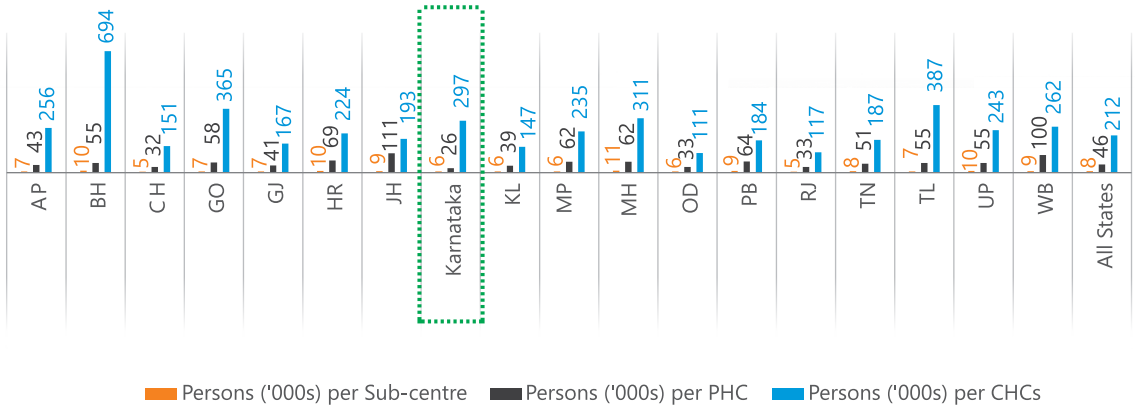
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

KR-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



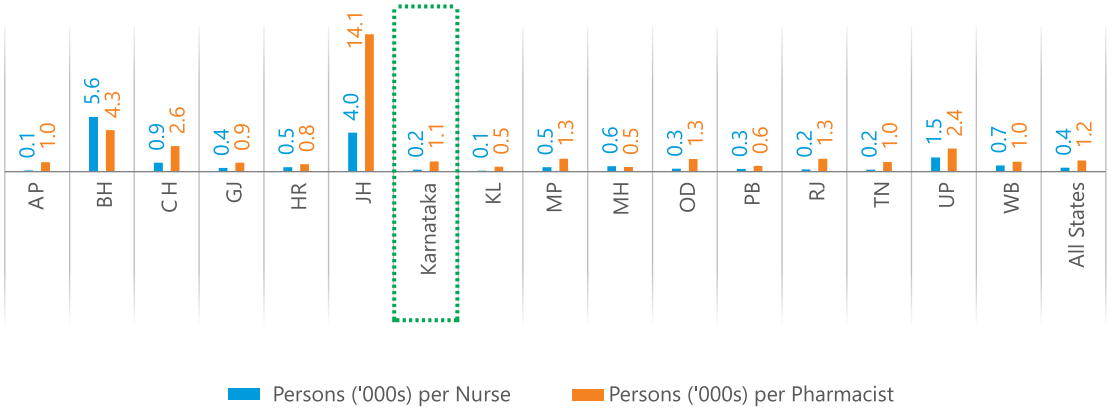
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

KR-3.B: Persons ('000s) per Sub-centre/PHC/CHC



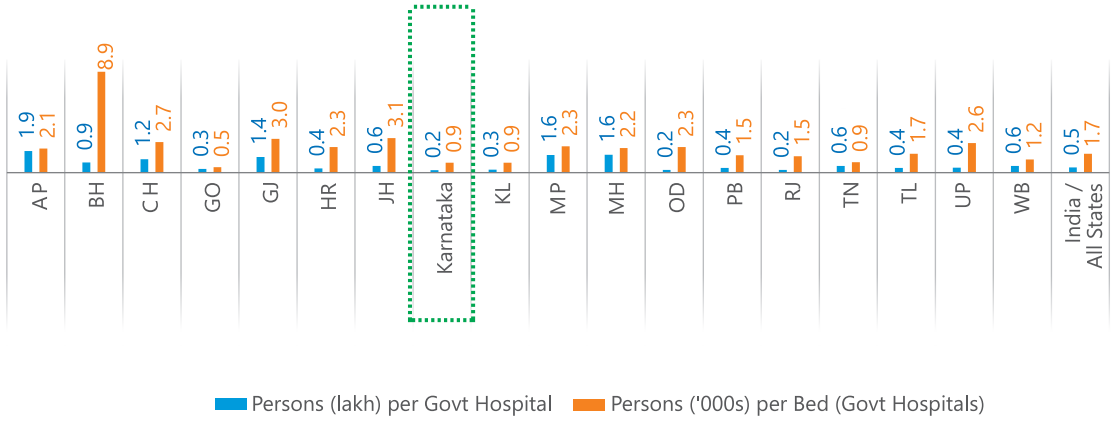
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

KR-3.C: Persons ('000s) per Nurse/ Pharmacist



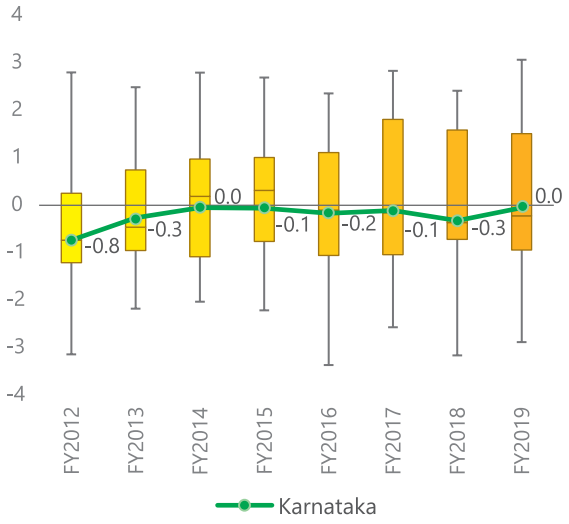
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

KR-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

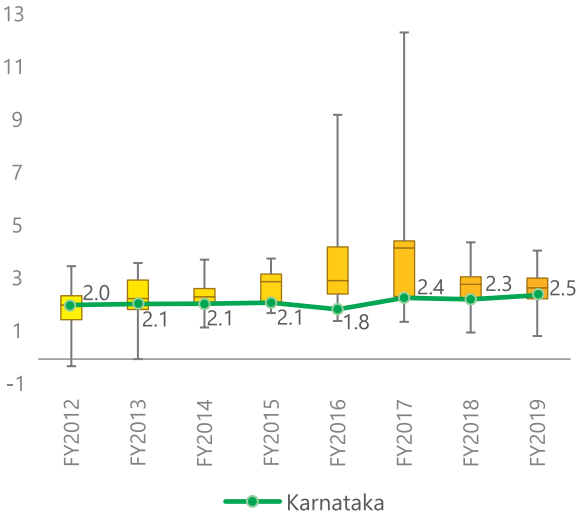


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

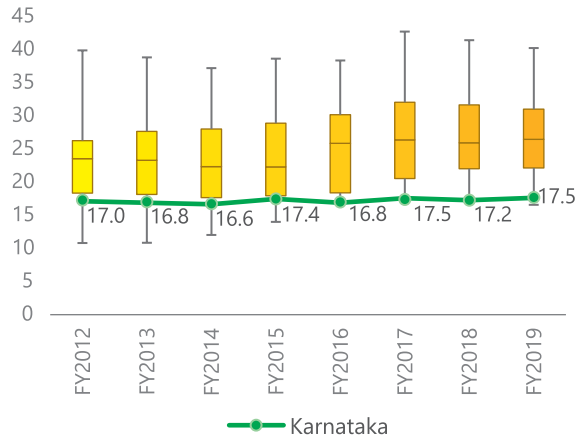
KR-4.A: Revenue Deficit as % of GSDP



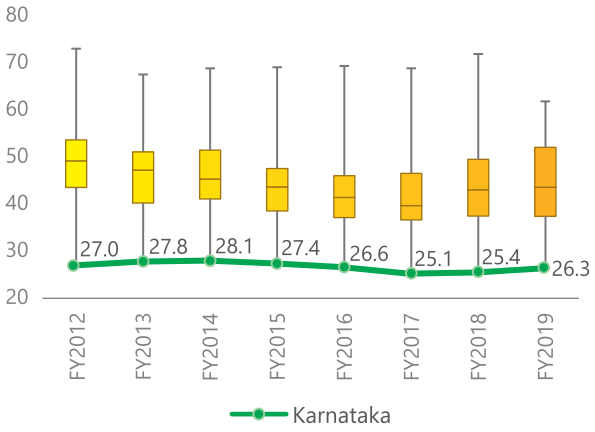
KR-4.B: Fiscal Deficit as % of GSDP



KR-4.C: Outstanding Debt as % of GSDP

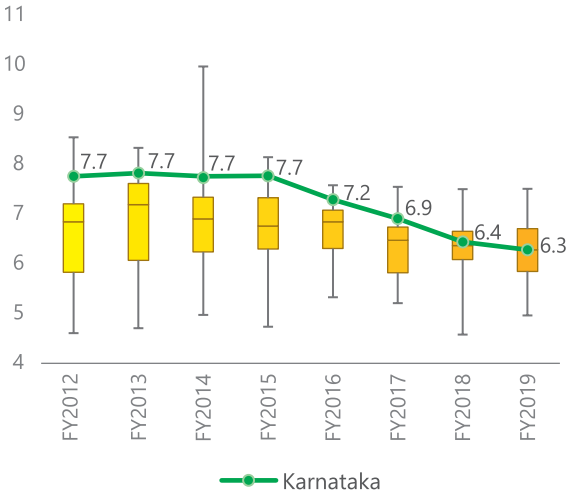


KR-4.D: Committed Expenditure as a % of Revenue Expenditure

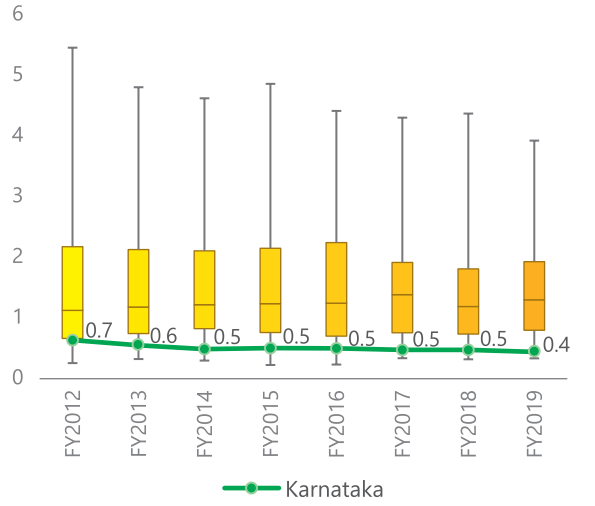


Note: Committed expenditure includes salaries, interest payments, and pensions

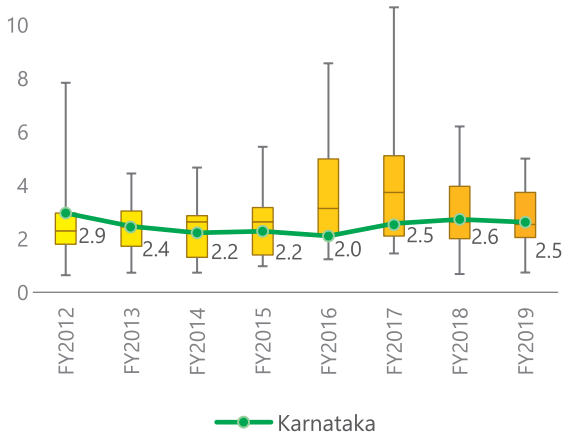
KR-4.E: OTR as % of GSDP



KR-4.F: NTR as % of GSDP



KR-4.G: Capital Expenditure to GSDP Ratio



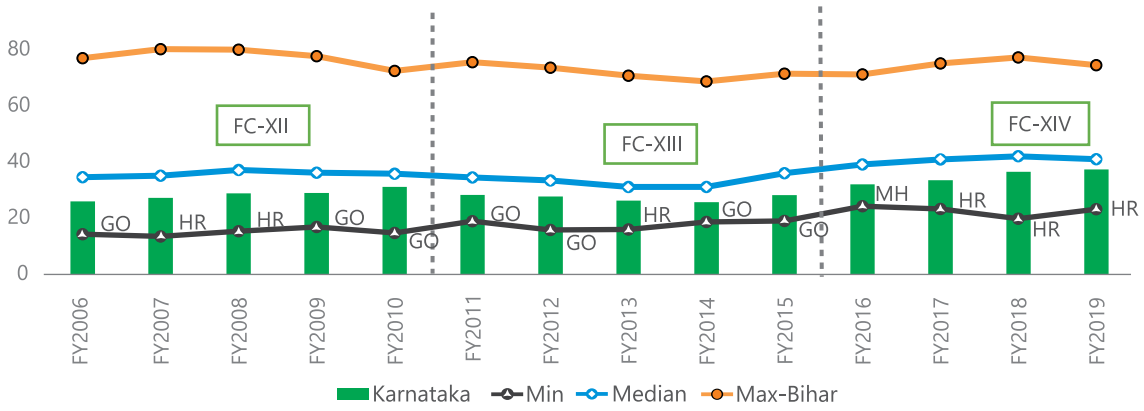
KR-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	2,32,874	1,41,099
Indicators as a percentage of GSDP		
TRR	10.7	13.4
OTR	6.3	6.4
NTR	0.4	1.1
TE	13.2	16.1
ES	3.1	3.1
SS	4.5	5.4
GS	2.7	4.7
Committed Expenditure	2.8	5.8
Capital Expenditure	2.5	2.5
FD	2.5	2.5
RD	–0.04	0.2
OD/GSDP	17.5	25.0

KR-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Karnataka	13.9	13.3	10.5
GS average	13.6	13.1	10.3

KR-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- All 29 functions envisaged in Eleventh Schedule of the Constitution have been devolved to RLBs.
- Of 18 functions envisaged in Twelfth Schedule of the Constitution, 17 have been devolved to ULBs. 'Fire Services' have been devolved only to the Greater Bengaluru Municipal Corporation or the Bruhat Bengaluru Mahanagara Palike.

Auditing Status

- Audit of accounts of RLBs and ULBs have been completed only till 2015–16.

Property Tax Board

- The Government of Karnataka has not set up the PTB (recommended by FC-XIII).

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
1	9	2	2

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Fourth SFC (2018–19 to 2022–23)

- The State Government is currently following the recommendations of the Fourth SFC.
- The Fourth SFC recommended that 48% of the State's non-loan net own revenue receipts (NLNORR) be devolved to local bodies.
- The State Government has decided to implement the recommendations in a phased manner, gradually raising devolution to 48% by 2022–23.

Debt and Losses

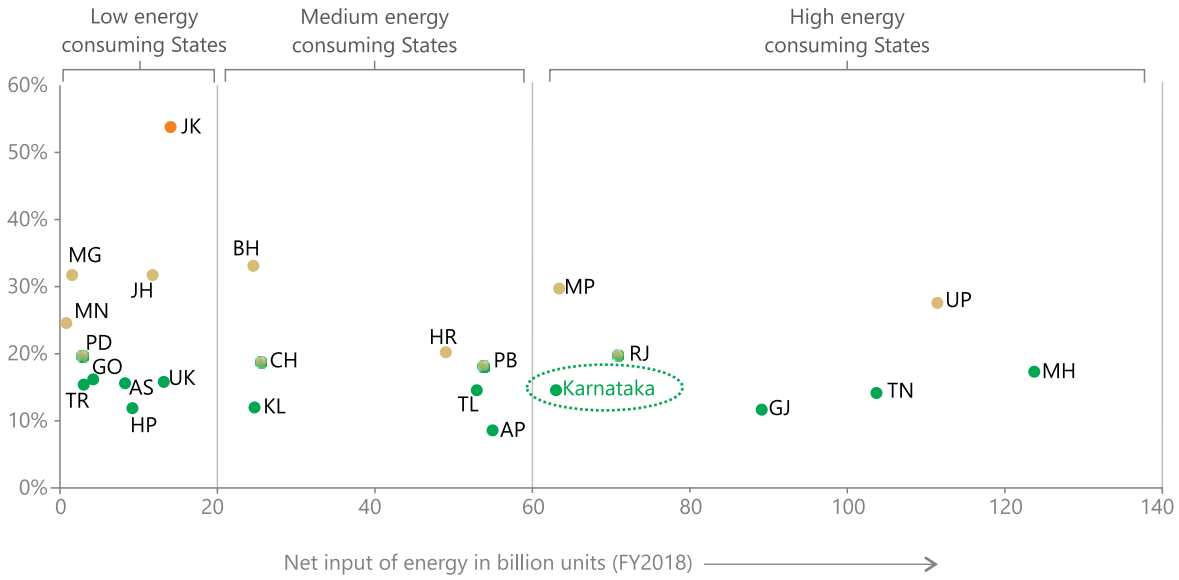
- Total borrowings of DISCOMs as on 31 March 2019 are Rs 18,021 crore of which State Government borrowing is Rs 552 crore.
- The State achieved the target ACS–ARR gap but not the target AT&C losses under UDAY in 2018–19.

- The State should aim to improve its performance on these UDAY barometers to avoid future fiscal risk.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	19.8	14.0
ACS–ARR Gap (Rs per unit)	–0.7	0.0

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India.

KR-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Under the vertical devolution, the FC-XV has recommended that 41% of the net proceeds of Union Taxes (divisible pool) be devolved to the States in the year 2020–21.
- The State contends that it is more or less same as the share proposed by the FC-XIV adjusted for the share of erstwhile Jammu & Kashmir.

Formula for Horizontal Devolution

S. no.	*Criteria*	*Weights (%)*
i)	Population	15
ii)	Area	15
iii)	Forest Cover	10
iv)	Income Distance	30
v)	Demographic Change	15
vi)	Tax Effort	10
vii)	GSDP	5

Suggestions by Government of Karnataka

i. Reduce weights assigned to the criteria of equity (Income Distance) to 30% from current 45% and allocate that weight to other parameters, preferably the parameters of performance, either tax effort or demographic changes.

ii. Use inverse of per capita income in place of distance.

iii. Income distance be moderated by raising it by 0.25 standard deviation.

Fiscal Discipline

- The adherence to the path of fiscal discipline has enabled the State to remain consistently revenue surplus since 2004–05.
- Its FD–GSDP ratio has been maintained below 3% since 2011–12 and the State has not resorted to additional borrowings under Article 293(3) of the Constitution.
- Further, the Debt–GSDP ratio has been maintained at less than 20% since 2011–12.
- Karnataka is setting an example for other States by including its 'off-budget borrowings' in the definition of the term 'total liabilities', through the Karnataka Fiscal Responsibility (Amendment) Act, 2014.

FRBM Compliance

- The State enacted the FRBM Act in 2002 and amended it in 2009, 2011, and 2014.
- The State adhered to FRBM targets during the period between 2011–12 and 2017–18.

Ratio as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	26.0	25.7	25.4	25.2	25.0	25.0	25.0
Actually achieved	17.0	16.8	16.6	17.3	16.8	17.5	17.2
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Actually achieved	2.0	2.1	2.1	2.1	1.8	2.4	2.3

Source: Government of Karnataka

Lowest Committed Expenditure

- Karnataka has been prudent in keeping its committed expenditure (interest payments, salaries, and pensions) at the lowest level amongst all 29 States from 2011–12 to 2018–19.
- However, it appears that there are some accounting issues as grants-in-aid (Salary) is not fully reflected in the salary thus the committed expenditure appears under-reported.

Ranking on the SDG Index of NITI Aayog (2019)

- The State ranked 6th among the Indian States according to the *SDG India Index and Dashboard, 2019–20* of the NITI Aayog.
- The State is a front-runner on SDG–3 Good Health and Wellbeing, SDG–4 Quality Education, SDG–5 Gender Equality, SDG–7 Affordable & Clean Energy, and SDG–9 Industry, Innovation and Infrastructure.

- However, the State needs to improve its performance on SDG–1 No Poverty, SDG–2 Zero Hunger, SDG–6 Clean Water and Sanitation, SDG–10 Reduced Inequality, SDG–11 Sustainable Cities and Communities.
- The State should continue to undertake innovative policies and focused action, which would lead the State to improve its economic and social indicators.

Port-Led Economy

- Being a coastal State, Karnataka needs to focus on the development and upgradation of ports in order to sustain its economic development.

Forests and Tourism

- Given that almost one-fifth of Karnataka is forested, the State needs to devise strategies to promote eco-tourism in order to create employment and growth.

Power Sector

- In line with the UDAY MoU, the DISCOMs were able to reach close to the targeted reduction in AT&C losses in 2016–17, 2017–18, and 2018–19.
- Further, the State has been able to achieve almost all the major UDAY barometer targets as on 31 March 2019.
- Two out of five DISCOMs incurred losses in 2016–17. The State should strive to make all the five DISCOMs profitable in the next 2–3 years.
- Robust systemic reforms are required to ensure that the power subsidy reaches intended beneficiaries without leakage.

Local Bodies

- The State ranks second (after Kerala) in aggregate devolution in policy to RLBs, across all States.[1]
- The State has implemented Project Aasthi for GIS-based property tax system and changed the property tax valuation from annual rental value assessment to a capital value method.
- Further, the Karnataka Municipal Data Society (KMDS) rolls out municipal IT applications for citizen services and municipal administration, manages websites of ULBs, and is a repository of municipal data.

Drought Mitigation and Irrigation

- While annual rainfall in Karnataka is close to the national average, several parts of the State experience annual droughts.
- Droughts of varied intensity in 13 years out of the past 15 years have caused devastating losses to the State.
- It should continue to invest heavily on drought mitigation measures. Further, mitigation measures and resources earmarked by FC-XV should be gainfully deployed by the State Government.
- A dependable irrigation system could go a long way in enhancing productivity of cultivable land in drought prone areas.
- Keeping this in mind, the State should try to raise the percentage of gross cropped area under irrigation from the current 34.2% to at least 48.6% (the national average in 2014–15).[2]

- Coverage of modern micro-irrigation techniques through drip and sprinkler systems could also be increased.

Health

- Though health indicators of Karnataka related to underweight children, stunting among children, anaemia among women, percentage of institutional deliveries, IMR, and MMR are by and large better than the national average, there are huge intra-State disparities that need to be bridged.
- Expenditure on health as a percentage of GSDP should be increased from 0.6% (2016–17) to at least 0.8% (GS average) in order to sustain and improve the health outcomes, with special focus on backward districts.

Education

- Though the State performs far better than the national average on learning outcomes,[3] districts that are worse off than the State average need greater focus.
- Hence, expenditure on education (1.6% of GSDP in 2016–17 against GS average of 2.5%) should be increased to sustain and improve the educational outcomes in backward districts.

Aspirational Districts

- Yadgir and Raichur districts of Karnataka figure in the list of aspirational districts identified by the NITI Aayog for special focus and monitoring of development.

Local Bodies

- The State has not yet set up the PTB though the recommendations of FC-XIII.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Public Sector Undertakings[4]

- The number of accounts in arrears have increased from 44 in 2013–14 to 79 in 2017–18, with the extent of arrears ranging from 1 to 5 years.
- During the years for which accounts were not finalised, the State Government invested Rs 1,931.33 crore crore in one of two power sector PSUs and Rs 9,857.73 crore in 25 out of 60 PSUs (other than power).

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Karnataka is part of the group which includes Gujarat, Tamil Nadu, Telangana, Maharashtra, Kerala, Haryana, and Goa.
- Critical fiscal parameters of Karnataka have been compared to others in its class (barring Goa which is too small).

Reform Signposts

- Karnataka is one of the most progressive States of India contributing substantially to the national GDP and reporting social indicators that are far better than the national average.

- However, its fiscal performance from 2012–13 (latest year of analysis used for FC-XIII projections) to 2018–19 (latest year available for FC-XIV) shows a downslide compared to other States in its class.
- For instance, though Karanataka's GSDP TGR from 2011–12 to 2018–19 was 14.18% against class average of 14%, it reported lower OTR buoyancy (0.75) than the class average (0.83) in 2018–19, far behind Maharashtra (in leading position with an OTR buoyancy of 0.99).
- Similarly, the TGR of OTR was 10.6% (class average 11.5%) and ORR/TRE was (63.1%) as compared to class average (67.4%) and Telangana (leading at 76.9%).
- TRE TGR at 13.9% between 2011–12 and 2018–19 is greater than ORR TGR by 3.4 percentage points for the same time period creating a recipe for fiscal unsustainability.
- Unless the ORR TGR outpaces TRE TGR during the award period of FC-XV, the State will not be able to increase critical social sector investments or build revenue generating capital assets.
- Karnataka allocates as much as 2.5% of GSDP to capital expenditure and its RD–FD ratio was 1.77% (2018–19). **It should continue to perform at this level for sustained fiscal consolidation.**
- Karnataka received the highest amount of GST Compensation among all these states amounting to 40% of the total compensation paid to the eight States in its class in 2017–18. However this dropped to 31% in 2018–19 indicating that the State's tax revenue (post-GST) has not improved as much as the States in its class and post 2022, this could pose a challenge for Karnataka.
- Though Karnataka reported the lowest percentage of committed expenditure in its class (30.1%), salary paid under grants-in-aid was not fully reflected.
- Expenditure on education (as a percentage of TRE) by Karnataka is the second lowest in its class (13.9%) after Telangana (11.6%). The class average is 16.4% with Maharashtra leading at 18.8%. **If the State improves in revenue position, it can increase its investments in education.**
- Though Karnataka's spending on health, drinking water and sanitation is ahead of the class average, it is lagging behind in expenditure on nutrition.

Notes

1 GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

2 GOI (2019), *Agricultural Statistics 2018*, Department of Agriculture, Cooperation, and Farmers' Welfare, Ministry of Agriculture and Farmers' Welfare, Government of India.

3 As indicated by results of the National Achievement Survey (NAS) conducted throughout India on 13 November 2017 for Grades III, V, and VIII, in government and government aided schools by the National Council of Educational Research and Training.

4 CAG (2019), *Report No.4 of 2019 – Public Sector Undertakings of Karnataka*, report of the Comptroller and Auditor General of India, published by the Government of Karnataka.

KL-1.A: Overview

POPULATION
33.4 million
2.8%
Of population across all States

AREA
38,852 sq km
1.2%
Of area across all States

3.0%
Of forest area across all States

FOREST COVER
21,144 sq km
54.4%
Of the State's own area is under forest

4.0% ↑
Forest cover changed from 2017 to 2019

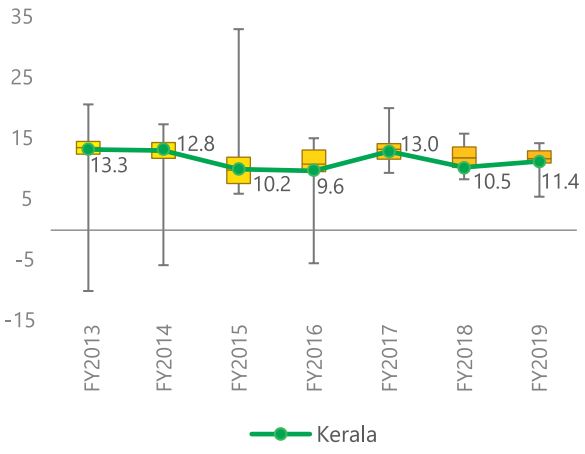
PER CAPITA GSDP
Rs 2,25,484
Rs 1,40,422
Average across all States

TAX TO GSDP
6.5%
6.3%
Average across all States

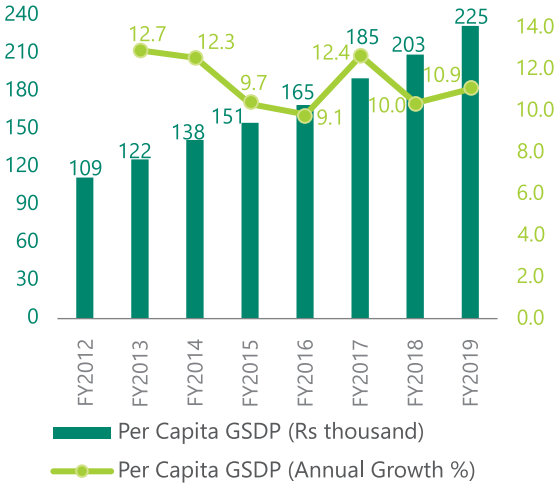
CHILDREN PER WOMAN
1.6
2.2
Average across all States

URBANISATION RATE
47.7%
31.1%
All India average

KL-1.B: Growth rate of GSDP (at current prices, %)



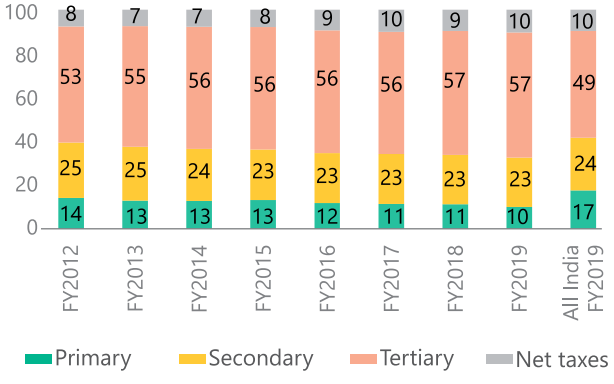
KL-1.C: Per capita GSDP (at current prices)



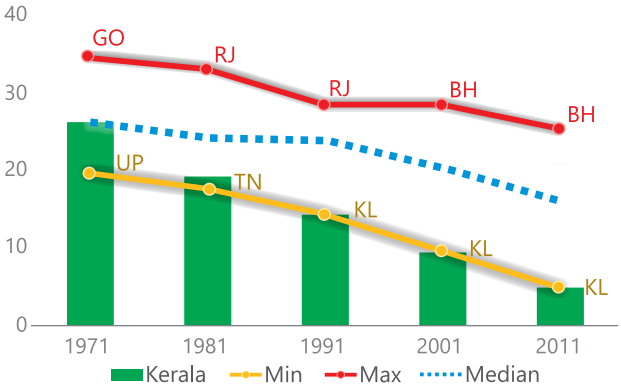
KL-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	3,64,048	77,44,945	4.7
2012–13	4,12,313	88,27,195	4.7
2013–14	4,65,041	1,00,07,392	4.6
2014–15	5,12,564	1,09,93,257	4.7
2015–16	5,61,994	1,21,91,256	4.6
2016–17	6,34,886	1,37,80,737	4.6
2017–18	7,01,577	1,54,20,126	4.5
2018–19	7,81,653	1,72,83,813	4.5

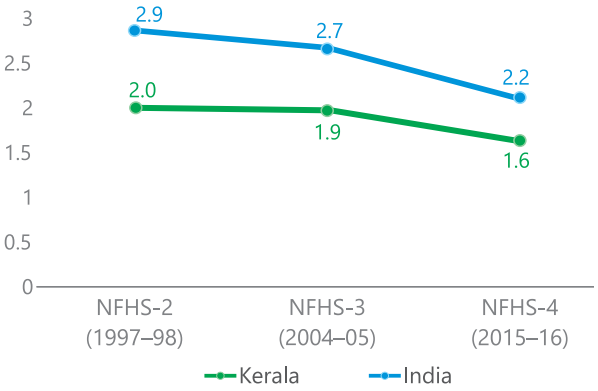
KL-1.E: Sectoral Contribution to GSDP (at current prices, %)



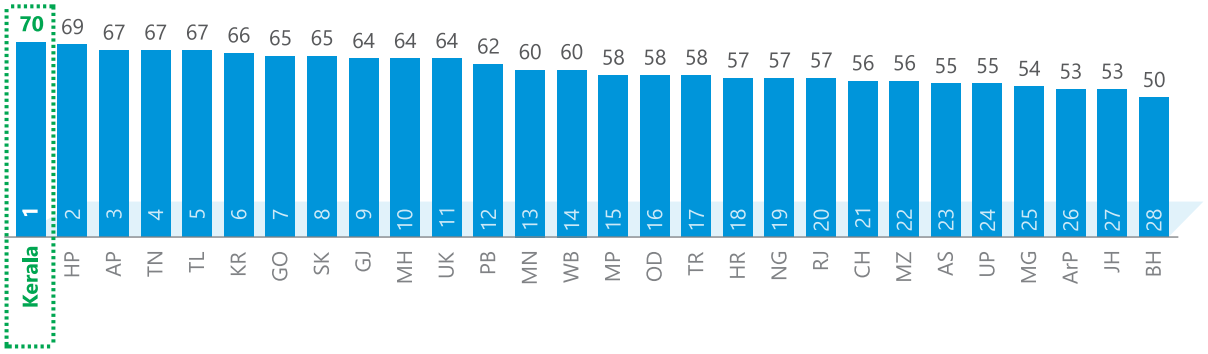
KL-2.A: Decadal Growth in Population (%)



KL-2.B: Total Fertility Rate (children per woman)



KL-2.C: SDG Index of NITI Aayog (2019)



KL-2.D: Key Social Indicators

EDUCATION

	KL	INDIA
Literacy rate (%)[a]	94.0	73.0
Pupil–Teacher ratio[b] (in Primary)	16.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	79.4	55.4

WATER & SANITATION

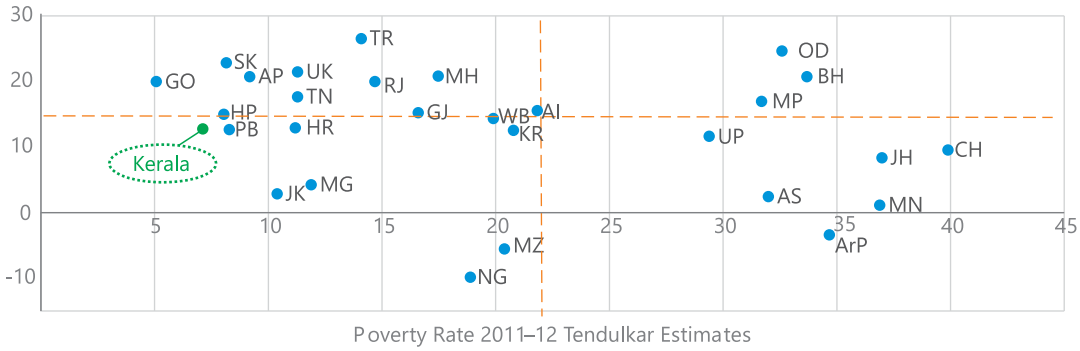
	KL	INDIA
Availability of safe drinking water[d] (household %)	94.3	89.9
Availability of toilets[d] (household %)	99.2	61.1

HEALTH

	KL	INDIA
Life expectancy (years)[g]	75.2	69.0
Sex ratio (♀ per 1000 ♂)[a]	1084	943
Underweight children (%)[d]	16.1	35.8
Stunting among children (%)[d]	19.7	38.4
Anaemia among children (%)[d]	35.7	58.6
Women with below normal BMI (%)[e,d]	9.7	22.9
Anaemia among Women (%)[d]	34.3	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	7.0	32.0
Institutional Deliveries (%)[d]	99.8	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	5.9	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	2,048	1,218 *(All States)*

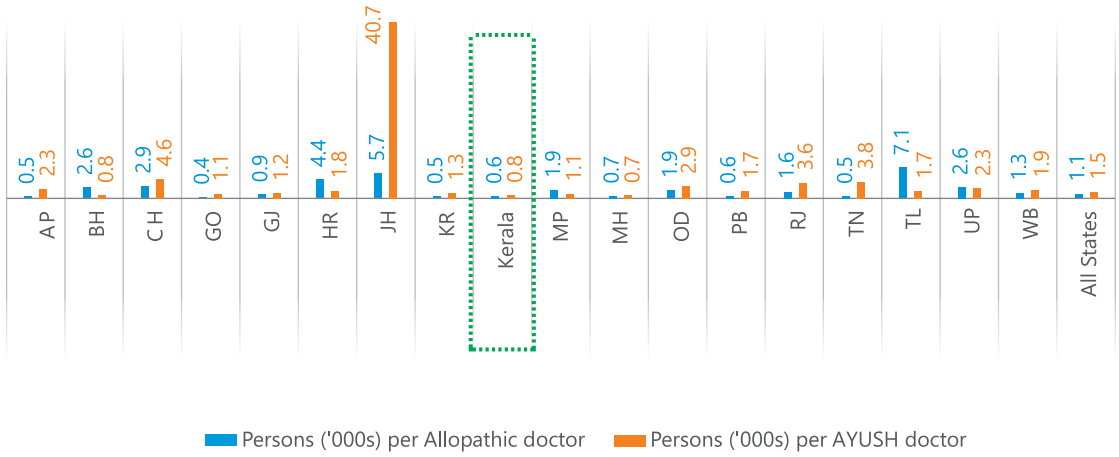
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

KL-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



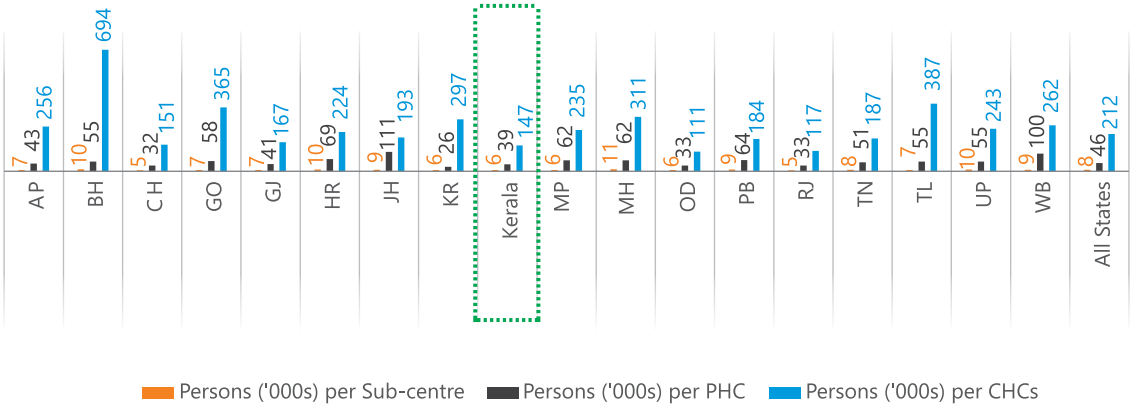
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

KL-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



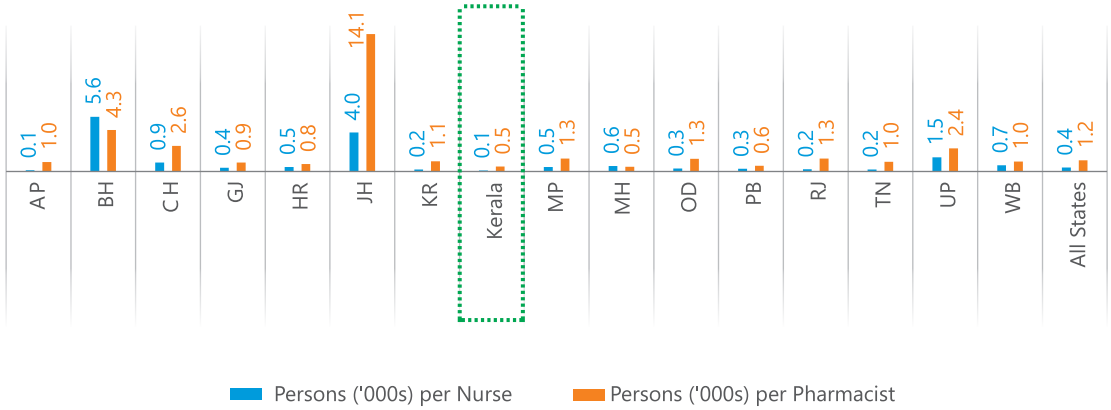
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

KL-3.B: Persons ('000s) per Sub-centre/PHC/CHC



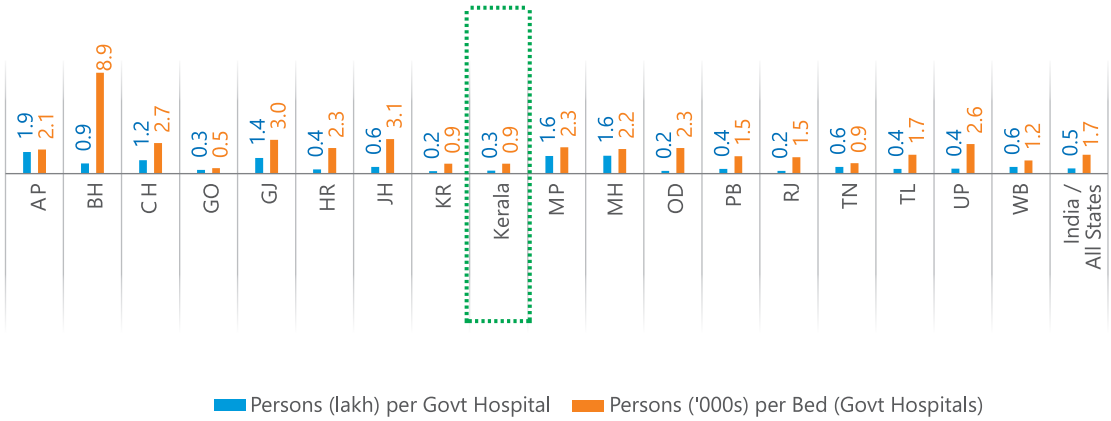
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

KL-3.C: Persons ('000s) per Nurse/ Pharmacist



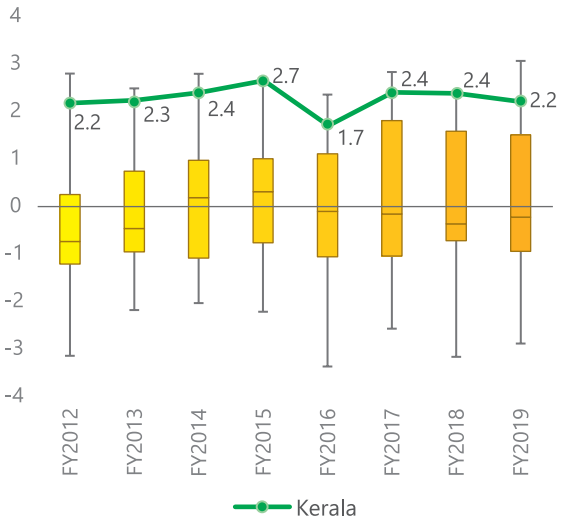
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

KL-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

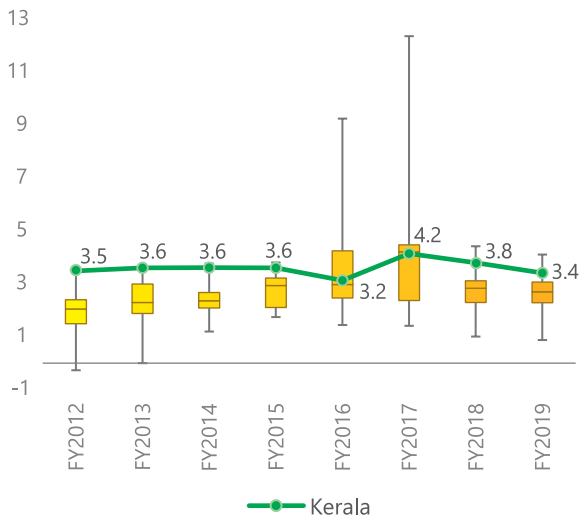


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

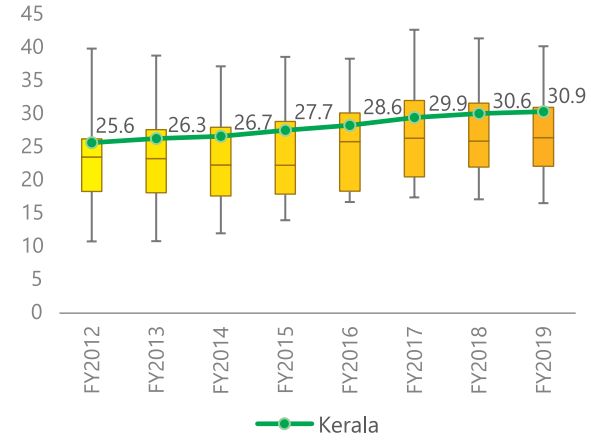
KL-4.A: Revenue Deficit as % of GSDP



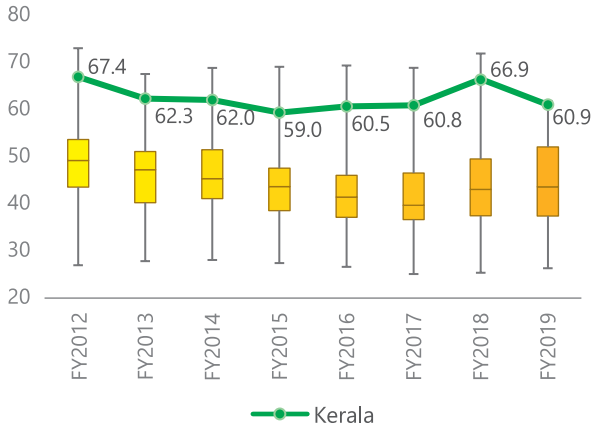
KL-4.B: Fiscal Deficit as % of GSDP



KL-4.C: Outstanding Debt as % of GSDP

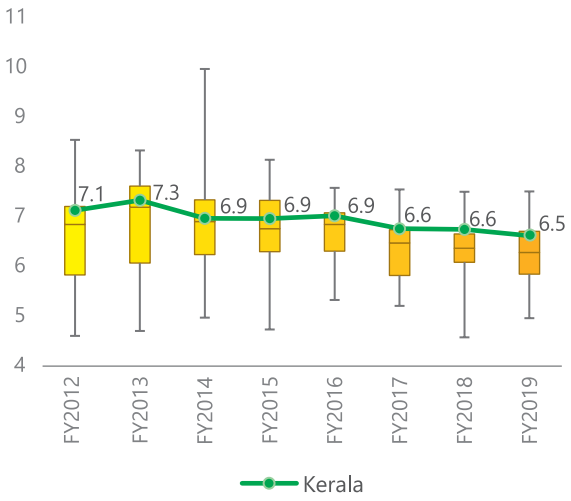


KL-4.D: Committed Expenditure as a % of Revenue Expenditure

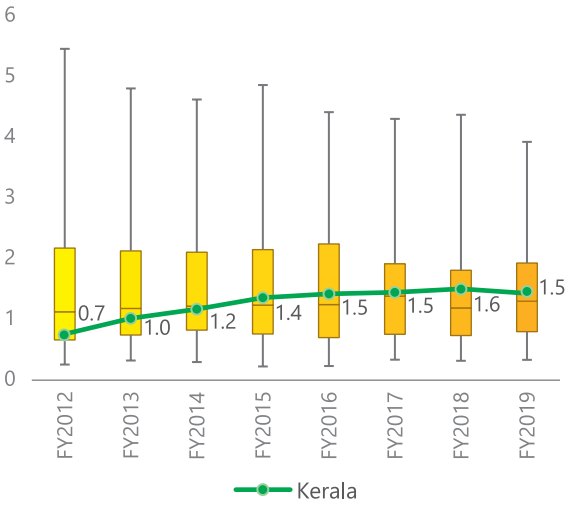


Note: Committed expenditure includes salaries, interest payments, and pensions

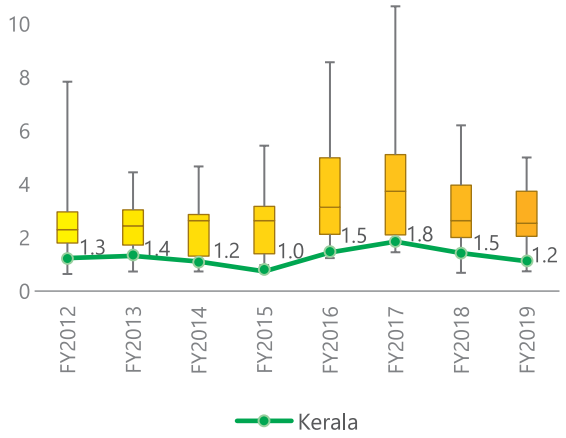
KL-4.E: OTR as % of GSDP



KL-4.F: NTR as % of GSDP



KL-4.G: Capital Expenditure to GSDP Ratio



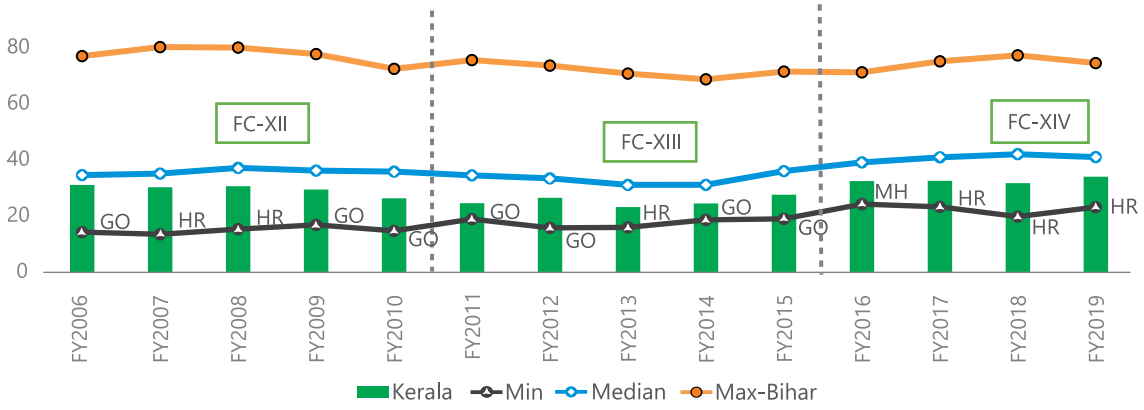
KL-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	2,25,484	1,41,099
Indicators as a percentage of GSDP		
TRR	11.9	13.4
OTR	6.5	6.4
NTR	1.5	1.1
TE	15.4	16.1
ES	1.6	3.1
SS	4.9	5.4
GS	6.5	4.7
Committed Expenditure	8.6	5.8
Capital Expenditure	1.2	2.5
FD	3.4	2.5
RD	2.2	0.2
OD	30.9	25.0

KL-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Kerala	13.4	13.8	11.6
GS average	13.6	13.1	10.3

KL-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- All the 29 functions enshrined in the Eleventh Schedule of the Constitution have been devolved to PRIs.
- Of the 18 functions envisaged in the Twelfth Schedule of the Constitution, 17 have been devolved to ULBs.
- During 2016–17, State grants constituted 71% of the funds available with local self-government institutions (LSGIs). Government of India grants constituted 22% and own funds including loans constituted 7%.
- Kerala is the first State in the country to have an Ombudsman exclusively for LSGIs since year 2000.

Auditing Status

- The computer-based accrual accounting system (Saankhya software) has been implemented in all the LSGIs.
- The National Municipal Accounts Manual for ULBs is also being implemented.
- Accounts of RLBs and ULBs have been audited till 2017–18.

Property Tax Board

- The State set up its PTB as recommended by the FC-XIII. It is a functional body, which regularly prepares work plans for all ULBs.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
2	1	1	1

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

Fifth SFC (2016–17 to 2020–21)

- According to the *Overview of State Finance Commission Reports* by the National Institute of Public Finance and Policy, the Government of Kerala did not accept all the recommendations of the Fifth SFC, which suggested that 20% of the net proceeds of the annual State OTR be devolved to local governments as development fund, maintenance fund, and general purpose fund.
- Kerala is currently implementing the recommendations of the Fourth SFC.

Debt and Losses

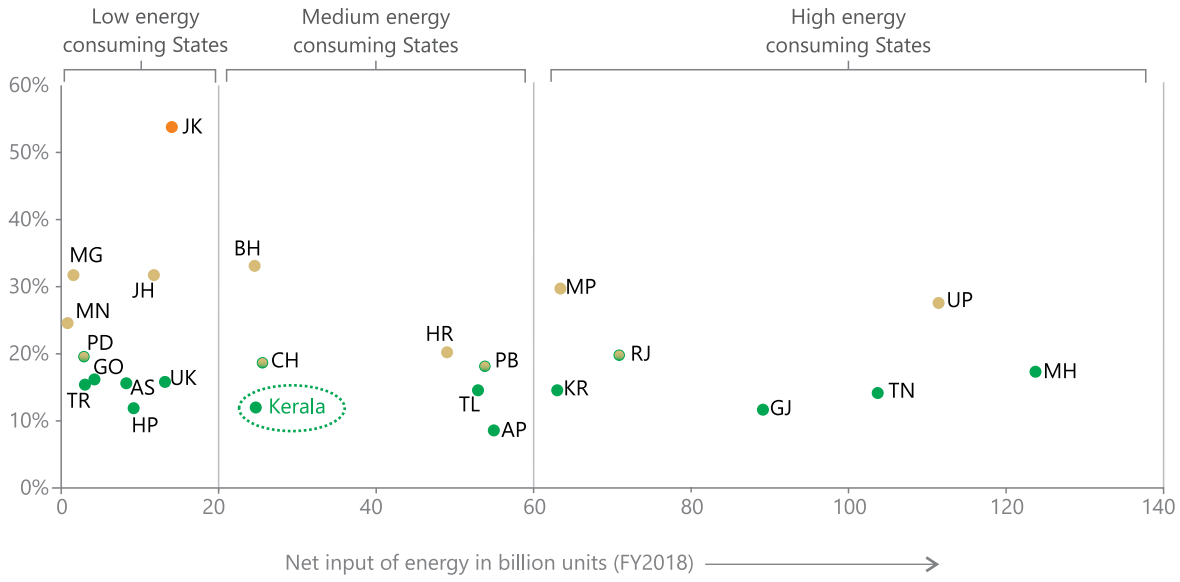
- As on 31 March 2019, the total borrowings by the DISCOMs were Rs 18,354 crore (3.8% of the total borrowings by DISCOMs across all States).
- Government of Kerala has taken no financial obligation under UDAY. It is committed to improving the operational efficiency of Kerala State Electricity Board Ltd (KSEBL) to make it sustainable.
- State achieved its AT&C loss (%) target but not the ACS–ARR gap target in 2018–19.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	9.1	11.0
ACS–ARR Gap (Rs per unit)	0.11	–0.06

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

KL-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Kerala recommended that the State share in the overall divisible pool of taxes be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population (2011)	30
ii)	Demographic achievement (proxied by 1971 population)	30
iii)	Income distance	20
iv)	Area	10
v)	Forest cover	10

Ranking on the SDG Index of NITI Aayog (2019)

- Kerala has Rank 1 according to the *SDG India Index and Dashboard 2019–20* of the NITI Aayog.
- The State has an SDG Index value of 70 (as compared to the national average 60).
- The State is a front-runner in SDG–1 No Poverty, SDG–2 Zero Hunger, SDG–3 Good Health and Well Being, SDG–4 Quality Education, SDG–6 Clean Water and Sanitation, SDG–7 Affordable and Clean Energy, SDG–9 Industry, Innovation, and Infrastructure, SDG–10 Reduced Inequality, SDG–15 Life on Land, and SDG–16 Peace, Justice, and Strong Institutions.

Social Indicators

- Kerala's achievements on human development parameters are acknowledged both nationally and globally.
- Kerala has the highest levels of literacy, school enrolment, and retention in India.

Democratic Decentralisation and the Third Tier

- The State has been the best performer in devolving funds, functions, functionaries and in empowering LSGs.[1]
- Decentralisation in Kerala was undertaken in mission mode through the Peoples' Plan Campaign.

GST Compensation Initiatives for Local Bodies

- As per the State Government, Kerala has put in place alternative mechanisms of resource generation to compensate the local bodies for revenue lost due to the implementation of the Central Goods and Services Tax Act, 2017.
- It provided Rs 133 crore in the budget of 2018–19 as compensation for loss of the entertainment tax during 2017–18. This amount was to be apportioned among local governments in proportion to the entertainment tax collected by each local government during 2015–16.

Tourism Potential

- Kerala offers vast and unexploited potential for both domestic and foreign tourism.
- Tourism contributes 10% of Kerala's GSDP and is a major employment generator.
- Kerala is the 7th most popular destination for foreign tourists to India attracting 3.8% of all such visits made across States and UTs in 2019.[2]
- However, it still does not feature in the list of top 10 destination States for domestic tourist visits and needs to do more to attract Indian tourists.

FRBM Compliance

- The Kerala FRBM Act was passed in 2003 and amended in 2011 and 2018.
- The State has not been adhering to its FRBM limit in the recent years.
- Hence, the State needs a credible debt path and careful calibration of expenditure for generating future streams of income.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	32.3	31.7	30.7	29.8	25.4	26.8	30.4
Actually achieved	25.6	26.3	26.7	27.7	28.6	29.9	30.6
FD–GSDP							
As prescribed by the State FRBM	3.5	3.5	3.0	3.0	3.1	3.5	3.0
Actually achieved	3.5	3.6	3.6	3.6	3.2	4.2	3.8

Notes:
i. As the FRBM Act was not amended in line with FC-XIV targets for the years 2015–16 and 2016–17, the targets in the Medium-term Fiscal Policy Statement for the said years have been used here.
ii. The FRBM (Amendment) Act 2018 incorporating the targets set by FC-XIV came into force on 1 April 2017.

Source: Government of Kerala

Large Elderly Population

- As per the State Government Memorandum, as a result of its health, school education, and direct demographic interventions, Kerala achieved replacement levels of fertility as early as 1988.
- Kerala has the highest life expectancy at birth in India: 71.8 years for males and 77.8 years for females.
- There has thus been a sharp rise in the proportion of elderly in the State.
- The old age dependency ratio of India was 12.2 at the Census of 1991 and 14.2 at the Census of 2011. The corresponding ratios for Kerala are 14.4 and 19.6, the highest among Indian States.
- Kerala is ageing faster than the rest of the country.
- Therefore, the State needs to focus on systemic provisioning for welfare of the elderly.

High Committed Expenditure

- Across all States, Kerala had the highest ratio of Pension to TRE of 17.2% in 2018–19.
- The State also had high committed expenditure as a percentage of TRE as compared to GS average.

Committed expenditure as a percentage of TRE	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
Median of GS	47	45	44	41	40	43	44
Kerala	62	62	59	61	61	67	61

Public Sector Undertakings[3]

- The State has 118 working PSUs of which 281 accounts in respect of 107 working PSUs are in arrears as on 30 September 2018. The extent of arrears ranged 1–11 years.
- The Return on Capital Employed (ROCE) of the State PSUs ranged between 3.03% and 6.8% during the period between 2013–14 and 2017–18.
- The ROCE increased by over 1% in 2017–18 mainly due to increase in earnings before interest and taxes (EBIT) (Rs 310 crore) of the Kerala State Financial Enterprises Ltd.
- The ROCE of the power sector undertakings ranged between 0.67% and 9.6% during the period between 2013–14 and 2017–18.
- The substantial decrease of ROCE in 2017–18 compared to 2016–17 was due to increase in borrowing (Rs 11,668 crore) and loss (Rs 366 crore) of Kerala State Electricity Board Ltd.

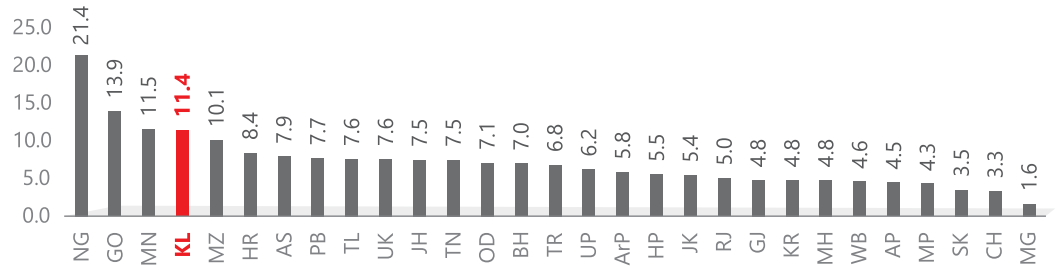
Migration

- According to the Development and Migration Brief (2017) published by the World Bank, inward remittances to India dropped by 9% from $68.2 billion in 2015 to $62.7 billion in 2016.
- While State-wise break up of remittances is not available, Kerala would no doubt have felt the impact of this fall.
- While people migrate from Kerala to many countries across the globe, a large share heads for the Gulf.
- Kerala has felt the repeated blowback of fall in crude oil prices and the consequent slowdown of Gulf economies.
- This, coupled with the fall in the prices of rubber and other cash crops of Kerala has reduced consumption expenditure leading to shrinking of revenue and fiscal stress.
- In-migration brings new skills to the economy. Kerala may devise a strategy to utilise these skills through appropriate intervention in the services sector.

Unemployment

- Among major Indian States, Kerala has the highest rates of unemployment 11.4% (as against the all India level of 6%).[4]
- Kerala has a substantial youth population (23%) in need of productive employment opportunities.
- Towards this goal, the ongoing programmes for skill development and employment generation should be more effectively implemented.

KL-5B: Unemployment (%) by State (Usual Principal Status Approach), 2017–18



Local Bodies

- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Kerala is part of the group which includes Gujarat, Tamil Nadu, Telangana, Maharashtra, Karnataka, Haryana, and Goa.

Reform Signposts

- Kerala is one of the most progressive States of India reporting the finest social indicators of the country.
- Kerala has some unique fiscal features:
  - **Remittances:** According to the RBI, Kerala received 19% of India's remittances, i.e., Rs 85,092 crore in 2017. Of this amount, 60% was spent on family maintenance, 20% held as bank deposits, 8.3% in investments, and 12.6% for others. This explains the basic character of Kerala's consumption-based economy, partly contributing to its high tax buoyancy.
  - **Local Government:** Kerala is the only State in India in which the State Legislative Assembly passes budget for local bodies annually and has transferred all 3 Fs (functions, functionaries, and funds) to the local bodies. The grants for LSGI constitute 70–75% of the State grants-in-aid (GIA). The total GIA in the State budget is about 17% of its TRE. As this GIA to LSGI forms part of the committed expenditure, its proportion in the TRE remains the highest in Kerala among States in its class.
  - **Masala Bonds:** In 2019, Kerala Infrastructure Investment Fund Board (KIIFB) the first ever sub-sovereign entity in India, accessed the offshore debt market by closing the issue of Masala Bonds of Rs 2,150 crore at 9.7% per annum. This in turn helped KIIFB mobilise term loans from other financial institutions. Such sub-sovereign borrowings, being below-line for the outstanding debt, have long-term fiscal implications for the State.
  - **State Lotteries:** Kerala is the only State with substantial revenues from State lotteries in its NTR. The receipts from lotteries were Rs 9,625 crore in 2018–19 (about 1% of the GSDP). This artificially increased the TRR and NTR when compared to other States, as they do not have such resource. For example for 2018–19:
    - TRR–GSDP ratio for Kerala without lottery was 10.7% but 11.9% including lottery;
    - Lottery receipts were Rs 9,625 crore (out of TRR of Rs 92,854 crore) and lottery expenditure was Rs 7,819 crore (out of TRE of Rs 1,10,316 crore).
  - **State Treasury Savings Bank (STSB):** State departments, State PSUs, and autonomous entities of Kerala have been transferring credit of unspent funds from consolidated fund of the State to the STSB accounts at the end of each financial year. Such funds are held in the STSB accounts over extended periods.
    - This has increased the outstanding amount in public account of the State thereby increasing the total liabilities of the Government of Kerala.
    - In 2017–18, the State Government ordered the resumption of such funds parked in STSB amounting to Rs 24,748 crore.
    - The parking of funds in the STSB results in distortion in expenditure figures when the TGR is calculated.
    - For instance in 2016–17, salary, pension, and interest payments expenditure increased by 22.9% but overpayment to the tune of Rs 7,812 crore was recovered in 2017–18.
- The State faces a few structural challenges including:
  - land scarcity and high density of population,

- » eco-sensitivity with highest forest area,
- » debt-stress with high committed expenditure with salary, interest, pension and GIA for LSGIs constituting 80% to 85% of TRE,
- » persistent liquidity mismatches and adverse ways and means position, and
- » highest unemployment rate in India among GS.

- On revenue side, the State has exhibited encouraging trends.
  - » Ratio of TRR to GSDP is 11.9% (2018–19).
  - » OTR–GSDP ratio at 6.5% (2018–19) is the third highest in its class.
- Good revenue trends were possibly owed to:
  - » increased tax devolution by FC-XIV,
  - » enhanced GIA (Revenue Deficit Grants of Rs 9,519 crore during 2015–2018),
  - » rationalisation of CSS (accounting practice change leading to notional increase),
  - » high foreign remittance to help the buoyancy in its economy, and
  - » shift in the sectoral composition of the economy from agriculture to services (with share of tertiary sector in GSVA rising from 57.5% in 2011–12 to 63.7% in 2018–19).
- The State is fiscally stressed.
  - » It has high committed expenditure of 61.9% of TRE in 2018–19, the highest in its class.
  - » Salaries constituted 29.4% of TRE, second highest in its class.
  - » Salary TGR at 11.5% was the highest in its class.
  - » TGR of interest payments was 15.1% (compared to the lowest rate reported by Gujarat (9.3% in its class).
  - » The interest payments to TRE ratio remained in the range of 13%–15% between 2011–12 and 2018–19, among the highest in the class.
  - » Pensions TGR was 13.9% and the ratio of pensions to TRE was 17.2% in 2018–19, as compared to the class average of 11.7%.
- Kerala is highly debt stressed.
  - » It reported the highest FD–GSDP ratio of 3.4% in 2018–19 in its class.
  - » It also reported RD–GSDP of 2.2% in 2018–19.
  - » Its OD–GSDP ratio was 30.9% in 2018–19.
  - » The State has been breaching its FRBM targets with unhealthy levels of RD–FD ratio (65% in 2018–19). This implicitly explains why the State has resorted to borrowing to finance its RD.
- Capital expenditure by Kerala is very low compared to its class both as a percentage of TE as well as GSDP.
- However, the State reports the best social indicators in health and education.
  - » Per capita revenue expenditure in these two sectors is way above the group average.
  - » The State has the highest ratio of medical colleges per district and highest ratio of blood banks per district in the country.
  - » The State not only has the highest per capita government expenditure on health but also the highest per capita out of pocket expenditure (OOPE) indicating heavy dependence on private healthcare services despite the presence of a large number of public hospitals and medical colleges.

» Of late, the State has been spending less per capita on water supply and sanitation than others in its class.

Notes

1 GOI (2016), *Devolution Report 2015–16: Where Local Democracy and Devolution in India are Heading Towards*, Ministry of Panchayati Raj, Government of India.

2 GOI (2020), *Tourism Statistics at a Glance 2020*, Ministry of Tourism, Government of India.

3 CAG (2020), *Report No.1 of 2020: Public Sector Undertakings, for the year ended 31 March 2018.* Report of the Comptroller and Auditor General of India published by the Government of Kerala.

4 GOI (2018), *Annual Report of Periodic Labour Force Survey, 2017–18*, Ministry of Statistics and Programme Implementation, Government of India.

MP-1.A: Overview

POPULATION
72.6 million
6.1%
Of population across all States

AREA
3,08,252 sq km
9.4%
Of area across all States

11.0%
Of forest area across all States

FOREST COVER
77,482 sq km
25.1%
Of the State's own area is under forest

0.1% ↑
Forest cover changed from 2017 to 2019

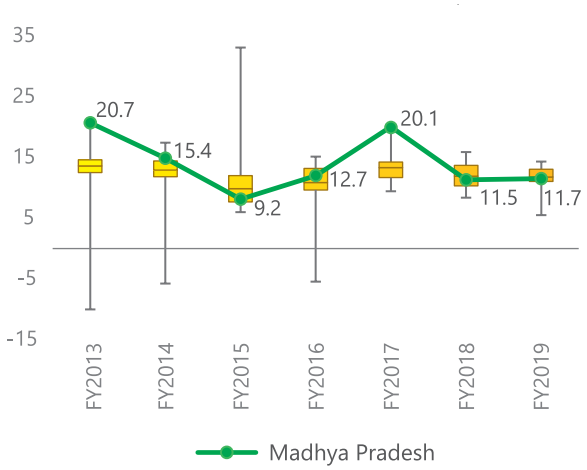
PER CAPITA GSDP
Rs 99,025
Rs 1,40,422
Average across all States

TAX TO GSDP
6.3%
6.3%
Average across all States

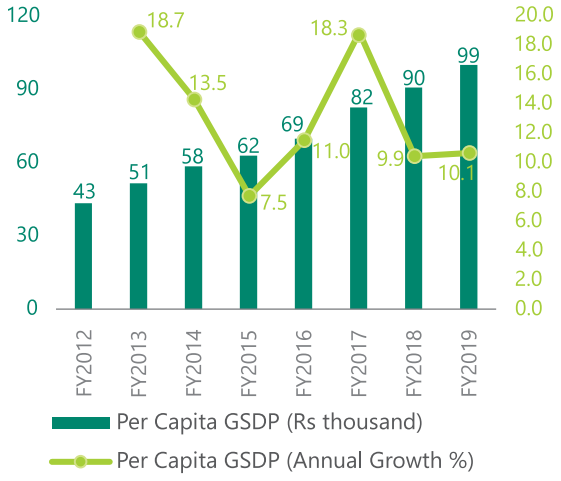
CHILDREN PER WOMAN
2.3
2.2
Average across all States

URBANISATION RATE
27.6%
31.1%
All India average

MP-1.B: Growth rate of GSDP (at current prices, %)



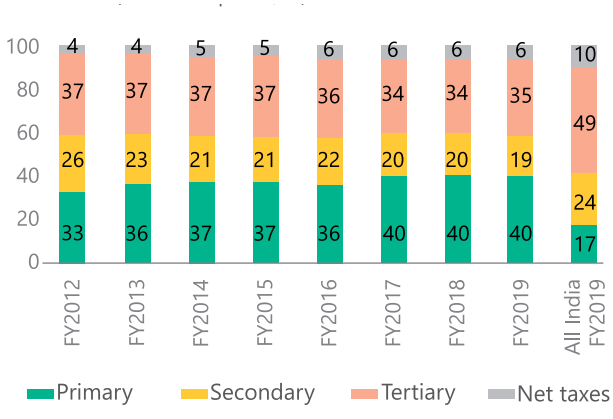
MP-1.C: Per capita GSDP (at current prices)



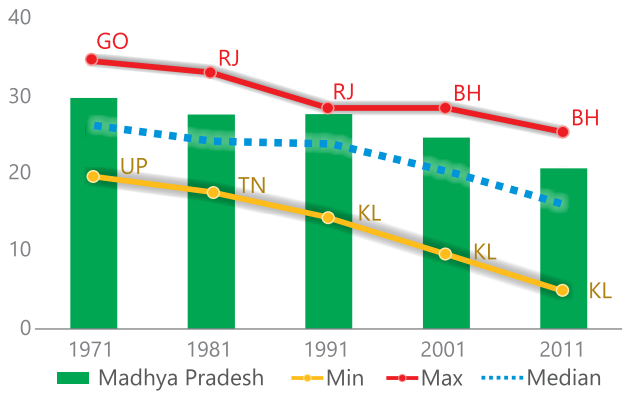
MP-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	3,15,562	77,44,945	4.1
2012–13	3,80,925	88,27,195	4.3
2013–14	4,39,483	1,00,07,392	4.4
2014–15	4,79,939	1,09,93,257	4.4
2015–16	5,41,068	1,21,91,256	4.4
2016–17	6,49,823	1,37,80,737	4.7
2017–18	7,24,729	1,54,20,126	4.7
2018–19	8,09,592	1,72,83,813	4.7

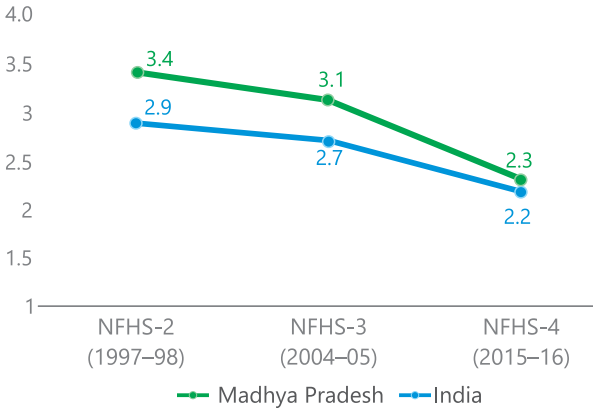
MP-1.E: Sectoral Contribution to GSDP (at current prices, %)



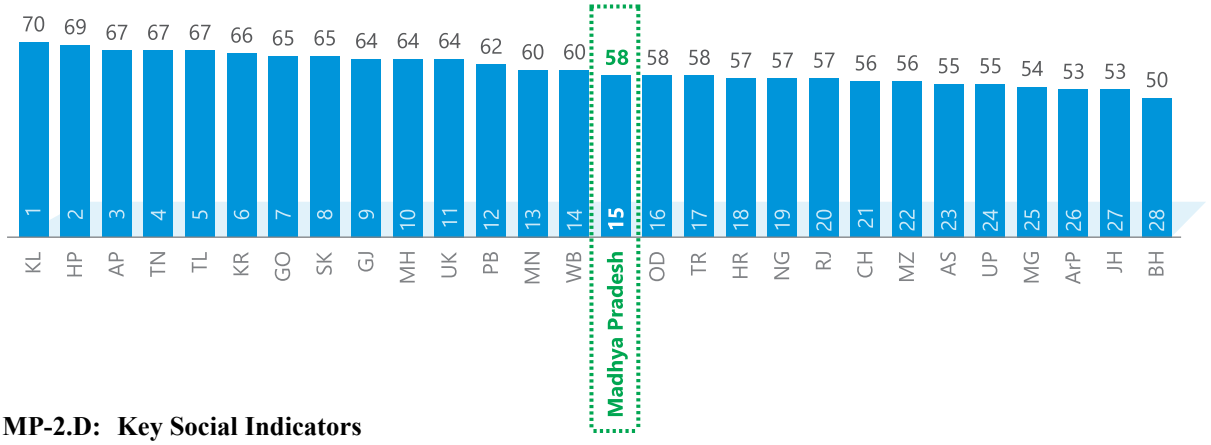
MP-2.A: Decadal Growth in Population (%)



MP-2.B: Total Fertility Rate (children per woman)



MP-2.C: SDG Index of NITI Aayog (2019)



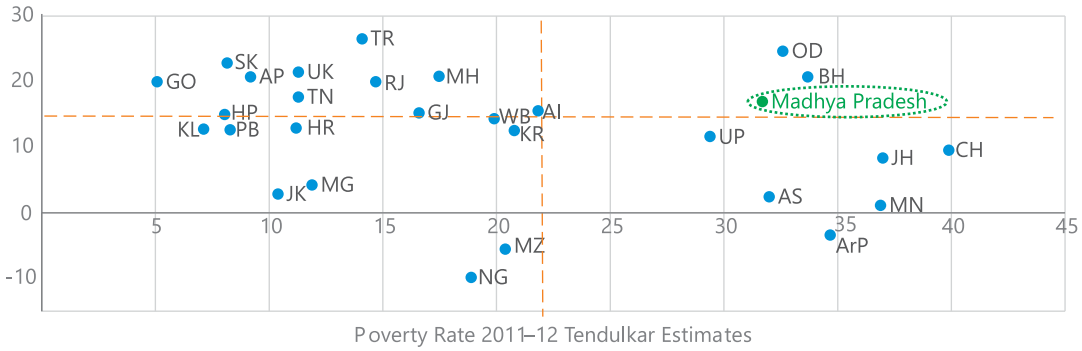
MP-2.D: Key Social Indicators

	MP	INDIA
EDUCATION		
Literacy rate (%)[a]	69.3	73.0
Pupil–Teacher ratio[b] (in Primary)	22.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	47.1	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	84.7	89.9
Availability of toilets[d] (household %)	42.8	61.1

	MP	INDIA
HEALTH		
Life expectancy (years)[g]	66.0	69.0
Sex ratio (♀ per 1000 ♂)[a]	931	943
Underweight children (%)[d]	42.8	35.8
Stunting among children (%)[d]	42.0	38.4
Anaemia among children (%)[d]	68.9	58.6
Women with below normal BMI (%)[e,d]	28.4	22.9
Anaemia among Women (%)[d]	52.5	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	48.0	32.0
Institutional Deliveries (%)[d]	80.8	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	4.5	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	947	1,218 *(All States)*

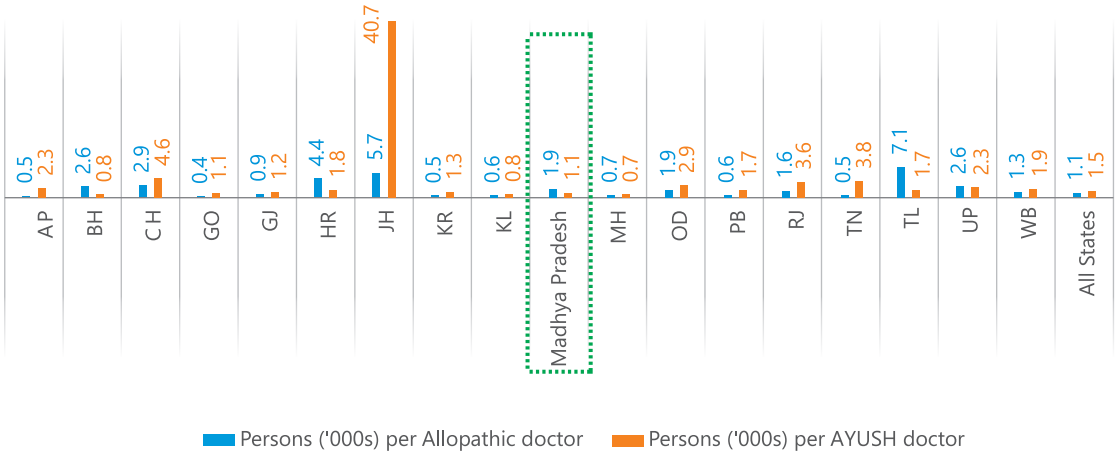
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

MP-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



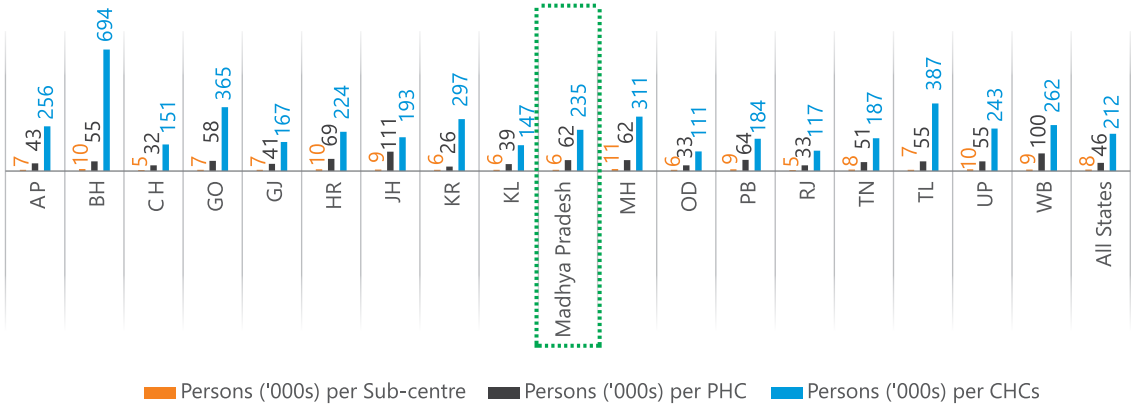
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

MP-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



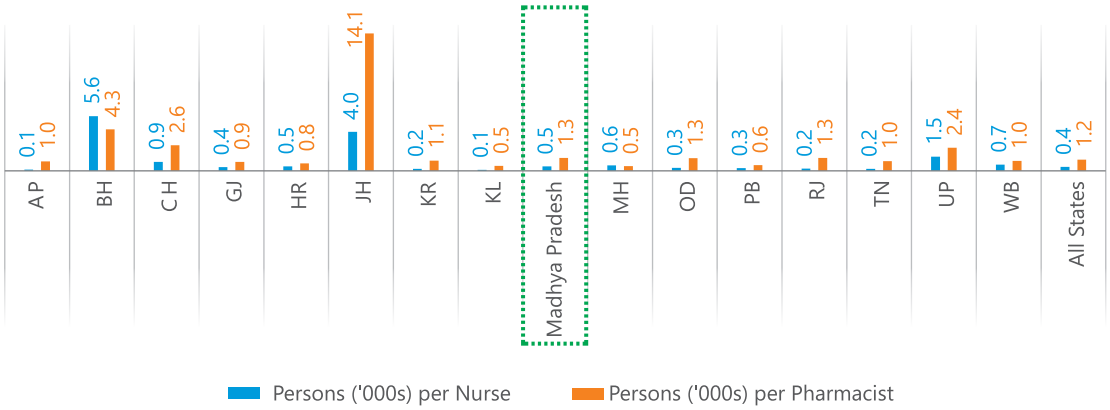
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MP-3.B: Persons ('000s) per Sub-centre/PHC/CHC



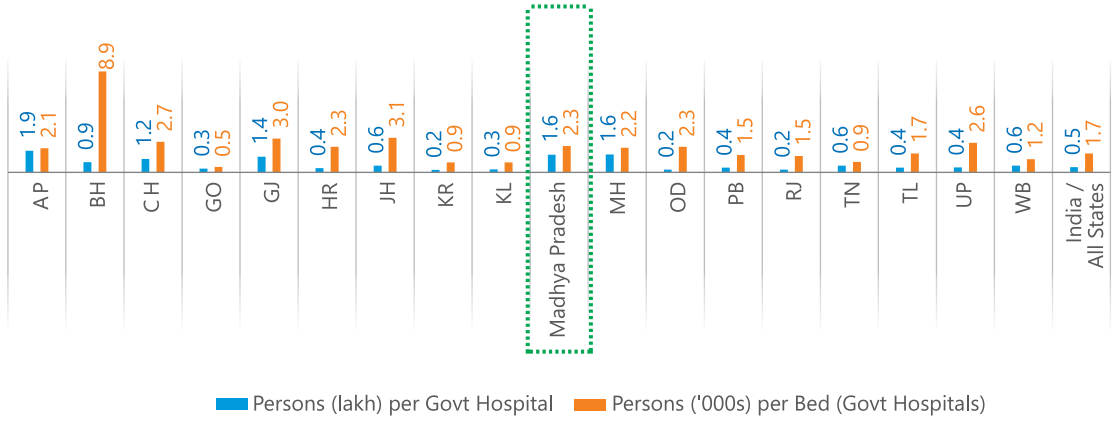
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MP-3.C: Persons ('000s) per Nurse/ Pharmacist



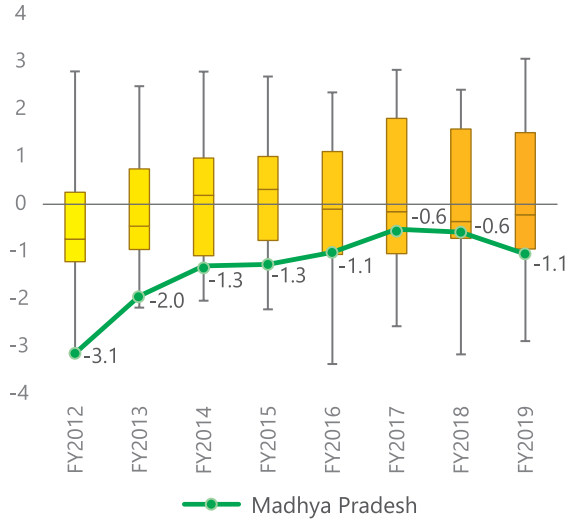
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MP-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

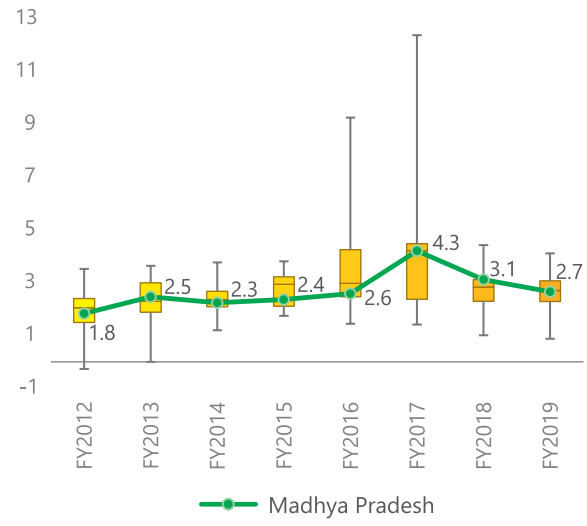


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

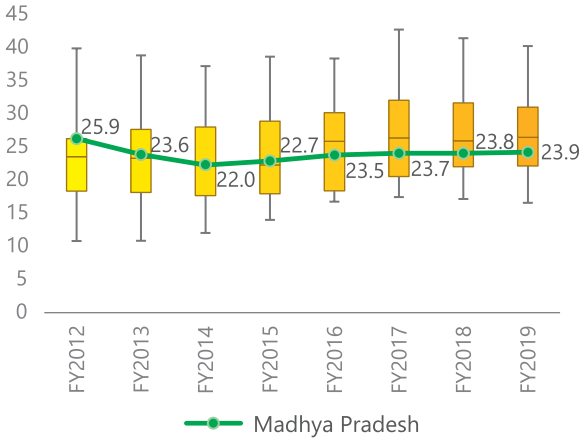
MP-4.A: Revenue Deficit as % of GSDP



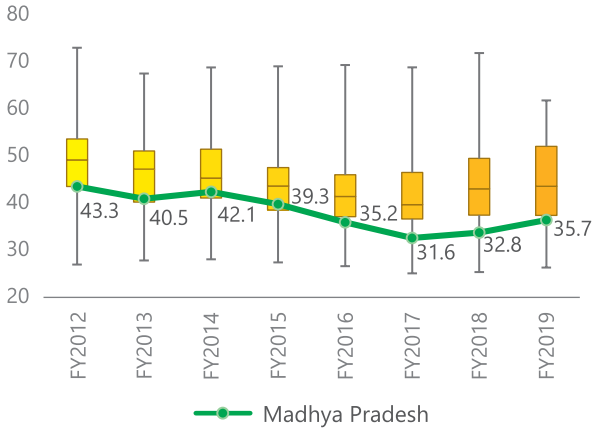
MP-4.B: Fiscal Deficit as % of GSDP



MP-4.C: Outstanding Debt as % of GSDP

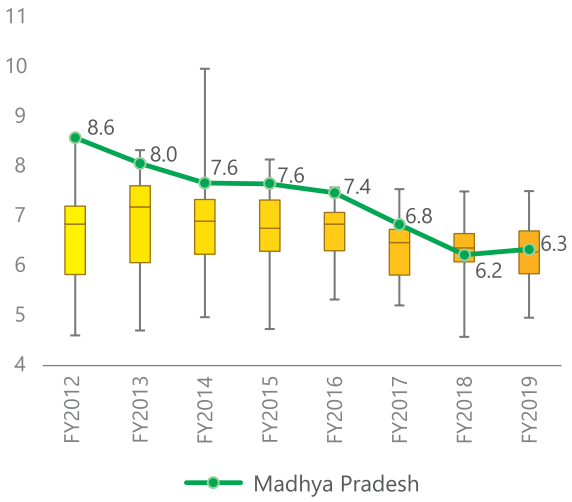


MP-4.D: Committed Expenditure as a % of Revenue Expenditure

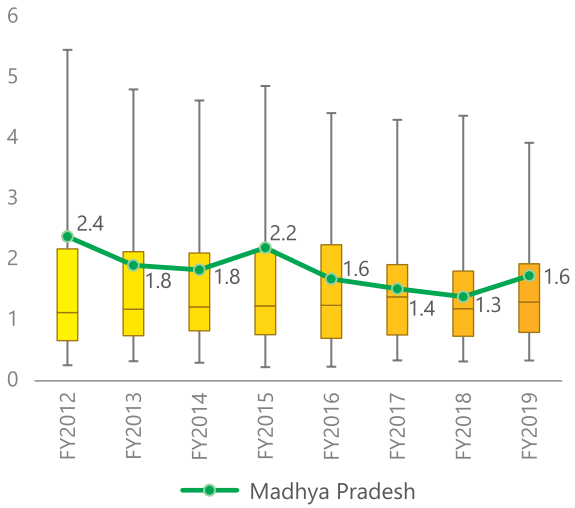


Note: Committed expenditure includes salaries, interest payments, and pensions

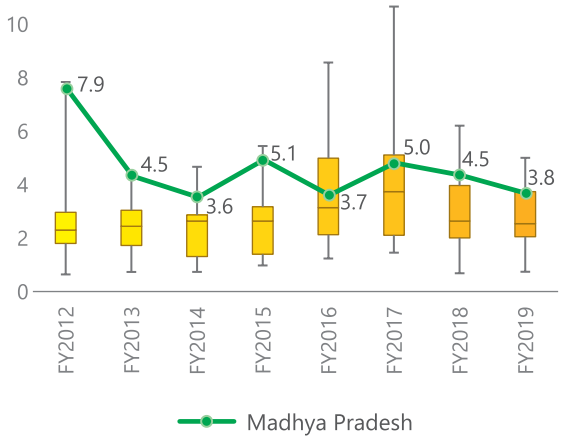
MP-4.E: OTR as % of GSDP



MP-4.F: NTR as % of GSDP



MP-4.G: Capital Expenditure to GSDP Ratio



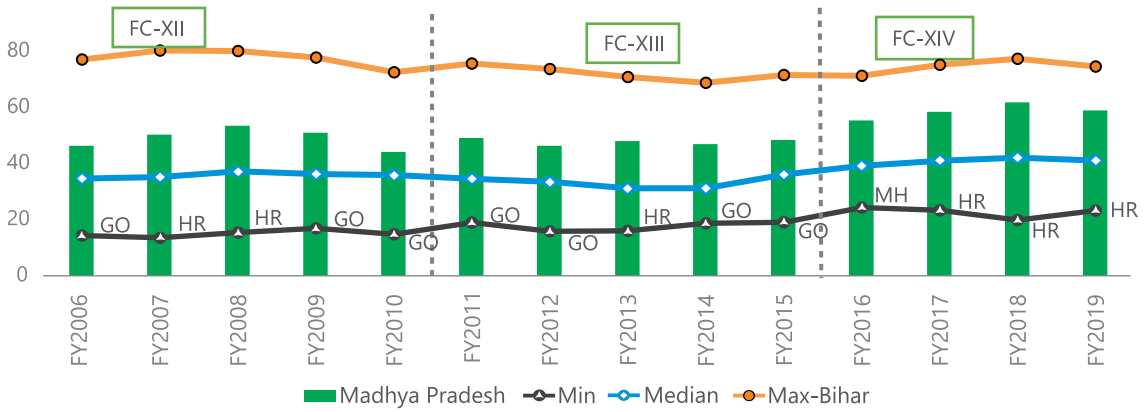
MP-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	99,025	1,41,099
Indicators as a percentage of GSDP		
TRR	18.6	13.4
OTR	6.3	6.4
NTR	1.6	1.1
TE	21.3	16.1
ES	4.7	3.1
SS	7.3	5.4
GS	4.6	4.7
Committed Expenditure	6.2	5.8
Capital Expenditure	3.8	2.5
FD	2.7	2.5
RD	–1.1	0.2
OD	23.9	25.0

MP-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Madhya Pradesh	15.9	14.0	8.7
GS average	13.6	13.1	10.3

MP-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Local Bodies

Functions Devolved

- All 29 functions devolved to RLBs as envisaged in Eleventh Schedule of the Constitution.
- All 18 functions devolved to ULBs as envisaged in Twelfth Schedule of the Constitution.

Auditing Status

- Audit of accounts of RLBs and ULBs completed till 2016–17.

Property Tax Board

- As recommended by the FC-XIII, Government of Madhya Pradesh set up its PTB in 2011, which has been dispensing its assigned functions since.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
13	3	12	12

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Fourth SFC (2015–16 to 2019–20)

- The Fourth SFC recommended that 7.5% of the Net OTR of the State be devolved to the local bodies—5.5% to RLBs and 2% to ULBs.
- The State Government did not accept the recommendations of Fourth SFC because the extent of devolution in the State was already higher than the proposed milestones.
- It is currently following the recommendations of the Third SFC for allocating resources to local bodies.

Fifth SFC (2020–21 to 2024–25)

- Fifth SFC constituted in March 2017 submitted its report on 30 April 2019. However, ATR of the report is yet to be laid before the Legislative Assembly.

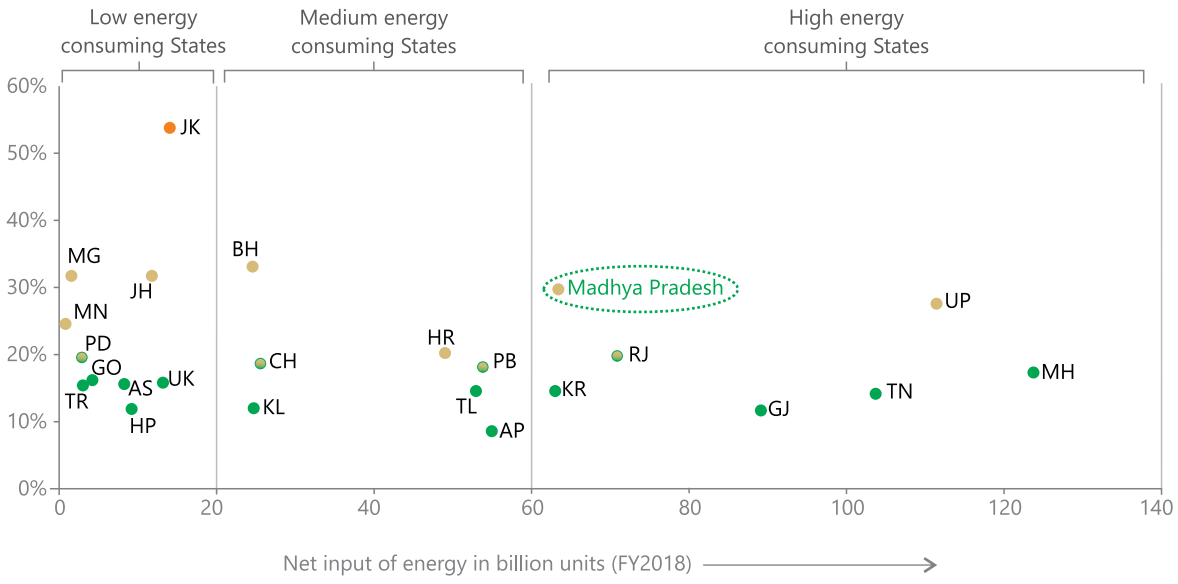
Debt and Losses

- Total equity and liabilities of DISCOMs as on 31 March 2019 is Rs 46,052 crore of which State Government borrowing is Rs 31,857 crore.
- The State Government is in the process of taking over DISCOM debt worth Rs 26,055 crore from 2016–17 to 2020–21 under UDAY.
- To this end, bonds worth Rs 7,360 crore were issued by the State Government in 2016–17 to take over outstanding loans pertaining to banks and other financial institutions.
- The balance comprises the State Government's own loans to DISCOMs for which no borrowing is required.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	36.0	17.0
ACS–ARR Gap (Rs per unit)	1.4	0.03

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India.

MP-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Madhya Pradesh proposed that the share of States in the divisible pool be increased to 50%.

Formula for Horizontal Devolution

S. no.	*Criteria*	*Weights (%)*
i)	Composite population index (A+B) a. Share in 2011 population b. Share in SC / ST population	25.0 12.5 12.5
ii)	Per capita income distance	50.0
iii)	Area	15.0
iv)	Forest area	10.0

Strengths and Opportunities

Low Committed Expenditure

- The State has been judicious in keeping its committed expenditure (interest payments, salaries and pensions) as percentage of RE relatively low (35.7% in 2018–19 compared to 44.7% for all States).

District Mineral Foundation

- According to data shared by the Union Ministry of Mines, the Government of Madhya Pradesh received Rs 2,428.83 crore under DMF in all 51 districts of the State up to June 2019.[1]
- These funds need to be utilised for the prescribed purposes within the fiscal year in which the amount was collected.
- If these funds remain idle as fixed deposits, substantial fiscal space for the State, though indirectly available, remains underutilised.
- The State Government shall put a mechanism in place to ensure their utilisation expeditiously within the fiscal year.

Forests and Tourism

- One-fourth of the State's geographical area is under forests.
- The State needs to devise strategies to promote eco-tourism, thereby generating greater resources from this sector.
- A MSP scheme for MFP was introduced by the Ministry of Tribal Affairs during 2013–14 to support STs and other forest dwellers, dependent on collection and selling of MFP. The scheme remained a non-starter due to its poor procurement mechanism.
- The Government of Madhya Pradesh should revive and implement the scheme, using electronic platforms and other existing programmes such as e-NAM to build a robust procurement mechanism.

Risks and Challenges

Fiscal Discipline

- The FD–GSDP ratio of the State increased from 2.3% in 2013–14 to 4.3% in 2016–17 and thereafter declined to 2.7% in 2018–19.
- Further, the Debt–GSDP ratio moved up from 22% in 2013–14 to around 23.7 in 2016–17 and has further increased to 23.9% in 2018–19.
- The State Government resorted to additional borrowings over 3% of FD–GSDP ratio under Article 293(3) of the Constitution in 2016–17 (0.49%), 2017–18 (0.21%), and 2018–19 (0.05%).
- In view of the above, the State needs to bring down its deficits and debt level substantially.

FRBM Compliance

- The State enacted the FRBM Act in 2005 and amended it in 2012, 2015 and 2017.
- The State did not adhere to FRBM target of FD–GSDP ratio in 2016–17.
- Debt–GSDP ratio was only marginally below the targets from 2015–16 to 2017–18.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	37.6	36.8	36.0	35.3	25.0	25.0	25.0
Actually achieved	25.9	23.6	22.0	22.7	23.5	23.7	23.8
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.5	3.5	3.5
Actually achieved	1.8	2.5	2.2	2.4	2.6	4.3	3.1

Source: Government of Madhya Pradesh

High and Rising Dependence on Agriculture and Allied Sectors

- Contrary to expectations from the development trajectory of an economy, the share of agriculture, forestry, and fishing sectors in GSVA (at current prices) has increased from 33% in 2011–12 to 40% in 2018–19.
- The State needs to diversify its economic base and strengthen other sectors, which would also lead to generation of more skilled jobs.

Incomplete Projects

- As on 31 March 2017, the State had 242 incomplete projects valued at Rs 9,557.16 crore across the Water Resources Department, Public Works Department, and Narmada Valley Development Authority, with cost over-run of Rs 4,800.14 crore in 24 projects.
- The State Government shall ensure expeditious completion of such projects for gainful utilisation of deployed resources and cost control.

Health

- Madhya Pradesh has been facing severe shortage of healthcare professionals with:[2]
  - 988 vacancies (80% shortfall) of specialists in CHCs against the sanctioned strength of 1,236; and
  - 659 vacancies (37% shortfall) of doctors in PHCs against the sanctioned strength of 1,771.
- For a sustainable solution, the State may explore Maharashtra's model of recognising diplomas from the College of Physicians and Surgeons as adequate for converting MBBS doctors to specialists who may then serve in remote and tribal areas.
- Besides, telemedicine could be promoted to fill the need gap in such areas.
- The State needs robust initiatives to improve key health indicators, which are inferior to the national average, such as maternal mortality of 173 per 100,000 live births (2016) as opposed to 130 all-India (for others, see MP-2.D).
- It is suggested that the annual per capita expenditure on health in Madhya Pradesh be brought at part with other states in its cohort and the national average.[3]

Education

- The State should make adequate effort to improve educational outcomes, which are currently below national average.

	% Children in Grade III who can read Grade II text		% Children in Grade III who can at least do subtraction	
	2016	2018	2016	2018
Madhya Pradesh	16.6	17.6	13.8	13.9
India	25.2	27.3	27.7	28.2

Sources: ASER (2018), *Annual Survey of Education Report, 2018,* ASER Centre; Census, 2011.

- Towards this end, annual per capita expenditure on education in Madhya Pradesh should be increased from Rs 2,616 (2016–17) to at least GS average of Rs 2,876.

Ranking on the SDG Index of NITI Aayog (2019)

- The State ranks 15th among the Indian States according to the *SDG India Index and Dashboard, 2019–20* of the NITI Aayog..
- The State needs to improve on SDG–1 No Poverty, SDG–2 Zero Hunger, SDG–3 Good Health and Wellbeing, SDG–4 Quality Education, SDG–5 Gender Equality, SDG–6 Clean Water and Sanitation, SDG–7 Affordable and Clean Energy, SDG–8 Decent Work and Economic Growth, SDG-9 Industry, Innovation and Infrastructure, SDG–10 Reduced Inequality, and SDG–16 Peace, Justice and Strong Institutions.

Backwardness

- Of the 52 districts of the State, eight are recognised as aspirational districts.
- Further, the State had poverty rate of 31.65% in 2011–12 (Tendulkar methodology) (compared to the national average of 21.92%). However, between 2004–05 and 2011–12, the poverty rate in MP has been declining fast.
- Accordingly, the State Government needs to take decisive steps to break the low-income trap and improve social outcomes.
- Further, the State may like to target the development of bottom 20% blocks as 'aspirational' blocks, on the lines of aspirational districts being monitored by NITI Aayog.

Piped Water Supply

- Only 11% of rural households have PWS connections in the State, which is less than two-third of all India coverage of 18.3%.
- The State needs to invest in cost-effective and innovative approaches such as rain-water harvesting and end-to-end value chain management of drinking water.

Power Sector

- The DISCOMs have not been able to achieve targeted reduction in AT&C losses across 2016–17, 2017–18 and 2018–19.
- Instead, AT&C losses have actually increased from 25.7% in 2016–17 to 36.01% in 2018–19.
- The gap between ACS and ARR of DISCOMs has increased from Rs 0.81 per unit in 2016–17 to Rs 1.41 per unit in 2018–19.
- To avoid fiscal risk, the State needs to substantially improve its performance on UDAY barometers.
- Robust systemic reforms are also required to ensure that power subsidy reaches intended beneficiaries without leakage.

Local Bodies

- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Public Sector Undertakings[4]

- Out of 63 PSUs, 28 submitted their accounts for the year 2017–18 for audit by CAG on or before 31 December 2018 whereas accounts of 35 PSUs were in arrears.
- The State Government provided Rs 1,431.94 crore (Equity: Rs 10.03 crore, Loan: Rs 53.08 crore, Grant: Rs 375.81 crore, and Subsidy: Rs 993.02 crore) to 11 of the 27 working State PSUs, accounts of which had not been finalised by 31 December 2018.
- The State Government may take appropriate decisions regarding the winding up of the 12 PSUs (excluding four PSUs under liquidation) which have been non-functional for the last 6 to 28 years.
- The profit of Rs 280.85 crore earned in 2015–16 by the 38 working SPSUs (other than power sector PSUs) covered in this report, increased to Rs 330.40 crore in 2017–18. According to latest finalised accounts of these SPSUs, 18 earned profit of Rs 380.01 crore and 8 incurred losses of Rs 49.61 crore.
- Of the 18 PSUs in profit, 16 earned 98.3% of the profit (Rs 373.67 crore) either due to monopolistic advantage or to assured income from budgetary support, centage, commission, interest on bank deposits etc. Thus, from the point of view of audit, these PSUs are strongly dependent on the State Government for their sustainability.

High Pollution (PM 10) as Monitored under NAMP

- Cities with a million-plus population in the State have far exceeded the NAMP threshold for PM 10 (of less than 90 micrograms per cubic metre).
- The State needs to chalk out a plan to improve the ease of breathing in such cities while they emerge as economic centres and investment hubs.

PM10 Micrograms Per Cubic Metre

City	*2016*	*2017*	*2018*	*Average*
Bhopal	89	93	135	105.7
Gwalior	96	110	134	113.3
Indore	95	80	88	87.7
Jabalpur	71	74	119	88.0

Reform Cohort of the State

- For the purpose of analysis, the States are grouped on the basis of per capita income. Madhya Pradesh is part of the group which includes Bihar, Uttar Pradesh, Jharkhand and Odisha.

Reform Signposts

- **Given its revenue surplus, prioritising essential social sector expenditures may allow MP to overcome its limitations and join the States in its cohort.**
- Continued fiscal laxity is visible in terms of the OTR TGR (9.1%) and buoyancy (0.64) of MP which is lower than the OTR TGR of the cohort (10.9%) and buoyancy (1.12). The OTR/TRR of the State (33.9%) is second best in its class (cohort average 32%). Also the OTR/ORR (79.3%) of MP is above the class average of 77.8%.
- The gap between TRE TGR and the TGR of OTR and ORR may lead to fiscal instability. **Hence, strengthening OTR and ORR and streamlining procedures is the right way forward for MP.**
- The share of agriculture, forestry, and fishing sectors in GSVA (at current prices) has increased from 33% in 2011–12 to 40% in 2018–19. **The State needs to diversify its economic base and strengthen other sectors, which would also lead to generation of more skilled jobs.**
- **There is a need to strengthen the administrative system and effective service delivery. Comprehensive re-prioritisation of expenditure and more focused approach on the 'aspirational' blocks and districts of the State is needed for social parameters to improve.**
- **Madhya Pradesh has been facing severe shortage of healthcare professionals. For a sustainable solution, the State may explore Maharashtra's model of recognising diplomas from the College of Physicians and Surgeons as adequate for converting MBBS doctors to specialists who may then serve in remote and tribal areas. Besides, telemedicine could be promoted to fill the need gap in such areas.**

Notes

1 The 52nd district, Niwari, was carved out of Tikamgarh district in 2018.

2 GOI (2018), *Rural Health Statistics 2018*, Ministry of Health and Family Welfare, Government of India.

3 FC-XV classified all States into cohorts based on fiscal, social, and general parameters of States with similar characteristics.

4 CAG (2019), *Report of the Comptroller and Auditor General of India on Public Sector Undertakings for the year ended 31 March 2018,* Government of Madhya Pradesh.

MH-1.A: Overview

POPULATION
112.4 million
9.4%
Of population across all States

AREA
3,07,713 sq km
9.4%
Of area across all States

7.2%
Of forest area across all States

FOREST COVER
50,778 sq km
16.5%
Of the State's own area is under forest

0.2% ↑
Forest cover changed from 2017 to 2019

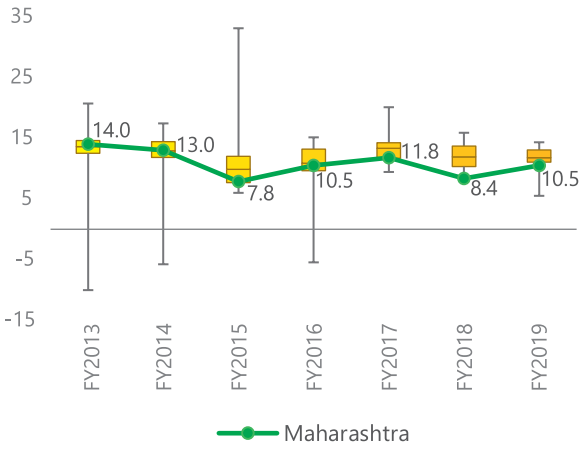
PER CAPITA GSDP
Rs 2,16,376
Rs 1,40,422
Average across all States

TAX TO GSDP
7.1%
6.3%
Average across all States

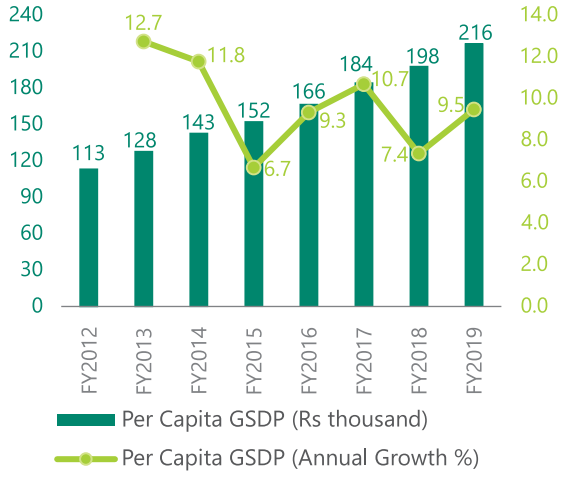
CHILDREN PER WOMAN
1.9
2.2
Average across all States

URBANISATION RATE
45.2%
31.1%
All India average

MH-1.B: Growth rate of GSDP (at current prices, %)



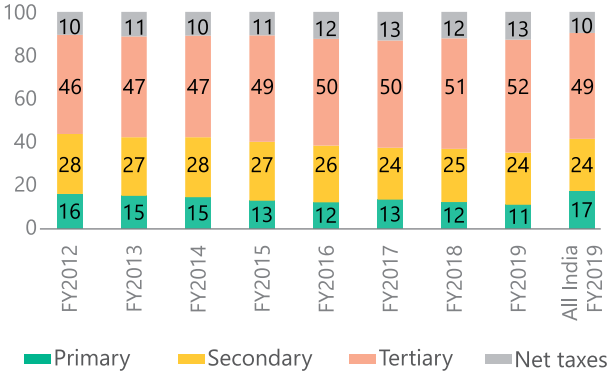
MH-1.C: Per capita GSDP (at current prices)



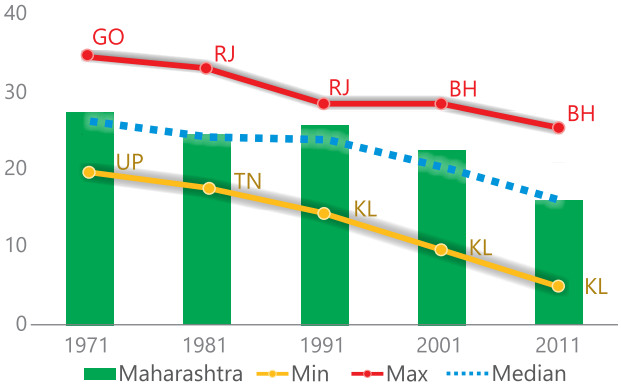
MH-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	12,80,369	77,44,945	16.5
2012–13	14,59,629	88,27,195	16.5
2013–14	16,49,647	1,00,07,392	16.5
2014–15	17,79,138	1,09,93,257	16.2
2015–16	19,66,225	1,21,91,256	16.1
2016–17	21,98,324	1,37,80,737	16.0
2017–18	23,82,570	1,54,20,126	15.5
2018–19	26,32,792	1,72,83,813	15.2

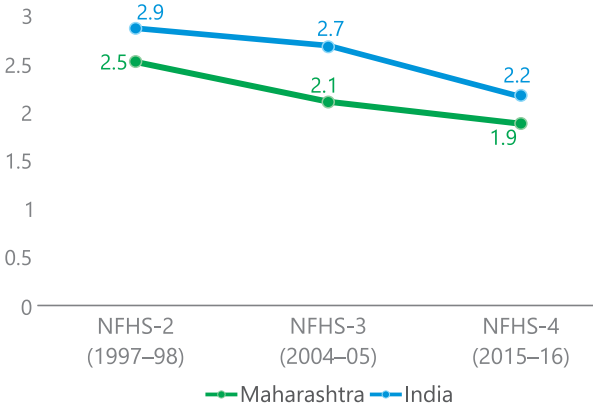
MH-1.E: Sectoral Contribution to GSDP (at current prices, %)



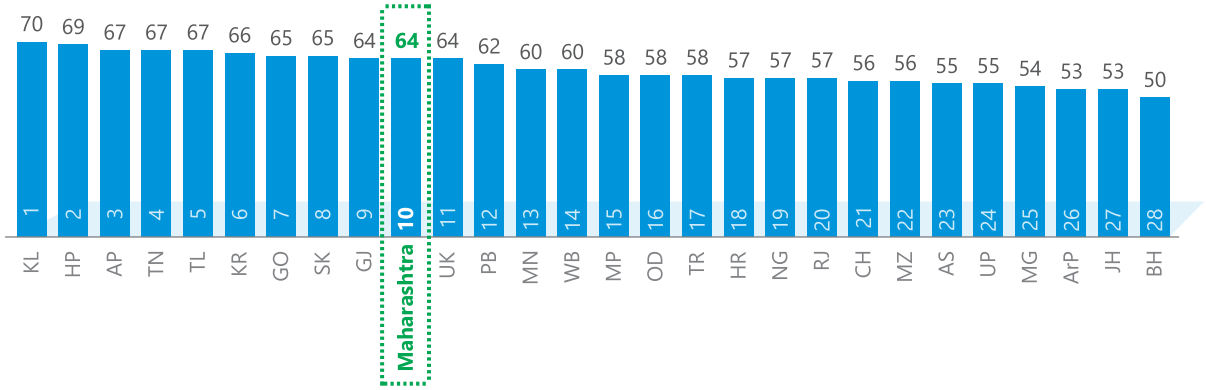
MH-2.A: Decadal Growth in Population (%)



MH-2.B: Total Fertility Rate (children per woman)



MH-2.C: SDG Index of NITI Aayog (2019)



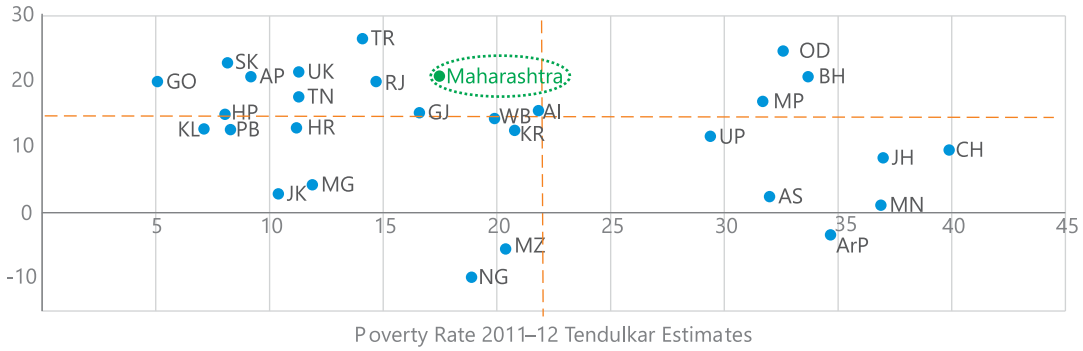
MH-2.D: Key Social Indicators

	MH	INDIA
EDUCATION		
Literacy rate (%)[a]	82.3	73.0
Pupil–Teacher ratio[b] (in Primary)	24.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	70.7	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	91.5	89.9
Availability of toilets[d] (household %)	71.2	61.1

	MH	INDIA
HEALTH		
Life expectancy (years)[g]	72.5	69.0
Sex ratio (♀ per 1000 ♂)[a]	929	943
Underweight children (%)[d]	36.0	35.8
Stunting among children (%)[d]	34.4	38.4
Anaemia among children (%)[d]	53.8	58.6
Women with below normal BMI (%)[e,d]	23.5	22.9
Anaemia among Women (%)[d]	48.0	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	19.0	32.0
Institutional Deliveries (%)[d]	90.3	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	4.3	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,069	1,218 *(All States)*

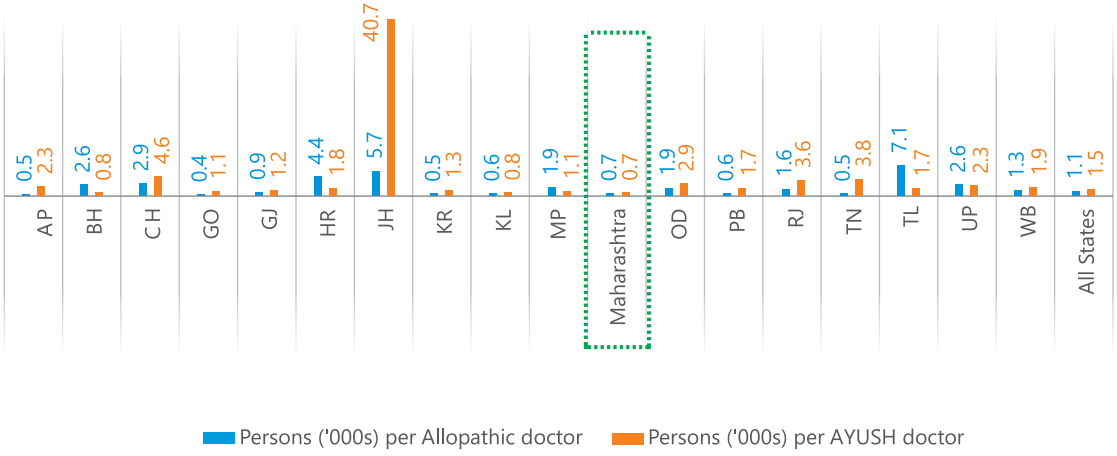
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

MH-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



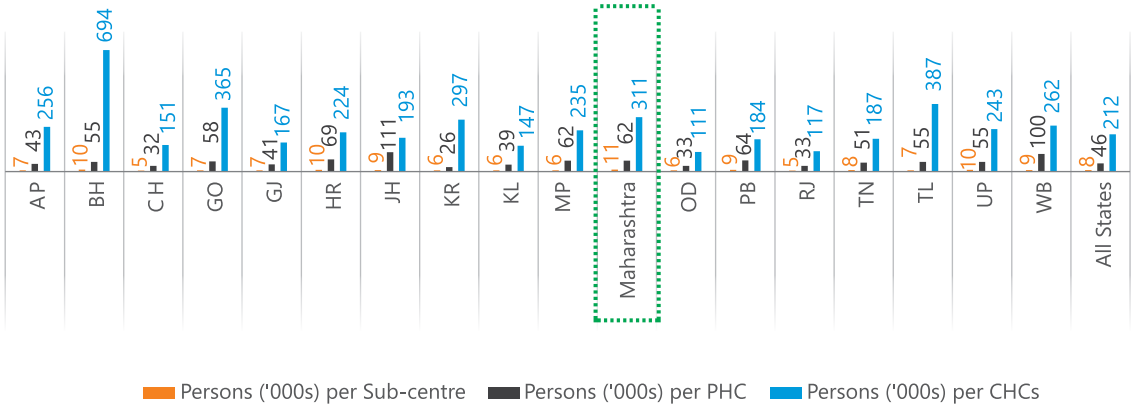
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

MH-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



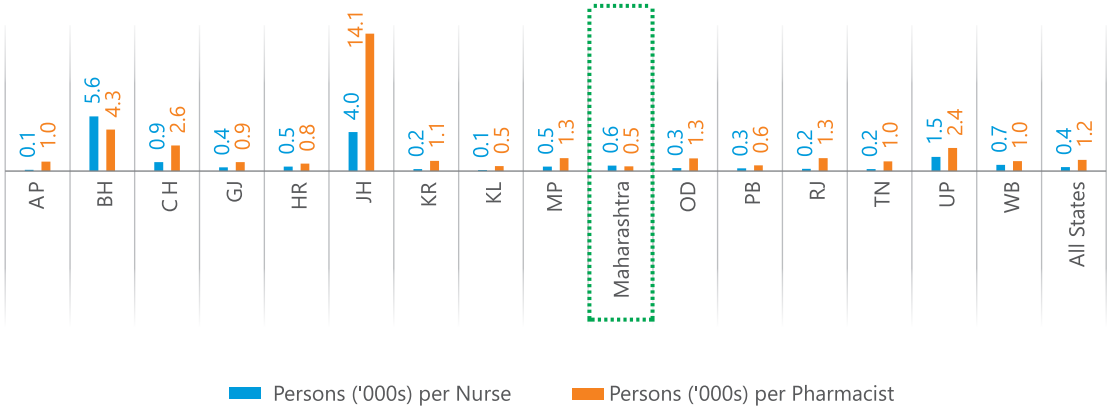
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MH-3.B: Persons ('000s) per Sub-centre/PHC/CHC



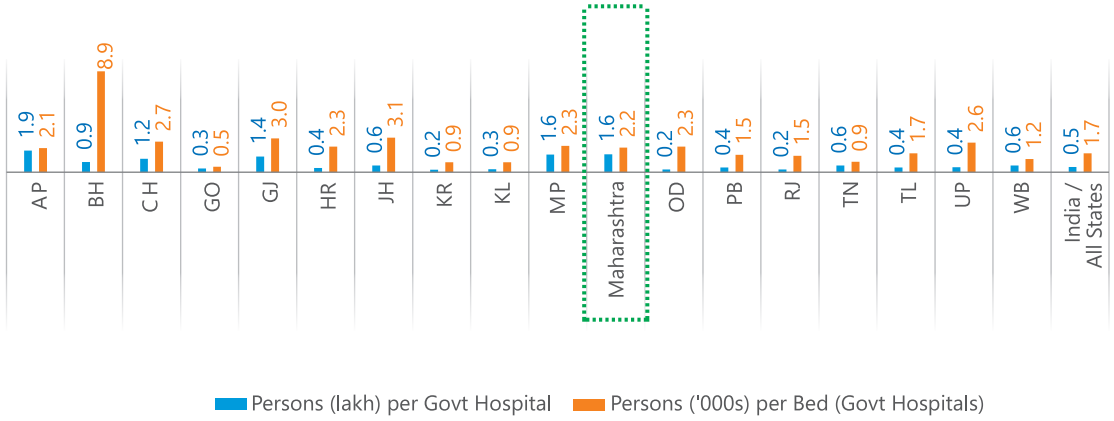
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MH-3.C: Persons ('000s) per Nurse/ Pharmacist



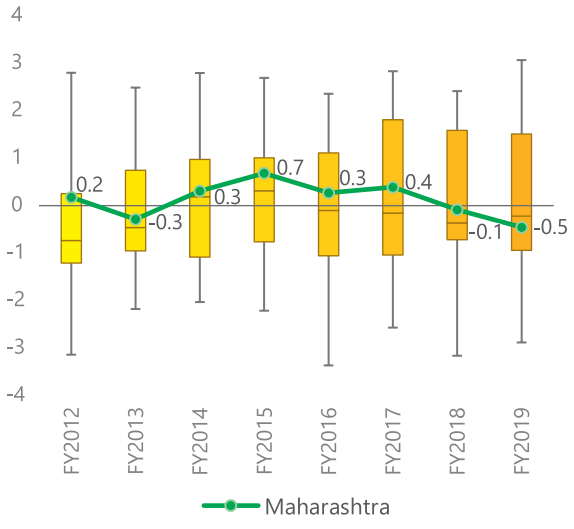
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MH-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

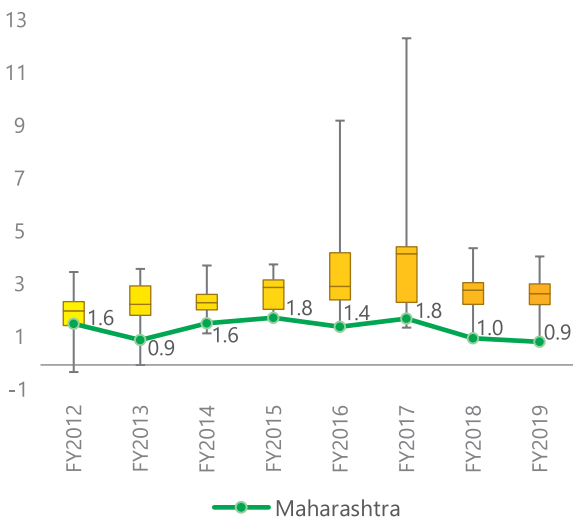


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

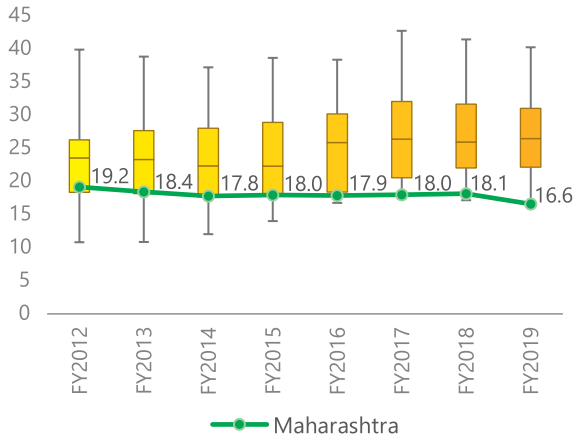
MH-4.A: Revenue Deficit as % of GSDP



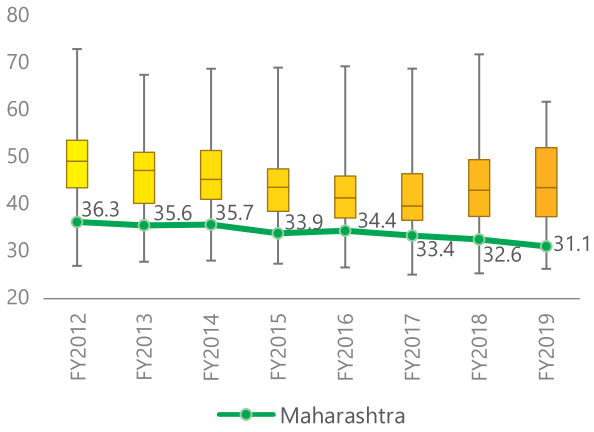
MH-4.B: Fiscal Deficit as % of GSDP



MH-4.C: Outstanding Debt as % of GSDP

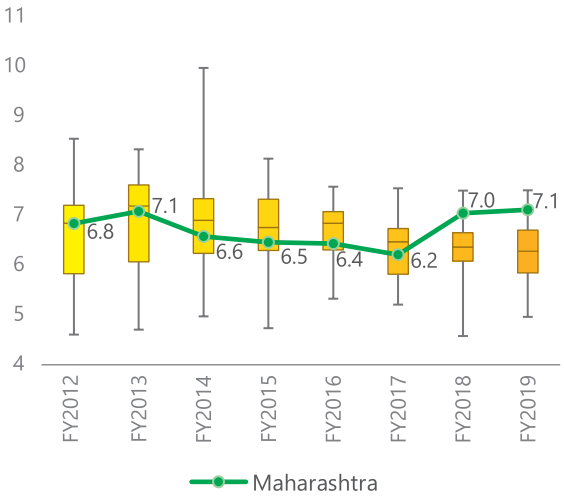


MH-4.D: Committed Expenditure as a % of Revenue Expenditure

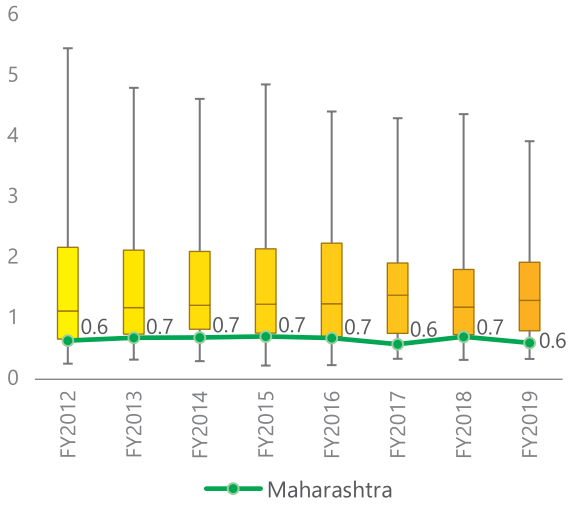


Note: Committed expenditure includes salaries, interest payments, and pensions

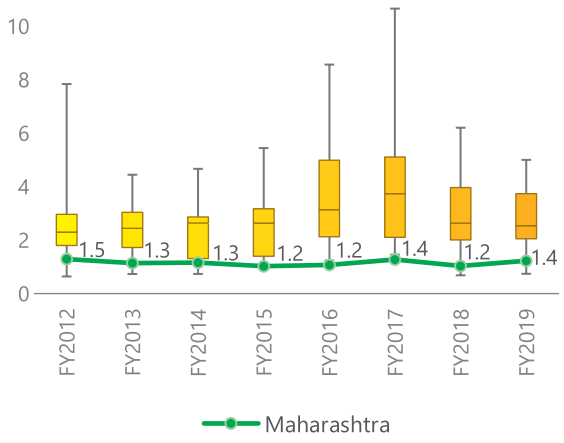
MH-4.E: OTR as % of GSDP



MH-4.F: NTR as % of GSDP



MH-4.G: Capital Expenditure to GSDP Ratio



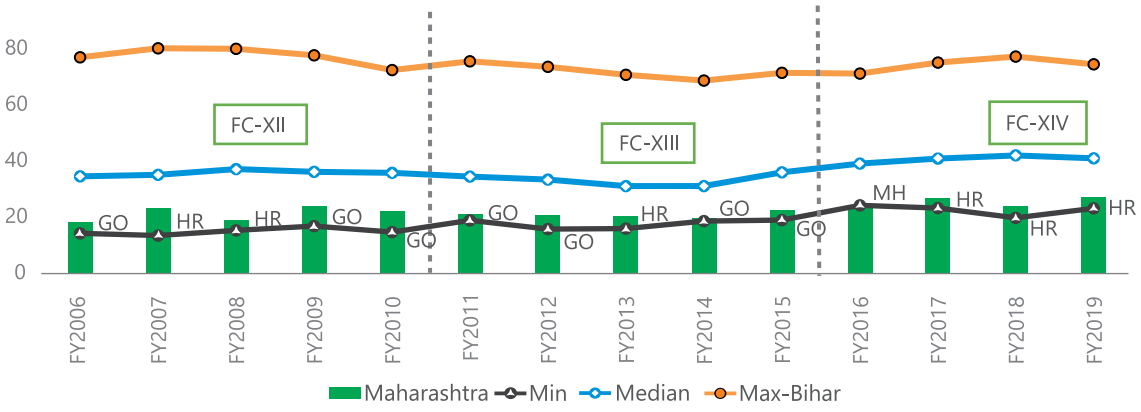
MH-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	2,16,376	1,41,099
Indicators as a percentage of GSDP		
TRR	10.6	13.4
OTR	7.1	6.4
NTR	0.6	1.1
TE	11.5	16.1
ES	2.0	3.1
SS	4.2	5.4
GS	3.2	4.7
Committed Expenditure	3.2	5.8
Capital Expenditure	1.4	2.5
FD	0.9	2.5
RD	–0.5	0.2
OD	16.6	25.0

MH-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Maharashtra	11.6	12.0	10.6
GS Average	13.6	13.1	10.3

MH-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions envisaged in the Eleventh Schedule of the Constitution, 24 were devolved to RLBs.
- All 18 functions of the Twelfth Schedule of the Constitution were devolved to ULBs.

Auditing Status

- Auditing of accounts was completed till 2016–17 for RLBs and till 2017–18 for ULBs.

Property Tax Board

- Although the State set up its PTB in 2011 (as recommended by FC-XIII), it is yet to function effectively.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
5	2	5	3

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

Third SFC (2006–07 to 2010–11)

- The State Government is currently implementing the recommendations of the Third SFC.

Fourth SFC (2011–12 to 2015–16)

- According to the *Overview of State Finance Commission Reports* by the National Institute of Public Finance and Policy, the report of the Fourth SFC was delayed.
- The difference between the date of actual submission and the mandated date of submission as per the ToR was 60 months in case of Fourth SFC of Maharashtra.
- The State government rejected the recommendations of the Fourth SFC.
- The Government of Maharashtra contended that the Fourth SFC had recommended a straight devolution of 40% of the State resources to local bodies without calculating the amount that

could be effectively made available by the State Government considering its own commitments and the position of its financial resources.

Fifth SFC (2019–20 to 2024–25)

- The Fifth SFC (2019–20 to 2024–25) constituted in March 2018, has submitted the report. The ATR is yet to be tabled in the State Legislature.

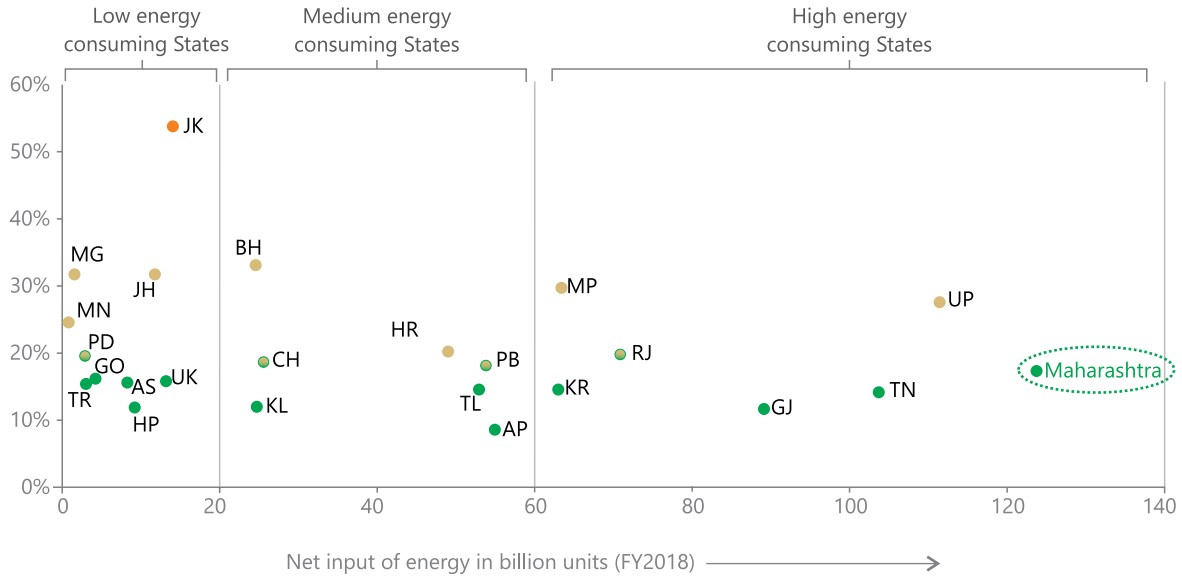
Debt and Losses

- The State met its targets on AT&C losses. However, the ACS–ARR target was not met for the year 2018–19.
- The State has taken over DISCOM debt under UDAY to the tune of Rs 4,960 crore during 2016–17.
- As on 31 March 2019. The total borrowings by DISCOMs (including borrowing from the State Government of Rs 2,004 crore) are Rs 35,196 crore (accounting for 7.4% of DISCOM borrowings across all States).

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT & C Losses (%)	14.73	14.98
ACS–ARR Gap (Rs per unit)	–0.16	–0.39

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India

MH-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Maharashtra has recommended that the State share in overall divisible pool of taxes be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Weights (%)*
i)	Population (2011)	35.0
ii)	Area	15.0
iii)	Income Distance	15.0
iv)	Deprivation (SECC Rural): Total deprived rural households of the State as a percent to total deprived households of all states using SECC data	15.0
v)	Urbanisation	10.0
vi)	Fiscal Efficiency (Fiscal Discipline+Tax Effort)	7.5
vii)	Tree cover	2.5

FRBM Compliance

- The State implemented its FRBM Act in 2006, amended in the years 2008 and 2016. The State has been adhering to its FRBM limit in the recent years.
- The State has since been a front-runner in terms of better fiscal management and its fiscal deficit (FD) continues to be well within the limit of 3% of GSDP.
- The Debt–GSDP ratio is also well within the limit set by the Maharashtra Fiscal Responsibility and Budgetary Management Rules (MFRBM, 2011). The State seems to have made a conscious effort to change the composition of debt from high-cost debt towards lower cost borrowings in the past 10 years.

Ratios in %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	26.1	25.8	25.5	25.3	Not Set	Not Set	Not Set
Actually achieved	19.2	18.4	17.8	18.0	17.9	18.0	18.1
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Actually achieved	1.6	0.9	1.6	1.8	1.4	1.8	1.0

Source: Government of Maharashtra

Power Sector

- The *Energy Statistics for 2017* reported by the Ministry of New and Renewable Energy, Government of India indicate that Maharashtra has a potential of about 64.32 GW of solar energy, out of which 0.39 GW have already been harnessed. The State should speed up the execution of the ongoing solar projects to exploit the potential and increase the revenue earnings.

Contingent Liabilities

- The Co-operative Institutions continue to have dominant shares in the receipt of guarantees. Within the co-operative sector, guarantees given to sugar and cotton cooperatives are the highest. The State needs to ensure systematic assessment or rating of projects before giving guarantees.

Million-Plus Cities

- Across all States, Maharashtra has the highest number of million-plus cities (Aurangabad, Kalyan-Dombivli, Nagpur, Nashik, Navi-Mumbai, Pimpri Chinchwad, Pune, Thane, Greater Mumbai, and Vasai-Virar city).
- Cities are crucial to the socio-economic future of the country. The State should promote investments in infrastructure and logistics to build them as economic centres and ensure quality of life of citizens.
- While cities like Mumbai have ample internal resources, local bodies need to generate more Own Tax Receipts (OTR) for creating, upgrading, and maintaining critical infrastructure for better investment climate. Upgrading of roads, bridges, rail, and sewerage systems, urban flood management, solid waste management, improvement of slums, open spaces and parks, etc., need to be viewed comprehensively through the sustainable cities framework. This will entail putting the ULBs in the driver seat.

Rank on the SDG Index of the NITI Aayog (2019)

- According to the SDG Index of the NITI Aayog, Maharashtra is placed 10th across states with an SDG score of 64 (All India score being 60). The State leads in SDG–4 Quality Education, SDG–6 Clean Water and Sanitation, SDG–7 Affordable and Clean Energy, SDG–8 Decent Work and Economic Growth, SDG–10-Reduced Inequality, SDG–15 Life on Land, and SDG–16 Peace, Justice and Strong Institutions. However, the State needs to improve on SDG–1 No Poverty, SDG–2 Zero Hunger, SDG 5 Gender Equality and SDG–11 Sustainable Cities and Communities.

Low NTR–GSDP Ratio

- The State has low NTR–GSDP ratio among GS. The State needs to take measures to enhance cost recoveries from provision of economic and social services.

NTR–GSDP Ratio, 2018–19

Maharashtra	*GS*	*Quartile 1*	*Median*	*Quartile 3*	*All States*
0.6	1.1	0.8	1.3	1.93	1.2

Proper Accounting for Parastatals

- The State, in its Memorandum, has stated that a large number of parastatals like the Mumbai Metropolitan Regional Development Authority (MMRDA), Maharashtra State Road Development Authority (MSRDC), City and Industrial Development Corporation (CIDCO), Maharashtra Industrial Development Corporation (MIDC), etc. invested over Rs 2.07 lakh crore (from 2013–14 to 2018–19) into the creation of infrastructure which is not reflected in the State Budgets.

- The State needs to follow procedure to ensure accountability of such finances to the State Legislature. Otherwise, the risk of extra budgetary borrowings on the fiscal capacities of the State would increase in the long run.

Local Bodies

- The State needs to take measures for the effective decentralisation of the 3Fs—Funds, Functions, and Functionaries.
- The State needs to transfer all 29 functions enshrined in the Eleventh Schedule of the Constitution to PRIs.
- The Fourth SFC noted long-standing vacancies in administrative and technical posts, which hampered data collection and analysis. Lack of authentic and updated data was a major hindrance in the functioning of the Commission. The State needs to address these issues for future SFCs to work effectively.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The Government of Maharashtra must constitute SFCs, act upon their recommendations and lay the explanatory memorandum as to the action taken thereon before the State legislature on or before March 2024.

Agriculture, Water Management, and Irrigation

- The State needs to promote watershed management strategies along with water-saving technologies.
- The consecutive drought years of 2014–15 and 2015–16 resulted in a negative growth of agriculture value added. Repeated crop failure due to drought coupled with low prices made farmers default on credit and perpetuated a vicious cycle of indebtedness and farmer distress.
- With only 18% of its cropped area under irrigation (as compared to the national average of 48.6%), Maharashtra is placed third in the list of drought-prone States.

Percentage of Cropped Area under Irrigation

Maharashtra	*Quartile 1*	*Median*	*Quartile 3*	*Average of All States*
18	18.7	34.2	49.5	48.6

Source: GOI (2017), *Agricultural Statistics 2017*, Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India.

- Although expenditure on major and minor irrigation constituted between 27% and 33% of capital expenditure during 2012–2017, the outcomes were not commensurate with the spending. With a number of stranded irrigation initiatives, the State has been saddled with over 190 incomplete projects for over 20 years.

Sharp Social and Economic Disparity

- Despite better fiscal and macro indicators than many other GS, Maharashtra is yet to bridge the huge development disparity between the Vidarbha and Marathawada Region and the rest of the State. Of the 36 districts in the State, the 16 falling in the Vidarbha and Marathawada Region report per capita incomes that are lower than both the State and national averages. A strong and focussed approach is required from the State Government to bridge this development deficit.

High Pollution (PM 10) As Monitored Under NAMP

- Million-plus cities in the State have far exceeded the NAMP threshold for PM 10 (of less than 90 micrograms per cubic metre). The State needs to chalk out a plan to improve the ease of breathing in these cities while they emerge as economic centres and investment hubs.

PM10 Micrograms Per Cubic Metre

City	*2016*	*2017*	*2018*	*Average*
Mumbai	119	151	166	145.3
Nagpur	118	102	103	107.7
Pune	107	102	106	105.0
Thane	122	125	108	118.3

Sex Ratio

- Data from decadal censuses shows that sex ratio (females per thousand males) in Maharashtra is not favourable and has in fact decreased over the years. Given that Maharashtra follows on the heels of Uttar Pradesh as the most populous State of India, the absolute number of missing women is significant. The State needs to devise a definite and immediate action plan to address this issue.

Maharashtra	*1981*	*1991*	*2001*	*2011*
Sex Ratio	937	934	922	929

Investment of Surplus Cash Balance

- The State has to devise the most suitable means to utilise its cash surplus in either return bearing treasury bills or in the development of backward regions.

Power Sector

- The State is required to enhance and upgrade its performance in UDAY Barometers of Smart Metering (above 200 and up to 500 kW-h), Smart Metering (above 500 kW-h), and DT Metering (Urban).

Reform Cohort of the State

- For the purpose of analysis, the States were grouped on the basis of per capita income. Maharashtra is part of the group which includes Gujarat, Tamil Nadu, Telangana, Kerala, Karnataka, Haryana, and Goa.

Reform Signposts

- Maharashtra has significant cash balance. Recent CAG reports indicate budget savings of 12%–14% at the end of each financial year. The State can therefore clearly invest these resources in initiatives to reduce inter-regional disparities and improve social indicators.
- Maharashtra spends less per capita on drinking water and health as compared to other States in its class, which reflects in relatively poor health indicators of its population. Despite huge annual cash balance, social sector expenditure vis-à-vis the needs, particularly in backward regions like Marathwada and Vidarbha, is abysmal.

- Health expenditure for the class (of eight States) as a percentage of Total Revenue Expenditure (TRE) has risen over the years. However, at 4.5% for Maharashtra it remains below the national average (5.3%) as well as those for Haryana (4.8%) and Karnataka (5.1%).
- **Maharashtra must take corrective action to arrest the decline in its OTR from 19.44% in 2009–2013 to 8.16% in 2014–2017. Furthermore, it has very high Off Budget Borrowing (OBB) through parastatals yielding an average return of 0.04% (2012–2017) against an average interest cost of 7.6 %. This must be carefully managed to avoid impending fiscal shock.**
- **Besides, it could tap into the rich cash balances available with parastatals such as Municipal Corporation of Greater Mumbai for better social infrastructure in and around the megacity to sustain economic activity during and after Covid-19.**
- **With Debt–GSDP ratio of 17%–18%, the State has headroom to borrow. It may use this capacity to reverse the pandemic-driven out-migration of labour and spur industrial activity to revive the State's economy by innovatively deploying such additional resources.**

MN-1.A: Overview

POPULATION
2.9 million
0.2%
Of population across all States

AREA
22,327 sq km
0.7%
Of area across all States

2.4%
Of forest area across all States

FOREST COVER
16,847 sq km
75.5%
Of the State's own area is under forest

2.9% ↓
Forest cover changed from 2017 to 2019

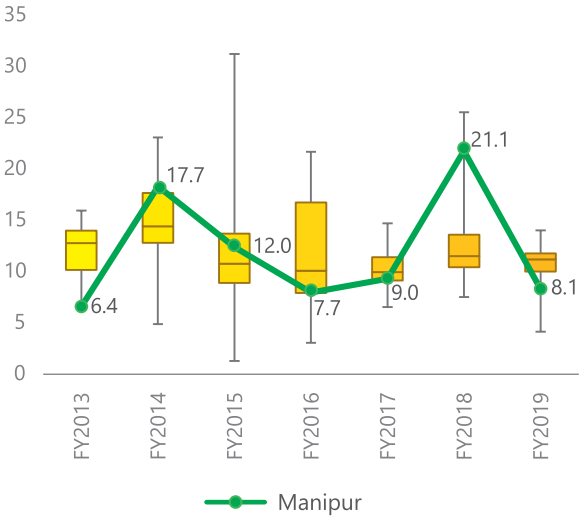
PER CAPITA GSDP
Rs 82,792
Rs 1,40,422
Average across all States

TAX TO GSDP
3.8%
6.3%
Average across all States

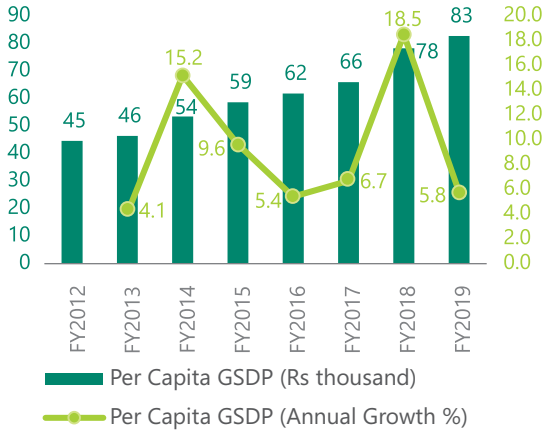
CHILDREN PER WOMAN
2.6
2.2
Average across all States

URBANISATION RATE
30.2%
31.1%
All India average

MN-1.B: Growth rate of GSDP (at current prices, %)



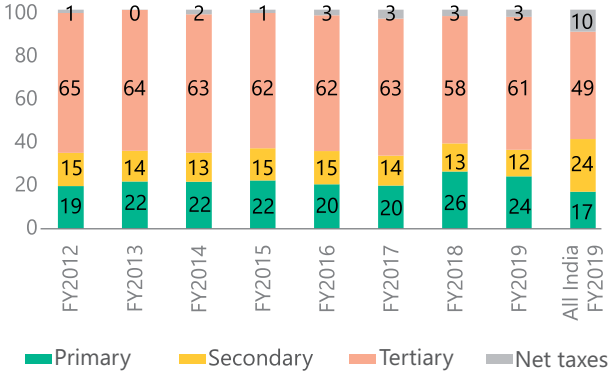
MN-1.C: Per capita GSDP (at current prices)



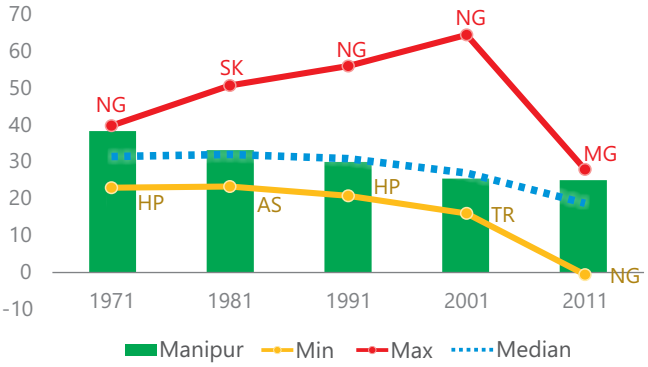
MN-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All NEHS*	*Share (%) of State in NEHS*
2011–12	12,915	5,03,182	2.6
2012–13	13,743	5,63,081	2.4
2013–14	16,182	6,37,264	2.5
2014–15	18,129	6,95,474	2.6
2015–16	19,531	7,88,321	2.5
2016–17	21,294	8,67,648	2.5
2017–18	25,789	9,74,240	2.7
2018–19	27,869	10,82,901	2.6

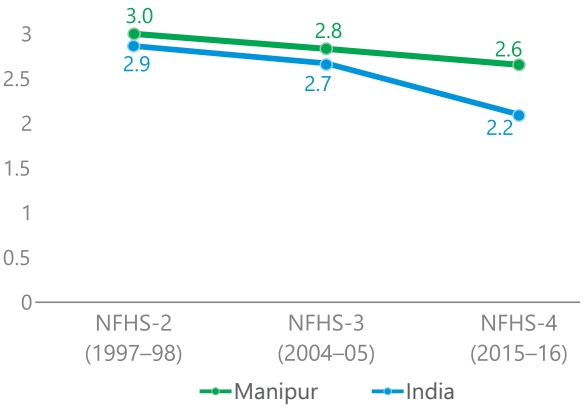
MN-1.E: Sectoral Contribution to GSDP (at current prices, %)



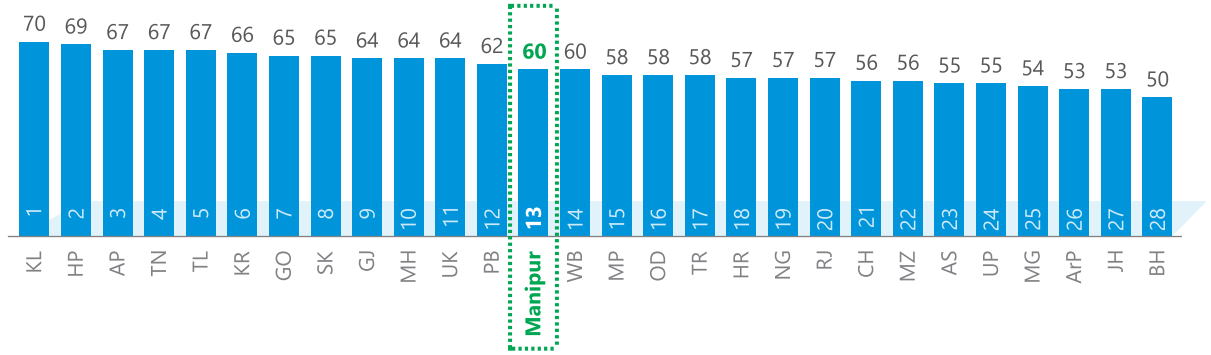
MN-2.A: Decadal Growth in Population (%)



MN-2.B: Total Fertility Rate (children per woman)



MN-2.C: SDG Index of NITI Aayog (2019)



MN-2.D: Key Social Indicators

EDUCATION

	MN	INDIA
Literacy rate (%)[a]	79.2	73.0
Pupil–Teacher ratio[b] (in Primary)	9.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	64.3	55.4

WATER & SANITATION

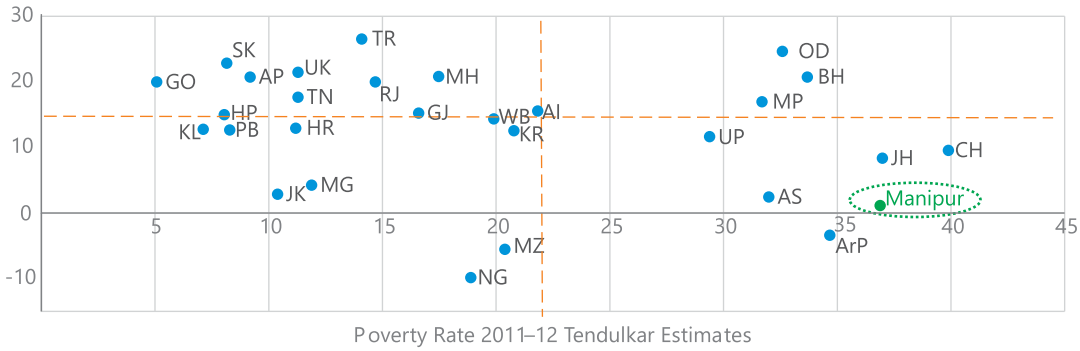
	MN	INDIA
Availability of safe drinking water[d] (household %)	41.6	89.9
Availability of toilets[d] (household %)	98.7	61.1

HEALTH

	MN	INDIA
Sex ratio[a] (females per 1000 males)	985	943
Underweight children (%)[d]	13.8	35.8
Stunting among children (%)[d]	28.9	38.4
Anaemia among children (%)[d]	23.9	58.6
Women with below normal BMI (%)[e,d]	8.8	22.9
Anaemia among Women (%)[d]	26.4	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	11.0	32.0
Institutional Deliveries (%)[d]	69.1	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	5.3	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,813	1,218 *(All States)*

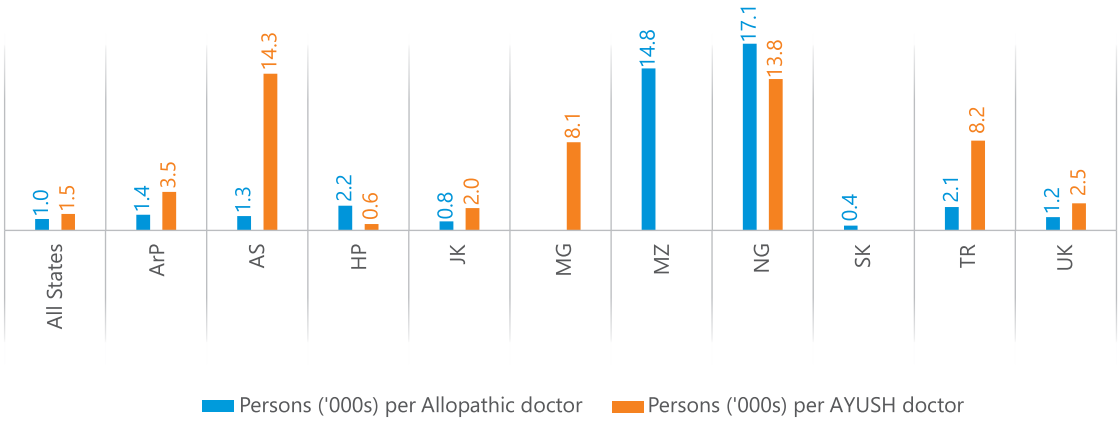
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018

MN-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



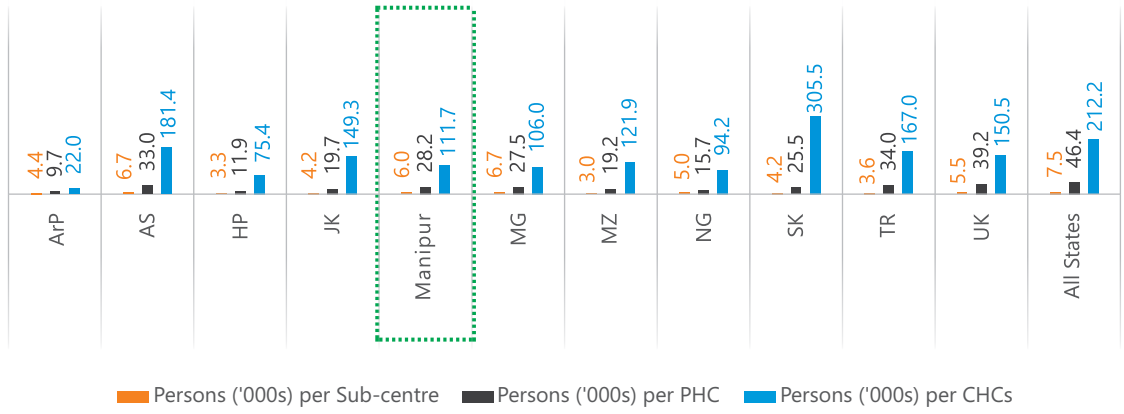
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

MN-3.A: Persons ('000s) per Allopathic and AYUSH Doctor (Information not available for Manipur)



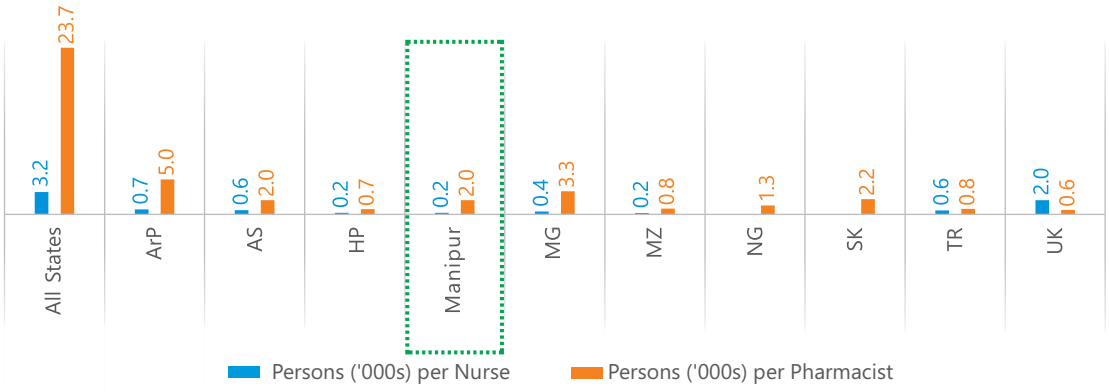
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MN-3.B: Persons ('000s) per Sub-centre/PHC/CHC



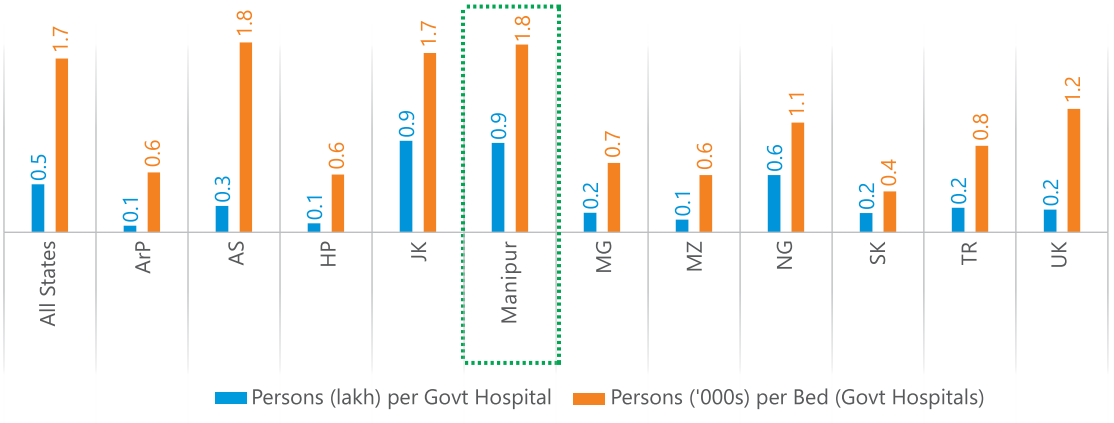
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MN-3.C: Persons ('000s) per Nurse/ Pharmacist



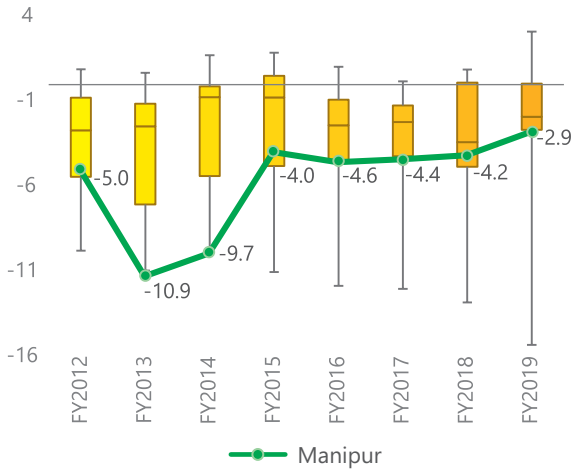
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MN-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed



Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

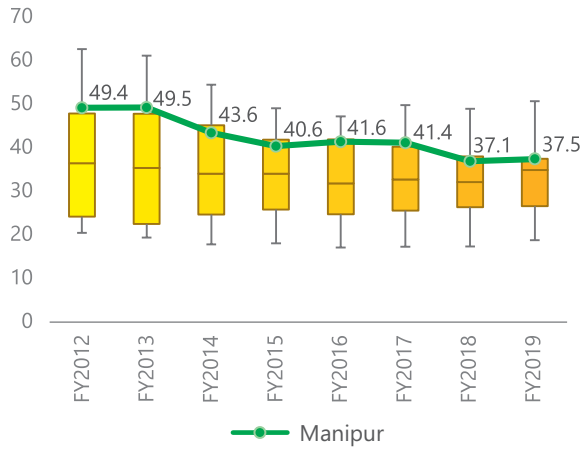
MN-4.A: Revenue Deficit as % of GSDP



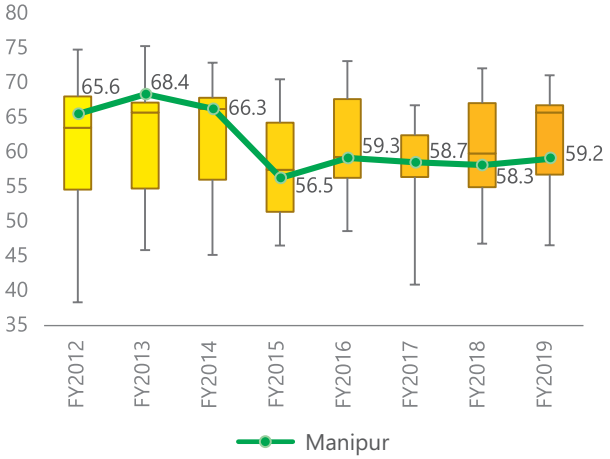
MN-4.B: Fiscal Deficit as % of GSDP



MN-4.C: Outstanding Debt as % of GSDP

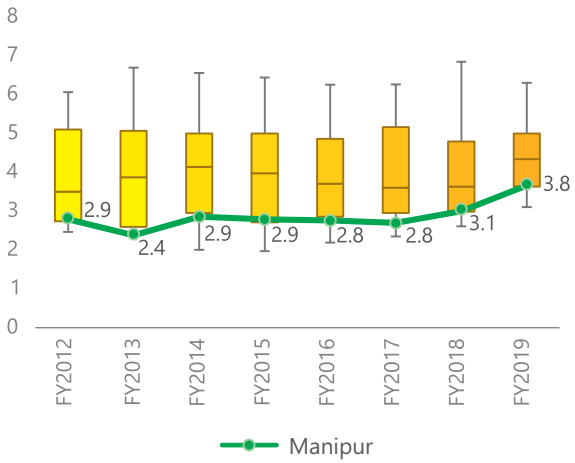


MN-4.D: Committed Expenditure as a % of Revenue Expenditure

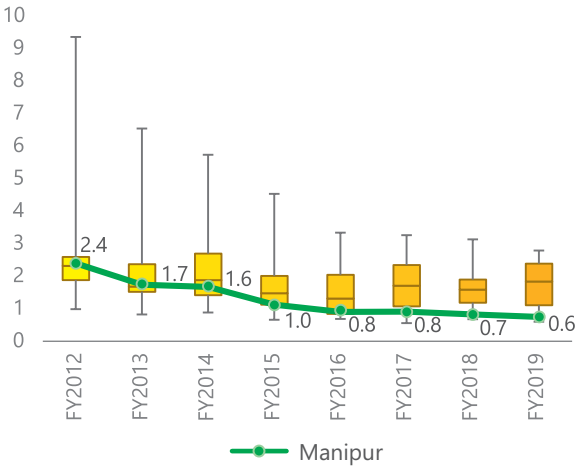


Note: Committed expenditure includes salaries, interest payments, and pensions

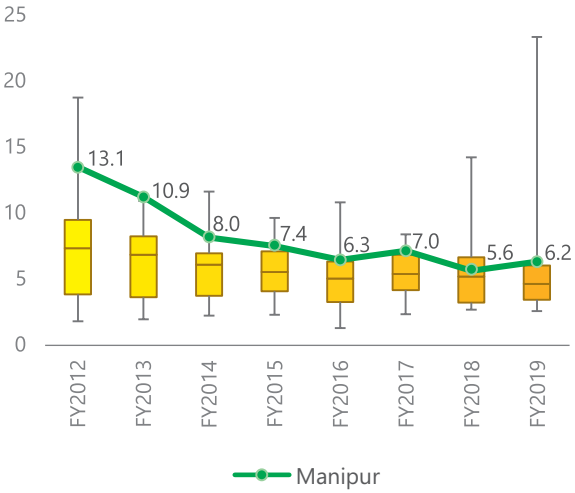
MN-4.E: OTR as % of GSDP



MN-4.F: NTR as % of GSDP



MN-4.G: Capital Expenditure to GSDP Ratio



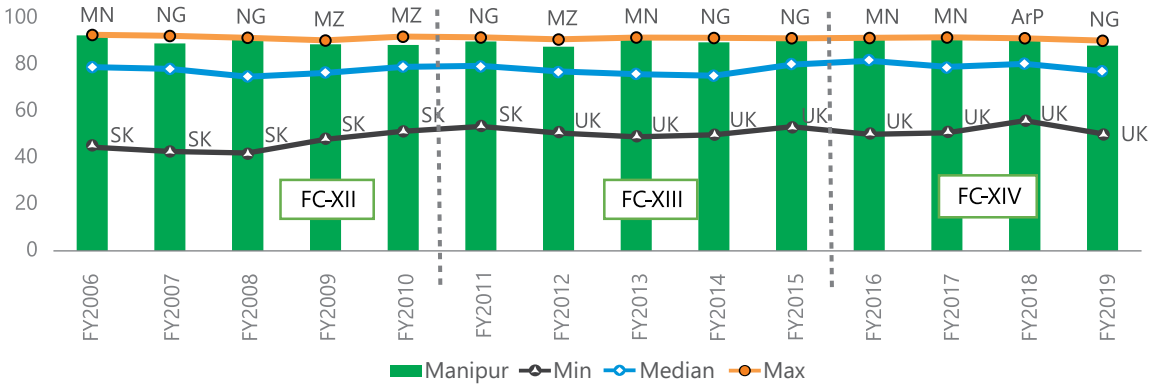
MN-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	82,792	1,30,427
Indicators as a percentage of GSDP		
TRR	37.9	23.3
OTR	3.8	5.0
NTR	0.6	2.0
TE	41.2	26.7
ES	9.1	5.0
SS	9.7	8.7
GS	14.2	8.5
Committed Expenditure	20.7	14.4
Capital Expenditure	6.2	4.3
FD	3.3	3.4
RD	–2.9	–0.9
OD	37.6	29.6

MN-4.I: TRE and ORR Gap

TGR % 2011–2019	*TRE*	*TRR*	*ORR*
Manipur	10.7	8.9	8.4
NEHS	12.6	12.1	10.7

MN-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



The Third Tier

- Besides 167 PRIs and 27 ULBs, Manipur has six Autonomous District Councils (ADCs) established under the Manipur (Hill Areas) District Councils Act, 1971 in hilly areas.

Functions Devolved

- Of the 29 functions as envisaged in the Eleventh Schedule of the Constitution, four have been devolved to RLBs.
- Of the 18 functions as envisaged in the Twelfth Schedule of the Constitution, 17 have been devolved to ULBs.
- Powers and functions of 24 departments mainly related to the socio-economic development of the hill areas have been given to ADCs.

Auditing Status

- All RLBs and ULBs have been audited till 2017–18 and ADCs till 2018–19.

Property Tax Board (PTB)

- The PTB set up in 2016 became functional in September 2018.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
16	9	10	15

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

Third SFC (2015–16 to 2019–20)

- Third SFC submitted its report in December 2014.
- The ATR was tabled on 17 December 2015.
- In line with the recommendations of the Third SFC, 10% of Manipur's own revenues and its share in central taxes and duties was devolved to RLBs and ULBs.

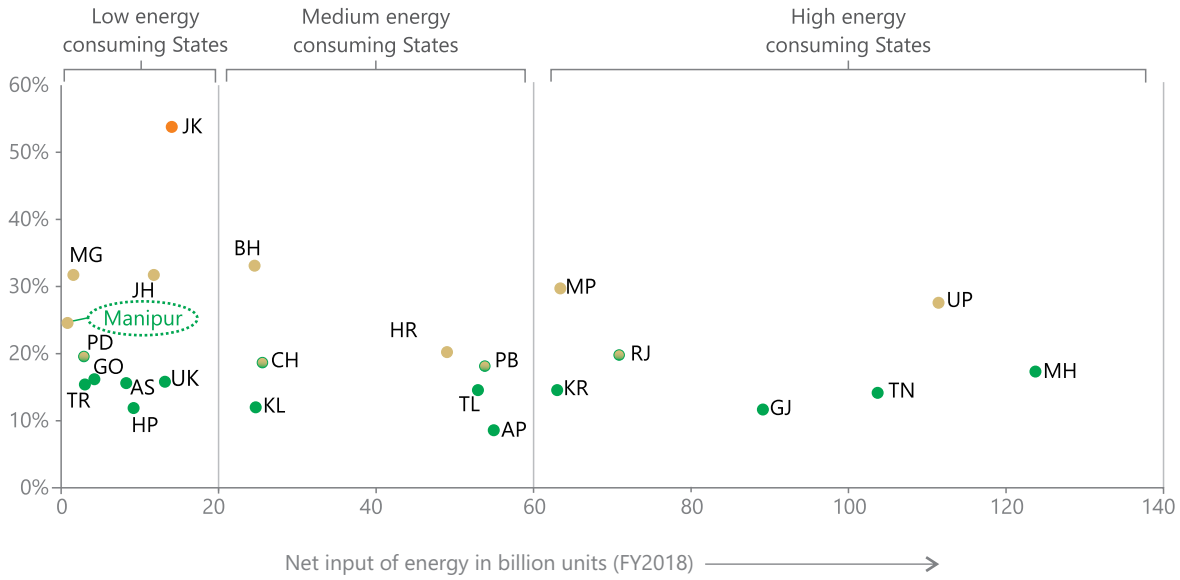
Debt and Losses

- The erstwhile Electricity Department of Manipur was unbundled and corporatised into two State-owned functionally independent successor entities with effect from 1 February 2014.
- The State signed UDAY agreement for operational efficiency only.
- The AT&C losses and ACS–ARR gap of Manipur were higher than the targets in 2018–19.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	29.79	15.0
ACS–ARR Gap (Rs per unit)	0.1	–0.36

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India

MN-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Manipur has recommended that vertical tax devolution to States be increased from 42% to 50% in light of rising share of cesses and surcharges.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population	15
ii)	Income Distance	55
iii)	Area	15
iv)	Forest Cover	15

Good GST Collections

- Manipur, being a consumer State has seen improvement in revenues with the introduction of GST.
- Manipur is receiving 91% of its OTR from VAT/GST (as opposed to NEHS average of 70%).
- The State hardly needs any GST compensation.
- The VAT/GST TGR during 2016–17 to 2018–19 was 38% (NEHS average 12%).

Tourism

- Manipur has many attractions like Loktak Lake, Keibul Lamjao National Park, variety of flora and fauna as well as a rich cultural heritage which may be used to promote tourism.
- The State has already started festivals, fairs, and events like Sangai festival, Shiruli Lily, etc., which attract both domestic and international tourists.
- Manipur could promote religious and medical tourism.
- Eco-tourism could be encouraged through incentives or PPP mode.
- Homestays, individual as well as community based, may be promoted as an alternate source of income for local people. The State Government may take active measures to link homestays with e-commerce players.

International Border

- Manipur has the potential to act as a gateway to South-East Asia as it shares long border with Myanmar. However, trade with Myanmar has reduced in the last few years as tariff concessions under the Indo-Myanmar Agreement, 1994 and the Least Developed Country (LDC) Scheme have been withdrawn.
- Integrated check-posts at Moreh need to be developed for promoting trade with Myanmar in line with the Act East policy.
- System of e-visa and money changers may be helpful for enhancing trade with Myanmar.

Natural Resources

- *Forest wealth*: Manipur is an important part of the 'Indo-Burma biodiversity hot spot' and 75.5% of its area is under forest cover.
- *Ample rainfall*: Precipitation in Manipur is far greater than the national average and should be harnessed through rain-water harvesting. Better drainage system could reduce the damage from heavy rains.
- *Diverse flora*: The State should undertake initiatives to promote its medicinal plants, bamboo products, agro-horticulture products, floriculture, and pharma industry.

Human Development Indicators

- Remarkable progress in health and education are hallmarks of Manipur's development (see MN-2.D).
- Among smaller States, Manipur is a front-runner in terms of annual incremental performance on indicators such as reduction in people living with HIV, first trimester ante-natal care registration, quality of community health centres, average occupancy of three key State-level officers, and reporting on the Integrated Disease Surveillance Programme (IDSP).[1]
- It is ranked second in terms of overall performance on the composite Health Index among smaller States.[2]

High Dependence on Union Government

- In spite of good GST collections in recent years, own-revenue to GSDP ratio of Manipur is far lower than NEHS average.
- It gets only 11.5% of its TRR from its own revenues.
- 88.5% of State's total revenue receipts are coming from the Union Government.

Revenues of Manipur vis-a-vis NEHS

S.No.	*As a percentage of GSDP in 2018–19*	*Manipur*	*NEHS*
A	Total Revenue Receipts (B+E)	37.9	23.3
B	Own Revenue Receipts (C+D)	4.4	7.0
C	Own Tax Revenue (c(i) to c(v))	3.8	5.0
i	VAT/GST	3.4	3.5
ii	Stamp Duty & Registration	0.1	0.2
iii	State Excise	0.0	0.7
iv	Electricity Duty	0.0	0.1
v	Other Taxes	0.3	0.5
D	Non Tax Revenue	0.6	2.0
E	Total Central Transfers (E(i) + E(ii))	33.6	16.3
i	Share in Central Taxes	16.9	8.1
ii	Grant in Aid	16.7	8.2

- Improvement in excise is difficult due to Manipur Liquor Prohibition Act 1991.
- However, with the third highest urbanisation rate (30.2%) in NEHS (after Mizoram and Uttarakhand), Manipur should be in a position to increase revenues from Stamp Duty and Registration Fee.
- Manipur needs to find innovative ways to enhance revenues from NTR. Its NTR TGR was –8.4% during 2011–2019 due to corporatisation of the power sector in 2014–15.

High Committed Expenditure

- Manipur has very high committed liabilities (71% of TRE) compared to NEHS (67.6%) and all States average (50.6%).
- Salaries (including GIA salary) constitute 49% of TRE against NEHS average of 44%.
- The State Government needs to rationalise and restructure its expenditure.
- Measures to reduce the burden of committed expenditure would ease up resources for other development expenditure.

Declining Capital Expenditure

- Capital expenditure as a percentage of GSDP declined from 13.1% in 2011–12 to 5.6% in 2017–18 and from 25% of total expenditure in 2011–12 to 15% in 2018–19.
- The State needs to rationalise its committed expenditure and spend more on infrastructure building.

FRBM Compliance

- The State implemented its FRBM Act in 2005 and amended it in 2006, 2010, 2011, and 2017.
- The State has not set FRBM targets in recent years.
- Manipur counts among States with very high debt burden. Its debt needs to be consolidated as per the fiscal path recommended by FC-XV.
- The loans and advances guarantee should be based on adequate cost–benefit analysis, and after a proper performance evaluation to avoid the additional fiscal burden.
- The State needs to bring down its Debt–GSDP ratio in line with New FRBM Act and FC-XV's recommendations. Hence, the State needs a credible debt path and careful calibration of expenditure for generating future streams of income.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	62.9	60.1	57.0	54.3	Not Set	Not Set	Not Set
Actually achieved	49.4	49.5	43.6	40.6	41.6	41.4	37.1
FD–GSDP							
As prescribed by the State FRBM	3.5	3.5	3.0	3.0	3.0	3.0	3.0
Actually achieved	8.1	0	–1.7	3.3	1.8	2.6	1.3

Source: Government of Manipur.

Low Per Capita Income and Very High Poverty

- Per capita GSDP of Manipur was the lowest among the NEHS in 2018–19.
- Its poverty ratio at 36.89% is the third highest in India (after Chhattisgarh and Jharkhand) by Tendulkar methodology. The poverty ratio in the State has not shown much decline from 2004–05 to 2011–12.
- Post-liberalisation, the share of agriculture in GSDP has declined without commensurate decline in share in employment, indicating low primary sector productivity.

Health and Demographic Indicators

- Manipur has the highest adult HIV prevalence of 1.15% against national prevalence of 0.26%.[3] With persistent effort, Manipur has reduced the percentage of pregnant women living with HIV from 1.3% in 2006 to 0.47% in 2017.[4] However, a more focused approach is needed to deal with the situation.
- Decline in child sex ratio (0–6 years) has been observed from 957 in 2001 to 930 in 2011. Necessary steps should be taken to arrest the dwindling number of girl children in the State.

Rising Unemployment

- Both rural and urban unemployment in Manipur are on the rise.
- The State needs to create job opportunities by attracting private capital and boosting job-oriented economic growth.

Unemployment (Usual Status) in Manipur:
Persons Unemployed per 1,000 Persons in Labour Force

Year	*Rural*		*Urban*	
	Male	*Female*	*Male*	*Female*
1977–78	9	1	12	27
1999–00	24	25	74	103
2011–12	35	50	58	129

Source: GOI (various years), *Employment and Unemployment in India*, NSSO Rounds 32nd, 55th, and 68th, National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India.

Local Bodies

- Measures should be taken to devolve all functions to local bodies as envisaged in the Constitution.
- ADCs and PRIs raise meagre revenues and are dependent on State and Union government for resources.
- Measures like upward revision of property tax rates, user charges, market fees, parking fees, etc., need to be explored.
- The State Government needs to focus on the capacity building of local bodies.

Infrastructure Deficit

- The State needs to take measures to upgrade its physical infrastructure, through PPP mode where necessary.
- *Power*: With installed capacity of 45 MW only, the State has to purchase 90% of its power requirements. Per capita power availability in the State is only 263 KWH as compared to the all India average of 938 KWH (2016–17). Shortage of power is the major cause for slow development in the State.[5]
- *Road*: Road density is much lower than national average..
- *Rail*: Rail connectivity is yet to be made operational.

Burden of Insurgency

- Police personnel account for about 40% of the total employee strength of the State Government.
- Expenditure on Police accounts for about 14% of TRE of the State (NEHS average 8%).
- Expenditure on Police in 2018–19 at Rs 1,370 crore, was higher than ORR of Rs 1,212 crore.
- The State needs to take active development measures to reduce incidence of insurgency.

Public Sector Undertakings[6]

- As on 30 September 2018, 94 accounts of 10 working PSUs were in arrears. The period of arrears ranged from 2 to 30 years.
- The State Government had invested Rs 2.10 crore in equity and disbursed grants of Rs 1,599.43 crore to six PSUs during the years for which their accounts had not been finalised.
- Timely maintenance and auditing of accounts of PSUs needs to be ensured.

Reform Signposts

- In spite of good GST collections in recent years, own-revenue to GSDP ratio of Manipur is far lower than the NEHS average. The State gets only 11.5% of its TRR from its own revenues. Hence, its dependence on the Union Government is high. **Manipur needs to tighten its tax administration and find innovative ways to enhance its own revenues**.
- Manipur has very high debt of 37.5 %. **The State needs to bring down its debt to GSDP ratio in line with New FRBM Act and FC-XV's recommendations. The State needs a credible debt path and careful calibration of expenditure for generating future streams of income.**
- The State has very high committed expenditure. On the other hand, its capital expenditure as a percentage of GSDP declined from 13.1% in 2011–12 to 5.6% in 2017–18 and from 25% of total expenditure in 2011–12 to 15% in 2018–19. **The State needs to rationalise its committed expenditure and increase spends on infrastructure building.**

Notes

1 GOI (2019), *Healthy States, Progressive India: Report of the Ranks of States and Union Territories*, NITI Aayog, the World Bank, and the Ministry of Health and Family Welfare, Government of India.

2. Ibid.

3. GOI (2015), *India HIV Estimations 2015: Technical Report*, National AIDS Control Organisation and National Institute of Medical Statistics, Indian Council of Medical Research (Department of Health Research), Ministry of Health & Family Welfare Government of India.

4. GOI (2017), *HIV Sentinel, Surveillance 2016–17, Technical Report*, National AIDS Control Organisation, Ministry of Health & Family Welfare Government of India.

5. Government of Manipur (2017), *Economic Survey of Manipur, 2016–17*, Directorate of Economics and Statistics, Government of Manipur.

6. CAG (2019), *Report No. 2 of 2019: Social, Economic (other than PSUs), Economic (PSUs), Revenue and General Sectors*, report by the Comptroller and Auditor General of India, published by the Government of Manipur.

MG-1.A: Overview

POPULATION
3.0 million
0.3%
Of population across all States

AREA
22,429 sq km
0.7%
Of area across all States

2.4%
Of forest area across all States

FOREST COVER
17,119 sq km
76.3%
Of the State's own area is under forest

0.2% ↓
Forest cover changed from 2017 to 2019

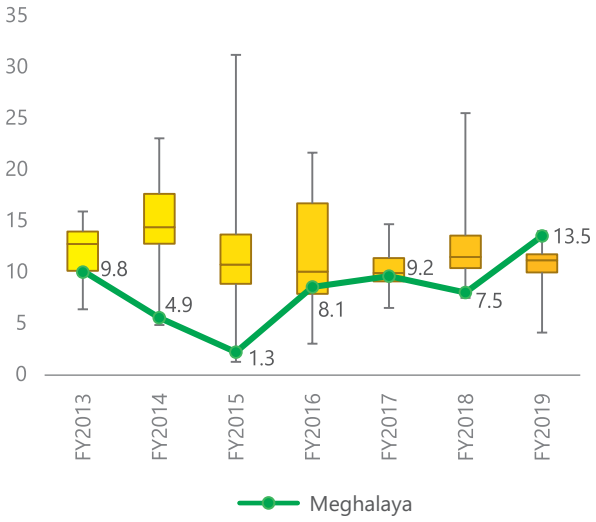
PER CAPITA GSDP
Rs 96,016
Rs 1,40,422
Average across all States

TAX TO GSDP
5.4%
6.3%
Average across all States

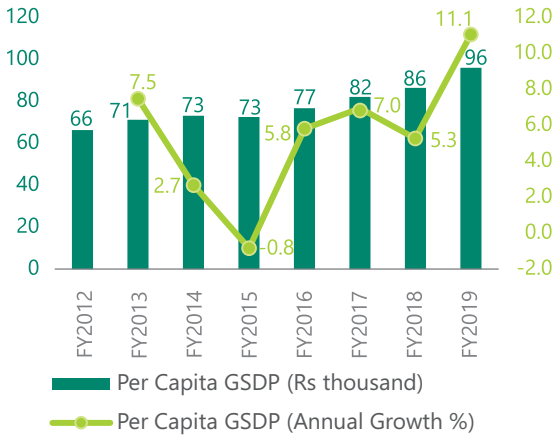
CHILDREN PER WOMAN
3.0
2.2
Average across all States

URBANISATION RATE
20.1%
31.1%
All India average

MG-1.B: Growth rate of GSDP (at current prices, %)



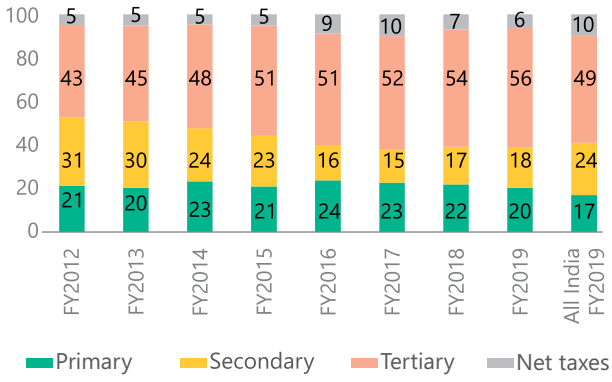
MG-1.C: Per capita GSDP (at current prices)



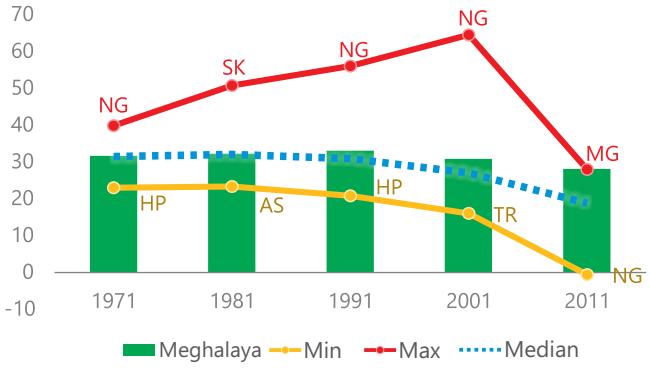
MG-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All NEHS*	*Share (%) of State in NEHS*
2011–12	19,918	5,03,182	4.0
2012–13	21,872	5,63,081	3.9
2013–14	22,938	6,37,264	3.6
2014–15	23,235	6,95,474	3.3
2015–16	25,117	7,88,321	3.2
2016–17	27,439	8,67,648	3.2
2017–18	29,508	9,74,240	3.0
2018–19	33,481	10,82,901	3.1

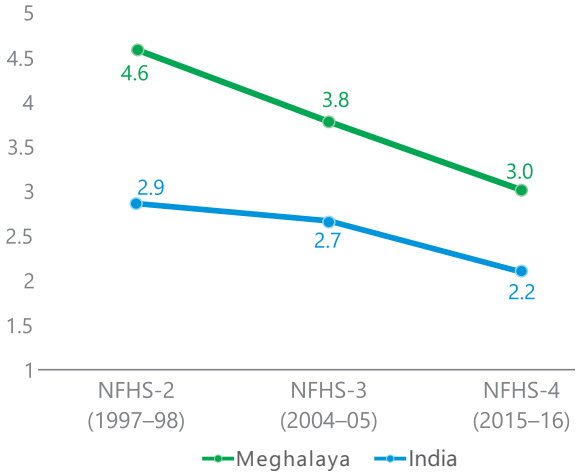
MG-1.E: Sectoral Contribution to GSDP (at current prices, %)



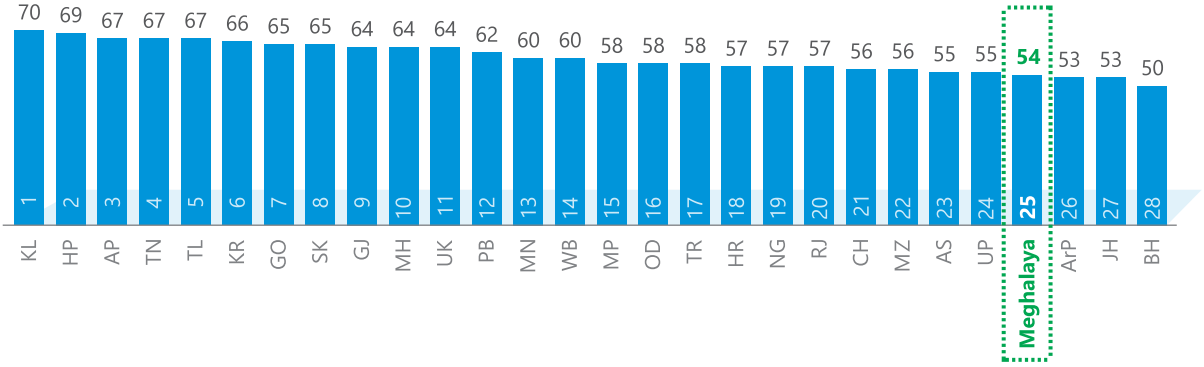
MG-2.A: Decadal Growth in Population (%)



MG-2.B: Total Fertility Rate (children per woman)



MG-2.C: SDG Index of NITI Aayog (2019)



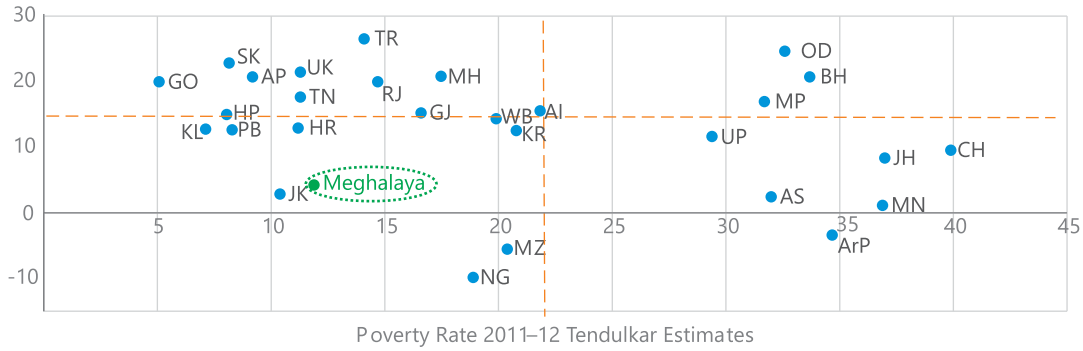
MG-2.D: Key Social Indicators

	MG	INDIA
EDUCATION		
Literacy rate (%)[a]	74.4	73.0
Pupil–Teacher ratio[b] (in Primary)	19.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	40.6	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	67.9	89.9
Availability of toilets[d] (household %)	92.4	61.1

	MG	INDIA
HEALTH		
Sex ratio[a] (females per 1000 males)	989	943
Underweight children (%)[d]	28.9	35.8
Stunting among children (%)[d]	43.8	38.4
Anaemia among children (%)[d]	48.0	58.6
Women with below normal BMI (%)[e,d]	12.1	22.9
Anaemia among Women (%)[d]	56.2	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	33.0	32.0
Institutional Deliveries (%)[d]	51.4	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	9.1	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	3,055	1,218 *(All States)*

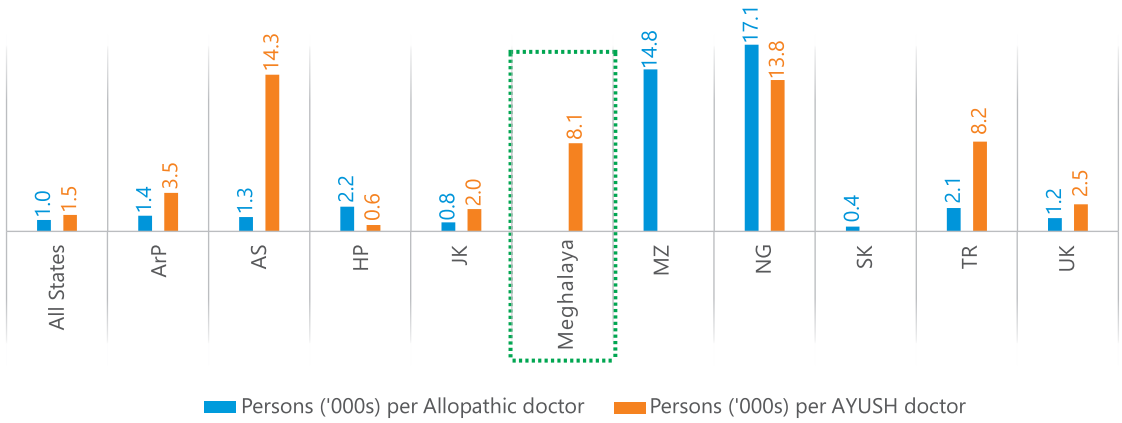
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018

MG-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



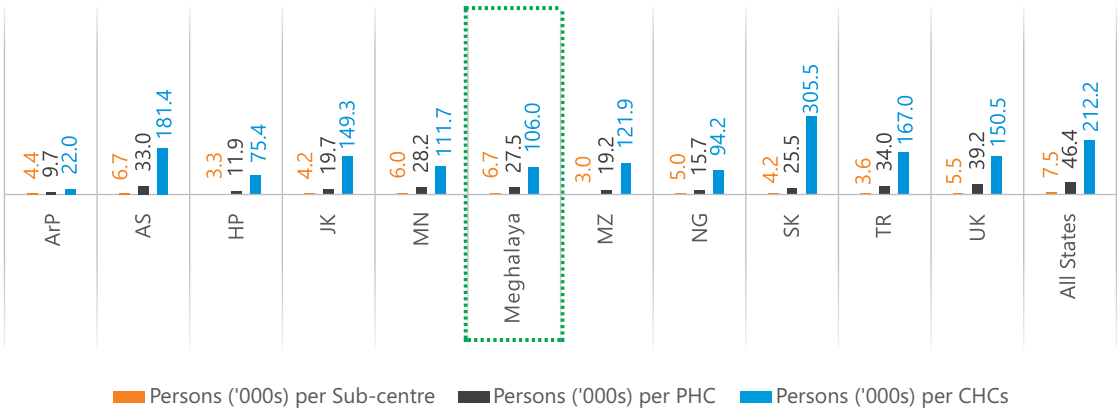
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

MG-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



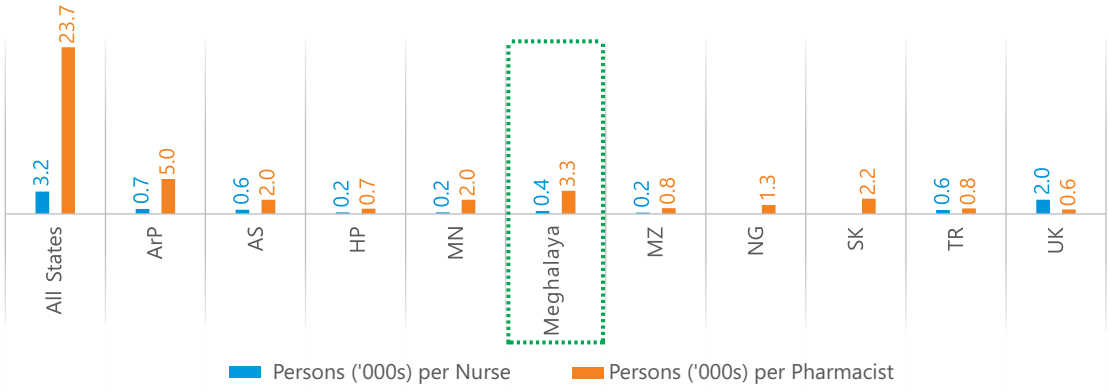
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MG-3.B: Persons ('000s) per Sub-centre/PHC/CHC



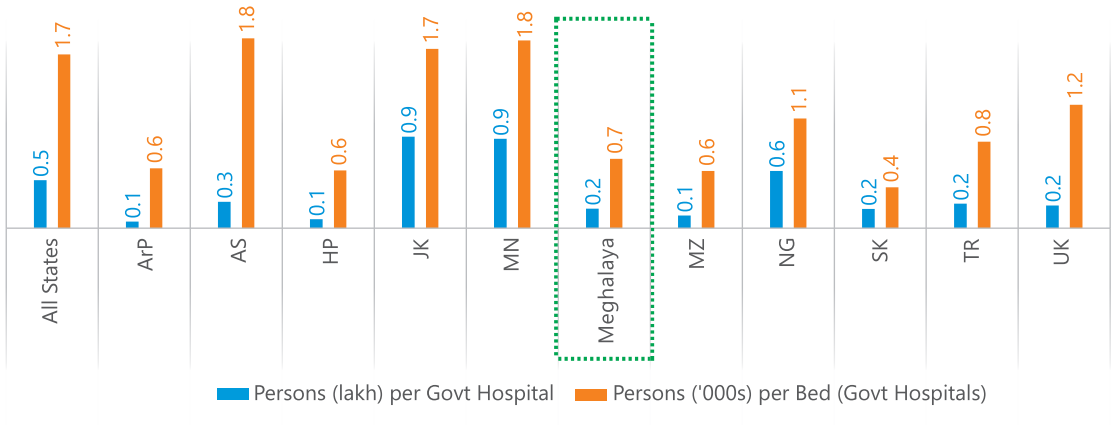
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MG-3.C: Persons ('000s) per Nurse/ Pharmacist



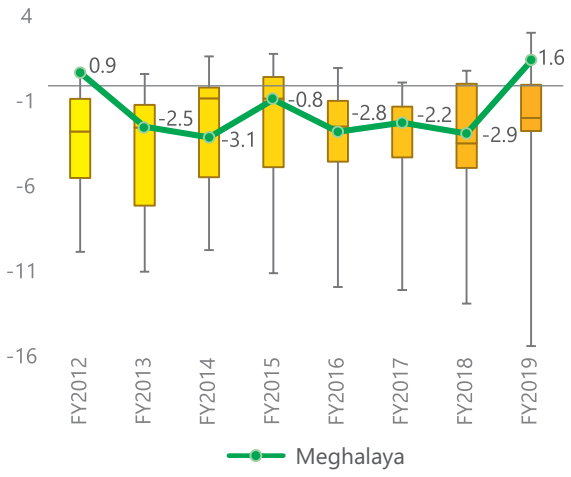
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MG-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

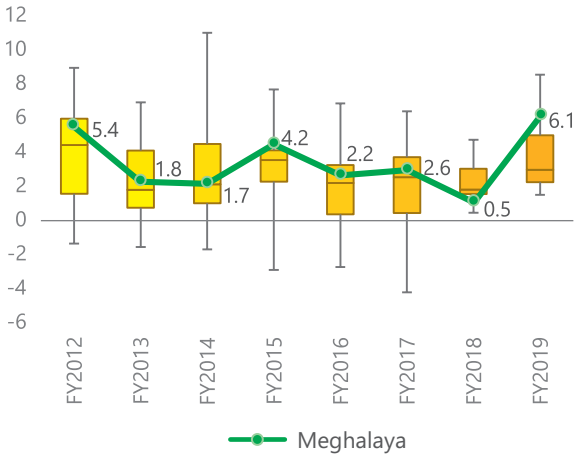


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

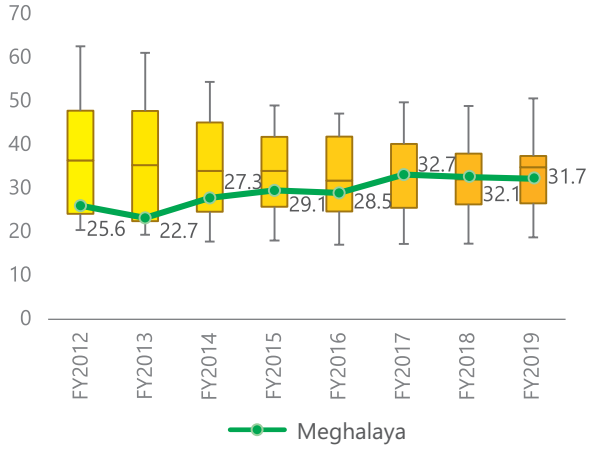
MG-4.A: Revenue Deficit as % of GSDP



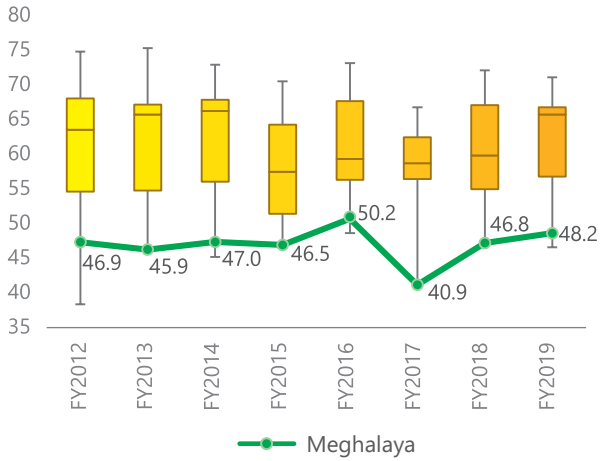
MG-4.B: Fiscal Deficit as % of GSDP



MG-4.C: Outstanding Debt as % of GSDP

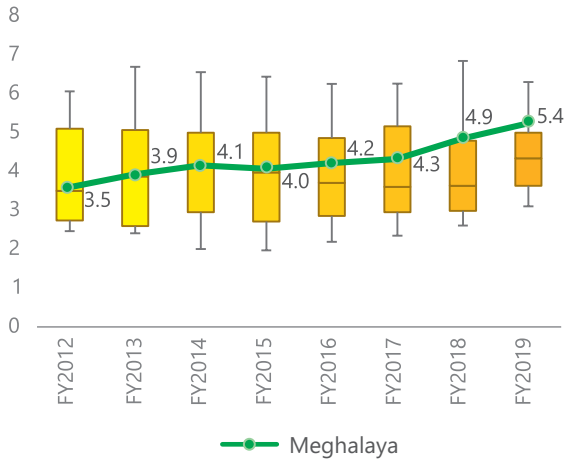


MG-4.D: Committed Expenditure as a % of Revenue Expenditure

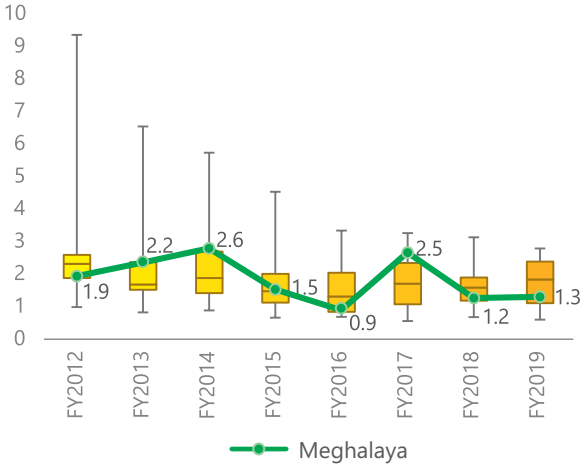


Note: Committed expenditure includes salaries, interest payments, and pensions

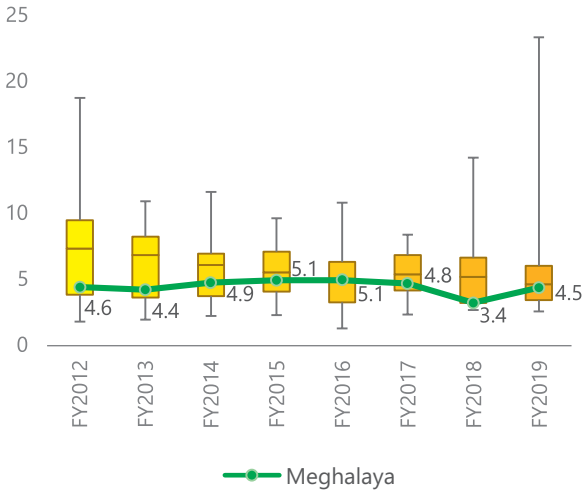
MG-4.E: OTR as % of GSDP



MG-4.F: NTR as % of GSDP



MG-4.G: Capital Expenditure to GSDP Ratio



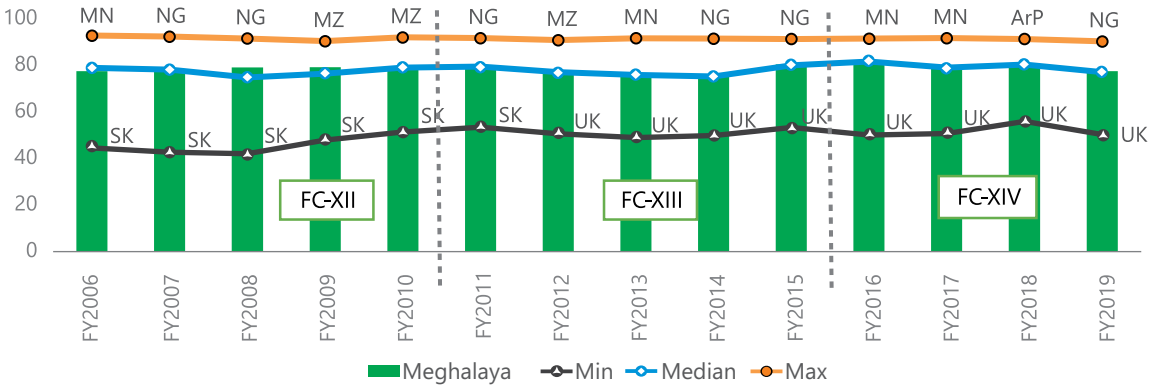
MG-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	96,016	1,30,427
Indicators as a percentage of GSDP		
TRR	29.0	23.3
OTR	5.4	5.0
NTR	1.3	2.0
TE	35.1	26.7
ES	7.8	5.0
SS	12.9	8.7
GS	9.9	8.5
Committed Expenditure	14.8	14.4
Capital Expenditure	4.5	4.3
FD	6.1	3.4
RD	1.6	–0.9
OD	31.7	29.6

MG-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Meghalaya	11.5	11.2	9.0
NEHS	12.6	12.1	10.7

MG-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- RLBs in Meghalaya include three Autonomous Development Councils (ADCs)—Garo, Khasi, and Jaintia.
- While Meghalaya has three Municipal Boards, Ward Commissioner elections have not been held for these since the creation of the State in 1972.
- Meghalaya is exempt from the 73rd and 74th amendments of the Constitution, and hence status of devolution of 3Fs is not a relevant statistic for the State.
- 10 functions have been devolved to ULBs.

Auditing Status

- Accounts of ULBs audited till 2017–18.
- ADC accounts: Garo audited till 2011–12, Khasi audited till 2016–17, and Jaintia audited till 2013–14.

Property Tax Board

- Though the State set up its PTB, as recommended by FC-XIII, in March 2012, it is not functional as yet.

SFC

- Exempt from the 73rd and 74th amendment of the Constitution, Meghalaya is the only State where SFC has never been constituted.

Debt and Losses

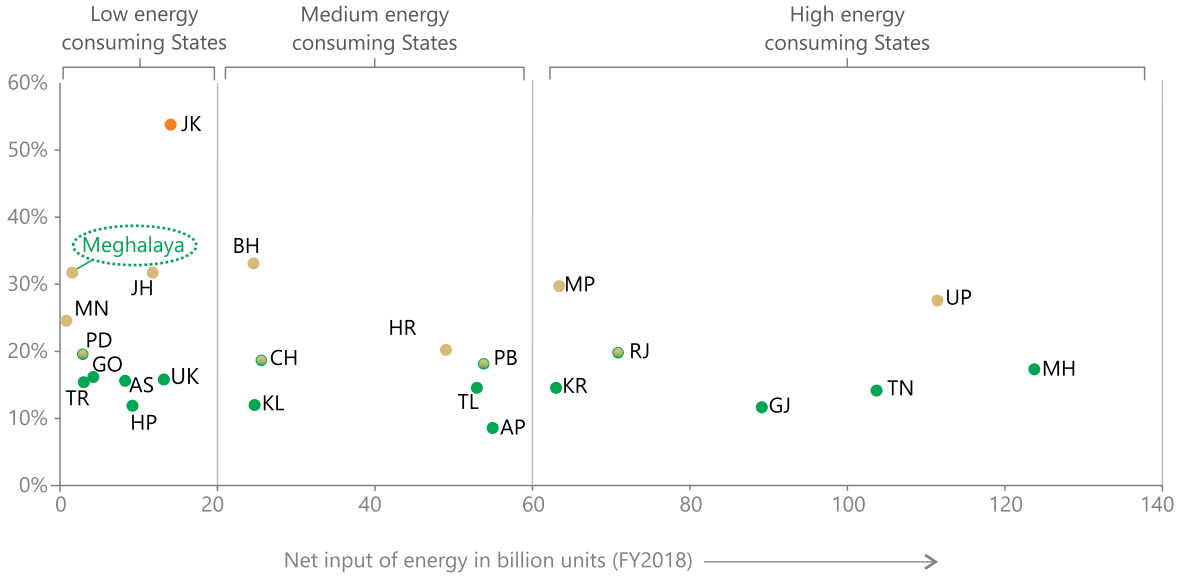
- Under UDAY, Government of Meghalaya took over DISCOM debt amounting to Rs 125 crore in the form of grant and equity.
- Meghalaya has neither met its target in AT&C losses nor ACS–ARR gap in 2018–19.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	35.22	22.0
ACS–ARR Gap (Rs per unit)	0.85	0.35

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

MG-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Meghalaya has recommended that vertical devolution may be enhanced from 42% to 48%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population 2011	17.5
ii)	ST population	7.5
iii)	Income distance[a]	50
iv)	Area[b]	15
v)	Forest cover	10

[a] Per capita income of Hill States must be adjusted for price differentials on account of cost disabilities.

[b] Floor limit should be set at 2% for smaller States and 3D area should be used for Hill States.

Increasing OTR

- OTR/GSDP increased from 3.5% in 2011–12 to 5.4% in 2018–19.
- The OTR TGR from 2011–12 to 2018–19 was 12.75% (higher than NEHS 11%).
- OTR buoyancy (from 2011–12 to 2018–19) at 1.8 was much higher than NEHS average of 0.95.
- TGR for collections from VAT/GST at 14.04% for the same period was also higher than NEHS average.
- The State has done well in increasing its collections from Stamp Duty and Registration Fees, though at 0.08% of GSDP, they are still lagging behind the NEHS average 0.18%.
- NTR/GSDP is also much lower for Meghalaya than NEHS. The NTR TGR from 2011–12 to 2018–19 for the State was negative.
- The State's dependence on receipts from the Union Government remains high at 77.1% of TRR.
- Meghalaya needs to improve its tax base further to reduce dependence on the Union.

Agriculture

- The potential for agro-based industries in the State is very high. Besides the major food crops of rice and maize, the State is also renowned for its horticultural crops like orange, lemon, pineapple, guava, litchi, banana, jackfruit, and temperate fruits such as plum, pear, and peach. Meghalaya has started various sectoral missions like Mission Lakadong, Mission Jackfruit, Mushroom Mission, Muga Mission, etc. to promote these crops.
- Due to its geo-climatic conditions, the State is well suited for floriculture (cut-flower production).
- Food processing, cold storage, and agri-value chains can help realise comparative advantage from these products.

Mineral-Based Industry

- Meghalaya with its wealth of mineral deposits like coal, limestone, granite, clay and other minerals, has tremendous industrial potential.
- The State needs to develop better infrastructure including roads and power network to enhance competitiveness of these goods.

Water Resources

- The State is among the wettest regions in the world. Its water resources support a rich aquatic biodiversity and provide potable and irrigation water.
- Some water bodies also present potential for development of inland fisheries and aqua-tourism.
- Meghalaya's potential in hydro- and other renewable energy needs to be harnessed.

Tourism

- The road network within the State should be improved to boost tourism.
- As the State is rich in flora and fauna, it should develop offbeat spots of tourist interest through right infrastructure and services.
- Eco-tourism and adventure sports may be encouraged through incentives or PPP mode.
- Homestays, individual as well as community-based, may be promoted as viable alternate source of income. Since homestays are primarily run by women, they can also be instrumental in their economic empowerment. The State Government may take active measures to link homestays with e-commerce players.

Long International Border

- Meghalaya mostly produces raw materials and perishable goods, which are exported to neighbouring countries. The State needs to incentivise the processing of minerals and export of processed goods as well as encourage entrepreneurship.
- There is inadequate infrastructure around land custom stations (barring Dawki). The State Government needs to build all-weather roads connecting the source and delivery points so that heavy vehicles can move easily.
- Active measures needed to connect the State with Chattogram port.

Low Inequality and Poverty

- While per capita GSDP of Meghalaya at Rs 96,016 (2018–19) is much lower than the all States of Rs 1,40,422, incidence of poverty in the State at 11.87% (2011–12, Tendulkar methodology) is almost half the national average of 21.9%. This implies that income inequality in the State is much lower than the country as a whole.

High Debt

- Debt/GSDP of 31.7% in 2018–19 (rising from 25.6% in 2011–12) is higher than NEHS average of 29.6% (2018–19).
- Debt should be consolidated according to the fiscal path recommended by FC-XV.
- Loans and advances guarantees based on adequate cost–benefit analysis, should be extended only after proper performance evaluation to avoid the additional fiscal burden.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	32.7	32.7	32.7	31.7	27.04	27.3	27.6
Actually achieved	25.6	22.7	27.3	29.1	28.5	32.7	32.1
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Actually achieved	5.4	1.8	1.7	4.2	2.2	2.6	0.5

Source: Government of Meghalaya.

Low and Declining Capital Expenditure

- Capital expenditure is only 12.81% of total expenditure against 16.11% of NEHS in 2018–19.
- Capital expenditure in the State grew at a TGR of only 5.4% against the NEHS average of 12.0% during 2011–12 to 2018–19.
- Capital expenditure as a percentage of GSDP declined from 4.6% in 2011–12 to 4.5% in 2018–19.
- The share of salaries (including GIA Salary) as a percentage of TRE at 45.22% in 2018–19 is also very high. This needs to be reduced to create fiscal space for development activities.

Low GSDP Growth Rate

- GSDP growth rate (at constant prices) of Meghalaya has been much lower than both NEHS as well as the national average. The GSDP TGR of Meghalaya (2011–2019) is the lowest among all NEHS (ranging from 16.2% in Mizoram to 11% in Himachal Pradesh).
- The Government of Meghalaya Memorandum to FC-XV indicates that its Credit–Deposit ratio was 35%–40% over last 10 years (as opposed to the national average of 60%).

Poor Tertiary and Secondary Sector Growth: Ban on the Coal Mining

- In 2014, the National Green Tribunal banned coal mining in Meghalaya. Consequently, GSDP from mining declined by 59% in 2014–15 and GSDP grew at only 1.3% in 2014–15. As Mining has strong forward and backward linkages with other economic activities, Meghalaya's GSDP actually declined in 2014–15. This had an impact on the employment in the State as well.
- Contribution of the secondary sector almost halved from 31% in 2011–12 to 18% in 2018–19.
- The State Government estimated a significant revenue loss due to the ban on mining.
- Alternate natural resources like water, agro-based products, floriculture, and fisheries should be harnessed to boost economic growth in the State.
- Besides selling raw material, the State government should try to incentivise product processing for better prices.
- Tourism may be promoted further to enhance economic activity in the State.

Local Bodies

- The State Government should ensure the election of Ward Commissioners to Municipal Boards—a task pending since 1972.
- CAG reports on local bodies have highlighted poor financial reporting and irregularity in maintenance of records.
- The State needs a comprehensive policy review and restructuring of its ADCs to ensure better partnerships for the development and preservation of tribal traditions.

Poor Physical and Social Infrastructure

- Infrastructure deficit in Meghalaya is much higher than the rest of India.
- Density of roads in Meghalaya is much lower than the national average.
- The capital city of Shillong is facing serious road congestion challenges.
- Percentage households with improved sources of drinking water is also lower than the national average (see MG-2.D).
- Meghalaya needs to revamp its infrastructure to enhance tourism and industrial activity in the State.
- Several health and education indicators are below the national average (see MG-2.D).
- A focused approach targeting the districts/blocks with the poorest health indicators may work well.

Public Sector Undertakings

- Highlights of a study on Meghalaya's State Finances conducted by the Indian Institute of Management, Shillong for FC-XV are presented below.
  - » Of the 15 SPSUs of Meghalaya, only the Forest Development Corporation Meghalaya Limited witnessed accumulated account of profit at the end of 2016–17.

- » Power sector SPSUs of Meghalaya bear the accumulated loss of Rs 1,836 crore, which is 6.5% of its GSDP.
- » However, six SPSUs (including one in the power sector) have shown account of profit in the year 2016–17.
- » With rising demand for power over the last few decades, Meghalaya has transitioned from a power-surplus to power-deficit State, resulting in huge debt accumulation.

- The distress status of SPSUs (particularly in power) invites medium-term debt sustainability risks with increasing fiscal liabilities. The State should conduct a comprehensive performance evaluation of these SPSUs, and take appropriate action to curb the aggravating losses.
- Highlights of the CAG Report 2018 are presented below.[1]
  - » In 2016–17, 46 accounts of 16 SPSUs were in arrears.
  - » The State Government had extended budgetary support of Rs 251.02 crore to 14 SPSUs during the years for which accounts were in arrears.
  - » The non-auditing of accounts could pose a serious downside risk given the substantial budgetary support.

Reform Signposts

- **The State has a very high debt to GSDP ratio which needs to be consolidated in line with the recommendations of FC-XV.**
- **Given the rich natural resources, Meghalaya should try to expand its secondary sector base. It should also give further boost to tourism. These initiatives may help it enhance revenue earnings.**
- **On the one hand, Meghalaya has low and declining capital expenditure (observed over the last few years). On the other, the State is in need of huge investment in physical infrastructure. It should reverse the trend of declining capital expenditure and find innovative ways of financing the huge infrastructure deficit.**
- **The distress status of SPSUs (particularly in power) invites medium-term debt sustainability risks with increasing fiscal liabilities. Hence, the State should conduct a comprehensive performance evaluation of these SPSUs and take appropriate action to curb the aggravating losses.**

1 CAG (2018), *Report No. 3 of 2018, Social, Economic, General and Economic (PSUs) Sectors*, report by Comptroller and Auditor General of India, published by Government of Meghalaya.

MZ-1.A: Overview

POPULATION
1.1 million
0.1%
Of population across all States

AREA
21,081 sq km
0.6%
Of area across all States

2.6%
Of forest area across all States

FOREST COVER
18,006 sq km
85.4%
Of the State's own area is under forest

1.0%↓
Forest cover changed from 2017 to 2019

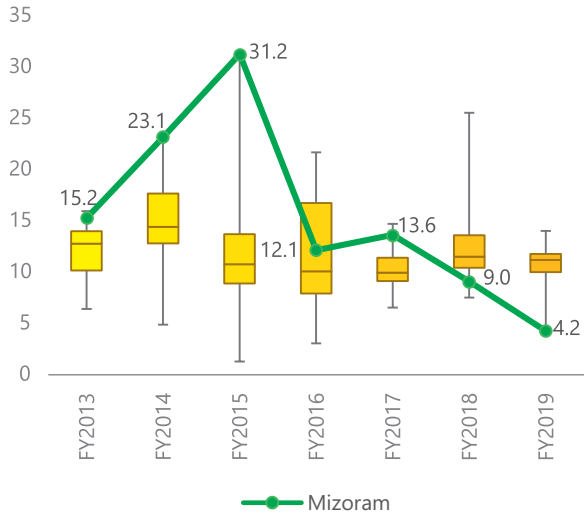
PER CAPITA GSDP
Rs 1,64,586
Rs 1,40,422
Average across all States

TAX TO GSDP
3.7%
6.3%
Average across all States

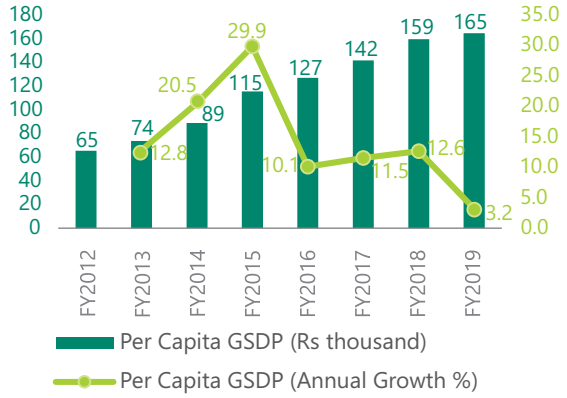
CHILDREN PER WOMAN
2.3
2.2
Average across all States

URBANISATION RATE
51.5%
31.1%
All India average

MZ-1.B: Growth rate of GSDP (at current prices, %)



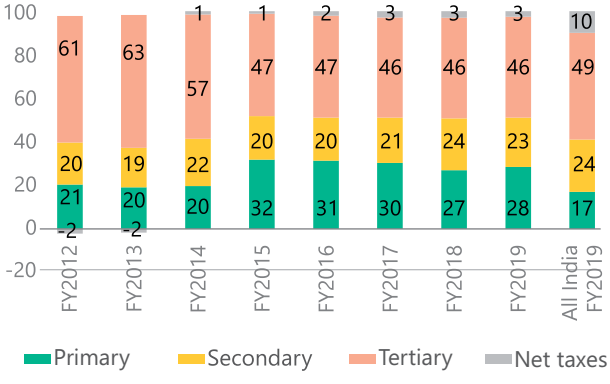
MZ-1.C: Per capita GSDP (at current prices)



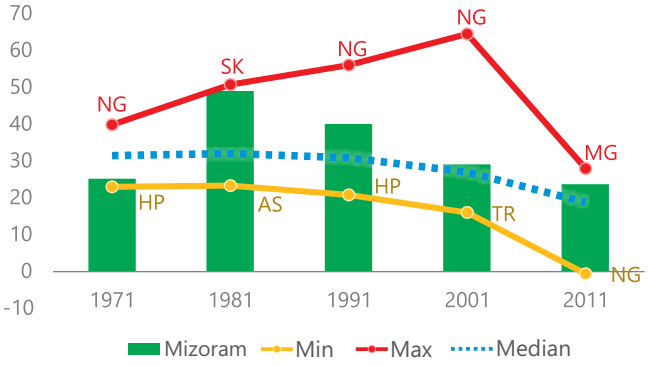
MZ-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	All NEHS	Share (%) of State in NEHS
2011–12	7,259	5,03,182	1.4
2012–13	8,362	5,63,081	1.5
2013–14	10,293	6,37,264	1.6
2014–15	13,509	6,95,474	1.9
2015–16	15,139	7,88,321	1.9
2016–17	17,192	8,67,648	2.0
2017–18	18,740	9,74,240	1.9
2018–19	19,520	10,82,901	1.8

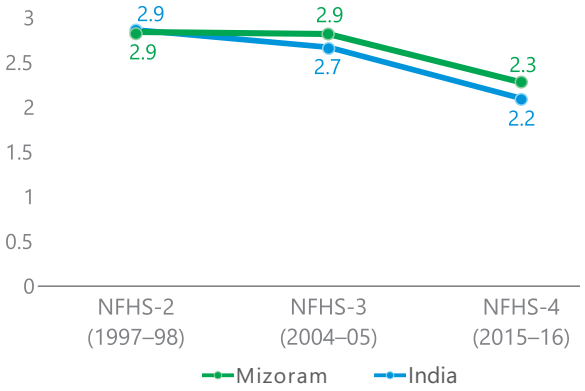
MZ-1.E: Sectoral Contribution to GSDP (at current prices, %)



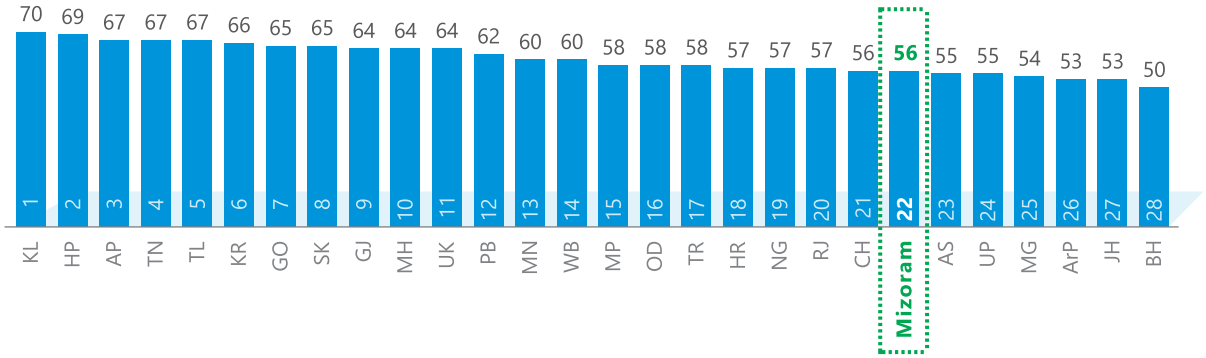
MZ-2.A: Decadal Growth in Population (%)



MZ-2.B: Total Fertility Rate (children per woman)



MZ-2.C: SDG Index of NITI Aayog (2019)



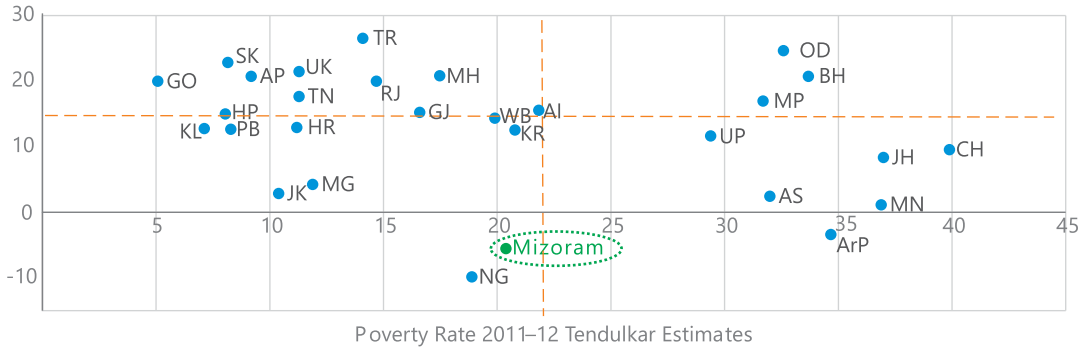
MZ-2.D: Key Social Indicators

	MZ	INDIA
EDUCATION		
Literacy rate (%)[a]	91.3	73.0
Pupil–Teacher ratio[b] (in Primary)	12.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	54.6	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	91.4	89.9
Availability of toilets[d] (household %)	99.1	61.1

	MZ	INDIA
HEALTH		
Sex ratio[a] (females per 1000 males)	976	943
Underweight children (%)[d]	12.0	35.8
Stunting among children (%)[d]	28.1	38.4
Anaemia among children (%)[d]	19.3	58.6
Women with below normal BMI (%)[e,d]	8.4	22.9
Anaemia among Women (%)[d]	24.8	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	5.0	32.0
Institutional Deliveries (%)[d]	79.7	78.9
Expenditure on Health Sector (revenue+capital) as % of total expenditure (FY2019)	6.2	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	4,907	1,218 *(All States)*

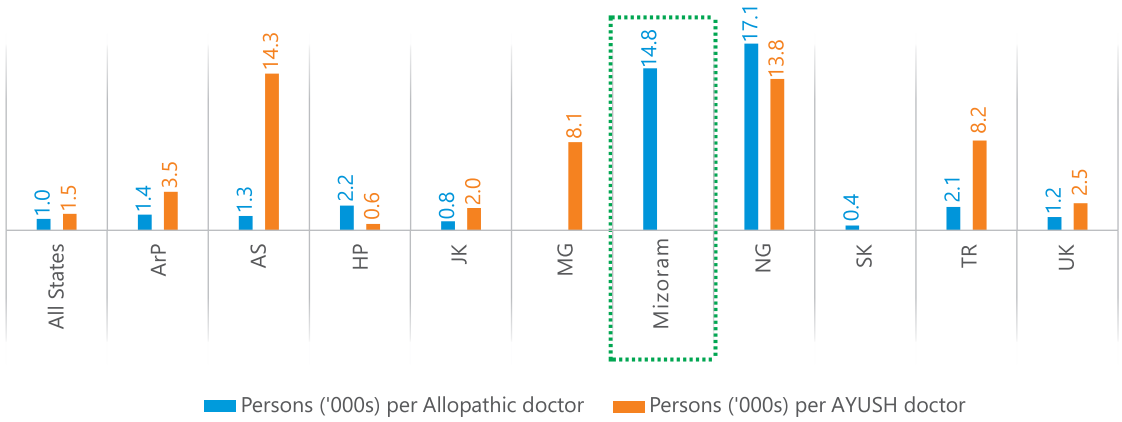
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018

MZ-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



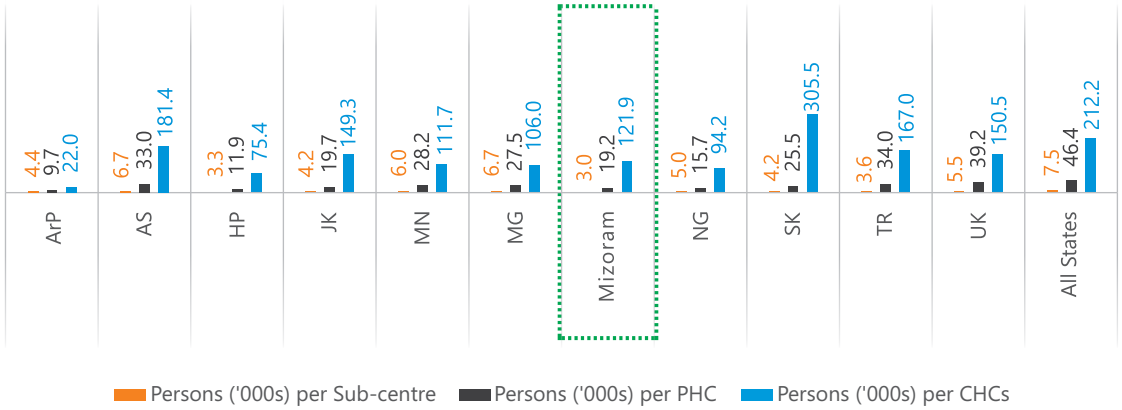
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

MZ-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



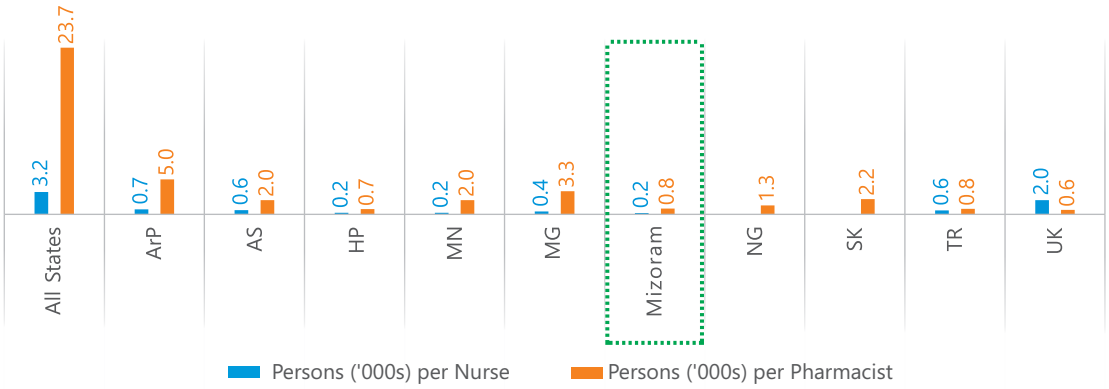
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MZ-3.B: Persons ('000s) per Sub-centre/PHC/CHC



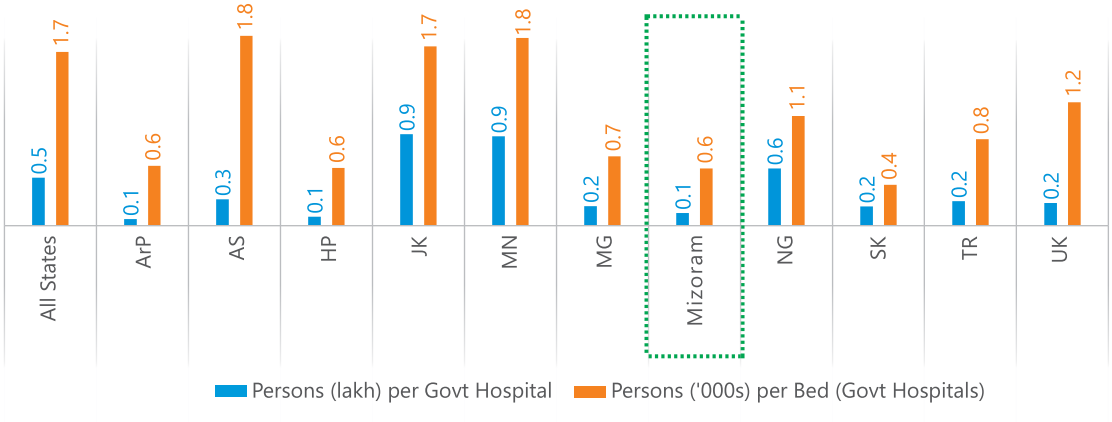
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

MZ-3.C: Persons ('000s) per Nurse/ Pharmacist



Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

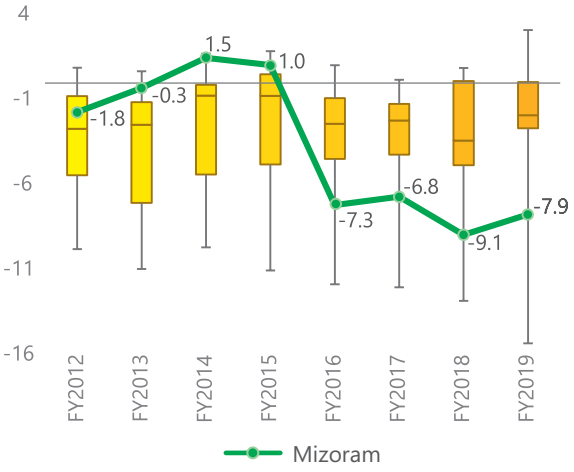
MZ-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed



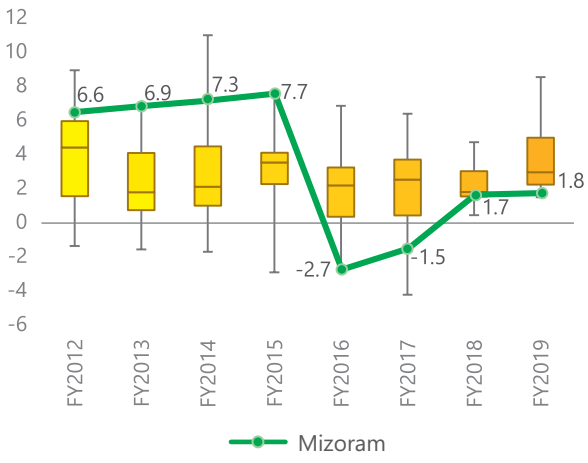
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

Fiscal Indicators

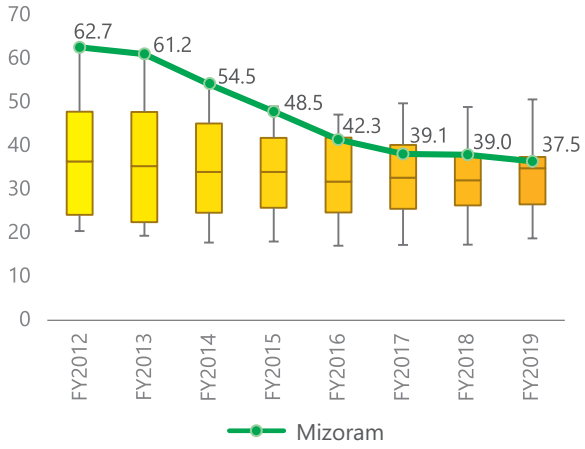
MZ-4.A: Revenue Deficit as % of GSDP



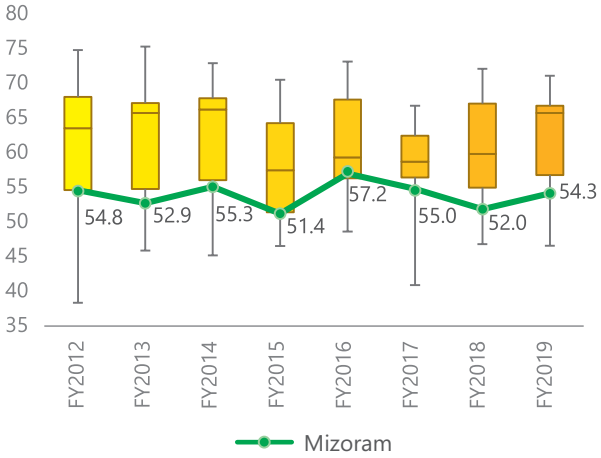
MZ-4.B: Fiscal Deficit as % of GSDP



MZ-4.C: Outstanding Debt as % of GSDP

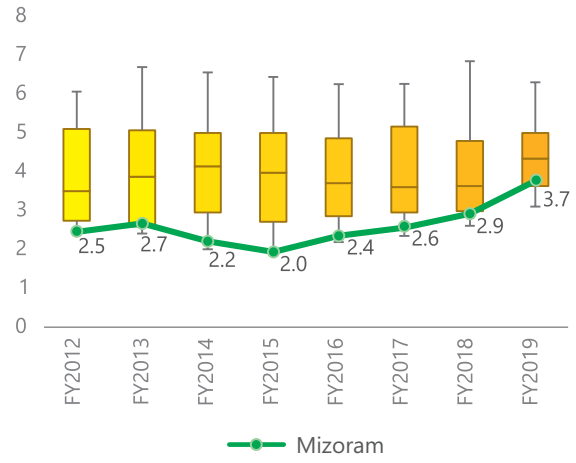


MZ-4.D: Committed Expenditure as a % of Revenue Expenditure

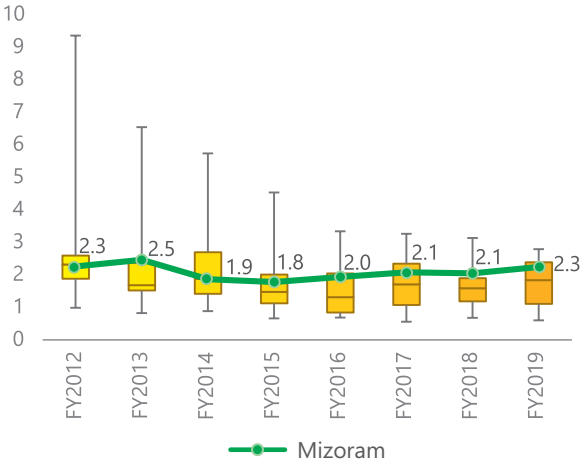


Note: Committed expenditure includes salaries, interest payments, and pensions

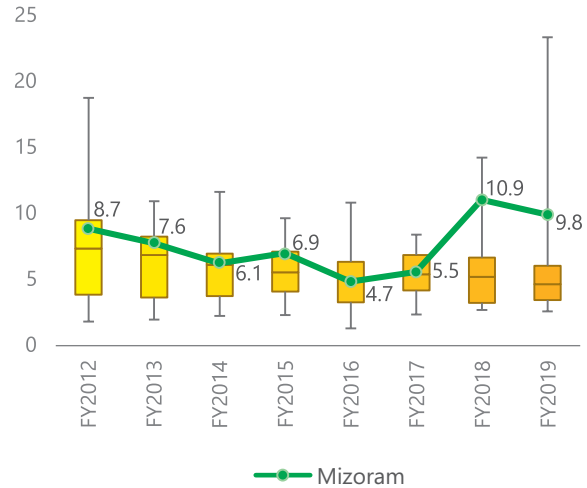
MZ-4.E: OTR as % of GSDP



MZ-4.F: NTR as % of GSDP



MZ-4.G: Capital Expenditure to GSDP Ratio



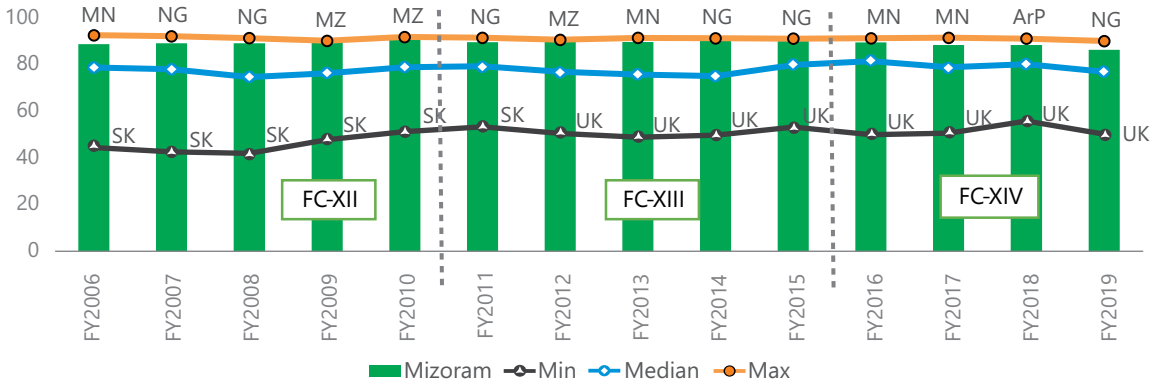
MZ-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	1,64,586	1,30,427
Indicators as a percentage of GSDP		
TRR	46.3	23.3
OTR	3.7	5.0
NTR	2.3	2.0
TE	48.2	26.7
ES	9.6	5.0
SS	15.3	8.7
GS	13.5	8.5
Committed Expenditure	20.9	14.4
Capital Expenditure	9.8	4.3
FD	1.8	3.4
RD	–7.9	–0.9
OD	37.5	29.6

MZ-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Mizoram	9.7	13.6	18.9
NEHS	12.6	12.1	10.7

MZ-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



RLBs

- There are three Autonomous Development Councils (ADCs)—Lai, Mara, and Chakma—and 804 Village Councils (VCs).
- ADCs fall under Sixth Schedule of the Constitution. The VCs are set up in accordance with the Lushai Hills District (Village Council) Act, 1953.
- Mizoram is excluded from the 73rd Amendment vide Article 243M (2) of the Constitution of India. Hence, the 3Fs rankings for Mizoram is not available in Devolution Index Report by Ministry of Panchayati Raj

ULBs

- There is only one municipal body in the State, the Aizawl Municipal Corporation (AMC), constituted under the Mizoram Municipalities Act, 2007 on 1 July 2008.
- The first election to the AMC was held on 3 November 2010.

Functions Devolved

- Of the 18 functions envisaged in Twelfth Schedule of the Constitution, 15 have been devolved to the AMC.
- The Lushai Hills District (Village Councils) Acts, 1953 authorises VCs to make certain rules such as those relating to sanitation, cleanliness, and control of fire. They also function as courts, administer land revenue, and handle developmental works in the villages.

Auditing Status

- Accounts of three ADCs have been audited for previous periods—Lai in 2017–18, Mara till 2016-17, and Chakma till 2014–15.
- Only few VCs have completed the audit of their accounts up to 2017–18.
- Auditing of accounts of Aizawl Municipal Corporation has been completed till 2018–19.

Property Tax Board (PTB)

- As recommended by FC-XIII, the State set up PTB in September 2011. It is functional.

First SFC (2015–16 to 2019-20)

- Mizoram is exempt from setting up SFC. However, the First SFC was constituted on 30 September 2011 and ATR tabled on 14 December 2015 for award period 2015–2020.
- First SFC recommended 15% devolution of the State's OTR to local bodies.

Debt and Losses

- According to the Government of Mizoram Memorandum, its DISCOM has been running into a huge deficit due to sale of power at subsidised rates.
- Huge gap between power demand and installed capacity has been observed within the State.

Year	*Expenditure for Power Purchase (Rs crore)*	*Receipt from Sale of Power (Rs crore)*	*Loss (Rs crore)*
2013–14	178.4	109.6	68.8
2014–15	194.8	140.3	54.5
2015–16	210.0	163.8	46.2
2016–17	291.7	199.5	92.2
2017–18	332.7	211.1	121.7

Source: Government of Mizoram Memorandum

- The State was able to achieve the target for AT&C losses.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	16.2	20.0
ACS–ARR Gap (Rs per unit)	N.A.	N.A.

Note: Data regarding the ACS–ARR gap was not submitted by the State on the UDAY portal.
Source: Ministry of Power, Government of India.

Vertical Devolution

- Mizoram recommended that the State share in the overall divisible pool of taxes be increased from 42% to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population	25.0
ii)	Income distance	40.0
iii)	Fiscal discipline	7.5
iv)	Area	10.0
v)	Forest cover	10.0
vi)	Historical infrastructure gap	7.5

Sharply Declining Debt–GSDP Ratio

- The State of Mizoram has sharply reduced its debt–GSDP from 62.7% in 2011–12 to 37.5% in 2018–19. It has also adhered to the FRBM targets set by the State.
- FD–GSDP of the State also declined from 6.6% in 2011–12 to 1.8% in 2018–19.
- The State should make further attempts to reduce the debt–GSDP ratio in line with the new FRBM targets and recommendations of FC-XV.

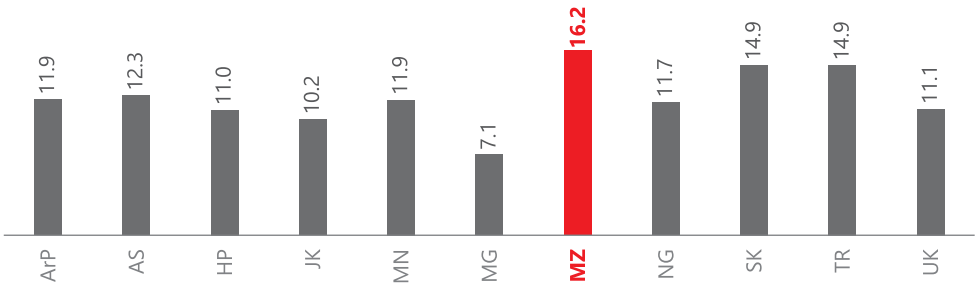
Ratios in %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	85.7	82.9	79.2	74.8	–	–	–
Actually achieved	62.7	61.2	54.5	48.5	42.3	39.1	39.0
FD–GSDP							
As prescribed by the State FRBM	6.4	5.2	4.1	3.0	–	–	–
Actually achieved	6.6	6.9	7.3	7.7	–2.7	–1.5	1.7

Source: Government of Mizoram

High GSDP Growth

- Mizoram has seen very high growth rate of GSDP in recent years. Nominal GSDP of Mizoram grew at a TGR of 16.20% from 2011 to 2019, which is much higher than other NEHS.
- However, the growth rate has been volatile. The significant increase in 2013–14 and 2014–15 came from Forestry & Logging and Mining & Quarrying.
- The State should ensure that the growth rate is consistent and does not lead to unsustainable and rapid exploitation of natural resources and the environment.
- The State needs to ensure that the benefits of this economic growth trickle down to all sections of society.

MZ-5.A: TGR of GSDP (2011 to 2019)



International Borders

- The State is hilly and remote, but has strategic importance for national security as well as geo-political and economic influence in South Asia.
- It shares 722 km of international border with Bangladesh and Myanmar. The State Government needs to improve infrastructure conditions to increase the competitiveness of local goods for exports to neighbouring countries.
- Kaladan Multi-modal river project can help in growth of trade and employment with neighbouring countries. The construction of the project was started in October 2010 but the pace of development has been very slow. The Union Government needs to enhance cooperation

with Myanmar to complete this project at the earliest so that the entire NER can access the port gateway in Myanmar.

Human Development Indicators

- Mizoram's indicators related to health and education are much better than the national average (see MZ-2.D).
- This implies potential for economic growth through service sector promotion.
- The State's revenue expenditure on health and education is much better than NEHS average.

Annual Per Capita Revenue Expenditure (in Rs)

	Education	*Health*
Mizoram	11,466	4,137
NEHS	5,970	1,987
All States	3,438	1,095

Low own revenues and high dependence on Union Government

- OTR/GSDP in Mizoram is only 3.72% in 2018–19 against NEHS average of 4.95%.
- On the other hand, NTR/GSDP at 2.31% compared to NEHS average of 2.0%. In Mizoram, revenues from power have increased substantially.
- The State's TGR for collections from VAT/GST, Stamp Duty and Registration and Excise have been very high during the period 2011–12 to 2018–19.
- The dependence of the State on the Union Government remains very high with 87% of its TRR coming from the Centre.
- The State needs to take measures to increase own revenues.

Particulars	*TGR from 2011–12 to 2018–19*	
	Mizoram	*NEHS*
Total Revenue Receipts	13.6	12.1
Own Tax Revenue	21.8	11.0
VAT/GST	20.9	11.1
Stamp Duty & Registration	32.0	6.7
State Excise	83.7	14.8
Electricity Duty	–	9.9
Other Taxes	9.5	8.2
Non Tax Revenue	15.4	10.0
Share in Central Taxes	29.1	22.8
Grant in Aid	6.4	6.7

High Committed Expenditure

- State has a very high committed expenditure (included GIA Salary) constituting 64.9% of total TRE in 2018–19.

- The State should try to reduce and rationalise the expenditure towards more productive activities.

Low Share of Manufacturing in GSDP

- The State only gets about 1 % of its GSDP from manufacturing.

Increasing Poverty

- The State witnessed an increase in poverty rate from 15.3% in 2004–05 to 20.4% in 2011–12 as per Tendulkar methodology. This trend needs to be reversed immediately.

Public Sector Undertakings[1]

- Of six working SPSUs, two SPSUs had finalised two annual accounts for previous years during the period 01 October 2017 to 30 September 2018. Two working companies forwarded two audited accounts to the Principal Accountant General during the period from 01 October 2017 to 30 September 2018. Twenty-four annual accounts pertaining to six SPSUs were in arrears.
- The GoM had provided Rs 29.2 crore (Rs 8.49 crore as equity and Rs 20.7 crore in grants) to four of the six working State PSUs, the accounts of which had not been finalised (as prescribed under the Companies Act, 2013) till 30 September 2018.
- Although the budgetary support is not significant, regular maintenance of accounts and auditing should be ensured by the State Government.

Local Bodies

- Local bodies have low own revenues. Village Councils have no independent sources of revenue with the exception of tax on animals, which is minimal.
- In 2017–18, own revenue (tax + non-tax) of VCs was only 3.68% of their total expenditure. Measures like property tax and water charges should be revamped.
- Revised formats of accounts prescribed by CAG have not been implemented by VCs. The revised CAG formats need to be adopted and implemented by the RLBs for enhancing accountability of funds.

Power Sector

- The State should take measures to unbundle and corporatise the power sector and allow it to run on sound economic principles.
- A huge gap between power demand and installed capacity is observed within the State. Mizoram has hydro-electric power potential of about 4,500 MW, of which only 0.6% has been harnessed. The State should harness the hydropower potential to reduce the deficit of power and improve future stream of revenues.

Road Network

- Mizoram has only 345.2 km of road per 1,000 sq km of area as against the national average of 952.8 (as of 2015).
- Roads are the only lifeline for hill States. Inadequate road network leads to heavy head-load cost of providing public services.
- The State needs to improve its road infrastructure.

Burden of Urbanisation

- Mizoram is one of the most urbanised States of India with 51.5% of its population living in Aizawl (its only city).

- It faces challenges of road congestion, difficult terrain, remote location, and poor transportation system.
- Disposal of plastic and e-waste is a challenge in the city of Aizawl.
- Aizawl needs to plan its roads and building.
- The planned infrastructure also needs to be developed in the hinterland around Aizawl to reduce the burden on the city.

Reform Signposts

- The State has very low OTR/GSDP as compared to NEHS average. The dependence of the State on the Union Government remains very high with 87% of its TRR coming from the Centre. However, its NTR/GSDP is higher than NEHS average. Also, the State's TGR for collections from VAT/GST, Stamp Duty and Registration and Excise has been very high during the period 2011–12 to 2018–19. **The State should take further measures to boost its secondary sector and enhance its revenue earning. The State needs to take measures to increase own revenues.**
- The State has reduced its debt to GSDP ratio in the last few years. However, it still remains high. **Hence, the State need to further consolidate its debt in line with the new FRBM Act and FC-XV's recommendations.**
- **The State has a very high committed expenditure and hence should try to reduce and rationalise the expenditure towards more productive activities.**

Notes

1 CAG (2019), *Report No. 2 of 2019: Report of the Comptroller and Auditor General of India on Social, General, Economic, and Revenue Sectors For the year ended 31 March 2018*, Government of Mizoram.

NG-1.A: Overview

POPULATION
2.0 million
0.2%
Of population across all States

AREA
16,579 sq km
0.5%
Of area across all States

1.8%
Of forest area across all States

FOREST COVER
12,486 sq km
75.3%
Of the State's own area is under forest

0%
Forest cover changed from 2017 to 2019

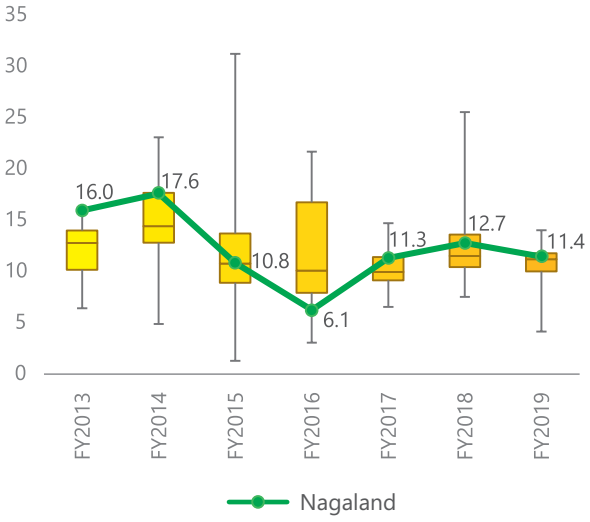
PER CAPITA GSDP
Rs 1,29,981
Rs 1,40,422
Average across all States

TAX TO GSDP
3.1%
6.3%
Average across all States

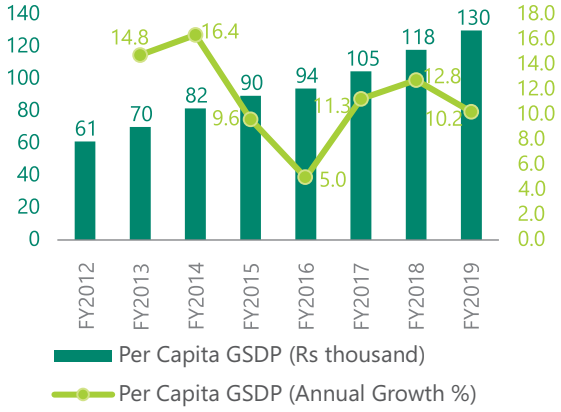
CHILDREN PER WOMAN
2.7
2.2
Average across all States

URBANISATION RATE
29.0%
31.1%
All India average

NG-1.B: Growth rate of GSDP (at current prices, %)



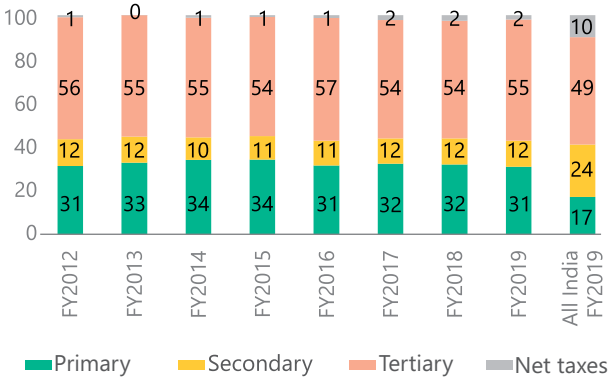
NG-1.C: Per capita GSDP (at current prices)



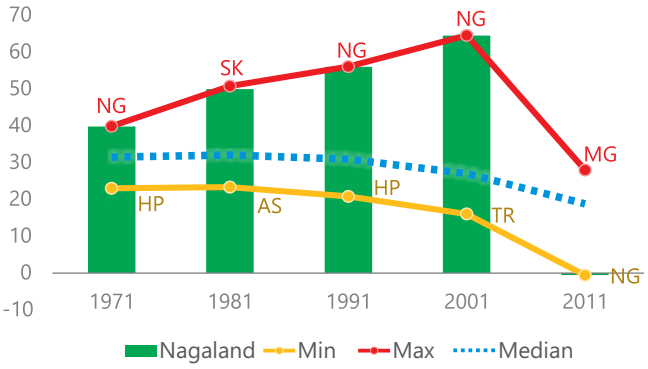
NG-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All NEHS*	*Share (%) of State in NEHS*
2011–12	12,177	5,03,182	2.4
2012–13	14,121	5,63,081	2.5
2013–14	16,612	6,37,264	2.6
2014–15	18,401	6,95,474	2.7
2015–16	19,524	7,88,321	2.5
2016–17	21,722	8,67,648	2.5
2017–18	24,492	9,74,240	2.5
2018–19	27,283	10,82,901	2.5

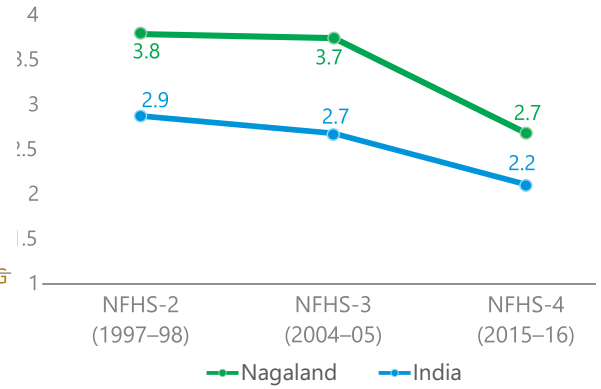
NG-1.E: Sectoral Contribution to GSDP (at current prices, %)



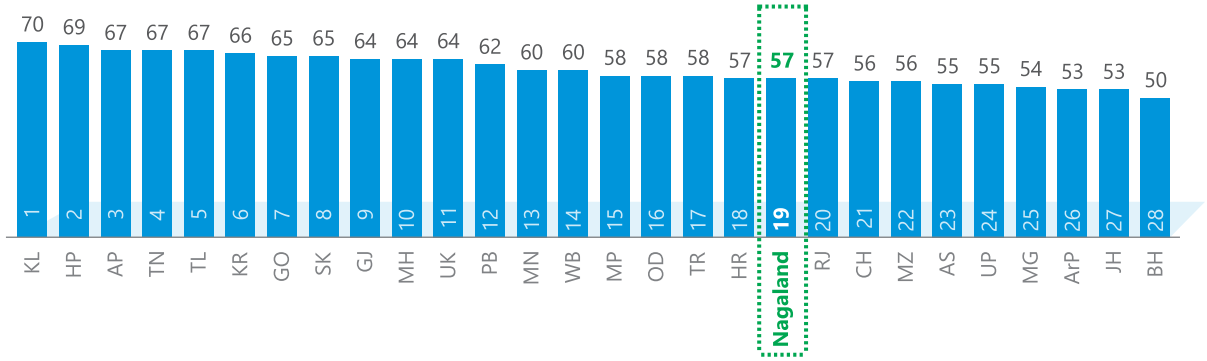
NG-2.A: Decadal Growth in Population (%)



NG-2.B: Total Fertility Rate (children per woman)



NG-2.C: SDG Index of NITI Aayog (2019)



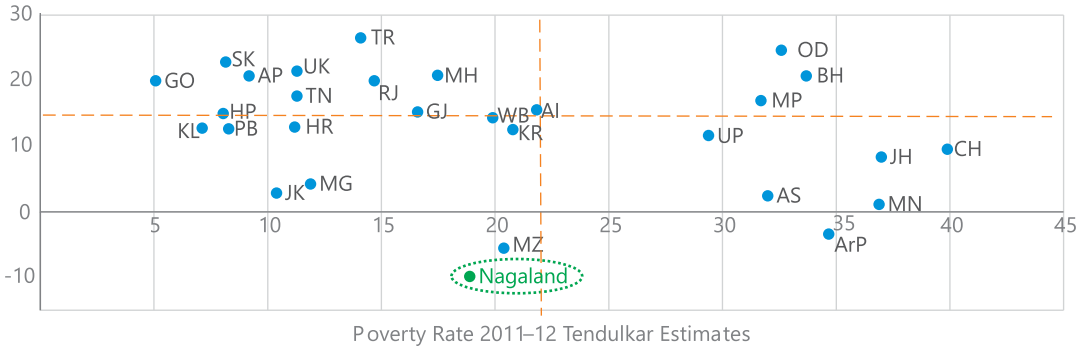
NG-2.D: Key Social Indicators

	NG	INDIA
EDUCATION		
Literacy rate (%)[a]	79.6	73.0
Pupil–Teacher ratio[b] (in Primary)	6.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	36.3	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	80.6	89.9
Availability of toilets[d] (household %)	98.3	61.1

	NG	INDIA
HEALTH		
Sex ratio[a] (females per 1000 males)	931	943
Underweight children (%)[d]	16.7	35.8
Stunting among children (%)[d]	28.6	38.4
Anaemia among children (%)[d]	26.4	58.6
Women with below normal BMI (%)[e,d]	12.3	22.9
Anaemia among Women (%)[d]	27.9	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	4.0	32.0
Institutional Deliveries (%)[d]	32.8	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	5.0	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	2,968	1,218 *(All States)*

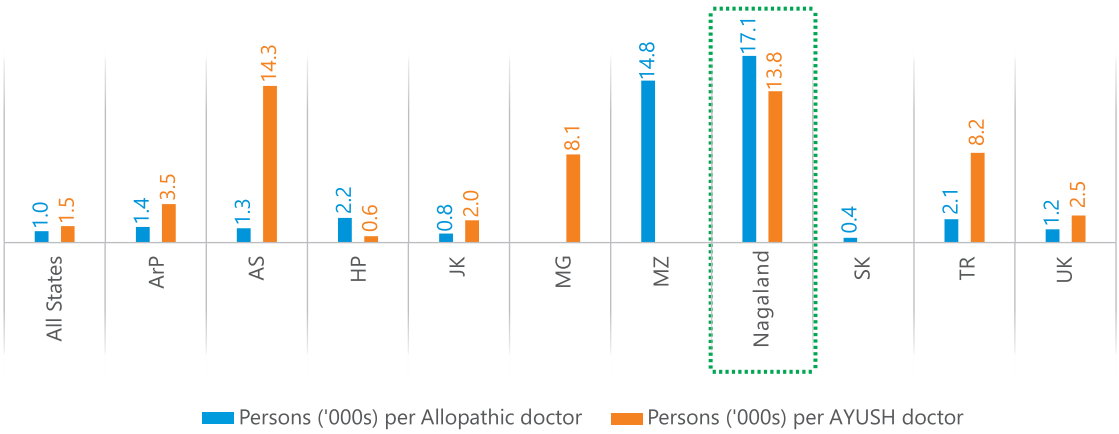
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018

NG-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



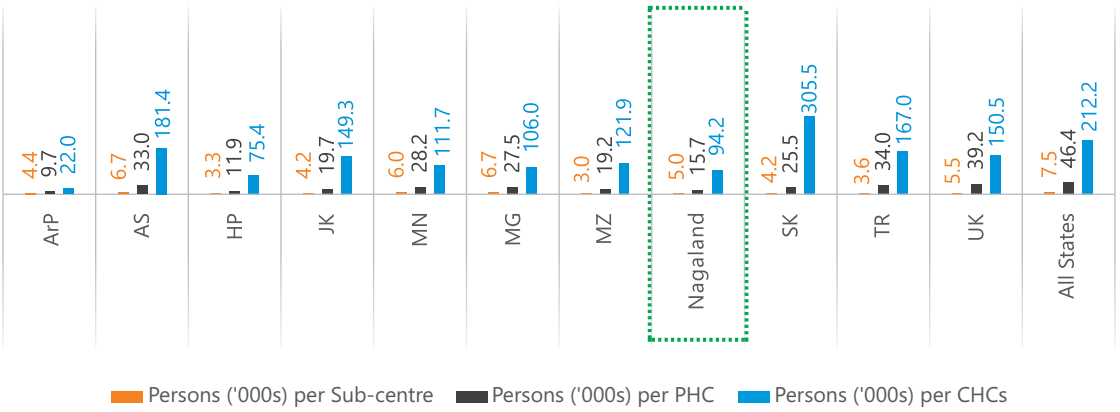
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

NG-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



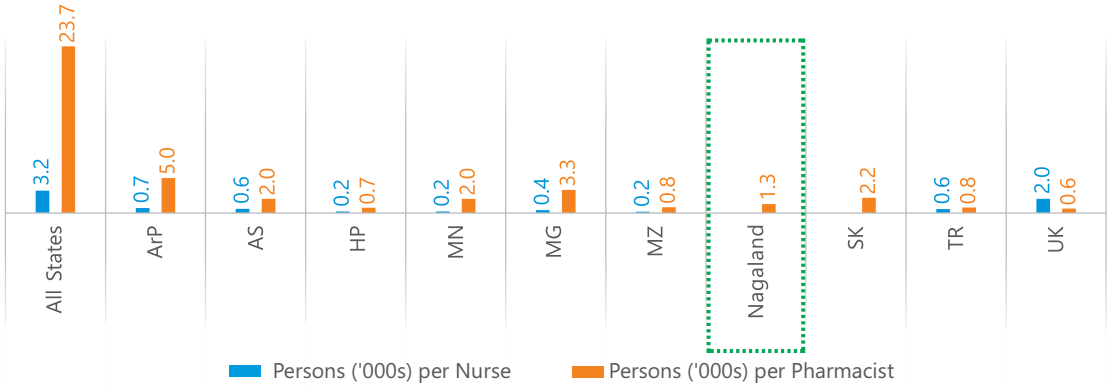
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

NG-3.B: Persons ('000s) per Sub-centre/PHC/CHC



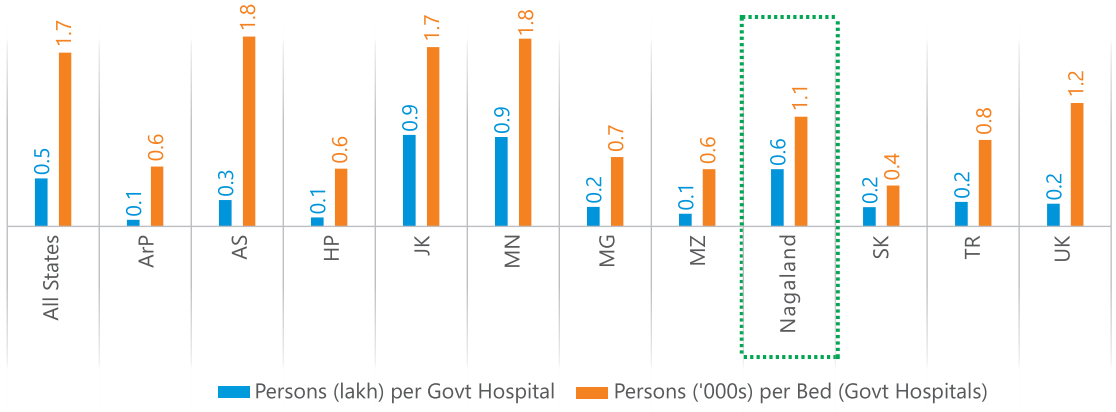
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

NG-3.C: Persons ('000s) per Nurse/ Pharmacist



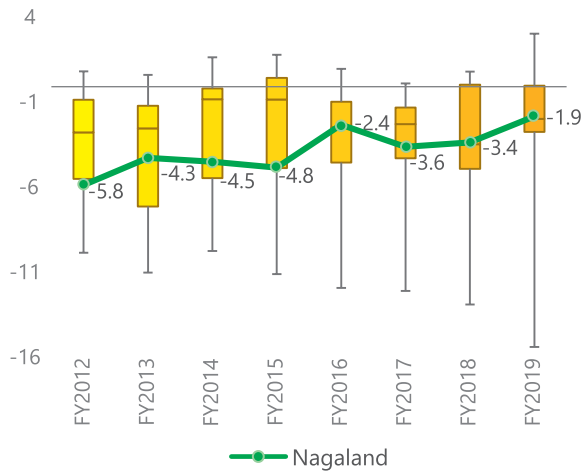
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

NG-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

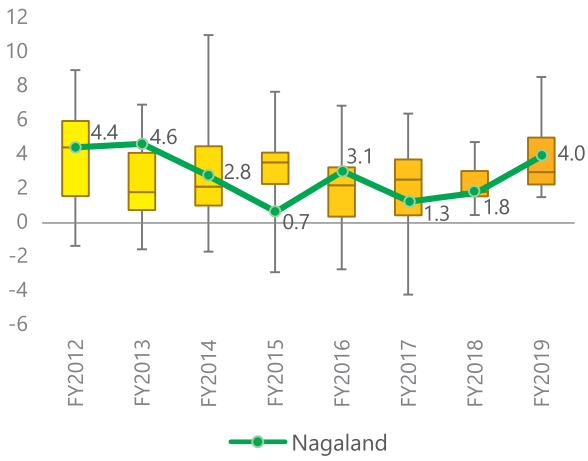


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

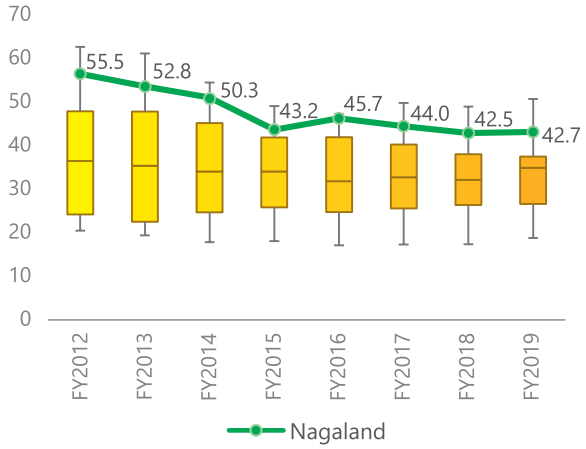
NG-4.A: Revenue Deficit as % of GSDP



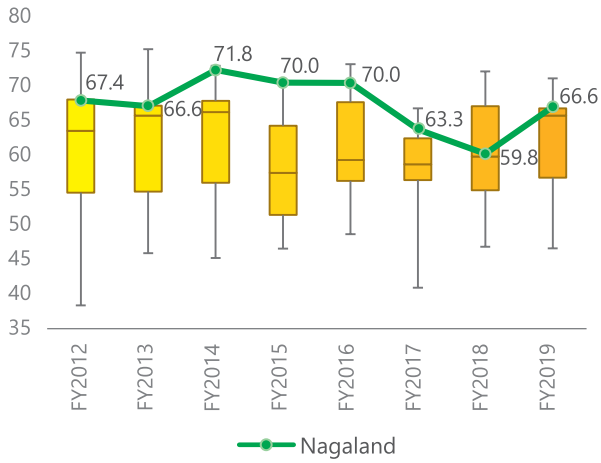
NG-4.B: Fiscal Deficit as % of GSDP



NG-4.C: Outstanding Debt as % of GSDP

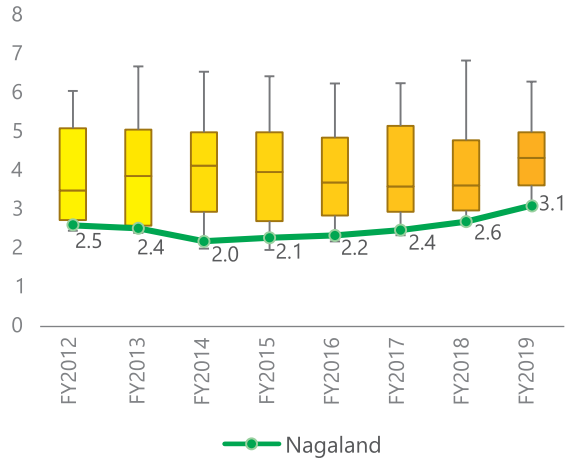


NG-4.D: Committed Expenditure as a % of Revenue Expenditure

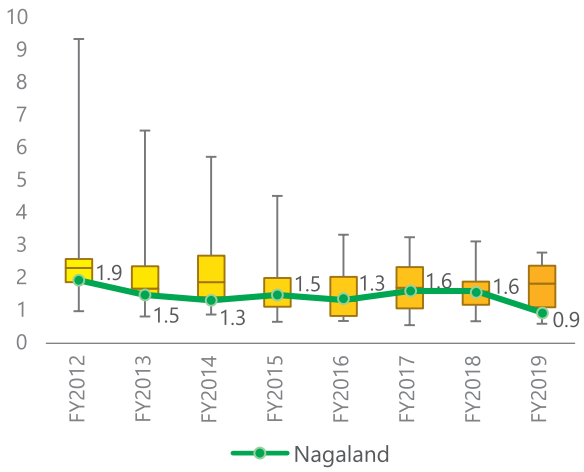


Note: Committed expenditure includes salaries, interest payments, and pensions

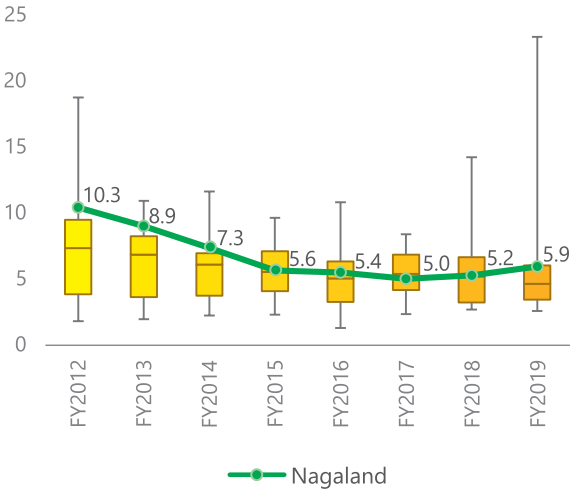
NG-4.E: OTR as % of GSDP



NG-4.F: NTR as % of GSDP



NG-4.G: Capital Expenditure to GSDP Ratio



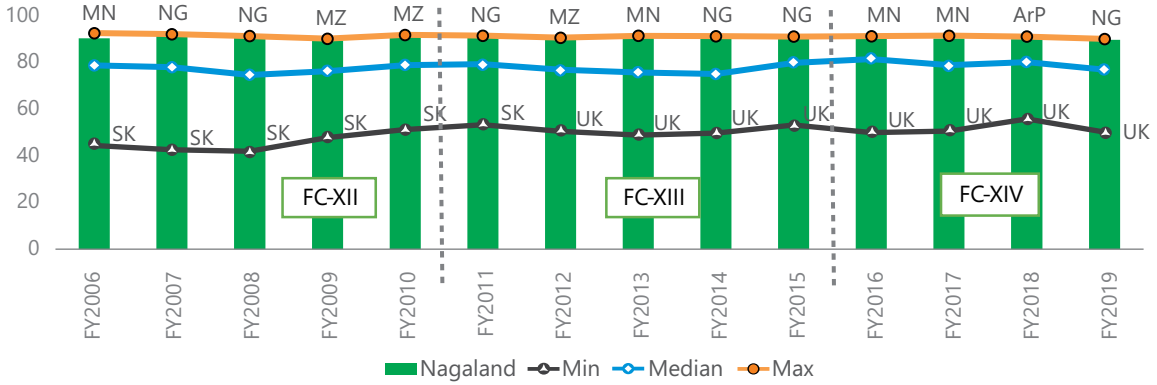
NG-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	1,29,981	1,30,427
Indicators as a percentage of GSDP		
TRR	41.9	23.3
OTR	3.1	5.0
NTR	0.9	2.0
TE	45.9	26.7
ES	10.1	5.0
SS	12.2	8.7
GS	17.8	8.5
Committed Expenditure	26.6	14.4
Capital Expenditure	5.9	4.3
FD	4.0	3.4
RD	–1.9	–0.9
OD	42.7	29.6

NG-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Nagaland	12.6	11.4	12.0
NEHS	12.6	12.1	10.7

NG-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Third Tier

- All 1,428 recognised villages in Nagaland are managed by Village Councils (VCs) and Village Development Boards (VDBs).
- The constitution and functions of VCs and VDBs are defined in the Nagaland Village and Area Council Act, 1978.
- ULBs in Nagaland consist of 3 Municipal Councils, 29 Town Councils and 5 Urban Station Committees.
- Municipalities in Nagaland were set up only in 2004–05 under the provisions of the Nagaland Municipal Council Act, 2001.

Functions

- VCs and VDBs formulate village development schemes and supervise proper maintenance of water supply, roads, forest, education and other welfare activities.
- Of the 18 functions as envisaged in Twelfth Schedule of the Constitution, 14 have been devolved to ULBs.

Auditing Status

- Auditing of accounts of RLBs and ULBs has been completed till 2018–19.

Property Tax Board

- The PTB recommended by the FC-XIII in 2011 has not been set up by the State Government as yet.

Second SFC

- Nagaland is exempted from forming SFC under 73rd and 74th Constitutional Amendments Act, 1992.
- However, the State constituted its Second SFC on 1 June 2013 for award period 2015–2020. But report has not been tabled yet.

Debt and Losses

- The State Government signed the UDAY agreement for operational efficiencies only.
- Receipts and expenditure of the Power Department are given in the table below:

Items (Rs crore)	*2010–11*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*Total*
Receipt	74.0	94.3	102.8	88.3	98.9	458.3
Expenditure	219.61	292.06	341.78	293.83	340.53	1,487.8
Loss	**145.6**	**197.8**	**239.0**	**205.5**	**241.6**	**1,029.5**

Source: Government of Nagaland

- Data on AT&C losses and ACS–ARR gap is not reported by the State Government on the UDAY portal.

Vertical Devolution

- The Government of Nagaland recommends that 25% of the total devolution to the States be set aside for Special Category States as against 11.53% allocated by the FC-XIV.
- Of the 25% of the total devolution to the States, 3% each be allocated to States like Nagaland which have geopolitical significance.

Formula for Horizontal Devolution

- Government of Nagaland did not propose a devolution formula for horizontal transfers.

Share of Subsidy in TRE

- In 2018–19, the share of subsidy in TRE of Nagaland was negligible from 2011–12 to 2018–19.

Tourism

- Natural and cultural heritage of Nagaland may be leveraged to promote tourism.
- The State has already started festivals and events like Hornbill, Sekrenyi, and Aoleang which attract both domestic and international tourists.
- Eco-tourism may be encouraged through incentives or PPP mode.
- Homestays, individual as well as community-based, may be promoted as viable alternate source of income. The State Government may take active measures to link homestays with e-commerce players.

Select Social Indicators

- Nagaland's per capita revenue expenditure per annum on education (Rs 8,336) and health (Rs 2,933) are higher than NEHS average (Rs 5,970 and Rs 1,987 respectively) in 2018–19.
- This prioritisation of social expenditure reflects in the key human development indicators of Nagaland, which are better than national averages (barring institutional deliveries) (see NG-2.D).
- Better health and education of the population indicates scope for service sector development in the State.

High Debt

- Nagaland has the second highest debt in the country.
- Though its Debt/GSDP has reduced from 55.5% in 2011–12 to 42.7 in 2018–19, it is still much higher than the NEHS average of 29.61%.
- Debt should be consolidated in line with the new FRBM Act and the recommendations of FC-XV.

High Committed Expenditure and Declining Capital Expenditure

- The State needs to restructure and rationalise its expenditure priorities.
- While committed expenditure (including GIA Salary) of Nagaland was 67.3% of its TRE in 2018–19 (all States average 50.6%).
- On the other hand, capital expenditure in Nagaland declined between 2011–12 and 2018–19 both as a percentage of GSDP (from 10.3% to 5.9%) and total expenditure (20.4% to 12.8%).
- Measures should be taken to reduce burden of committed expenditure to free up resources for development expenditure.
- At the same time, the State needs to reduce its infrastructure deficit by increasing capital expenditure and finding alternate sources of funding like PPP.

High Dependence on Union Government

- Nagaland's OTR/GSDP was only 3.1% in 2018–19 (NEHS average 5%).
- The State's collections from VAT/GST, Stamp Duty and Registration Fees, and Excise are very low as compared NEHS average. However, its collections have improved with the implementation of GST.
- The State's NTR is only 0.94% as compared to NEHS average of 2%.
- It gets 90% of its TRR from Union transfers (highest across all States).
- The State needs to widen its tax base and tighten its tax administration to improve its own revenues.

Regional Inequality

- Of the 11 districts of Nagaland, the remote eastern districts—Mon, Tuensang, Longleng, and Kiphire, covering 36% of the State area and home to 28% of its population—have remained relatively backward.
- The State needs to have a more focused approach for these areas and improve its physical and digital connectivity as well as other physical and social infrastructure in these areas.

Indicators	*Eastern Nagaland*	*Rest of Nagaland*
Roads (km per sq km)	71	96
Water supply coverage (% households)	32	41
No. of government schools	711	1,544
No. of government colleges	4	15
No. of private colleges	1	46
Male literacy (%)	69	88
Female literacy (%)	61	82
Urbanisation rate (%)	16.7	33.8

Source: Government of Nagaland Memorandum

Ranking in NITI Aayog's SDG Index (2019)

- Nagaland is placed 19th of 29 States in the SDG ranking 2019 by the NITI Aayog.
- While Nagaland regressed on SDG–1 No Poverty, with incidence of poverty in the State rising from 9% in 2004–05 to 18.88% in 2011–12, it reported decent economic growth in the last few years.
- The State needs to ensure that benefits of economic growth trickle down to all sections of society.

Low Share of Secondary Sector

- Only 12% of Nagaland's GSDP comes from the secondary sector.
- The secondary sector in Nagaland, already hamstrung by its remoteness, lack of connectivity to mainland India, and low Credit–Deposit ratio, is further disrupted by insurgency.
- The tertiary sector could be encouraged in the State through capacity building activities, establishment of vocational training institutes, developing Indigenous Skill Curriculum, and establishment of Traditional Skill Resource Centre in all districts.

Power Sector

- The State has reported high AT&C losses in its memorandum.
- Receipt–Expenditure gap in the power sector is also widening.
- The proposal for corporatisation and unbundling of the power sector is still under examination. The State needs to take appropriate action at the earliest so that its power sector can work on sound commercial and economic principles.
- Measures like pre-paid metering/smart metering, feeder segregation, and drive against power theft need to be taken up immediately to reduce the burden of losses and protect against fiscal risk.

Local Bodies

- Low own resources
  - » Village Councils, Municipal Councils and Town Councils have negligible resources.
  - » The State needs to explore options like user charges, parking fees, property tax, market fee, etc., to improve resources of local bodies and establish a PTB at the earliest.
- Elections
  - » Municipal elections have not been held since 2004–05 because the Constitutional Provision regarding the reservation of 33% seats for women is under litigation in the State.
  - » The State Government has nominated CEOs and administrative officers in Municipal and Town Councils.
  - » The State needs to immediately resolve the issue of reservation and conduct elections at the earliest to allow local bodies to function democratically.
- SFC
  - » The State should ensure constitution of SFCs, timely report submission, and tabling of ATR before start of the award period.

Public Sector Undertakings[1]

- The number of accounts in arrears had increased from 18 in 2013–14 to 21 in 2017–18. Three PSUs (Nagaland Industrial Development Corporation, Nagaland State Mineral Development Corporation, and Nagaland Industrial Raw Materials & Supply Corporation Ltd., Dimapur)

finalised six accounts as of 30 September 2018, while the remaining PSUs (two) did not finalise any accounts. The delay in finalisation of accounts of these PSUs was mainly due to delay in compilation/adoption of accounts by the Board of Directors of respective PSUs. In addition to above, the accounts of one non–working PSU had arrears of accounts for 16 years (2002–2018).

- In view of the above, it is recommended that the State Government monitor and ensure timely finalisation of accounts in conformity with the provisions of the Companies Act, 1956 and orders of the Ministry of Corporate Affairs issued from time to time. The timely auditing of account should also be ensured.

Reform Roadmap

Reform Signposts

- The State has a debt to GSDP ratio of 42.7% which is one of the highest in the country. **Debt should be consolidated in line with recommendations of new FRBM Act and FC-XV.**
- The State has high committed expenditure while capital expenditure has seen a decline over the years. **Measures should be taken to reduce burden of salaries to free up resources for development expenditure. At the same time, the State needs to reduce its infrastructure deficit by increasing the capital expenditure and finding alternate sources of funding like PPP.**
- The State has very low OTR to GSDP ratio as compared to rest of NEHS. Although, the State's tax collections have improved with the GST collections, **it needs to widen its tax base and tighten its tax administration to improve its own revenues.**

Notes

1. CAG (2019), *Report of the Comptroller and Auditor General of India on Social, Economic, Revenue, and General Sectors for the year ended 31 March 2019*, Report 2 of 2019, Government of Nagaland.

OD-1.A: Overview

POPULATION
42 million
3.5%
Of population across all States

AREA
1,55,707 sq km
4.8%
Of area across all States

7.3%
Of forest area across all States

FOREST COVER
51,619 sq km
33.2%
Of the State's own area is under forest

0.5% ↑
Forest cover changed from 2017 to 2019

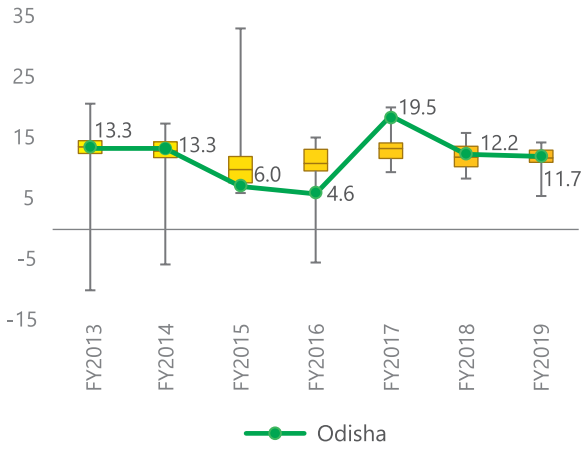
PER CAPITA GSDP
Rs 1,12,907
Rs 1,40,422
Average across all States

TAX TO GSDP
6.2%
6.3%
Average across all States

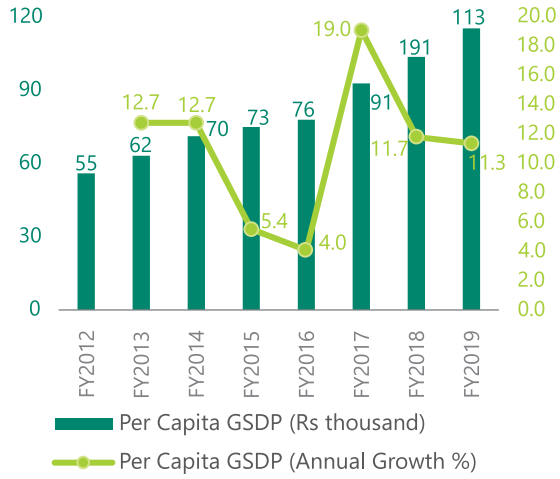
CHILDREN PER WOMAN
2.1
2.2
Average across all States

URBANISATION RATE
16.7%
31.1%
All India average

OD-1.B: Growth rate of GSDP (at current prices, %)



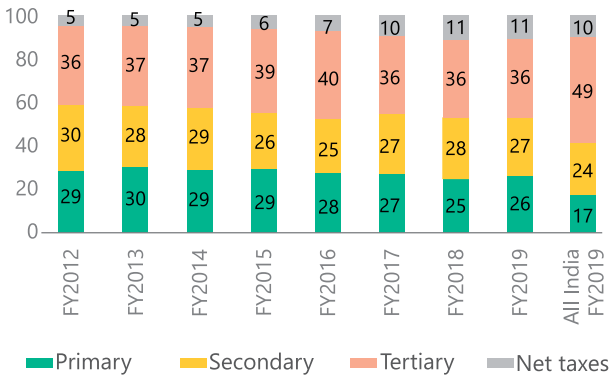
OD-1.C: Per capita GSDP (at current prices)



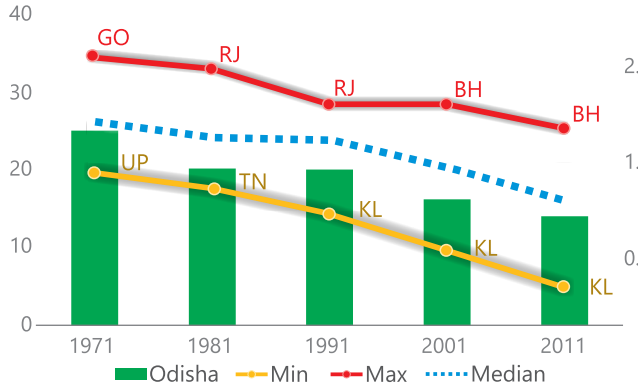
OD-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	All GS	Share (%) of State in GS
2011–12	2,30,987	77,44,945	3.0
2012–13	2,61,700	88,27,195	3.0
2013–14	2,96,475	1,00,07,392	3.0
2014–15	3,14,250	1,09,93,257	2.9
2015–16	3,28,550	1,21,91,256	2.7
2016–17	3,92,708	1,37,80,737	2.9
2017–18	4,40,517	1,54,20,126	2.9
2018–19	4,92,229	1,72,83,813	2.9

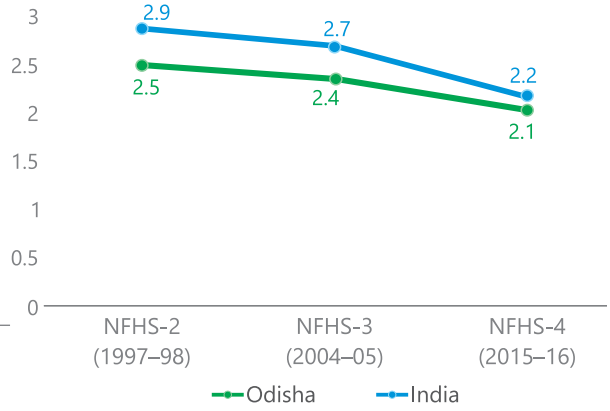
OD-1.E: Sectoral Contribution to GSDP (at current prices, %)



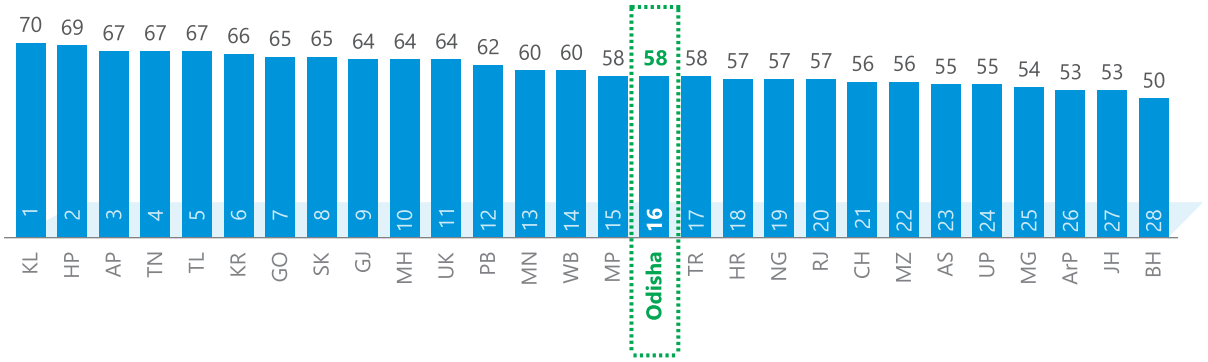
OD-2.A: Decadal Growth in Population (%)



OD-2.B: Total Fertility Rate (children per woman)



OD-2.C: SDG Index of NITI Aayog (2019)



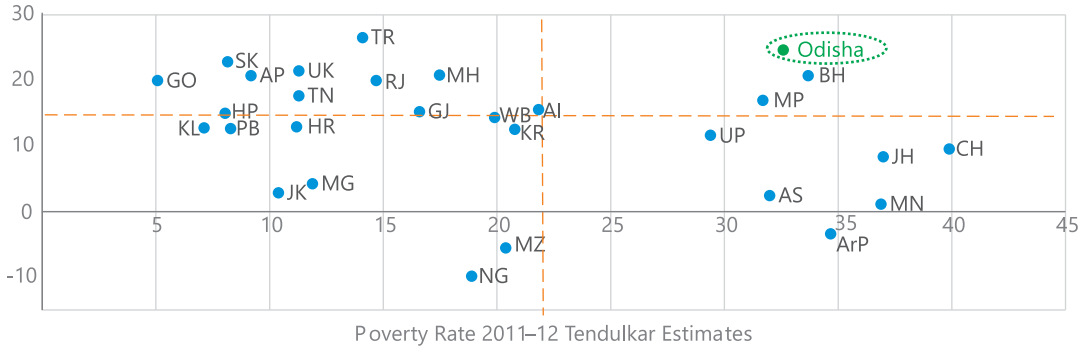
OD-2.D: Key Social Indicators

	OD	INDIA
EDUCATION		
Literacy rate (%)[a]	72.9	73.0
Pupil–Teacher ratio[b] (in Primary)	18.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	40.1	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	88.8	89.9
Availability of toilets[d] (household %)	35.0	61.1

	OD	INDIA
HEALTH		
Life expectancy (years)[g]	68.4	69.0
Sex ratio (♀ per 1000 ♂)[a]	979	943
Underweight children (%)[d]	34.4	35.8
Stunting among children (%)[d]	34.1	38.4
Anaemia among children (%)[d]	44.6	58.6
Women with below normal BMI (%)[e,d]	26.5	22.9
Anaemia among Women (%)[d]	51.0	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	40.0	32.0
Institutional Deliveries (%)[d]	85.3	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	5.2	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,308	1,218 *(All States)*

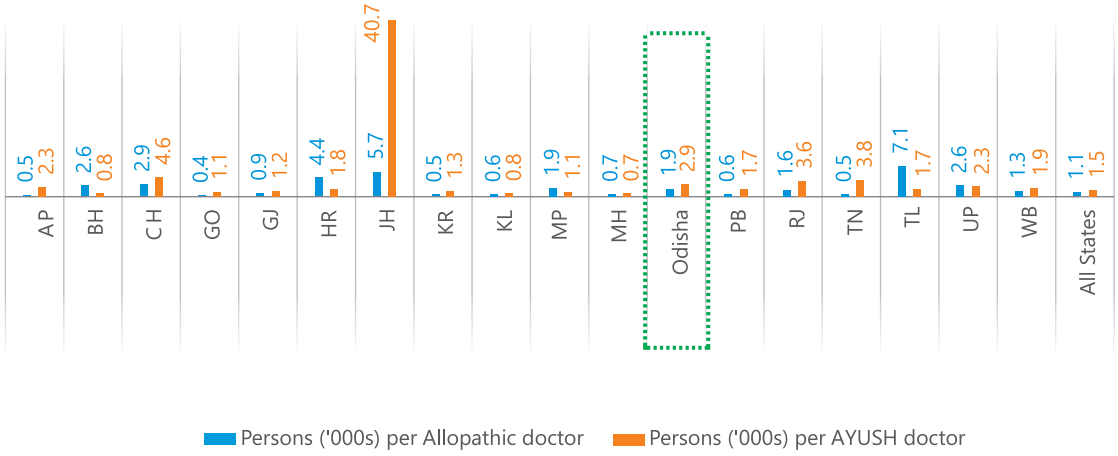
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

OD-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



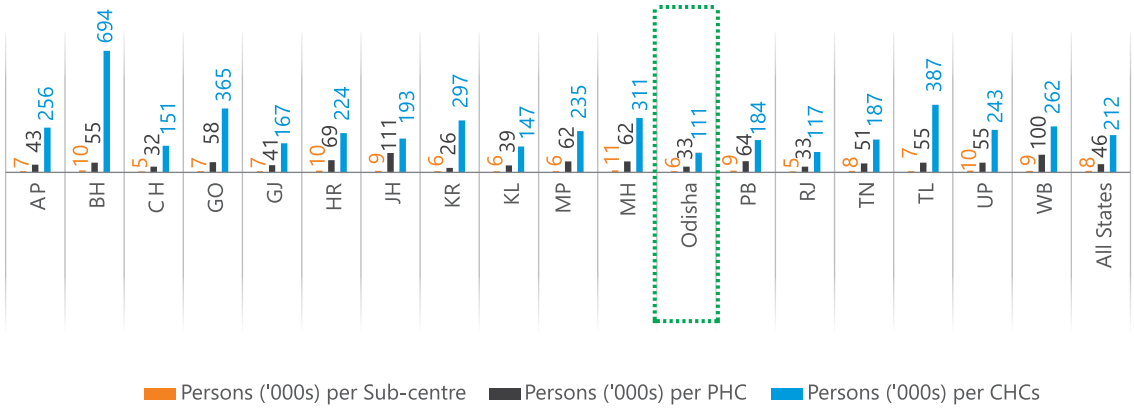
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

OD-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



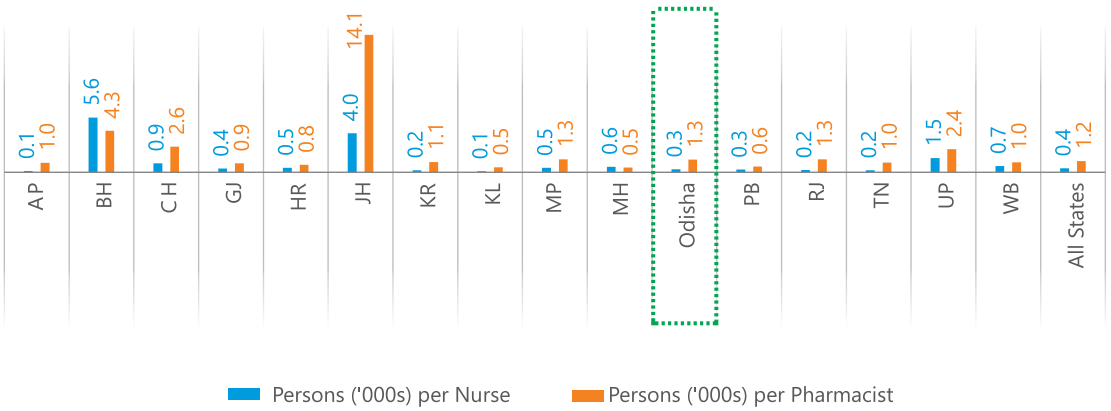
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

OD-3.B: Persons ('000s) per Sub-centre/PHC/CHC



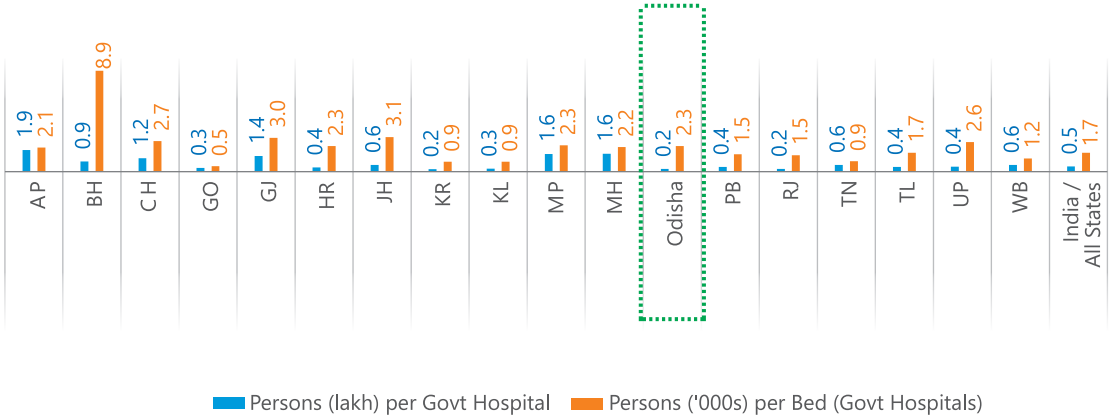
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

OD-3.C: Persons ('000s) per Nurse/ Pharmacist



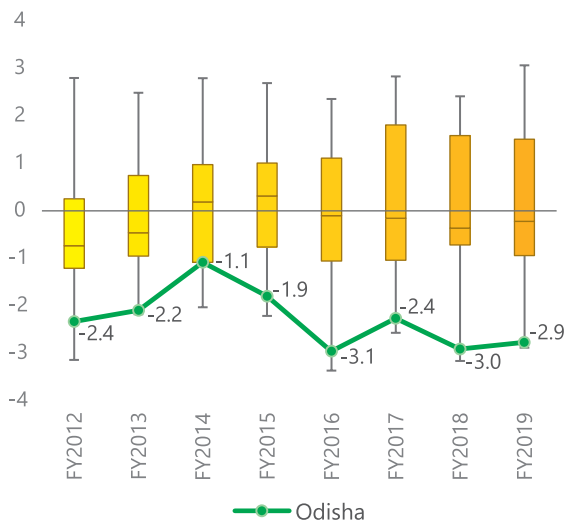
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

OD-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

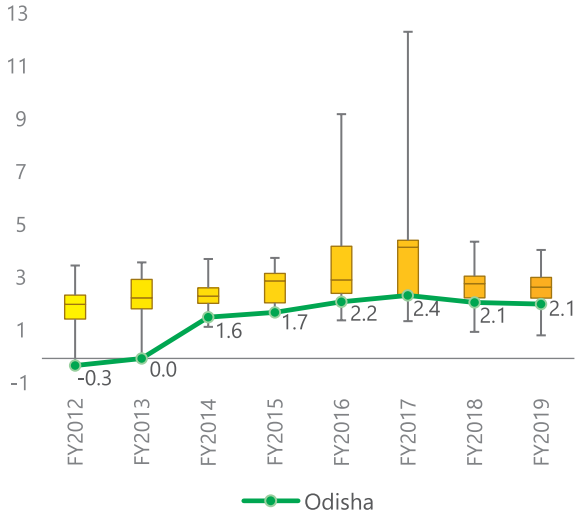


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

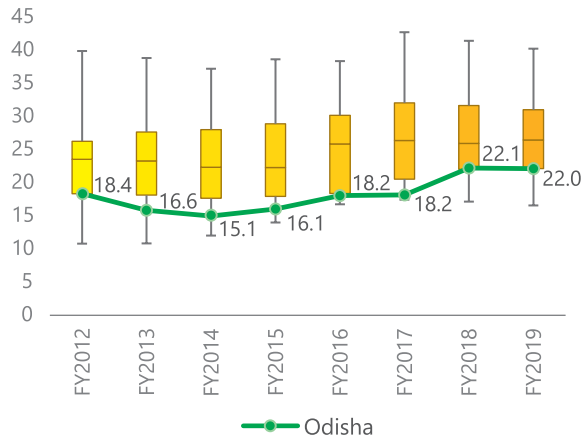
OD-4.A: Revenue Deficit as % of GSDP



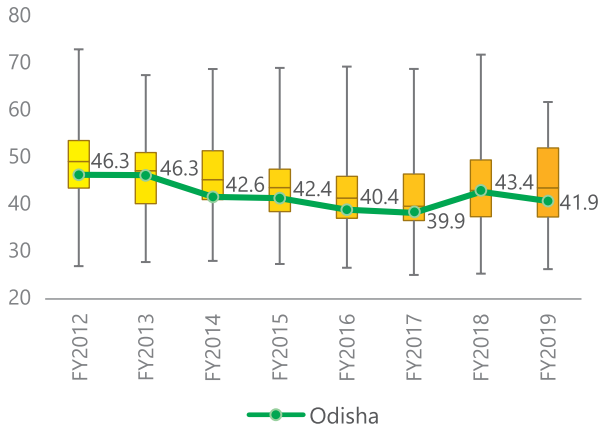
OD-4.B: Fiscal Deficit as % of GSDP



OD-4.C: Outstanding Debt as % of GSDP



OD-4.D: Committed Expenditure as a % of Revenue Expenditure

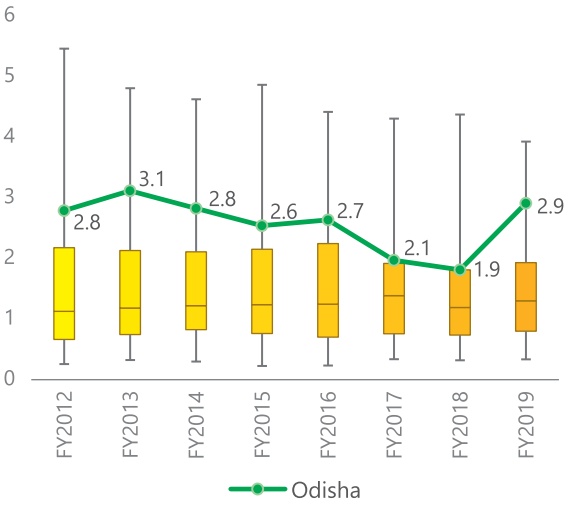


Note: Committed expenditure includes salaries, interest payments, and pensions

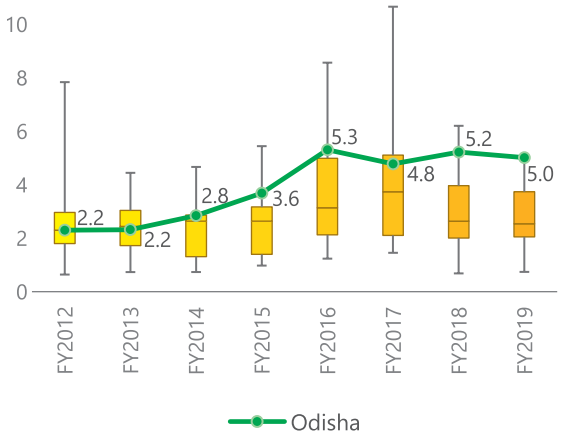
OD-4.E: OTR as % of GSDP



OD-4.F: NTR as % of GSDP



OD-4.G: Capital Expenditure to GSDP Ratio



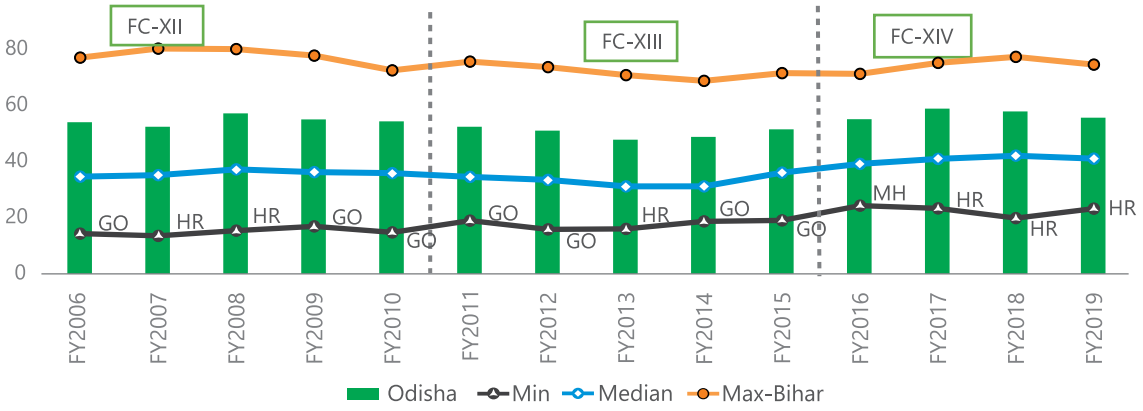
OD-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	1,12,907	1,41,099
Indicators as a percentage of GSDP		
TRR	20.2	13.4
OTR	6.2	6.4
NTR	2.9	1.1
TE	22.4	16.1
ES	4.8	3.1
SS	7.6	5.4
GS	4.7	4.7
Committed Expenditure	7.3	5.8
Capital Expenditure	5.0	2.5
FD	2.1	2.5
RD	–2.9	0.2
OD	22.0	25.0

OD-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Odisha	13.5	14.1	10.8
GS average	13.6	13.1	10.3

OD-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions envisaged in the Eleventh Schedule of the Constitution, 21 have been devolved to RLBs.
- Of the 18 functions envisaged in the Twelfth Schedule of the Constitution, 17 have been devolved to ULBs.

Auditing Status

- Audit of accounts of RLBs and ULBs has been completed till 2016–17.

Property Tax Board

- The Valuation Organisation under Odisha's Housing and Urban Development Department is assisting ULBs in setting up an independent and transparent procedure for assessing property tax.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
13	12	6	8

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Fourth SFC (2015–16 to 2019–20)

- The State Government has accepted and is currently following the recommendation of the Fourth SFC to devolve 3% of the net tax revenue during the period 2015–2020 to local bodies, to be distributed between PRIs and ULBs in a 75:25 ratio.

Fifth SFC (2020–21 to 2024–25)

- Fifth SFC constituted in May 2018 submitted its report to the State Government on 02 August 2019.
- However, the ATR has not been laid before the Legislative Assembly yet.

Debt and Losses

- Total borrowings of DISCOMs as on 31 March 2019 are Rs 4,487 crore of which State Government borrowings are Rs 219 crore.
- Since all DISCOMs in Odisha are privatised, the State is not considered eligible for benefits under the UDAY scheme.

Key Performance Indicators (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	29.2	Not available
ACS–ARR Gap (Rs per unit)	0.6	Not available

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Government of Odisha.

Vertical Devolution

- Odisha proposed that the share of States in the divisible pool be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Determinant*	*Weight (If 1971 population is adopted)*	*Weight (If 2011 population is adopted)*
i)	Composite Population Index (1971)	25	
ii)	Composite Population Index (2011)		10
iii)	Inverse of Population Growth between 1971 and 2011		15
iv)	Income Distance	50	50
v)	Composite Area Index (Adjusted)	15	15
vi)	Forest Cover	10	10

Fiscal Discipline

- Odisha has been fiscally disciplined, maintaining revenue surplus since 2005–06.
- It has kept FD–GSDP ratio below 3% since 2011–12 (even attaining fiscal surplus in 2011–12).
- The State has, therefore, not resorted to additional borrowings under Article 293(3) of the Constitution.
- Further, the Debt–GSDP ratio has been maintained at less than 20% between 2011–12 and 2016–17.
- However, fiscal pressures are gradually building-up as Debt–GSDP ratio has increased from 15.1% in 2013–14 to 22% in 2018–19.

FRBM Compliance

- The State enacted the FRBM Act in 2005 and amended it in 2006, 2011 and 2016.
- The State adhered to FRBM targets during the period 2011–12 to 2017–18.

Ratios in %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	30.6	30.2	29.8	29.5	25.0	25.0	25.0
Actually achieved	18.4	16.6	15.1	16.1	18.2	18.2	22.1
FD–GSDP							
As prescribed by the State FRBM	–3.0	–3.0	–3.0	–3.0	–3.0	–3.5	–3.5
Actually achieved	–0.3	0.0	1.6	1.7	2.2	2.4	2.1

Note: (–) sign indicates surplus and (+) indicates deficit.
Source: Government of Odisha

Port-Led Industrialisation

- Though Odisha is endowed with 480 km of coastline, it has only three ports—Paradip (major port), Dhamara (minor), and Gopalpur (minor).
- The State needs to expedite the development of other ports to provide impetus to industrialisation and economic growth.

District Mineral Foundation

- According to data shared by the Union Ministry of Mines, the Government of Odisha received Rs 7,496.72 crore under DMF (highest across 21 States) in all 30 districts of the State up to May 2019.
- These funds need to be utilised for the prescribed purposes within the fiscal year in which the amount was collected.
- If these funds remain idle as fixed deposits, substantial fiscal space for the State, though indirectly available, remains underutilised.
- The State Government shall put a mechanism in place to ensure their utilisation expeditiously within the fiscal year.

Forests and Tourism

- About 33% of the State's geographical area is under forests.
- The State needs to devise strategies to promote eco-tourism, thereby generating greater resources from this sector.
- An MSP scheme for MFP was introduced by the Ministry of Tribal Affairs during 2013–14 to support STs and other forest dwellers, dependent on collection and selling of MFP. The scheme remained a non-starter due to its poor procurement mechanism.
- The Government of Odisha should revive and implement the scheme, using electronic platforms and other existing programmes such as e-NAM to build a robust procurement mechanism.

Irrigation

- The State receives much more annual rainfall (1,344.5 mm in 2017) than the national average (1,127 mm in 2017).[1]
- Hence, the State needs to make concerted effort to raise its area under irrigation (percentage of gross irrigated area over gross cropped area) from 28.7% to at least the national average of 48.6% in 2014–15 (provisional).[2]

Health

- Odisha has been facing severe shortage of healthcare professionals with:[3]
  - 1,276 vacancies (83.5% shortfall) of specialists in CHCs against the sanctioned strength of 1,529; and
  - 409 vacancies (30.8% shortfall) of doctors in PHCs against the sanctioned strength of 1,326.
- For a sustainable solution, the State may explore Maharashtra's model of recognising diplomas from the College of Physicians and Surgeons as adequate for converting MBBS doctors to specialists who may then serve in remote and tribal areas.
- Besides, telemedicine could be promoted to fill the need gap in such areas.
- The State needs robust initiatives to improve key health indicators, which are inferior to the national average, such as maternal mortality of 150 per 100,000 live births (2016) as opposed to 113 all-India (for others, see OD-2.D).[4]

Education

- Odisha's performance has been, by and large, satisfactory (compared to national average) educational parameters such as learning outcomes (percentage of children in Grade III who can at least do subtraction and read Grade II text);[5] pupil–teacher ratio (primary, upper primary, and high school);[6] literacy rate, etc.[7]
- However, the annual per capita expenditure on education in Odisha should be increased from Rs 2,707 (2016–17) to at least the GS average of Rs 2,876.

Urbanisation

- Across 29 Indian States, Odisha has fourth lowest urbanisation rate (16.7%) as against the national average of 31.2% for the country.
- According to the Census of 2011, it did not have a single million-plus city.
- Since urban areas are growth drivers of an economy, substantial stimulus should be provided for accelerating urbanisation in the State.

Ranking on the SDG Index of NITI Aayog (2019)

- The State ranks 16th among the Indian States.
- The State needs to improve its performance on SDG–1 No Poverty, SDG–2 Zero Hunger, SDG–3 Good Health and Wellbeing, SDG–4 Quality Education, SDG–6 Clean Water and Sanitation, SDG–7 Affordable and Clean Energy, SDG–8 Decent Work and Economic Growth, SDG–9 Industry, Innovation and Infrastructure, SDG–11 Sustainable Cities and Communities, and SDG–16 Peace, Justice and Strong Institutions.

Backwardness

- Of the 30 districts of the State, 10 are recognised as aspirational districts.
- Further, the State had a poverty rate of 32.6% in 2011–12 (Tendulkar methodology) (compared to the national average of 21.92%).

- The State Government needs to take decisive steps to break the low-income trap and improve social outcomes.
- Further, the State may like to target the development of bottom 20% blocks as 'aspirational' blocks, on the lines of aspirational districts being monitored by NITI Aayog.

Left Wing Extremism

- Of the 30 districts of the State, 15 are LWE affected.[8]
- Moreover, 2 of the 10 aspirational districts feature among the worst 35 LWE-affected districts of the country, creating serious obstacles in their development path.
- A concerted and coordinated approach involving Central Government and neighbouring States is very critical for resolving the situation.

Piped Water Supply

- Only 4% of rural households have PWS connections in the State, which is less than one-fourth of the all India coverage of 18.3%.
- The State needs to invest into cost-effective and innovative approaches such a rain-water harvesting and end-to-end value chain management of drinking water.

Power Sector

- Though the State was unable to participate in UDAY as the power sector is privatised, it should undertake effective measures to bring down AT&C losses from the high level of 29.2% (2018–19).
- Robust systemic reforms should be undertaken to ensure that power subsidies reach intended beneficiaries without leakage.
- The State needs to substantially improve its performance on key power sector barometers to minimise fiscal risk.

Local Bodies

- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Public Sector Undertakings[9]

- The number of accounts in arrears increased from 47 in 2012–13 to 64 in 2016–17. This indicates that there was little improvement in clearance of arrear accounts. Fifty–three accounts of 43 PSUs were finalised as of September 2017. Of these, 39 PSUs had arrears ranging between 1 and 8 years.
- It may be seen that year–wise budgetary outgo of the State towards equity, loans and grants/ subsidies to State PSUs showed an increasing trend during 2012–13 to 2015–16. It touched the highest figure of Rs 2,369.06 crore during 2015–16 decreasing to Rs 1,601.17 crore in 2016–17.

Recurrent Cyclones

- The State suffers heavily from recurring cyclones—cyclone Phailin in 2013, cyclone Titli in 2018, and cyclone Fani in 2019, caused devastating losses.

- The State should continue to invest heavily in disaster preparedness and prevention measures.
- The recommendations of FC-XV on mitigation measures and resources earmarked therein should be gainfully deployed by the State Government.

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Odisha is part of the group which includes Bihar, Uttar Pradesh, Jharkhand, and Madhya Pradesh.

Reform Signposts

- It also does well in its class on key socioeconomic statistics related to underweight children, stunting among children, anaemia, women whose BMI is below normal, and households with drinking water and toilet facility.
- **Given that Odisha is a revenue surplus State, it could increase social sector spends to ensure that its statistics match those of States in its class.**
- Some fiscal laxity continues to result in higher TGR in TRE as compared to that in OTR and ORR. This may be a source of fiscal instability. Hence, strengthening of OTR and ORR and streamlining of procedures play an important role for the State. It is worth mentioning that the OTR as a percentage of ORR for FY 2018–19 is 68% for Odisha (as compared to an average of 77.8% for States in its class).
- **It would be ideal if the GSDP composition of Odisha could be shifted away from the tertiary to secondary sector in the long run through appropriate capital expenditure.**
- **Under the non-fiscal measures towards State Policy recommendation, there is a need for strengthening administrative systems and effective service delivery.**
- **Comprehensive re-prioritisation of expenditure and more focused approach may be adopted for the development of the bottom 20% blocks of Odisha as 'aspirational' blocks, on the lines of aspirational districts being monitored by NITI Aayog.**

Notes

1 Indian Meteorological Department

2 GOI (2018), *Agricultural Statistics 2018*, Department of Agriculture, Cooperation, and Farmers' Welfare, Ministry of Agriculture and Farmers' Welfare, Government of India.

3 GOI (2018), *Rural Health Statistics 2018*, Ministry of Health and Family Welfare, Government of India.

4 GOI (2016, 2017, and 2018), *Sample Registration Surveys 2016–2018*, Office of the Registrar General and Census Commissioner of India, Ministry of Home Affairs, Government of India.

5 ASER (2018), *Annual Survey of Education Report*, 2018, ASER Centre.

6 NUEPA (2016), *School Education in India, U-DISE, 2015–16*, published by National University of Educational Planning and Administration, New Delhi and the Department of School Education and Literacy, Ministry of Human Resource Development. Government of India.

7 GOI (2011), *Census of India 2011*, Office of the Registrar General and Census Commissioner of India, Ministry of Home Affairs, Government of India.

8 As shared by the Ministry of Home Affairs in February 2019.

9 CAG (2018), *Report of the Comptroller and Auditor General of India on Public Sector Undertakings for the year ending 31 March 2017,* Government of Odisha.

PB-1.A: Overview

POPULATION
27.7 million
2.3%
Of population across all States

AREA
50,362 sq km
1.5%
Of area across all States

0.3%
Of forest area across all States

FOREST COVER
1,849 sq km
3.7%
Of the State's own area is under forest

0.7% ↑
Forest cover changed from 2017 to 2019

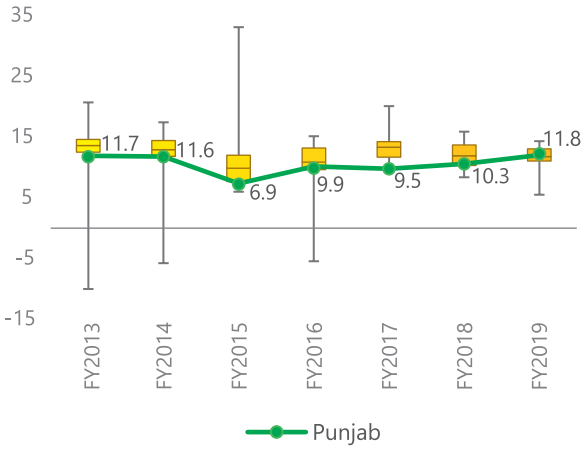
PER CAPITA GSDP
Rs 1,71,907
Rs 1,40,422
Average across all States

TAX TO GSDP
6.0%
6.3%
Average across all States

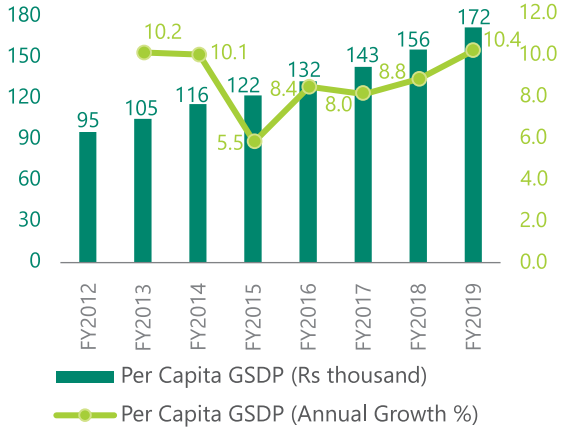
CHILDREN PER WOMAN
1.6
2.2
Average across all States

URBANISATION RATE
37.5%
31.1%
All India average

PB-1.B: Growth rate of GSDP (at current prices, %)



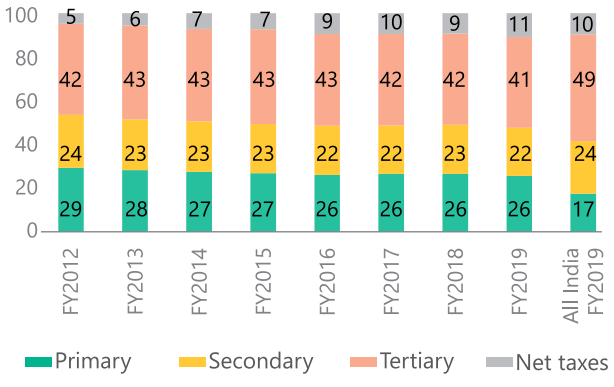
PB-1.C: Per capita GSDP (at current prices)



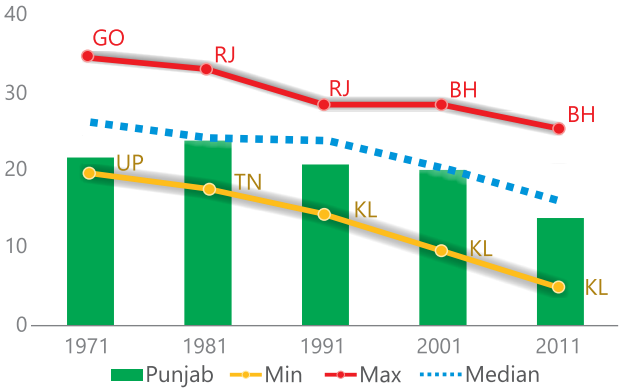
PB-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	2,66,628	77,44,945	3.4
2012–13	2,97,734	88,27,195	3.4
2013–14	3,32,147	1,00,07,392	3.3
2014–15	3,55,102	1,09,93,257	3.2
2015–16	3,90,087	1,21,91,256	3.2
2016–17	4,26,988	1,37,80,737	3.1
2017–18	4,70,834	1,54,20,126	3.1
2018–19	5,26,376	1,72,83,813	3.0

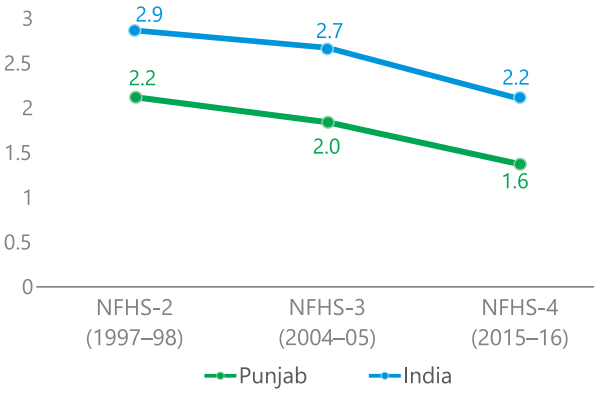
PB-1.E: Sectoral Contribution to GSDP (at current prices, %)



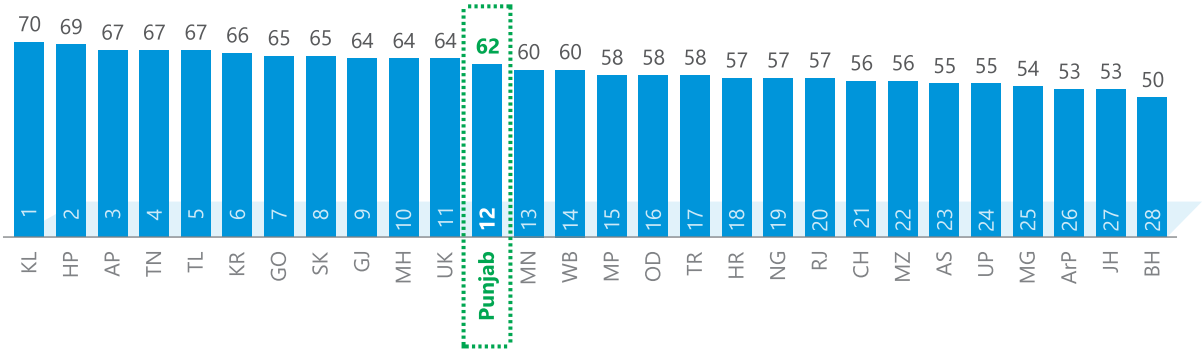
PB-2.A: Decadal Growth in Population (%)



PB-2.B: Total Fertility Rate (children per woman)



PB-2.C: SDG Index of NITI Aayog (2019)



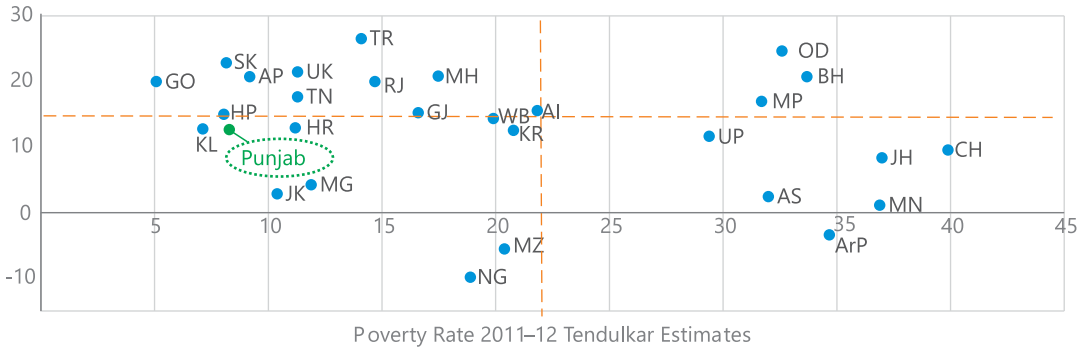
PB-2.D: Key Social Indicators

	PB	INDIA
EDUCATION		
Literacy rate (%)[a]	75.8	73.0
Pupil–Teacher ratio[b] (in Primary)	20.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	72.2	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	99.1	89.9
Availability of toilets[d] (household %)	92.9	61.1

	PB	INDIA
HEALTH		
Life expectancy (years)[g]	72.4	69.0
Sex ratio (♀ per 1000 ♂)[a]	895	943
Underweight children (%)[d]	21.6	35.8
Stunting among children (%)[d]	25.7	38.4
Anaemia among children (%)[d]	56.6	58.6
Women with below normal BMI (%)[e,d]	11.7	22.9
Anaemia among Women (%)[d]	53.5	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	20.0	32.0
Institutional Deliveries (%)[d]	90.5	78.9
Expenditure on Health Sector (revenue+capital) as % of total expenditure (FY2019)	4.1	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,059	1,218 *(All States)*

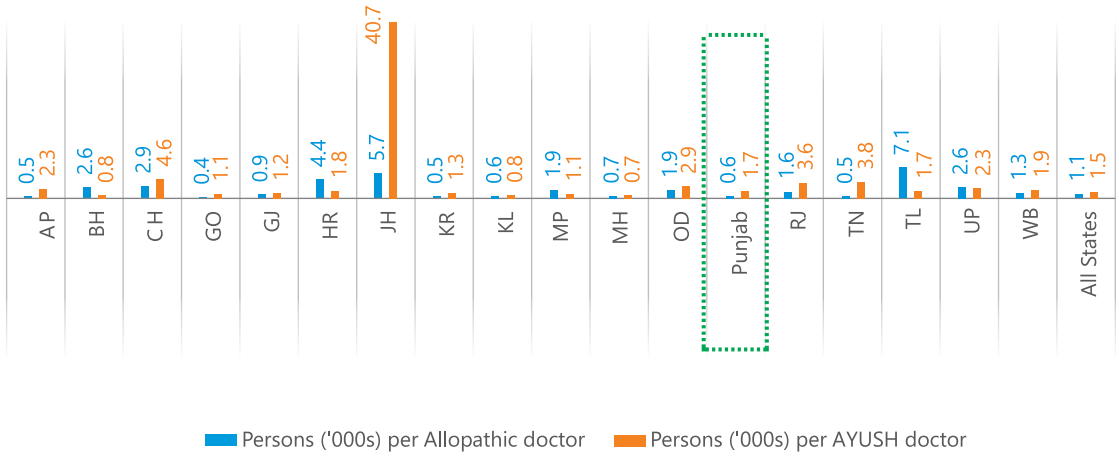
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

PB-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



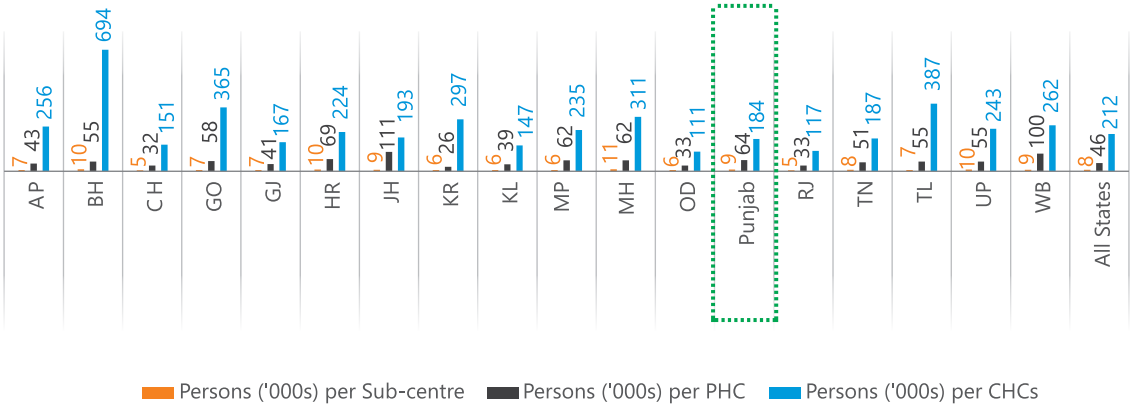
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

PB-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



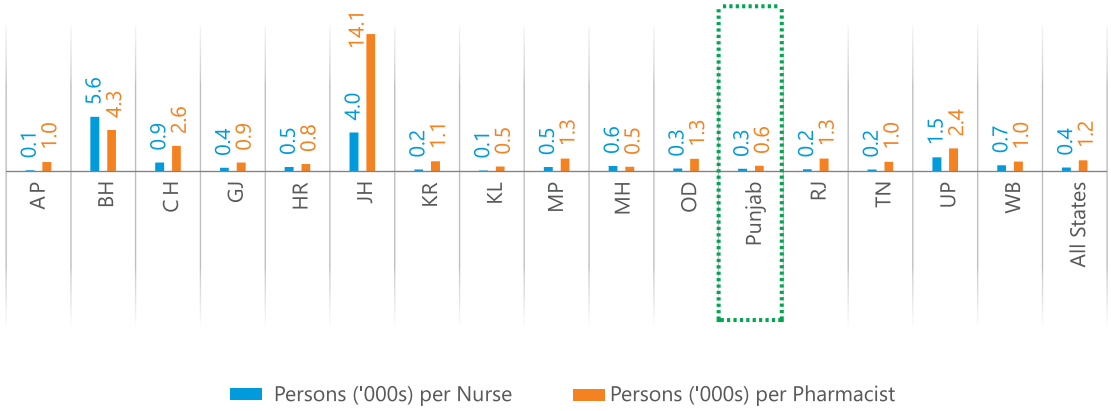
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

PB-3.B: Persons ('000s) per Sub-centre/PHC/CHC



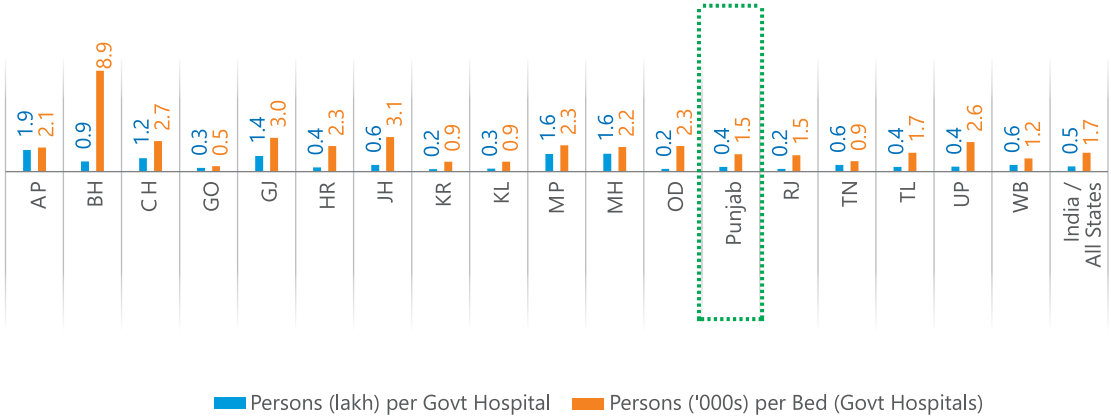
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

PB-3.C: Persons ('000s) per Nurse/ Pharmacist



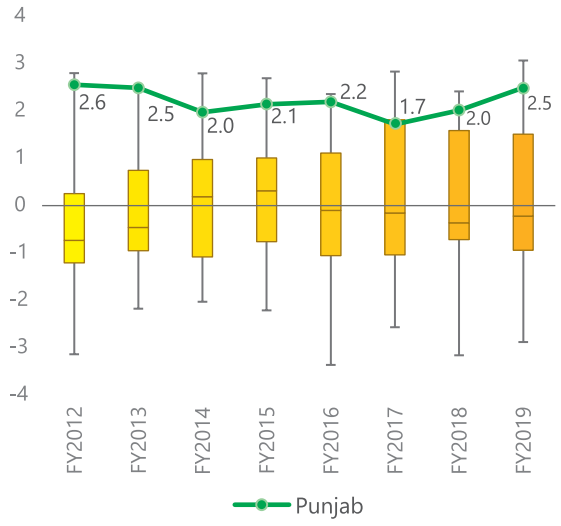
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

PB-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

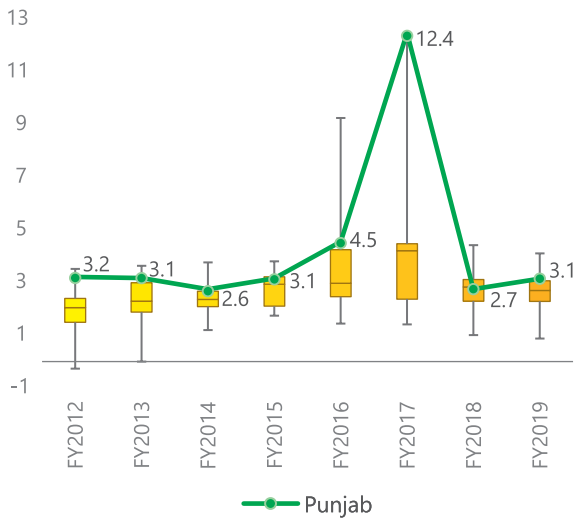


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

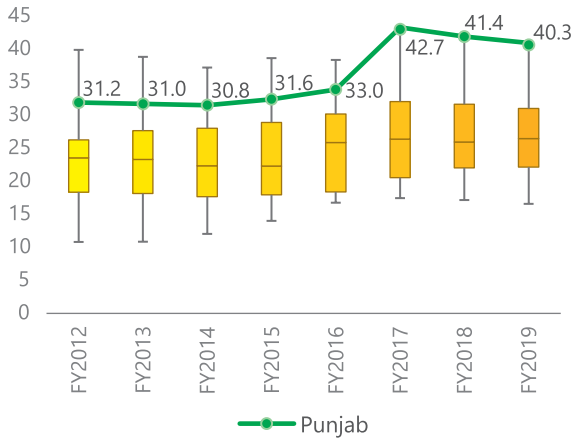
PB-4.A: Revenue Deficit as % of GSDP



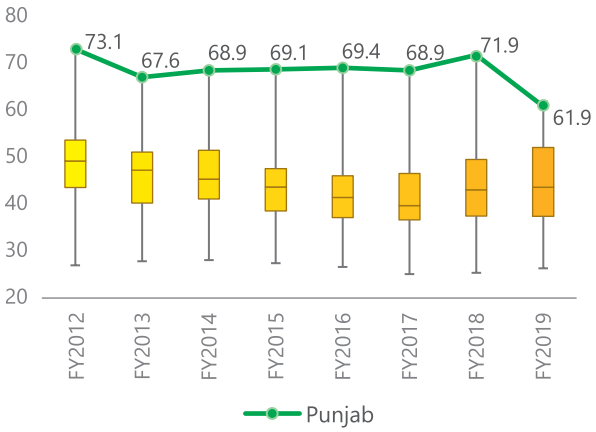
PB-4.B: Fiscal Deficit as % of GSDP



PB-4.C: Outstanding Debt as % of GSDP

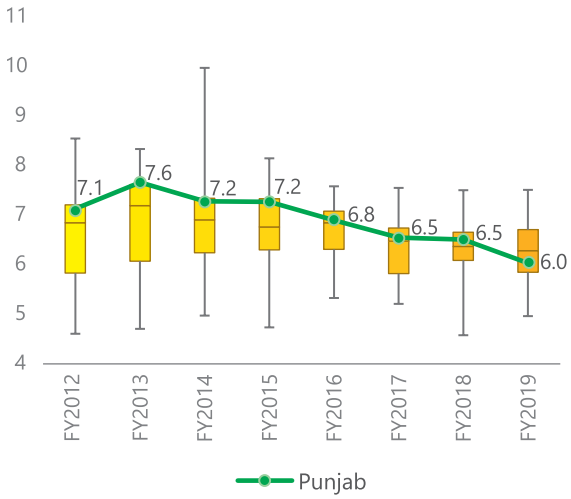


PB-4.D: Committed Expenditure as a % of Revenue Expenditure

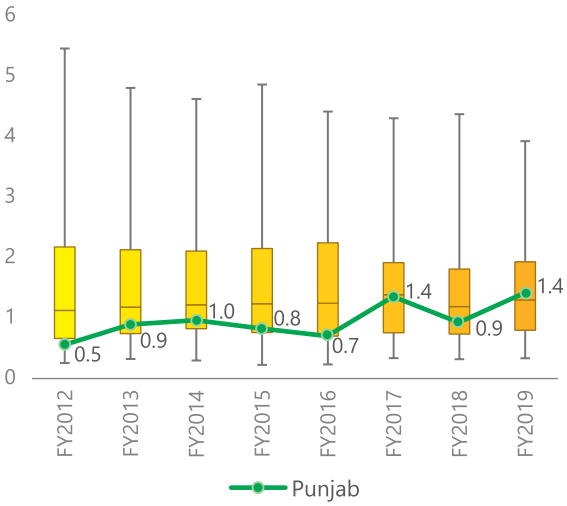


Note: Committed expenditure includes salaries, interest payments, and pensions

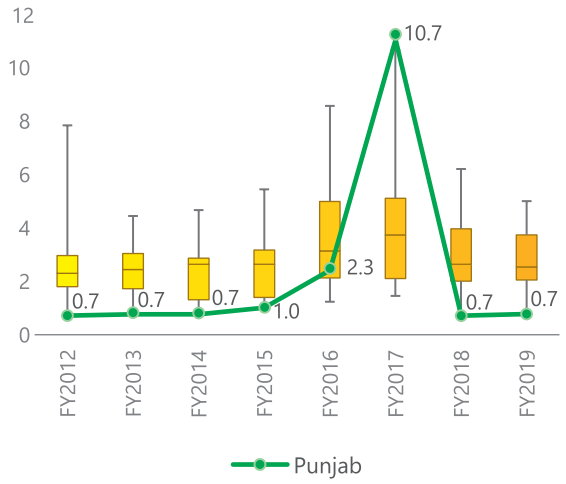
PB-4.E: OTR as % of GSDP



PB-4.F: NTR as % of GSDP



PB-4.G: Capital Expenditure to GSDP Ratio



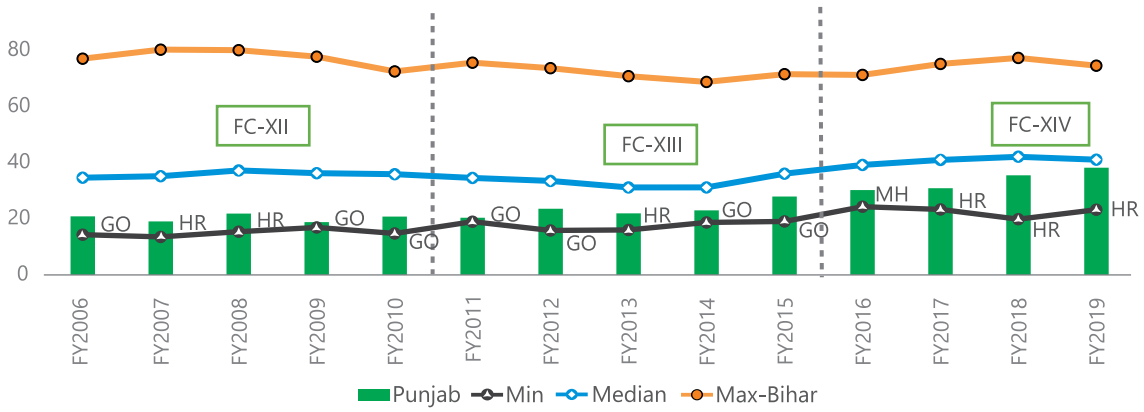
PB-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	1,71,907	1,41,099
Indicators as a percentage of GSDP		
TRR	11.8	13.4
OTR	6.0	6.4
NTR	1.4	1.1
TE	15.0	16.1
ES	3.4	3.1
SS	3.5	5.4
GS	6.9	4.7
Committed Expenditure	8.9	5.8
Capital Expenditure	0.7	2.5
FD	3.1	2.5
RD	2.5	0.2
OD	40.3	25.0

PB-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Punjab	11.3	12.1	8.5
GS average	13.6	13.1	10.3

PB-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Punjab devolved 9 out of 29 functions as envisaged in the Eleventh Schedule of the Constitution to RLBs and all 18 functions in the Twelfth Schedule of the Constitution to ULBs.

Auditing Status

- According to the Ministry of Panchayati Raj, the Directorate of Local Fund Audit of Punjab has reported that local body accounts have been audited till 2017–18.

Property Tax Board

- The State set up its PTB in the year 2013 as recommended by the FC-XIII; however, it is not functional yet.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
15	15	16	18

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

Fifth SFC (2016–17 to 2020–21)

According to the *Overview of State Finance Commission Report*s by the National Institute of Public Finance and Policy, though Punjab has already constituted its Sixth SFC (2021–22 to 2025–26), the recommendations of the Fifth SFC are currently under implementation there. Its key recommendations are given below.

- Of the net total tax revenue (less cost of collection), 4% may be devolved to local bodies.
- Besides the grants to Gram Panchayats made by the FC-XIV, Panchayat Samitis and Zila Parishads may be given an annual grant of Rs 1 crore.
- PRIs were not able to claim the performance grants recommended by FC-XIV (as also by the Fifth SFC) as they were not able to collect and maintain good quality data.

Debt and Losses

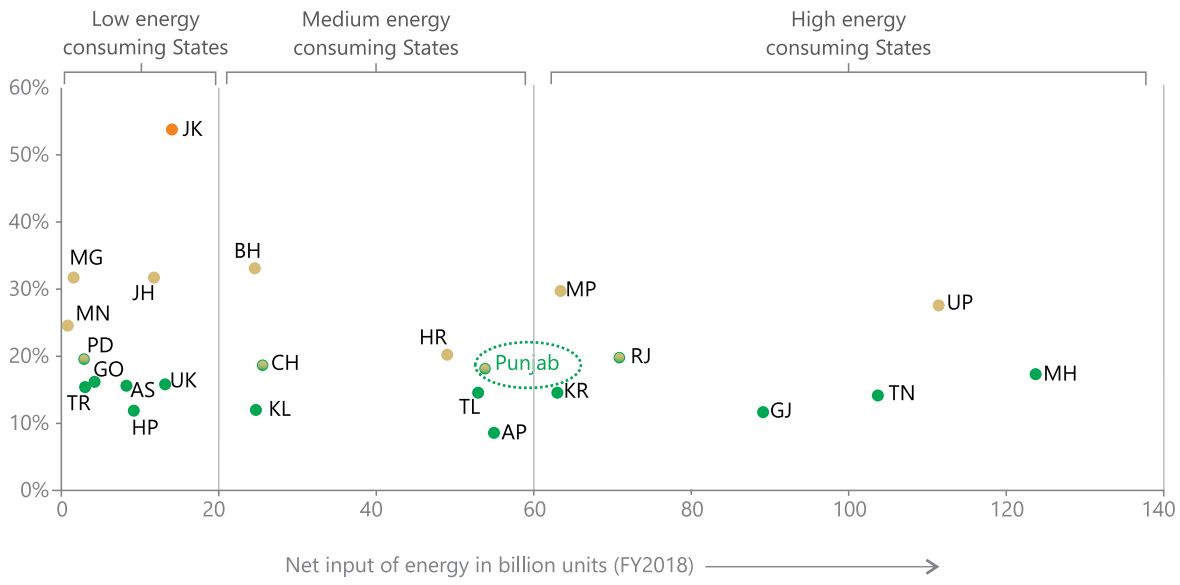
- Though Punjab achieved its target for AT&C losses, the ACS–ARR gap target was not met in 2018–19.
- The State has a commitment to take over debt to the tune of Rs 15,628 crore under UDAY during 2015–16 and 2016–17.
- As on 31 March 2019, the total borrowings by the DISCOMs (including borrowings from the State Government) are Rs 30,473 crore, accounting for 6.4% of the total DISCOM borrowings across all States.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	11.28	14
ACS–ARR Gap (Rs per unit)	–0.05	–0.09

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

PB-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Punjab has recommended that the State share in the overall divisible pool of taxes be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population (2011) • 20% for Population 2011 • 5% for SC/ST Population	25
ii)	Area • 12.5% for total area • 2.5% for share of international borders with Punjab in total international borders of India	15
iii)	Income Distance	45
iv)	Share of GSDP in Aggregate GDP	10
v)	Sustainability Index • 4% for forest cover • 1% for share of power generated through renewable energy systems (RES) in Punjab in total RES Power Generation	5

Poverty Reduction

- Punjab has made significant progress in reducing poverty, thereby showing its commitment towards SDG–1.
- Its poverty rate declined to 8.3% in 2011–12 from 20.9% in 2004–05 (Tendulkar Methodology).

Ranking on the SDG Index of NITI Aayog (2019)

- The State has an SDG Index value of 62 (as compared to the national average 60).
- The State is a front-runner in SDG–3 Good Health and Well Being, SDG–4 Quality Education, SDG–6 Clean Water and Sanitation, SDG–7 Affordable and Clean Energy, SDG–8 Decent Work and Economic Growth, SDG–9 Industry, Innovation, and Infrastructure, and SDG–16 Peace, Justice, and Strong Institutions.
- However, the State needs to improve on SDG–5 Gender Equality and SDG–12 Sustainable Consumption and Production.

Physical Infrastructure

- According to the State Government Memorandum, Punjab is the first State to achieve 100% rural electrification, 100% rural connectivity through all-weather roads, linking of rural areas to mandis, and 24X7 rural water supply.
- It has 100% road connectivity and with a road density of 133 per square kilometre.
- According to the State Cell, Department of Commerce, Ministry of Commerce and Industry, Government of India, Punjab ranked second in India on Logistics Ease Across Different States in 2018.
- Transmission & Distribution (T&D) losses in Punjab reduced to 13.6% in 2017–18 from 16.95% in 2013–14. It is among the lowest in the country.

Skill Development of Livestock Farmers in Border Areas

- According to the State Government Memorandum, the areas adjoining Punjab's 553 km international border are famous for high yielding milch cattle—the *Nili Ravi* buffalo and the *Sahiwal* cow.
- Therefore, border areas need to be developed holistically, to leverage the strength of the livestock sector.
- Punjab shall invest into animal breeding, nutrition, health, and shelter management in these areas.

Fiscal Indicators

- The Debt–GSDP ratio rose from 31% in 2012–13 to a whopping 40.2% in 2018–19. This was due to:
  - » legacy of accumulated debt on account of conversion of Cash Credit Limit (CCL) gap on Food Credit Account for Rs 31,000 crore into long term loan for the State by the Central government, and
  - » additional debt burden due to power sector losses being taken over under UDAY (Rs 15,628 crore).
- Committed expenditure comprising salary, interest payment, and pensions constitutes around 75% of the total revenue receipts of the State during 2018–19.
- Punjab's interest payments–TRR ratio in 2018–19 at 26.2%, is the highest among all States.
- The gross borrowings of Punjab are not even enough to meet its expenditure on repayment of principal and interest payment, leaving little scope for the State to spend on developmental works.

FRBM Compliance

- The Punjab Fiscal Responsibility and Budget Management Act was implemented in 2003 and amended in the 2005, 2007, 2011, and 2018.
- The State has not been adhering to its FRBM limit in the recent years.
- It needs a credible debt path and careful calibration of expenditure along with adequate sources for generation of future revenue streams.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	41.8	41.0	39.8	38.7	32.1	31.5	30.9
Actually achieved	31.2	31.0	30.8	31.6	33.0	42.7	41.4
FD–GSDP							
As prescribed by the State FRBM	3.5	3.5	3.0	3.0	3.0	3.0	3.0
Actually achieved	3.2	3.1	2.6	3.1	4.5	12.4	2.7

Source: Government of Punjab

Public Sector Undertakings[2]

- The State of Punjab has 33 working PSUs (29 companies and four Statutory corporations) and 20 inactive companies.

- Of the working PSUs, 27 submitted their 37 accounts up to September 2018. Of these, 13 accounts reflected profit of Rs 115.6 crore and 16 accounts reflected loss of Rs 5,081.5 crore.
- Of the 33 working PSUs in Punjab, 24 had arrears (as on 30 September 2018) with the extent of arrears ranging from 1–4 years.
- Given the massive budgetary support, timely auditing of SPSU accounts is critical to avoiding risk enhancement of the State's already precarious fiscal situation.

Local Bodies

- The State needs to effectively devolve the 3Fs—Finance, Functions and Functionaries—to the third tier.
- The Examiner, Local Fund and Accounts (ELFA) is yet to be established in Punjab as the statutory auditor of RLBs and ULBs accounts.
- Accounts of RLBs and ULBs from 2011–12 to 2017–18 are in arrears.
- There is no process of consolidation of PRI accounts from village accounts to block to district and finally to the State level.
- Model Accounting System (MAS) for PRIs is yet to be followed.
- Of the 167 ULBs, only 17 were eligible for performance grant in 2017–18.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Agriculture Distress and Groundwater Depletion

- According to the State Government Memorandum, with 99% of its net cropped area under irrigation (71% groundwater and 28% surface water), Punjab has the highest irrigation intensity (204%) in India.
- With only 1.5% of India's geographical area, the State produced 17.4% of the country's wheat and 11.3% of the rice in 2015–16 and contributed 29% rice and 46.4% wheat to the central pool in 2016–17.
- The State shows a declining trend in the crop diversification index from 0.71 in 1994–95 to 0.68 in 2005–06 and further declining to 0.66 in 2014–15.
- Punjab (where farmers get free power) had the second highest discharge of ground water through irrigation (34.1 billion cubic metres) in 2017 and the estimated ground water availability for future irrigation use is negative.[3]
- The State needs to diversify away from paddy and wheat into crops with low water intensity and high value including horticulture crops.

Percentage Irrigation Mode by Power Subsidy

Year	*Canals*	*Tube wells*	*No. of tube wells (lakh)*
1996–97	43	57	7.50
2017–18	29	71	13.66
Change in percentage points (1996–2018)	–14	+14	

Source: AG Punjab

Status of Groundwater Blocks in Punjab (2017)

	Safe	*Semi-Critical*	*Critical*	*Over exploited*	*Saline*
Punjab	19	2	3	76	0
All India	69	10	4	16	1

Source: AG Punjab

Gender Disparity

- Punjab despite high economic development has poor social indicators for women, with a sex ratio of 895 females per 1,000 males against all India average of 943 according to Census 2011.

High Pollution (PM10) as Monitored under NAMP: Stubble Burning

- Paddy/wheat straw management has emerged as a major challenge since the advent of mechanised harvesting using combine harvesters.
- Dense air pollution is caused by stubble burning soon after *Kharif* harvesting.
- This not only raises PM10 suspension in Punjab's million-plus cities way beyond the NAMP threshold (of PM10 below 90 micrograms per cubic metre), but also causes the air quality in Delhi NCR to deteriorate.
- Though the State has already charted on some effective measures like Super Straw Management Systems (SMS), more effective and sustained efforts are required for effective management of air quality.

PM10 Micrograms Per Cubic Metre

City	*2016*	*2017*	*2018*	*Average*
Amritsar	194	168	177	179.7
Ludhiana	139	162	162	154.3

Source: Ministry of Environment, Forest and Climate Change, Government of India.

Ways and Means Advances

- According to Finance Accounts data, Government of Punjab maintained minimum balance by taking ordinary ways and means advances on 170 days in 2018–19.
- There is an increasing dependence on ways and means advances.

Reform Cohort of the State

- For the purpose of analysis, the States were grouped on the basis of per capita income. Punjab is part of the group which includes West Bengal, Chhattisgarh, Rajasthan, and Andhra Pradesh.

Reform Signposts

- The State has been exhibiting unsustainable debt patterns in the recent years.
- Expenditure is rising much faster than receipts in the State creating fiscal sustainability challenges. Punjab's TGR of TRE was 11.3% against a TGR of ORR of 8.5% (2011–2019).
- Committed expenditure of the State government (towards salary, pensions, and interest) alone was 62% of the TRE in 2018–19, the highest among States in its class.
- With the current resource base, Punjab needs to either increase ORR growth rate to about 12% during the award period of FC-XV or reduce TRE TGR to less than 8%.
- Punjab has a low tax buoyancy (0.7 between 2011 and 2019) among States in its class. This gives cause for fiscal concern.
- Excise procedures and regulatory systems need to be more objective, transparent, and efficient (along the lines of West Bengal).
- Long-term finances of Punjab are critically dependent on:
  - » Agricultural Produce Market Committee Act reforms to disintermediate food grain

procurement,
  - » rationalisation of free power to farmers, and
  - » streamlining of excise revenue collection.
- Punjab needs to undertake comprehensive reform of Stamp Duty and Registration, Excise and Electricity Duties. The steps taken by Chhattisgarh and West Bengal could be emulated for better revenue streams.
- Among the States in its class, Punjab has one of the highest subsidy expenditures as a percentage of TRE.

Subsidy as a percentage of TRE

State	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
Chhattisgarh	8	7	10	9	17	9	9	13
Punjab	10	13	12	10	10	11	11	18
Rajasthan	6	9	9	9	10	14	16	13
West Bengal	3	5	4	2	4	7	8	9

Note: Andhra Pradesh has not been included because the erstwhile AP was bifurcated into AP and Telangana in 2015 and disaggregated figures are not available for all years.

- With such a large subsidy burden, Punjab's capital expenditure is very low, preventing the State from generating new streams of income.
- Despite the fact that Punjab has not implemented the recommendations of the latest Pay Commission yet, its fiscal situation extremely precarious.
- Although per capita income in Punjab is highest in its class, its key social and fiscal parameters have been deteriorating consistently.
- Though almost all the Finance Commissions on the last two decades have been recommending various reform measures for Punjab (and some other States), Punjab has not been able to improve its fiscal situation much.
- **FC-XV recommends that the State government comprehensively address these issues in such a way that:**
  - » **fiscal reforms lead to sustainable streams of enhanced revenues,**
  - » **investments are made in durable capital infrastructure,**
  - » **power subsidy is rationalised to restore the water table and soil fertility,**
  - » **Further, it appears that there are three areas that have a serious impact on long term finances of Punjab They are (a) APMC Act reforms that facilitates abolition of agents in food grain procurement and other impediments (b) rationalizing free power for agriculture and (c) streamlining excise revenue collection. If the State can address these things, it would help itself in arresting the fiscal slippage further, and**
  - » **investments in the social sector lead to improvements in key socioeconomic indicators.**
- **These steps will improve the fiscal health of Punjab over the next five years and place it among higher income States of India.**

Notes

1 GOI (2018), *Logistics Ease Across Different States*, a study conducted by Deloitte at the behest of State Cell, Department of Commerce, Ministry of Commerce & Industry, Government of India.

2 CAG (2019), *Report No. 2 of 2019 - PSUs (Social, General and Economic Sectors) for the year ended 31 March 2018*. Report of the Comptroller and Auditor General of India published by the Government of Punjab.

3 GOI (2018), *Economic Survey 2017–18*, Volume II, Agriculture and Food Management, Ministry of Finance, Government of India.

RJ-1.A: Overview

POPULATION
68.6 million
5.8%
Of population across all States

AREA
3,42,239 sq km
10.5%
Of area across all States

FOREST COVER
16,630 sq km
2.4%
Of forest area across all States
4.9%
Of the State's own area is under forest
0.3% ↑
Forest cover changed from 2017 to 2019

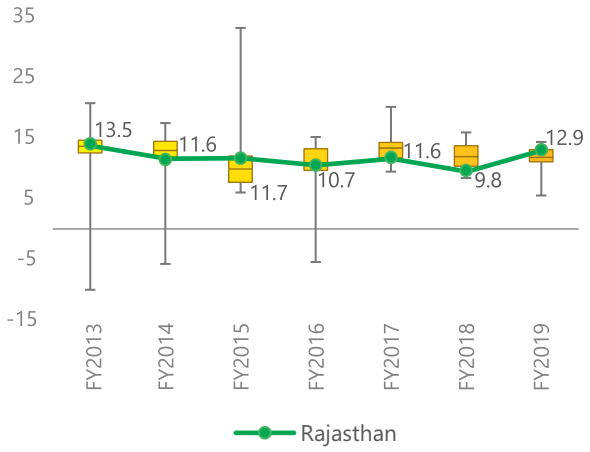
PER CAPITA GSDP
Rs 1,23,343
Rs 1,40,422
Average across all States
(FY2019)

TAX TO GSDP
6.1%
6.3%
Average across all States
(FY2019)

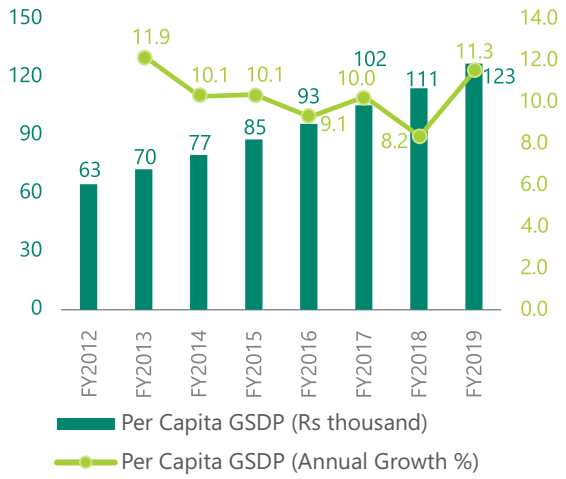
CHILDREN PER WOMAN
2.4
2.2
Average across all States
TFR

URBANISATION RATE
24.9%
31.1%
All India average

RJ-1.B: Growth rate of GSDP (at current prices, %)



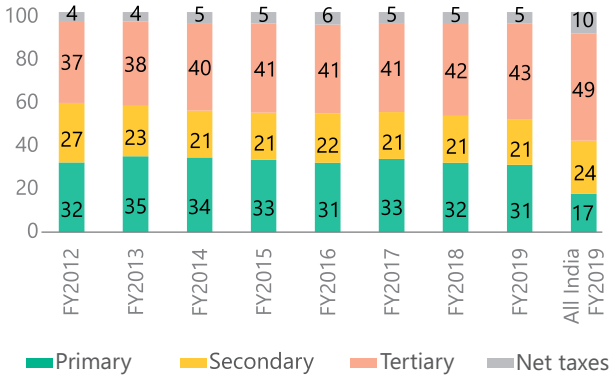
RJ-1.C: Per capita GSDP (at current prices)



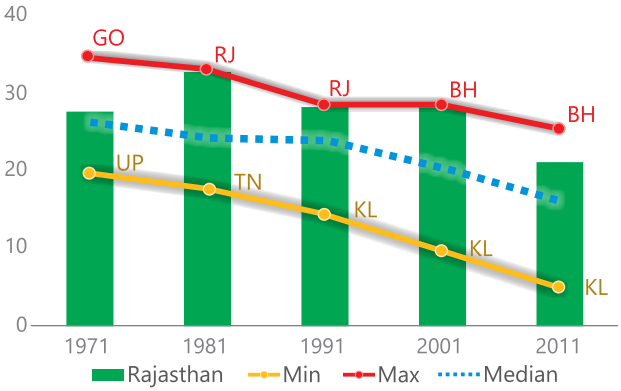
RJ-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	4,34,837	77,44,945	5.6
2012–13	4,93,551	88,27,195	5.6
2013–14	5,51,031	1,00,07,392	5.5
2014–15	6,15,642	1,09,93,257	5.6
2015–16	6,81,482	1,21,91,256	5.6
2016–17	7,60,750	1,37,80,737	5.5
2017–18	8,35,170	1,54,20,126	5.4
2018–19	9,42,586	1,72,83,813	5.5

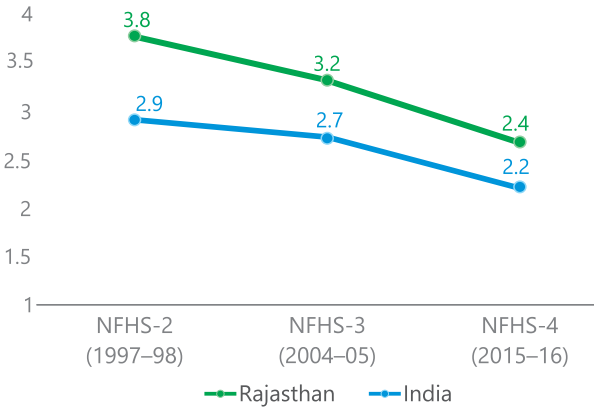
RJ-1.E: Sectoral Contribution to GSDP (at current prices, %)



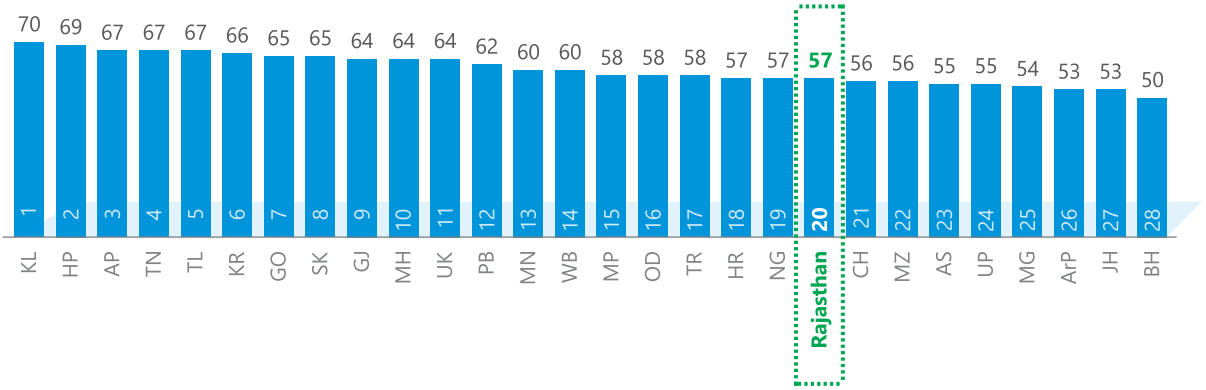
RJ-2.A: Decadal Growth in Population (%)



RJ-2.B: Total Fertility Rate (children per woman)



RJ-2.C: SDG Index of NITI Aayog (2019)



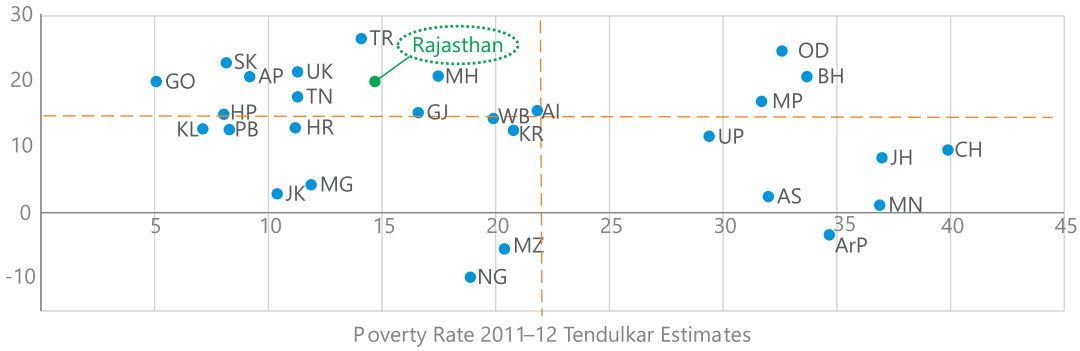
RJ-2.D: Key Social Indicators

	RJ	INDIA
EDUCATION		
Literacy rate (%)[a]	66.1	73.0
Pupil–Teacher ratio[b] (in Primary)	20.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	60.3	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	85.5	89.9
Availability of toilets[d] (household %)	54.0	61.1

	RJ	INDIA
HEALTH		
Life expectancy (years)[g]	68.5	69.0
Sex ratio (♀ per 1000 ♂)[a]	928	943
Underweight children (%)[d]	36.7	35.8
Stunting among children (%)[d]	39.1	38.4
Anaemia among children (%)[d]	60.3	58.6
Women with below normal BMI (%)[e,d]	27.0	22.9
Anaemia among Women (%)[d]	46.8	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	37.0	32.0
Institutional Deliveries (%)[d]	84.0	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	6.3	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,552	1,218 *(All States)*

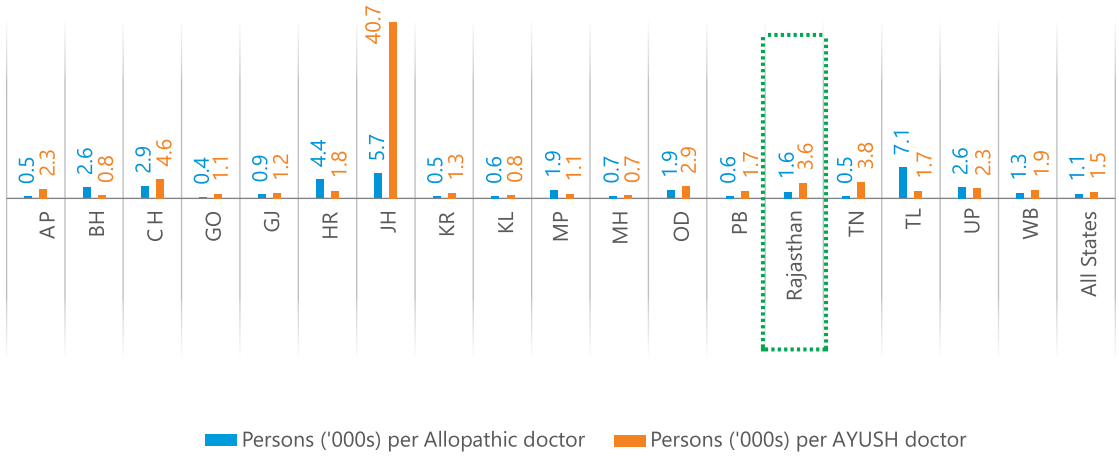
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

RJ-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



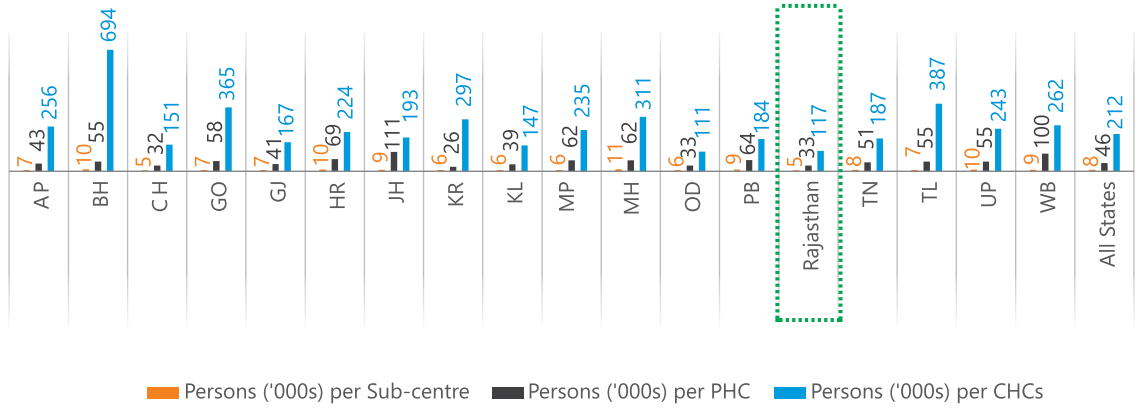
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

RJ-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



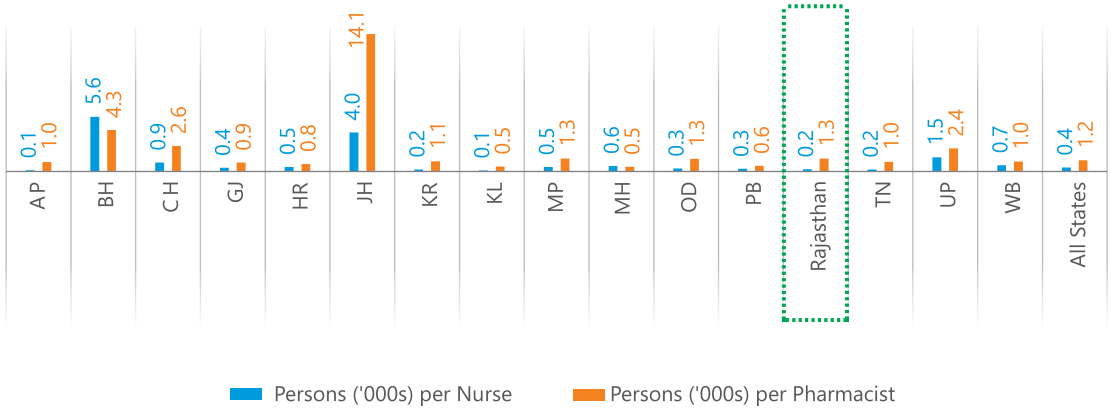
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

RJ-3.B: Persons ('000s) per Sub-centre/PHC/CHC



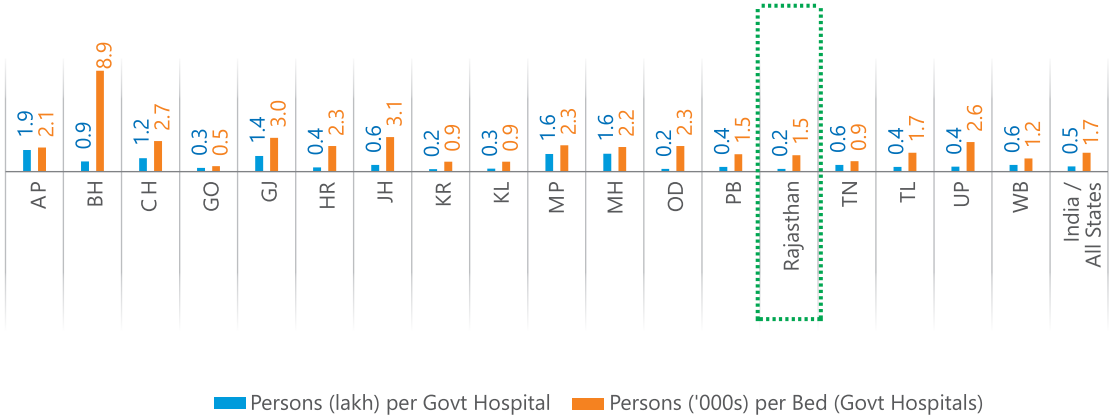
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

RJ-3.C: Persons ('000s) per Nurse/ Pharmacist



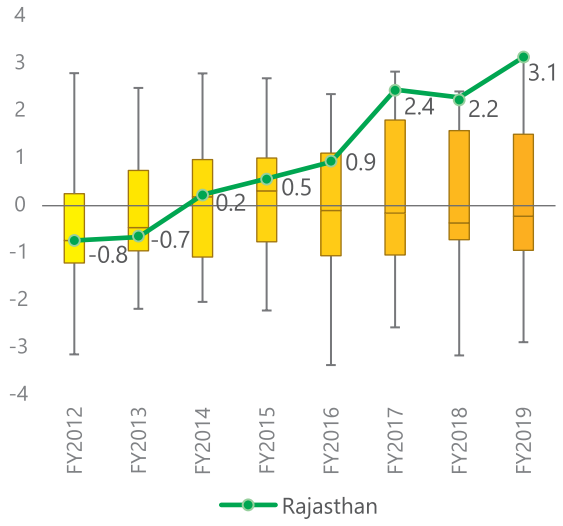
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

RJ-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

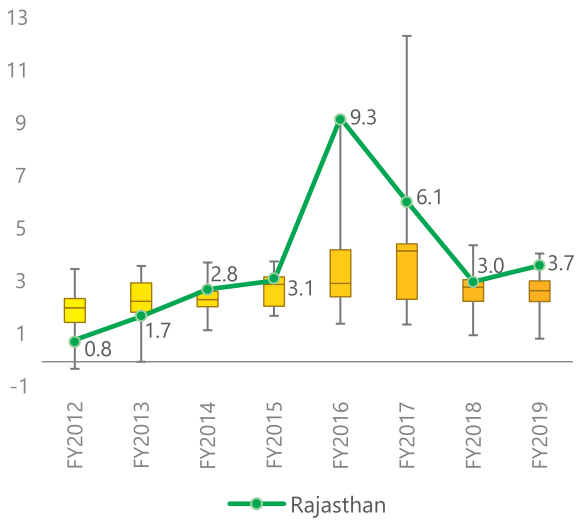


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

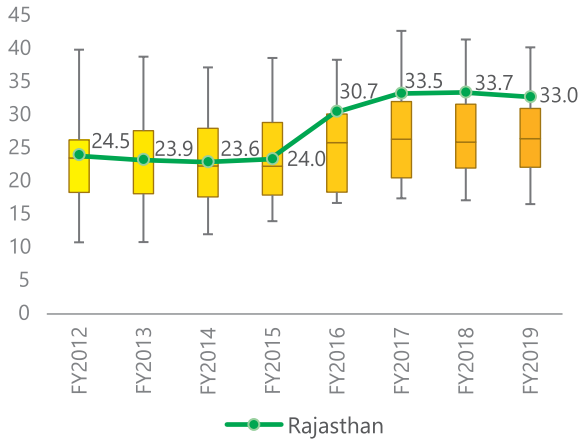
RJ-4.A: Revenue Deficit as % of GSDP



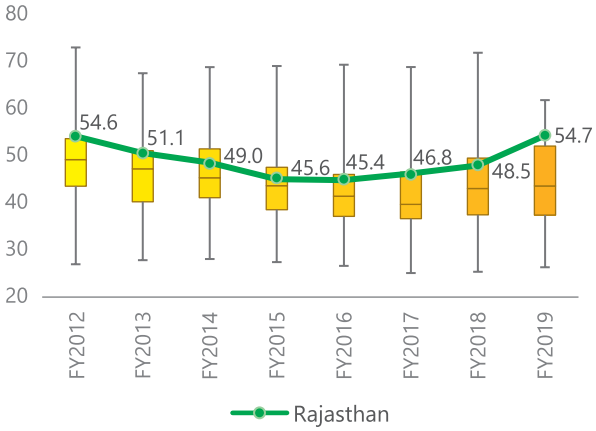
RJ-4.B: Fiscal Deficit as % of GSDP



RJ-4.C: Outstanding Debt as % of GSDP

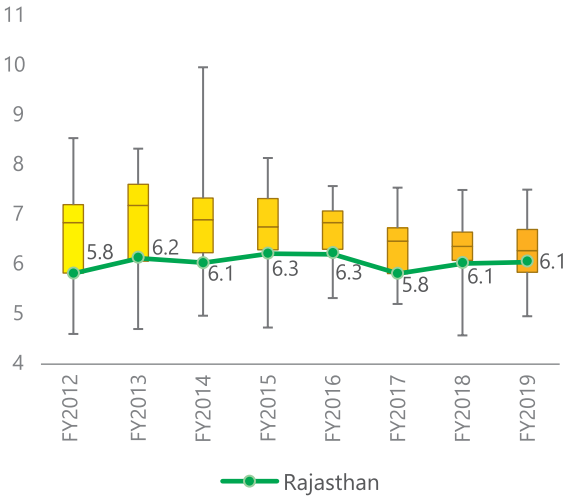


RJ-4.D: Committed Expenditure as a % of Revenue Expenditure

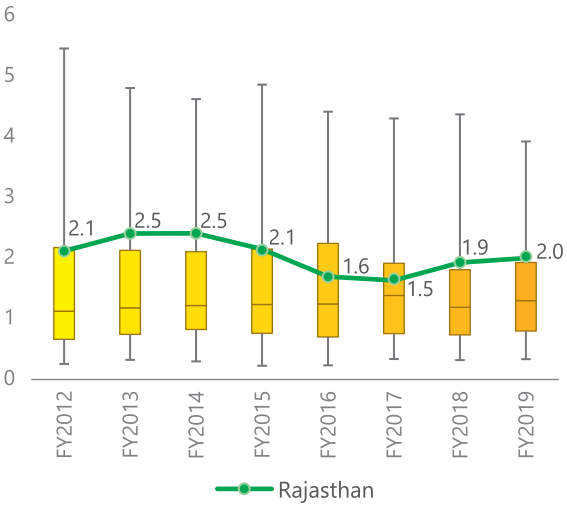


Note: Committed expenditure includes salaries, interest payments, and pensions

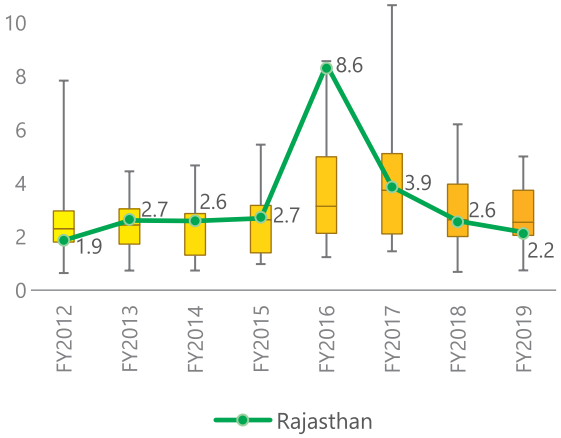
RJ-4.E: OTR as % of GSDP



RJ-4.F: NTR as % of GSDP



RJ-4.G: Capital Expenditure to GSDP Ratio



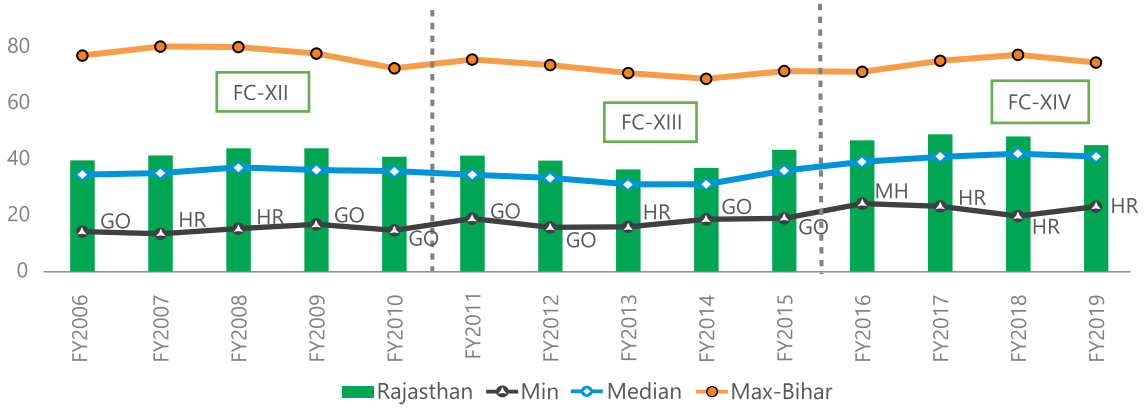
RJ-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	1,23,343	1,41,099
Indicators as a percentage of GSDP		
TRR	14.6	13.4
OTR	6.1	6.4
NTR	2.0	1.1
TE	19.9	16.1
ES	5.0	3.1
SS	7.0	5.4
GS	5.8	4.7
Committed Expenditure	9.7	5.8
Capital Expenditure	2.2	2.5
FD	3.7	2.5
RD	3.1	0.2
OD	33.0	25.0

RJ-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Rajasthan	17.8	13.5	10.4
GS average	13.6	13.1	10.3

RJ-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions of the Eleventh Schedule of the Constitution 25 have been devolved to RLBs/PRIs.
- Funds and functionaries have been transferred in 15 out of these 23 functions.
- Of the 18 functions of the Twelfth Schedule of the Constitution 16 have been devolved to ULBs.
- Water Supply function has been partially devolved and urban planning is yet to be devolved to ULBs.

Auditing Status[1]

- Directorate of Local Fund Audit Department (DLFAD) has been entrusted with the statutory audit of RLBs and ULBs in RJ.
- The accountability mechanism and financial reporting of the PRIs in the State continues to be weak. Poor account maintenance, lack of qualified certification, parking of money, and multiplicity of bank accounts are major areas of concern in RLBs, hampering transparency and accountability.
- Only 6,802 (66.5%) of the 10,219 RLB accounts in RJ were certified by DFLAD in 2017–18.
- Only 20% of the PRIs have closed their yearbooks by following the use of Priasoft software in 2017–18.
- As on March 2018, Rs 1,872 crore lay as unutilised closing balance in Zila Panchayat funds and Rs 1,450 crore in Panchayat Samiti funds.
- Only 68% of the ULB accounts were certified during 2017–18.

Property Tax Board

- Government of Rajasthan set up a PTB as recommended by the FC-XIII.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
3	16	16	11

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

Fifth SFC (2015–16 to 2019–20)

- According to the *Overview of State Finance Commission Reports* by the National Institute of Public Finance and Policy, two interim reports for 2015–16 and 2016–17 were placed in the Legislative Assembly along with the Action Taken Reports (ATRs).
- The Fifth SFC submitted its final report in November 2018.
- According to the Fifth SFC recommendations currently under implementation in the State:
  - » 7.2% of State's net OTR are to be devolved to the local bodies;
  - » the distribution of funds between RLBs/PRIs and ULBs are to be made in the ratio of 75:25 based on population as per Census 2011.

Debt and Losses

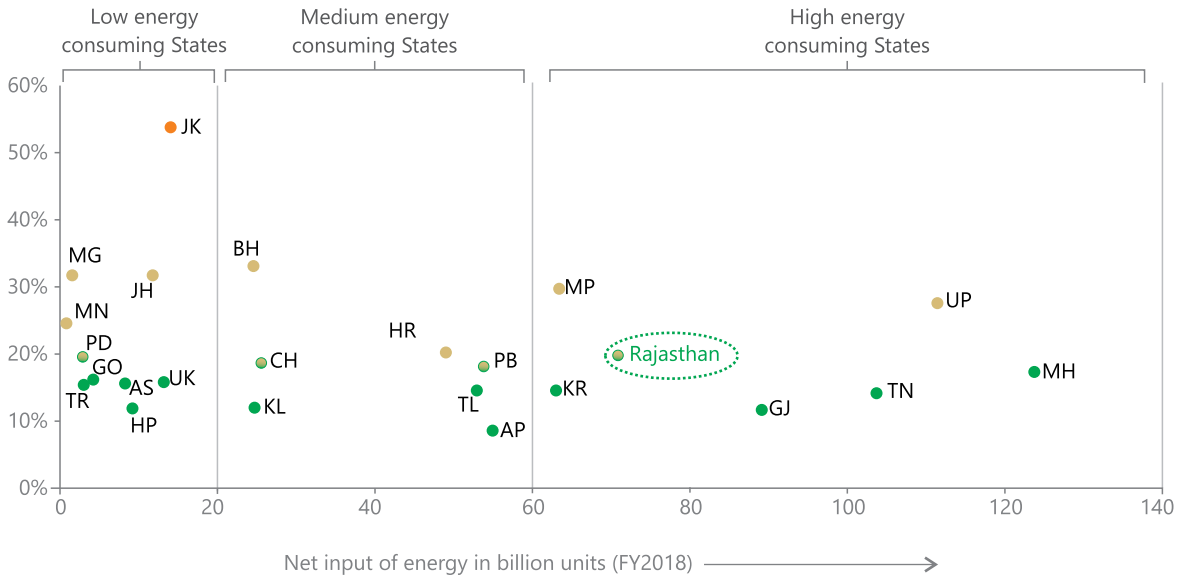
- Neither the ACS–ARR gap target nor the AT&C loss target was achieved in 2018–19.
- The State has taken over DISCOM debt amounting to Rs 62,422 crore during the period 2015–16 and 2016–17 under UDAY.
- As on 31 March 2019, the total borrowings by DISCOMs (including borrowings from the State Government of Rs 16037 crore) are Rs 54,538 crore (11.4% of the total DISCOM borrowing of all States).
- The State needs to substantially improve its performance on UDAY barometers. Otherwise, power could pose a fiscal risk in the near future.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	28.26	15.0
ACS–ARR Gap (Rs per unit)	1.5	-0.12

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

RJ-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Rajasthan has recommended that the State's share in overall divisible pool of taxes be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population	15.0
ii)	Area	20.0
iii)	Forest and Ecology	5.0
iv)	Income Distance	45.0
v)	Demographic Performance	12.5
vi)	Tax Effort	2.5

Fiscal Indicators

- The Debt–GSDP ratio in RJ increased from 23.9% in 2012–13 to 33.0% in 2018–19, which is quite high compared to many other States.

FRBM Compliance

- The State implemented its FRBM Act in 2005, which was amended in 2007, 2009, 2011, 2014, and 2016.
- While RJ has been adhering to its debt limit in the recent years, it has not complied with its FD target.
- Hence, the State needs a credible debt path and careful calibration of expenditure for generating future streams of income.

Ratios in %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	39.3	38.3	37.3	36.5	36.5	36.5	35.5
Actually achieved	24.5	23.9	23.6	24.0	30.7	33.5	33.7
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Actually achieved	0.8	1.7	2.8	3.1	9.3	6.1	3.0

Source: Government of Rajasthan

Steps Taken to Mobilise Revenue

- The State has shown OTR buoyancy of 1.0 during 2011–2019.
- It has also posted double-digit growth in OTR since 2011–12 (barring 2016–17, that had negative growth in Stamp and Electricity duty).
- The State has undertaken significant reform Excise duty, Stamp duty, and Mining duties during the last five years.

- » Rate of Stamp duty has been decreased on the agreement to sale and power of attorney relating to sale of immovable property so as to encourage the registration of these documents.
- » To recover old dues of stamp duty, concessions in interest and penalty have been given by way of amnesty schemes during the last five years.
- » Information about 'Dealer Search', payment, PAN, Forms & Certificates and status of all types of applications are available to dealers on an any time and anywhere basis.
- » Amendments made in VAT/Electricity Duty/Luxury Tax Acts/Rules to facilitate dealers, Amnesty Schemes for VAT, Entry Tax (Goods) and Entry Tax (Motor Vehicles) notified, have helped recover taxes long overdue.
- » For registration of motor vehicles, an organised system of online registration named Vahan has been put in place. Vahan helps the Transport Department to analyse and forecast the number of vehicle registrations and thus estimate tax collection.
- » Dispatch of minerals from mining leases has been made compulsory through e-Rawannas only. Similarly, dispatch of certain minerals from stock/dealers site has also been made compulsory through e-Transit Pass only.
- » Under Excise Policy, the Department has increased the Exclusive Privilege Amount in country liquor as well as licence fee of Indian made foreign liquor (IMFL) and beer shops.
- » Excise Duty of country liquor and distillery price of IMFL, permit fee, bottling fee, brand and label approval fee on various licences of distilleries/breweries and bottling plants as well as licence fees of hotels, bars, and restaurants have also been increased.

Poverty Reduction

- The State has showed 19.7% reduction in poverty (SDG–1) from 2004–05 to 2011–12.

Renewable Energy

- According to the State Government Memorandum, Rajasthan has the third highest solar capacity (across States) of 3,072.43 MW (as of March 2019).
- At present, solar power projects of 3,000 MW capacity are in the pipeline.
- The State Government is promoting the development of solar parks through public, private, and joint venture companies for which several MoUs and joint venture agreements have already been signed.
- If these MoUs materialise into parks on ground, it will give the State Government much needed fiscal space.

Tourism

- Rajasthan has vast and unexplored tourism potential—Desert Tourism and Cultural Tourism given the Thar Safari and the many forts and monuments in the State.
- According to *Tourism Statistics at a Glance 2020,*[2] Rajasthan is the sixth most popular destination (across States) for foreign tourists to India with 5.1% of all such visits being made to it.
- Similarly, it ranks 10th (across States) in attracting domestic tourists with 2.2% of all domestic tourists heading for the State in 2019.

Crude Oil Production

- According to the State Government Memorandum, Rajasthan is the second largest producer of crude oil in India after Bombay High offshore.

- The oil fields in the State are producing nearly 80 lakh tonnes of crude oil annually, which accounts for 22%–23% of the total domestic crude oil production.
- The Government of Rajasthan entered into a joint venture with Hindustan Petroleum Corporation Limited on 18 April 2017 for setting up a refinery cum petrochemical complex with a capacity of 9 million metric tonnes per annum (the first of its kind in India). The proposed refinery could anchor downstream industries and services in the region.
- If the State supports and promotes increased exploration, royalty proceedings into the State's exchequer would rise.

FDI and Foreign Joint Ventures

- Rajasthan State Industrial Development & Investment Corporation Ltd (RIICO) and Japan External Trade Organization (JETRO) collaborated for facilitating Japanese investment in Rajasthan during 2006–2016.
- The State needs to figure out why such investment was not forthcoming after the establishment of the industrial zone at Ghiloth near Neemrana and how the potential may be realised.

Local Bodies

- The State constituted Fifth SFC (2015–16 to 2019–20) which submitted two interim reports in 2015–16 and 2016–17 followed by the final report in November 2018.
- Even the Fourth SFC had submitted its report after a delay of over a year and a half after its due date. Thus, it is seen that the State Government has not been complying with the provision of the Constitution.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.
- The accountability mechanism and financial reporting of the RLBs and ULBs in the State continue to be weak as mentioned earlier.

Ranking on the SDG Index of NITI Aayog (2019)

- The State has an SDG Index value of 57 (as compared to the national average 60).
- In 2019, it was placed 20th among the Indian States, slipping from 14th position in 2018.
- The State is a front-runner in SDG–1 No Poverty, SDG–6 Clean Water and Sanitation, SDG–8 Decent Work and Economic Growth, SDG–10 Reduced Inequality, SDG–15 Life on Land, SDG–16 Peace, Justice and Strong Institutions.
- However, the State needs to improve on SDG–2 Zero Hunger, SDG–5 Gender Equality, SDG–9 Industry, Innovation and Infrastructure, and SDG–12 Sustainable Consumption and Production.
- The State should make focused investments into SDGs that it is lagging behind in and closely monitor the outcomes, especially in aspirational the districts of Baran, Dhaulpur, Jaisalmer, Karauli and Sirohi which have poor socioeconomic indicators.

Scarcity of Technically Skilled Population

- According to NITI Aayog, lack of technically qualified personnel in the State has been a concern.

- As reported by the State Government, availability of skilled personnel is estimated to be 2.17 lakh, which is less than half the estimated need.
- The deficit in semi-skilled personnel is about 20 lakh persons.
- Government of Rajasthan needs to take up skilling in mission mode.

Freshwater Deficit

- According to the State Government Memorandum, Rajasthan is home to nearly 6% of India's population, which survives on only 1.1% of the nation's surface water and 2.5% of its ground water resources.
- The per capita water availability is 640 cubic metres per year (where availability below 1,700 cubic meters per person per annum constitutes 'water stress').
- The ground water situation in the State is quite alarming. Out of total 295 blocks in the State, only 52 blocks are safe, 191 over exploited, 11 critical and semi-critical, and 3 saline. The Central Ground Water Board has identified 34 blocks as highly critical.

Transport Sector

- The State needs to review and reorient its transport sector.
- Rajasthan State Road and Transport Corporation (RSTRC) has reported consistent losses in the past few years. Negative net earnings per km are owed to higher cost of operation than revenue earned per km.
- A comprehensive review of the Metro Project is needed to make it commercially viable.

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Rajasthan is part of the group which includes West Bengal, Chhattisgarh, AP, and Punjab.

Reform Signposts

- Rajasthan reported a TGR of TRR at 13.5% from 2011–12 to 2018–19 as opposed to TRE growth of 17.8%. Clearly, expenditure is growing much faster than revenues. This is an unsustainable fiscal path in the long run.
- As mentioned already, the State has shown a good OTR buoyancy of 1.0 during 2011–19 and double-digit growth in OTR (since 2011–12) barring in 2016–17. The State has undertaken significant reform in Excise, Stamp Duties and Mining during the last five years.
- Rajasthan receives royalty as the second largest oil producing State in India.
- Rajasthan had been fiscally very stable till recent power sector liabilities (exacerbated by implementation of UDAY) damaged the fiscal architecture of the State. Total outstanding payment from DISCOMs to power generation and transmission companies is around Rs 1,19,000 crore, out which Rs 35,000 crore are owed by the Government of Rajasthan.
- The State is currently maintaining a RD–FD ratio of 84% in 2018–19.
- Among the States in its class, Rajasthan has one of the highest subsidy expenditures as a percentage of TRE.

Subsidy Expenditure as Percentage of TRE

State	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
Chhattisgarh	8	7	10	9	17	9	9	13
Punjab	10	13	12	10	10	11	11	18
Rajasthan	6	9	9	9	10	14	16	13
West Bengal	3	5	4	2	4	7	8	9

Note: Andhra Pradesh has not been included because the erstwhile AP was bifurcated into AP and Telangana in 2015 and disaggregated figures are not available for all years.

- While Rajasthan is spending a relatively high proportion of its TRE on health and education, its socioeconomic indicators are still very low, specifically in the areas of women's health and education (see RJ-2.D).
- **FC-XV recommends that the Government of Rajasthan comprehensively address the above issues through:**
  - **fiscal reform to ensure sustainable stream of enhanced revenues,**
  - **investment in durable capital infrastructure,**
  - **subsidy rationalisation,**
  - **ground and surface water management, and**
  - **focused and enhanced investment in critical social sectors.**
- **These steps will improve the overall economic and social indicators of RJ over the next five years and place it among higher income States of India.**

Notes

1 Presentation by the State Principal Accountants General to FC-XV.

2 GOI (2020), *Tourism Statistics at a Glance 2020,* Ministry of Tourism, Government of India.

SK-1.A: Overview

POPULATION
0.6 million
0.1%
Of population across all States

AREA
7,096 sq km
0.2%
Of area across all States

0.5%
Of forest area across all States

FOREST COVER
3,342 sq km
47.1%
Of the State's own area is under forest

0.1% ↓
Forest cover changed from 2017 to 2019

PER CAPITA GSDP
Rs 4,35,204
Rs 1,40,422
Average across all States

TAX TO GSDP
3.1%
6.3%
Average across all States

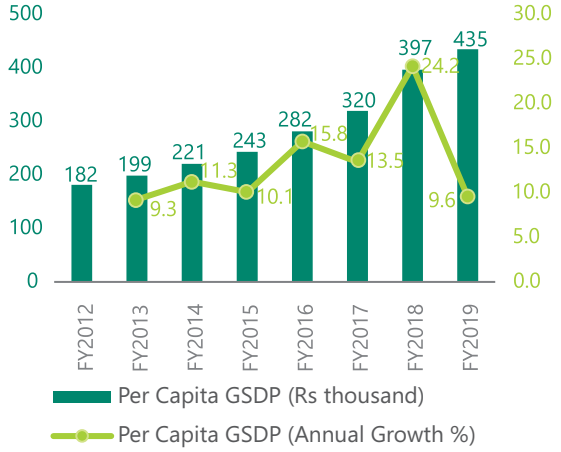
CHILDREN PER WOMAN
1.2
2.2
Average across all States

URBANISATION RATE
25.0%
31.1%
All India average

SK-1.B: Growth rate of GSDP (at current prices, %)



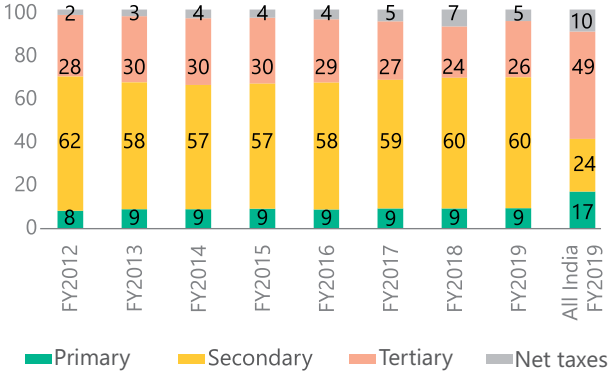
SK-1.C: Per capita GSDP (at current prices)



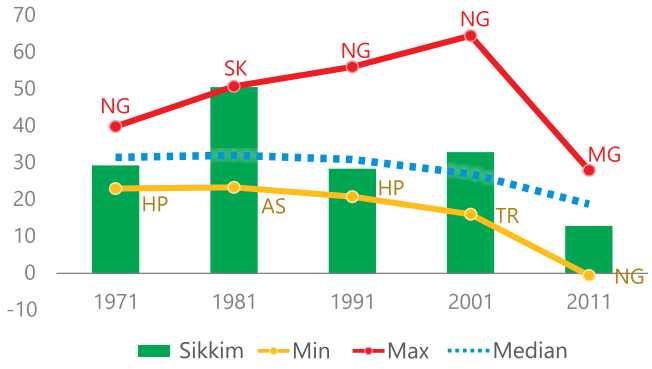
SK-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All NEHS*	*Share (%) of State in NEHS*
2011–12	11,165	5,03,182	2.2
2012–13	12,338	5,63,081	2.2
2013–14	13,862	6,37,264	2.2
2014–15	15,407	6,95,474	2.2
2015–16	18,034	7,88,321	2.3
2016–17	20,687	8,67,648	2.4
2017–18	25,971	9,74,240	2.7
2018–19	28,723	10,82,901	2.7

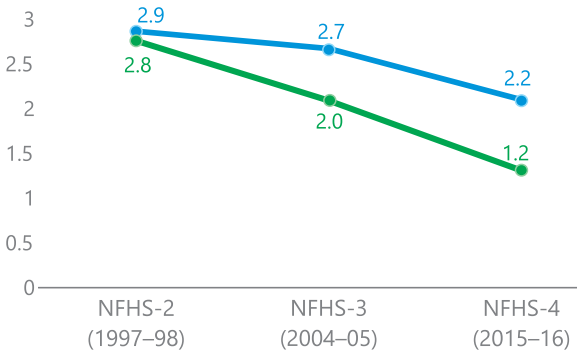
SK-1.E: Sectoral Contribution to GSDP (at current prices, %)



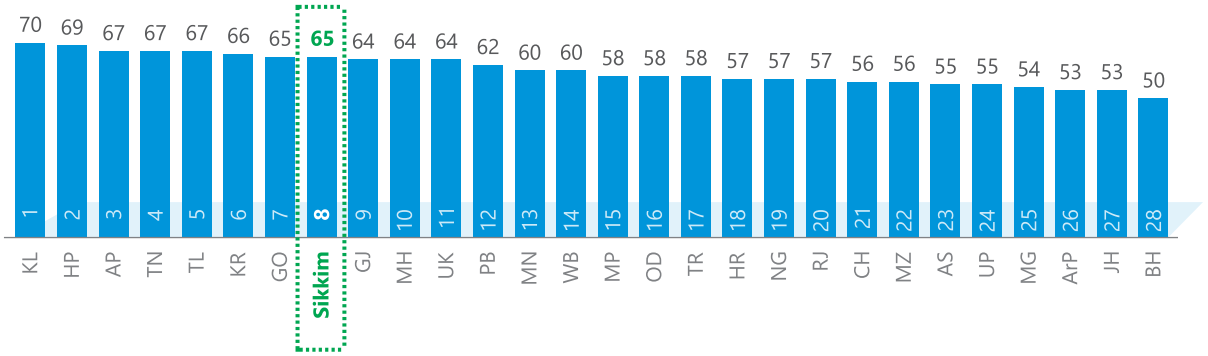
SK-2.A: Decadal Growth in Population (%)



SK-2.B: Total Fertility Rate (children per woman)



SK-2.C: SDG Index of NITI Aayog (2019)



SK-2.D: Key Social Indicators

EDUCATION

	SK	INDIA
Literacy rate (%)[a]	81.4	73.0
Pupil–Teacher ratio[b] (in Primary)	4.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	64.2	55.4

WATER & SANITATION

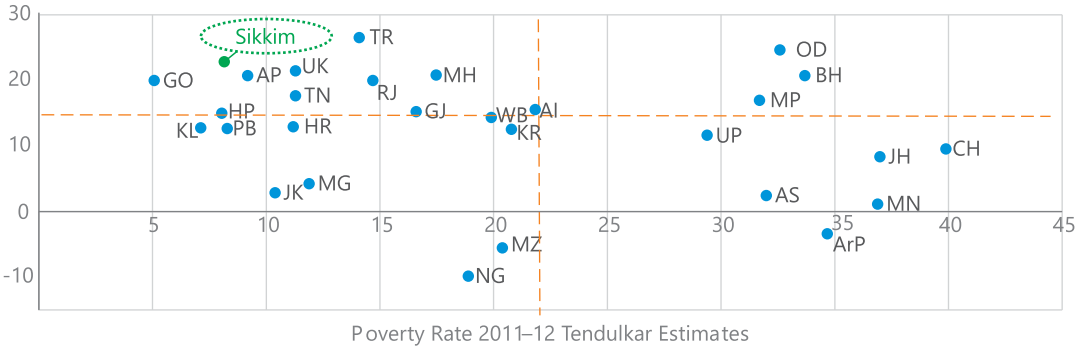
	SK	INDIA
Availability of safe drinking water[d] (household %)	97.6	89.9
Availability of toilets[d] (household %)	99.7	61.1

HEALTH

	SK	INDIA
Sex ratio[a] (females per 1000 males)	890	943
Underweight children (%)[d]	14.2	35.8
Stunting among children (%)[d]	29.6	38.4
Anaemia among children (%)[d]	55.1	58.6
Women with below normal BMI (%)[e,d]	6.4	22.9
Anaemia among Women (%)[d]	34.9	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	7.0	32.0
Institutional Deliveries (%)[d]	94.7	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	6.2	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	6,165	1,218 *(All States)*

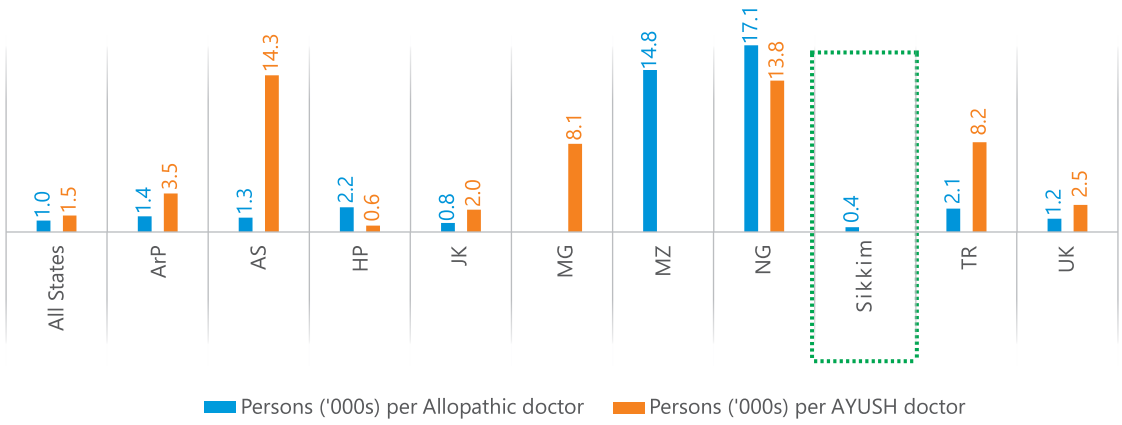
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018

SK-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



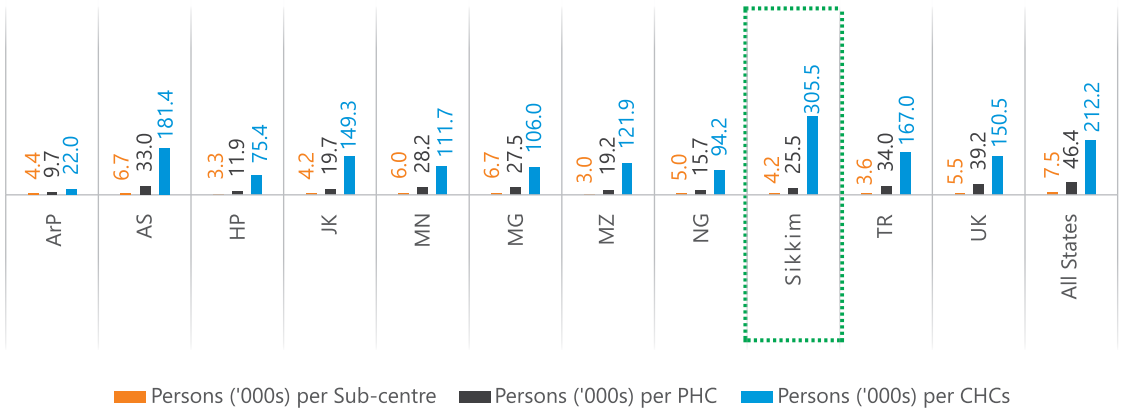
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

SK-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



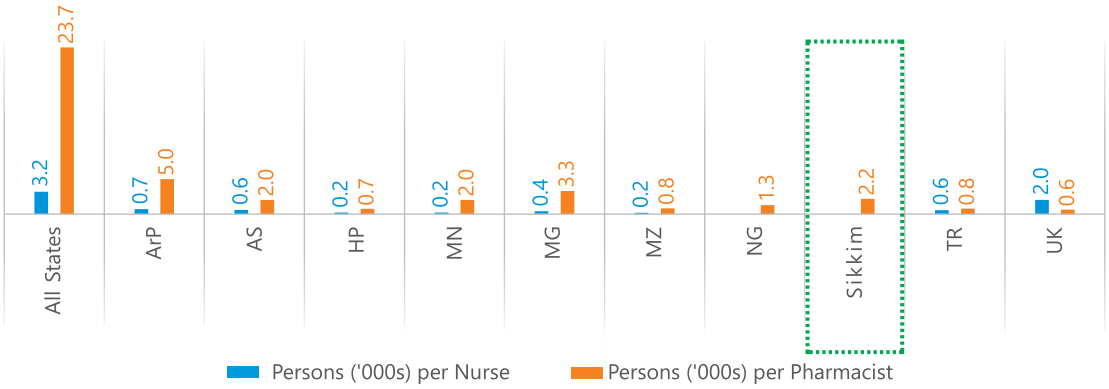
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

SK-3.B: Persons ('000s) per Sub-centre/PHC/CHC



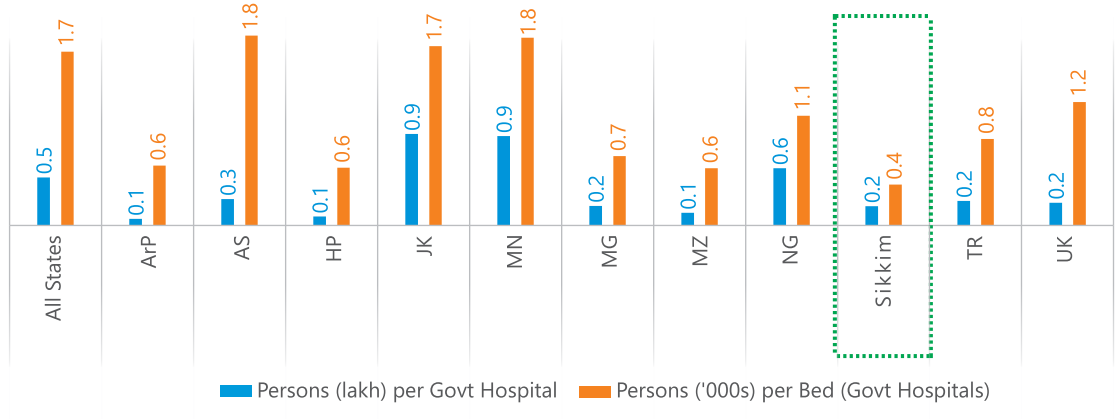
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

SK-3.C: Persons ('000s) per Nurse/ Pharmacist



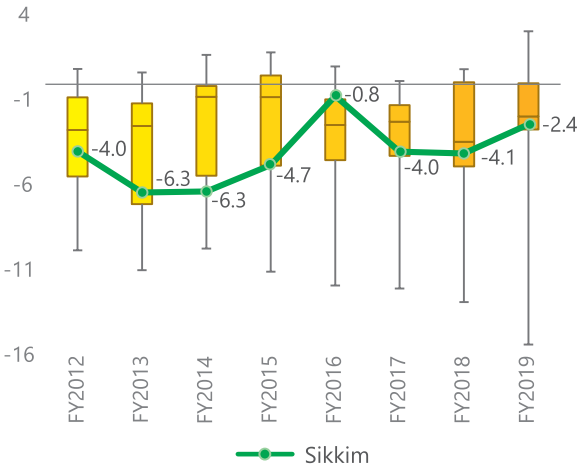
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

SK-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

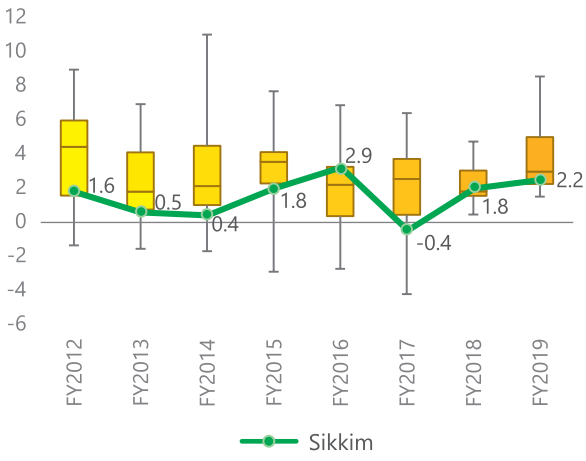


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

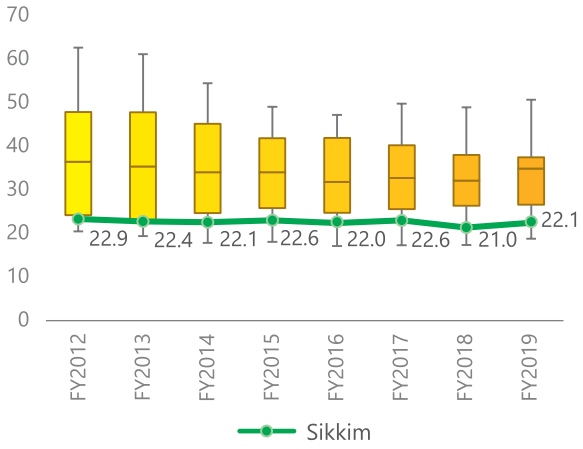
SK-4.A: Revenue Deficit as % of GSDP



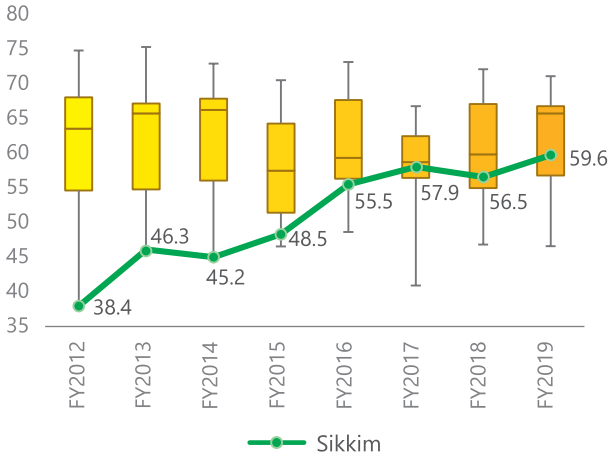
SK-4.B: Fiscal Deficit as % of GSDP



SK-4.C: Outstanding Debt as % of GSDP

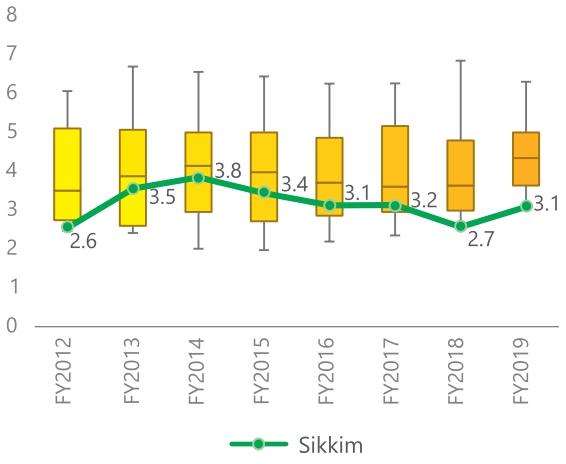


SK-4.D: Committed Expenditure as a % of Revenue Expenditure

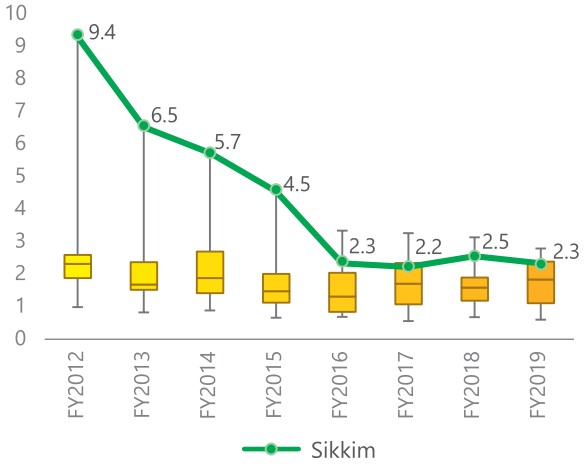


Note: Committed expenditure includes salaries, interest payments, and pensions

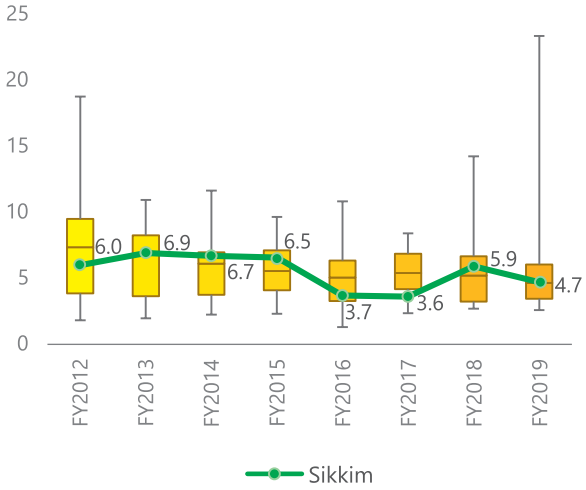
SK-4.E: OTR as % of GSDP



SK-4.F: NTR as % of GSDP



SK-4.G: Capital Expenditure to GSDP Ratio



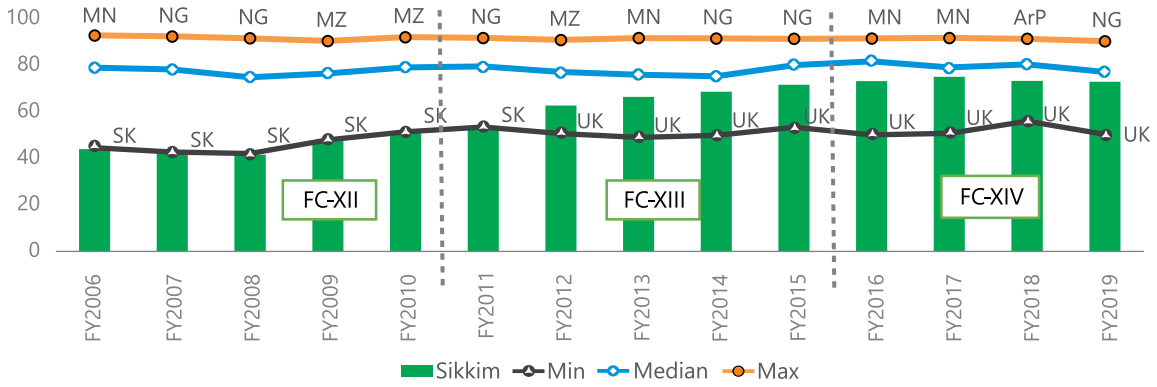
SK-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	4,35,204	1,30,427
Indicators as a percentage of GSDP		
TRR	20.6	23.3
OTR	3.1	5.0
NTR	2.3	2.0
TE	22.9	26.7
ES	3.9	5.0
SS	7.3	8.7
GS	6.7	8.5
Committed Expenditure	10.8	14.4
Capital Expenditure	4.7	4.3
FD	2.2	3.4
RD	–2.4	–0.9
OD	22.1	29.6

SK-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Sikkim	6.4	6.1	0.8
NEHS	12.6	12.1	10.7

SK-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- All 29 functions envisaged in the Eleventh Schedule of the Constitution have been devolved to RLBs.
- Of the 18 functions envisaged in the Twelfth Schedule of the Constitution, 6 have been devolved to ULBs.

Auditing Status

- Auditing of accounts of RLBs and ULBs has been completed till 2016–17.

Property Tax Board

- PTB (recommended by the FC-XIII) has not been set up by the State Government yet.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
11	7	7	6

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Fourth SFC (2015–16 to 2019–20)

- Fourth SFC submitted its report in May 2013.
- Allocation of taxes to PRIs and ULBs in the ratio of 75:25 was recommended on basis of provisional rural and urban population figures of the Census 2011.
- Grants by the Commission was split into 'Primary grant' and 'Improvement grant' in the ratio of 70:30.

Debt and Losses

- While the State is a signatory to UDAY agreement for operational efficiency only.
- AT&C losses and ACS–ARR gap are both much higher than UDAY targets for the year 2018–19.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	31.83	15.0
ACS–ARR Gap (Rs per unit)	0.02	–0.09

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

Vertical Devolution

- Sikkim recommended that the State share in the overall divisible pool of taxes be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population (Census 2011)	20
ii)	Area	20
iii)	Income Distance	30
iv)	Population Control	20
v)	Forest Cover	10

Fiscal Indicators

- Fiscal deficit of Sikkim has remained well below 3% over past few years.
- The State has also reported revenue surplus in the recent fiscals.
- Debt–GSDP ratio has also remained moderate at 22.06% in 2018–19 (NEHS average 29.6%).
- The State has also been able to keep the Debt–GSDP ratio with the prescribed targets of the State FRBM.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	41.8	29.9	36.2	33.5	23.3	24.5	25.8
Actually achieved	22.9	22.4	22.1	22.6	22.0	22.6	21.0
FD–GSDP							
As prescribed by the State FRBM	4.8	3.2	3.0	3.6	3.3	3.0	3.5
Actually achieved	1.6	0.5	0.4	1.8	2.9	–0.4	1.8

Source: Government of Sikkim

Per Capita Income and Incidence of Poverty

- Per capita GSDP of Sikkim at Rs 4,35,204 per annum is far more than NEHS average Rs 1,30,427 in 2018–19.
- Only 8.19% of the population in Sikkim lives below the poverty line as opposed to the national average of 21.9% (Tendulkar methodology, 2011–12).

Share of Secondary Sector in GSDP

- Secondary sector contributes about 60% of Sikkim's GSDP, bolstered by hydel power and pharmaceutical industries.
- The State should speed up the execution of the ongoing hydel projects to exploit the potential fully and increase revenue earnings.

Tourism

- Measures needed to boost the tourism sector are listed below.
  - » The State needs to develop its unique brand for tourism and enhance engagement with tour operators.
  - » Air connectivity and road network should be improved to reduce the cost of travel.
  - » Eco-tourism and adventure sports may be encouraged through incentives or PPP mode.
  - » Homestays, individual as well as community based, may be promoted as a viable alternate source of income for local people. Since homestays are primarily run by women, they can be instrumental in their economic empowerment. The State Government may take active measures to link homestays with e-commerce players.
  - » Government of Sikkim should take steps for the preservation and propagation of its diverse and unique flora and fauna.

Horticulture and Organic Farming

- Potential in organic farming and horticulture can be exploited in Sikkim by establishing more cold storages, setting up agri-value chains, and developing food processing industry.

Socio-economic Indicators

- Sikkim has better human development indicators than the national average on most counts (see SK-2.D).
- It was the first State to be declared Open Defecation Free.
- Sikkim's per capita expenditure per annum on health at Rs 4,792 and education at Rs 14,580 are far higher than NEHS averages at Rs 1,987 and Rs 5,970 respectively.
- Despite this, at 890 females per 1,000 males, Sikkim's sex ratio is more adverse than the national average of 943.

Low Own Tax Revenue

- Sikkim has third lowest OTR among NEHS, in spite of having second highest per capita income and high share of secondary sector in GSDP.
- Sikkim's OTR/GSDP was only 3.1% in 2018–19 against the NEHS average of 4.95%. Due to small own resource base, the State depends heavily on transfer of resources from the Central Government. It receives 75% of its TRR from the Union Government.
- However, the TGR of Sikkim's OTR from 2011–12 to 2018–19 at 13.7% is higher than NEHS average of 11%.
- Collections from VAT/GST were only 2% in 2018–19 for Sikkim against 3.5% NEHS average.
- However, the collections grew at a rate of 15% in 2017–18 (NEHS 7%) and 41% in 2018–19 (NEHS 16%).
- The State needs to ramp up its efforts to enhance revenues by tapping more resources.

Falling Non-Tax Revenue

- NTR remains an important source of revenue for the State as it constitutes about 40%–50% of ORR. However, NTR has a TGR of (–7.5%) from 2011–12 to 2018–19 due to fall in revenues from lottery.
- The State has potential to increase its earnings through the hydro-power sector and tourism which should be explored.

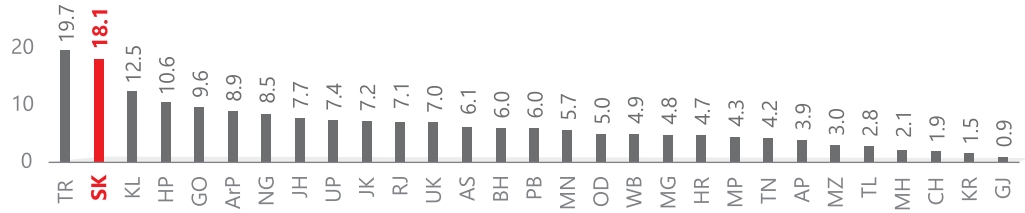
High Committed Expenditure

- Committed expenditure (including GIA Salary) is 68.3% of Sikkim's TRE in 2018–19, which is almost at par with the NEHS average of 67.7%. This does not take away from the fact that it is extremely high.
- The TGR of committed expenditure (2011–12 to 2018–19) in Sikkim (14.2%) is higher than the NEHS average (12.1%).

High Unemployment Rate

- Despite a large secondary sector, Sikkim has the second highest unemployment rate in the country of 18.1% (as against the all India level of 5%).[1]
- Sikkim needs to find ways to create opportunities for employment in the State.

SK-5.B: Unemployment Rate in Major States in India, Usual Principal Status Approach, in %



Source: GOI (2016), *Employment Unemployment Survey 2015–16*, Labour Bureau, Ministry of Labour and Employment, Government of India.

Local Bodies

- Own revenues of ULBs are negligible.
- RLBs in Sikkim earn meagre revenues on their own.
- The State government may help the local bodies use innovative methods like market fees, parking space etc., for improving own revenues.

- PTB has not been set up by State Government yet.
- Steps should be taken to devolve the remaining functions immediately to ULBs.

Poor Connectivity and Infrastructure

- Though a small airport is operational in Sikkim, it has limited capacity.
- Sikkim lacks rail networks.
- The State is entirely dependent on National Highway–10 (NH–10) (single-laned), the only link with the rest of the country.
- Frequent road disruptions due to natural calamities lead to rise in prices of essential goods and high cost of living in the State.
- The State faces difficulties in service delivery to a dispersed population living in hilly areas.
- The State Government needs to prioritise the development of infrastructure that will improve the quality of life of the locals and boost tourism.

High Power Sector Losses

- The Energy & Power Department, Government of Sikkim is solely responsible for generation, transmission, distribution, and trading of power in the State.
- The State Government extends heavy subsidy to rural consumers of electricity.
- Also, 15% of the consumers were not metered as on 31 March 2017.
- State has very high AT&C losses of 31.83%.
- The State Government should take steps to corporatise and unbundle the power department and allow it to run on sound economic principles. Any other alternative, suitable and viable given the size and need of the State could also be devised.

Natural Disasters

- Sikkim is mountainous and geologically young and hence its structure is extremely fragile.
- It is also in the Seismic Zone IV and susceptible to earthquakes.
- It is prone to flash floods and landslides during the monsoon (May–October).
- Climate change could lead to the flooding of the glacial lakes in the Sikkim Himalayas causing extensive damage.
- Sikkim has high cost of infrastructure building and maintenance and a compressed working season due to heavy rainfall.

Public Sector Undertakings

- As on 30 September 2017, 29 accounts of 9 working SPSUs due for finalisation were pending. Sixteen (55%) of these belonged to two SPSUs. The number of accounts with arrears for working SPSUs were 18 in 2012–13, indicating finalisation of fewer accounts by working SPSUs during the period.[2]
- The non-auditing of accounts could pose a serious downside risk given the consistent budgetary support.

Reform Signposts

- Sikkim has a relatively low OTR given its high per capita GSDP and share of GSDP from secondary sector. **The State needs to further boost efforts to increase OTR.**
- **The State should also enhance its NTR through the hydro-power sector and tourism.** Better infrastructure facilities including better connectivity may help to boost tourism in the State.
- As seen earlier, the State's committed expenditure has grown at a relatively higher rate from 2011–12 to 2018–19. **The State should reduce its committed expenditure and enhance spending on development sector.**
- **The State needs to enhance efficiency of the power sector by reducing its AT&C losses and ACS–ARR gap.**
- **It should ensure timely audit of accounts of all PSUs.**

Notes

1 GOI (2016), *Fifth Annual Employment–Unemployment Survey 2015–16*, Labour Bureau, Ministry of Labour and Employment, Government of India.

2 CAG (2018), *Report No. 1 of 2018: Report of the Comptroller and Auditor General of India on Social, Economic, Revenue and General Sectors for the year ended March 2017*, Government of Sikkim

TN-1.A: Overview

POPULATION
72.2 million
6.1%
Of population across all States

AREA
1,30,060 sq km
4.0%
Of area across all States

3.7%
Of forest area across all States

FOREST COVER
26,364 sq km
20.3%
Of the State's own area is under forest

0.3% ↑
Forest cover changed from 2017 to 2019

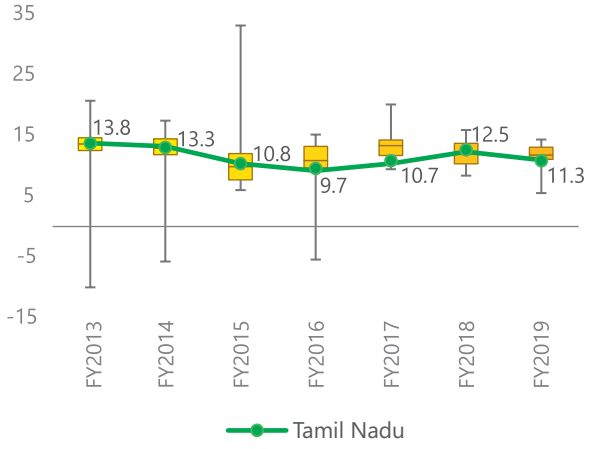
PER CAPITA GSDP
Rs 2,15,784
Rs 1,40,422
Average across all States
(FY2019)

TAX TO GSDP
6.5%
6.3%
Average across all States
(FY2019)

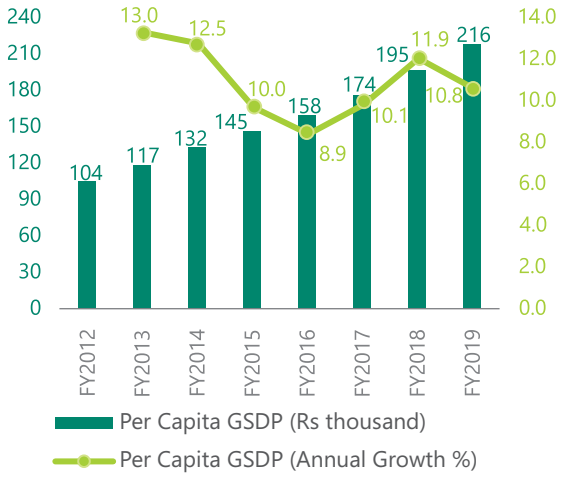
CHILDREN PER WOMAN
1.7
2.2
Average across all States
TFR

URBANISATION RATE
48.5%
31.1%
All India average

TN-1.B: Growth rate of GSDP (at current prices, %)



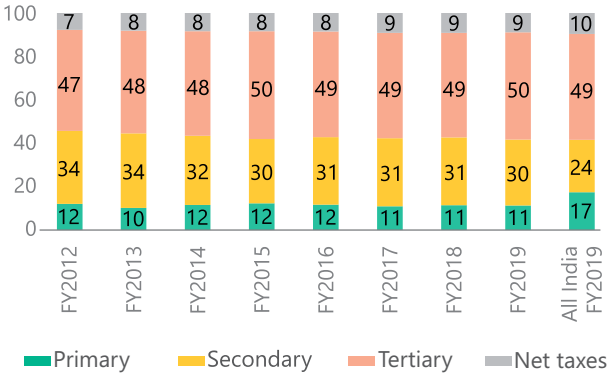
TN-1.C: Per capita GSDP (at current prices)



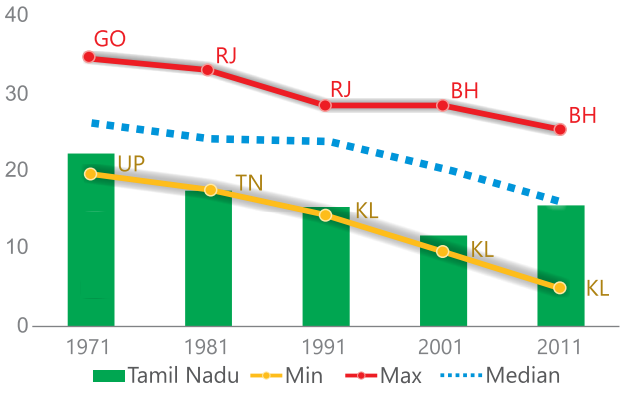
TN-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	All GS	Share (%) of State in GS
2011–12	7,51,486	77,44,945	9.7
2012–13	8,54,825	88,27,195	9.7
2013–14	9,68,530	1,00,07,392	9.7
2014–15	10,72,678	1,09,93,257	9.8
2015–16	11,76,500	1,21,91,256	9.7
2016–17	13,02,639	1,37,80,737	9.5
2017–18	14,65,051	1,54,20,126	9.5
2018–19	16,30,208	1,72,83,813	9.4

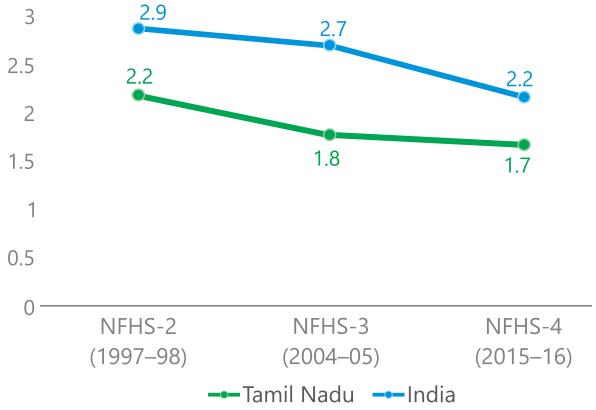
TN-1.E: Sectoral Contribution to GSDP (at current prices, %)



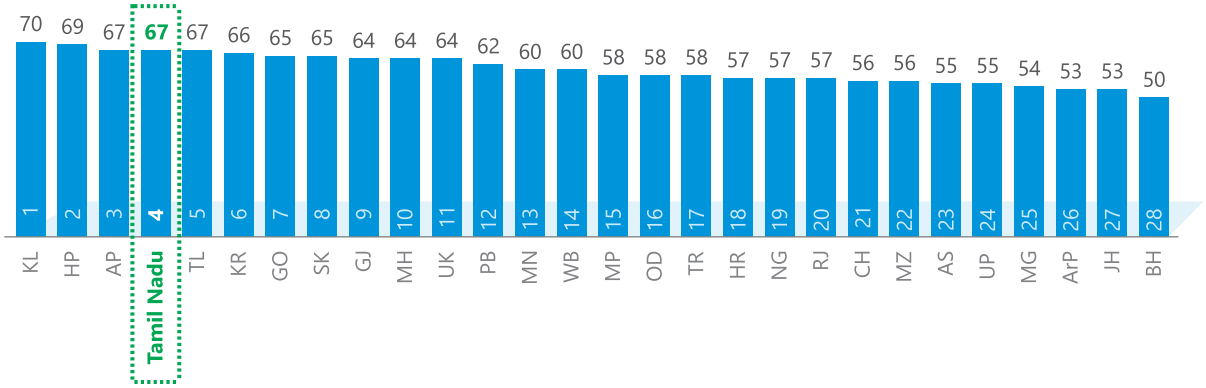
TN-2.A: Decadal Growth in Population (%)



TN-2.B: Total Fertility Rate (children per woman)



TN-2.C: SDG Index of NITI Aayog (2019)



TN-2.D: Key Social Indicators

EDUCATION

	TN	INDIA
Literacy rate (%)[a]	80.1	73.0
Pupil–Teacher ratio[b] (in Primary)	20.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	83.7	55.4

WATER & SANITATION

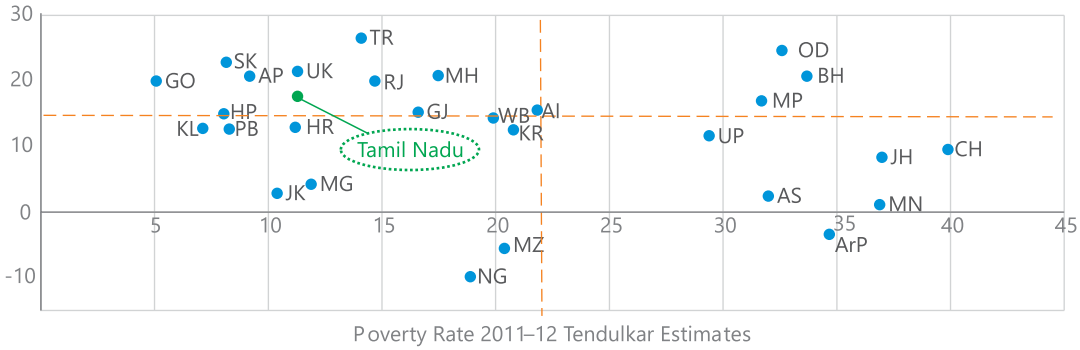
	TN	INDIA
Availability of safe drinking water[d] (household %)	90.6	89.9
Availability of toilets[d] (household %)	61.7	61.1

HEALTH

	TN	INDIA
Life expectancy (years)[g]	71.7	69.0
Sex ratio (♀ per 1000 ♂)[a]	996	943
Underweight children (%)[d]	23.8	35.8
Stunting among children (%)[d]	27.1	38.4
Anaemia among children (%)[d]	50.7	58.6
Women with below normal BMI (%)[e,d]	14.6	22.9
Anaemia among Women (%)[d]	55.0	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	15.0	32.0
Institutional Deliveries (%)[d]	98.9	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	5.5	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,653	1,218 *(All States)*

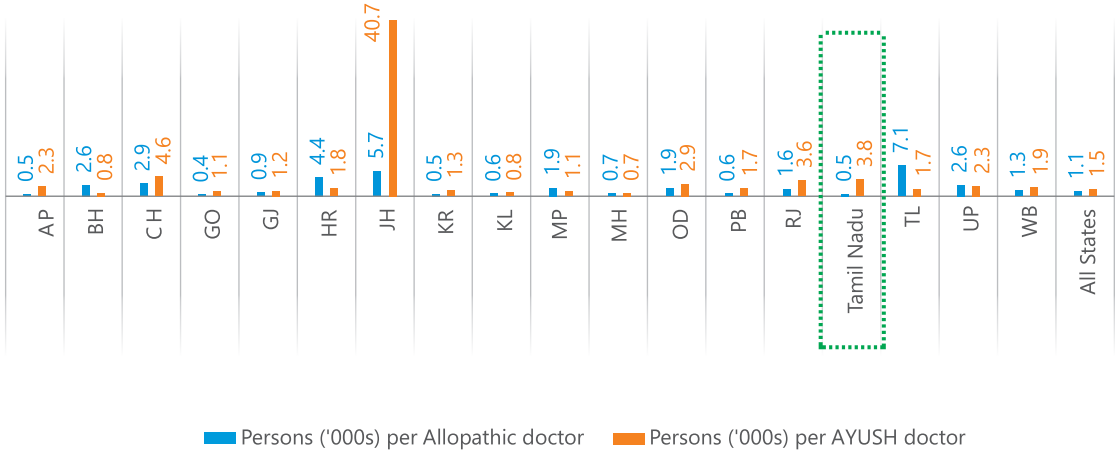
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

TN-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



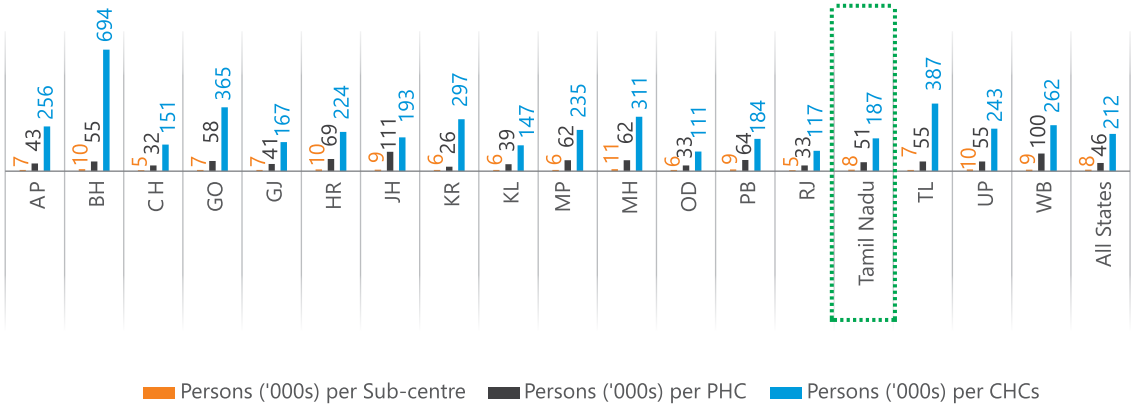
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

TN-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



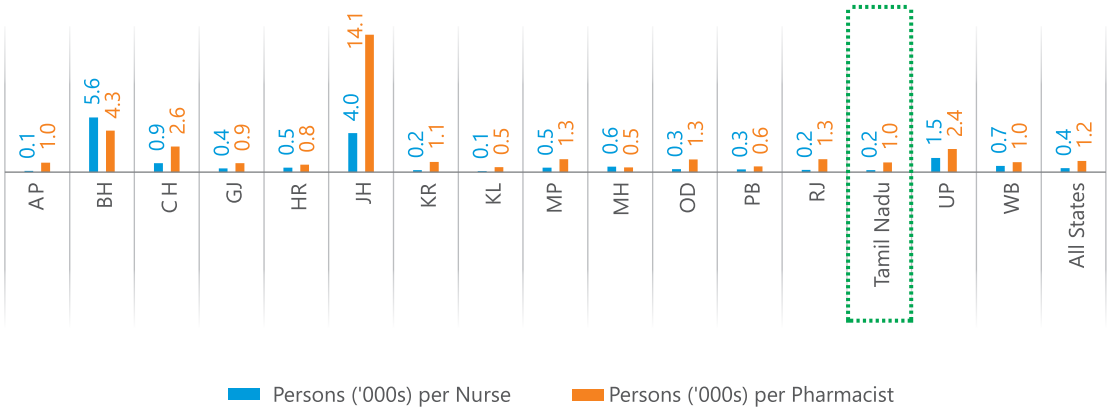
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

TN-3.B: Persons ('000s) per Sub-centre/PHC/CHC



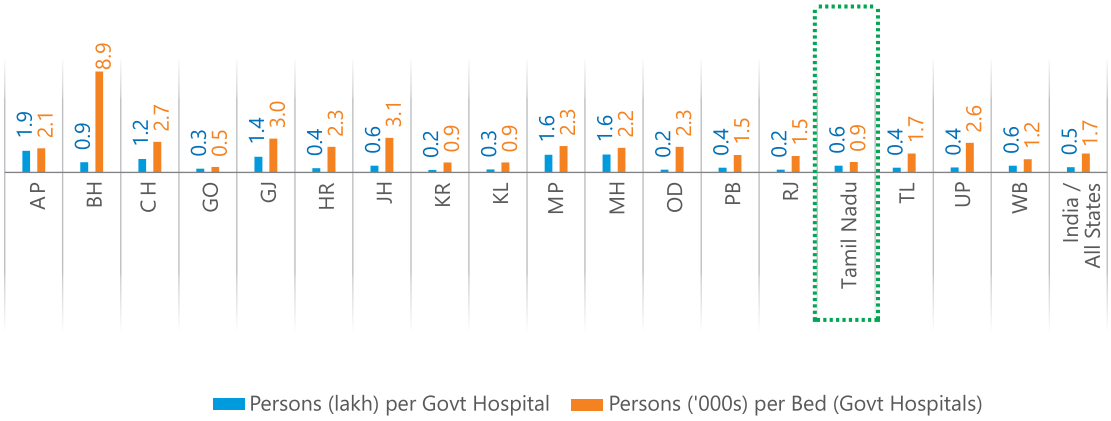
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

TN-3.C: Persons ('000s) per Nurse/ Pharmacist



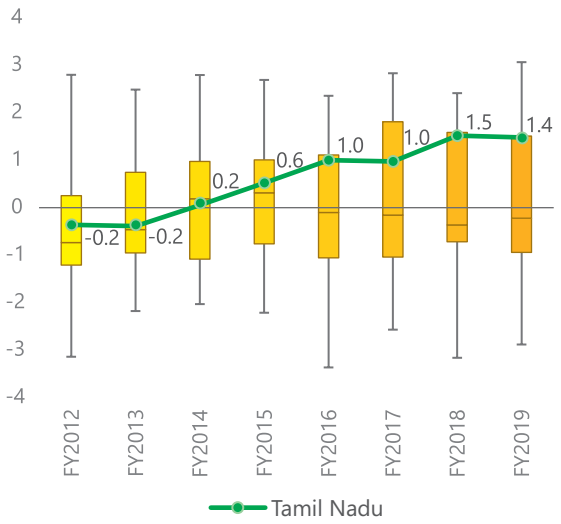
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

TN-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

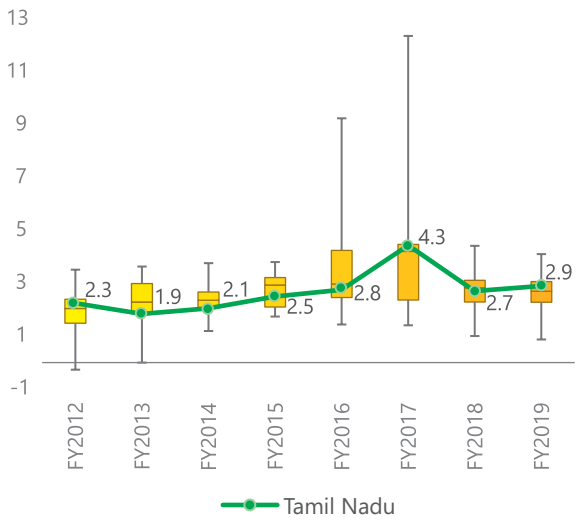


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

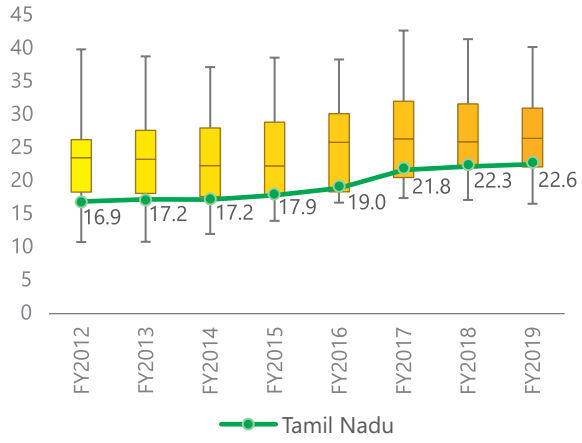
TN-4.A: Revenue Deficit as % of GSDP



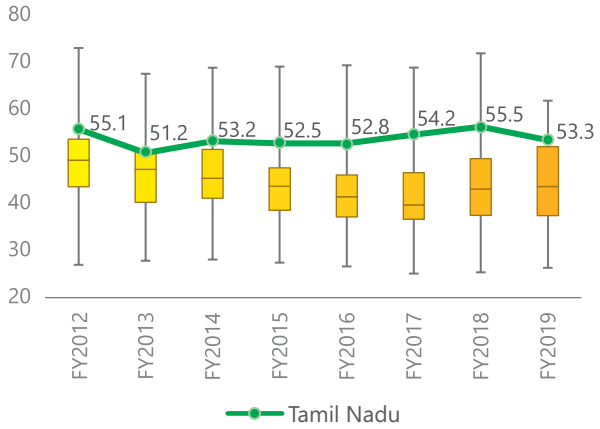
TN-4.B: Fiscal Deficit as % of GSDP



TN-4.C: Outstanding Debt as % of GSDP

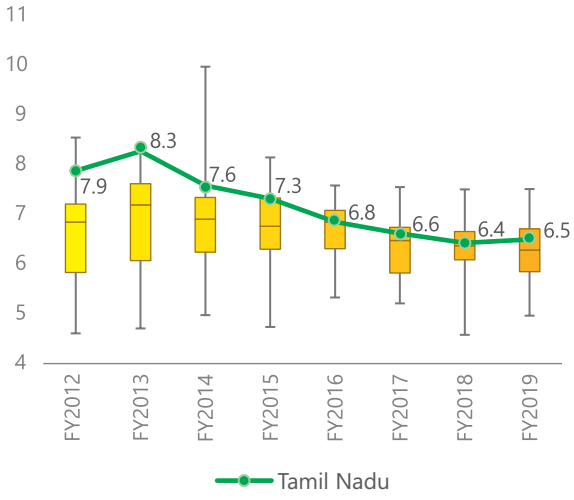


TN-4.D: Committed Expenditure as a % of Revenue Expenditure

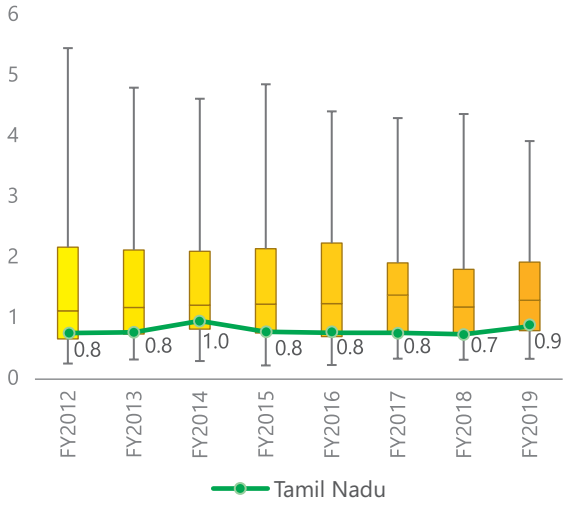


Note: Committed expenditure includes salaries, interest payments, and pensions

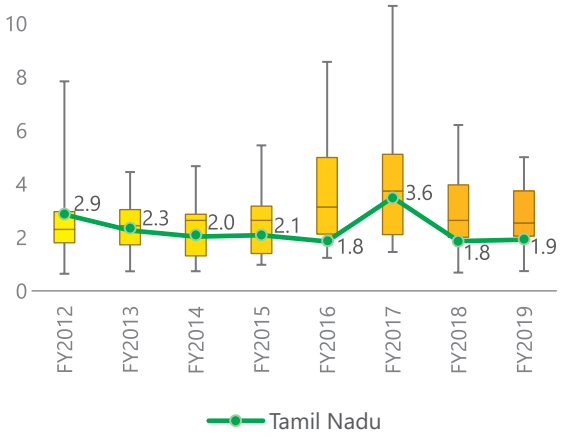
TN-4.E: OTR as % of GSDP



TN-4.F: NTR as % of GSDP



TN-4.G: Capital Expenditure to GSDP Ratio



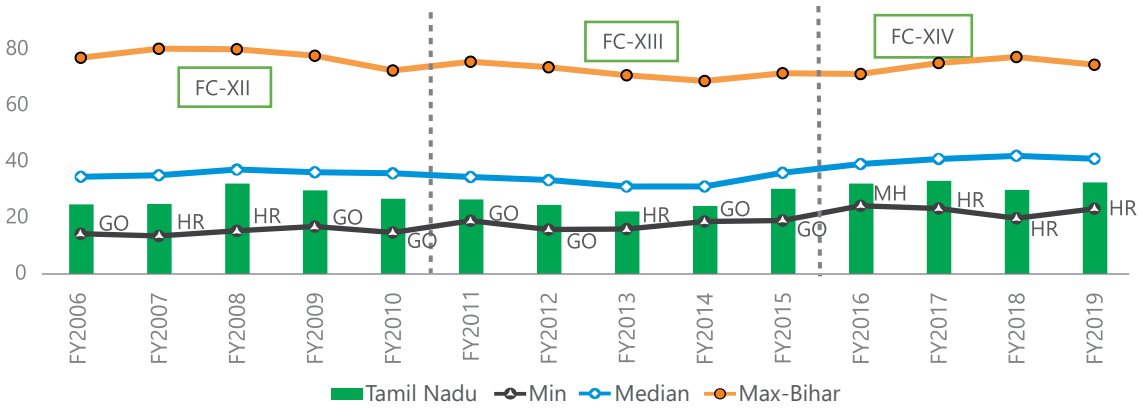
TN-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	2,15,784	1,41,099
Indicators as a percentage of GSDP		
TRR	10.7	13.4
OTR	6.5	6.4
NTR	0.9	1.1
TE	14.0	16.1
ES	2.4	3.1
SS	4.3	5.4
GS	4.4	4.7
Committed Expenditure	6.5	5.8
Capital Expenditure	1.9	2.5
FD	2.9	2.5
RD	1.4	0.2
OD	22.6	25.0

TN-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Tamil Nadu	12.4	9.7	7.6
GS average	13.6	13.1	10.3

TN-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- All 29 functions of the Eleventh Schedule of the Constitution were devolved to RLBs/PRIs.
- All 18 functions of the Twelfth Schedule of the Constitution were devolved to ULBs.

Auditing Status

- In accordance with the Tamil Nadu Local Fund Audit Act, 2014, the Directorate of Local Fund Audit (DLFA) conducts the statutory audit of RLBs and ULBs in the State.
- The CAG provides technical guidance and support to DLFA.
- The accounts of RLBs and ULBs were audited up to 2017–18.

Property Tax Board

- As recommended by FC-XIII, the State set up its PTB in the year 2013. The Board is functioning properly.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
7	5	3	4

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

Fifth SFC (2017–18 to 2021–22)

- According to the *Overview of State Finance Commission Reports* by the National Institute of Public Finance and Policy, the Government of Tamil Nadu accepted the recommendations of the Fifth SFC, which are currently under implementation.
  - » The Commission recommended devolution of 10% of the net SOTR during the award period commencing from 2017–18.
  - » The vertical sharing ratio between RLBs and ULBs shall be 56:44.

» Within RLBs, the vertical sharing ratio between District Panchayats, Panchayat Unions, and Gram Panchayats may be determined as 8:37:55.

- The Fifth SFC has raised concerns regarding quality of data.
- Tamil Nadu is the only State besides Odisha (Fourth SFC) and Sikkim (Fifth SFC) to have submitted its SFC Report and Action Taken Report before the start of the respective award periods.

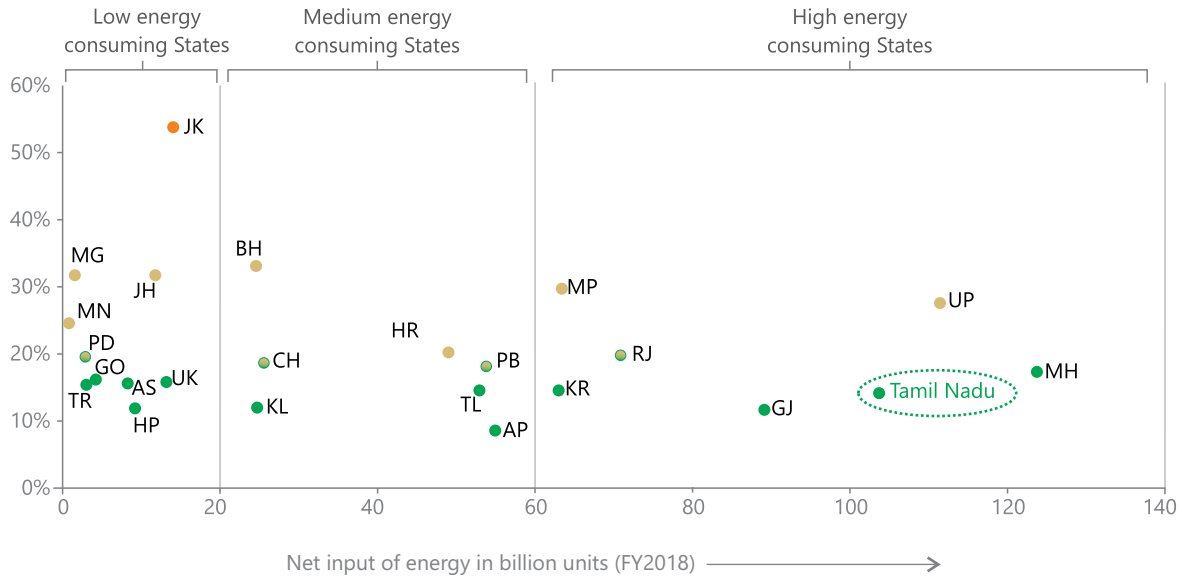
Debt and Losses

- The State has achieved neither the target for ACS–ARR gap nor the target for AT&C Loss% in 2018–19.
- The State has taken over of DISCOM debt under UDAY to the tune of Rs 22,815 crore during 2016–17.
- As on 31 March 2019, the total borrowings by the DISCOMs (including borrowings from the State Government of Rs 17101 crore) are Rs 1,13,438 crore (23.7% of the total DISCOM borrowings of all States).

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	17.47	13.50
ACS–ARR Gap (Rs per unit)	1.88	–0.07

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India.

TN-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Tamil Nadu has recommended that the overall divisible pool of taxes be substantially increased by bringing cesses and surcharges into it.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population (2011)	25
ii)	Population control based on inverse of population growth from 1971 to 2011	25
iii)	Income distance measured from minimum level of High Middle Income Countries.	25
iv)	Contribution to Central Taxes • Contribution of each State to personal income tax collection • Collection of SGST plus IGST settled to each State • Direct and indirect tax contributions to have equal weights	25

Fiscal Indicators

- Tamil Nadu's Debt–GSDP ratio has increased from 17.2% in 2012–13 to 22.6% in 2018–19.

FRBM Compliance

- The State implemented its FRBM Act in 2003 and has adhered to its FRBM limit in recent years.
- It needs to continue on the credible debt path and careful calibration of expenditure for generating future streams of income.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	24.5	24.8	25.0	25.2	25.2	25.0	25.0
Actually achieved	16.9	17.3	17.2	17.9	18.9	21.8	22.3
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	NA	3.0
Actually achieved	2.3	1.9	2.1	2.5	2.8	4.3	2.7

Not Applicable (NA): Target was not fixed because the liabilities of the Tamil Nadu Generation and Distribution Corporation were taken over under UDAY.

Source: Government of Tamil Nadu

Poverty Reduction

- With 17.6 percentage point reduction in poverty between 2004–05 and 2011–12, the State has made significant progress in SDG–1.

Ranking on the SDG Index of NITI Aayog (2019)

- The State has an SDG Index value of 67 (as compared to the national average 60) and ranks 4th among the Indian States.
- The State is a front-runner in SDG–1 No Poverty, SDG–3 Good Health and Well-being, SDG–4 Quality Education, SDG–6 Clean Water and Sanitation, SDG–7 Affordable and Clean Energy, SDG–8 Decent Work and Economic Growth, SDG–10 Reduced Inequality, and SDG–15 Life on Land, and SDG–16 Peace, Justice and Strong Institutions..
- However, the State needs to improve on SDG–2 Zero Hunger, SDG–5 Gender Equality, and SDG–13 Climate Action.

Tourism

- The State offers vast and unexploited potential for domestic and international tourism.
- According to the Tourism Statistics at a Glance 2020, Tamil Nadu ranked first amongst all States in attracting foreign tourist visits in the country in 2019 (22% of foreign tourist visits were made to Tamil Nadu in 2019).
- The State ranked second amongst all States in attracting domestic tourists in 2019 (21.3% of all domestic tourist visits were made to Tamil Nadu in 2019.

Energy

- Of TN's total solar energy potential of 18 GW, about 1.0 GW has already been harnessed.[1]
- While TN is a pioneer in the production of renewable energy (wind and solar), grid management needs more focus.
- Better grid management in renewables could generate substantial streams of future revenue.

Effective Democratic Decentralisation

- TN is among the few States to have moved to accrual based accounting of ULBs.
- It has also devolved the power to levy property tax to ULBs.

Promotion of Aquaculture to Enhance Revenue

- Despite a coastline of around 1,076 km, the aquaculture sector in TN is much smaller than that of its neighbour, Andhra Pradesh.
- Given the prevailing trend of declining Tax and NTR to GDP ratio, aquaculture can become an important revenue generator for TN.
- Forestry and Tourism are also sectors with significant potential for the State.

FDI into Infrastructure

- Airports, roads, and ports may be expanded to provide necessary logistical support to industries.
- The State needs to establish cable-landing stations (such as those at Vizag and Mumbai) for increasing bandwidth for high data speed and create a digital ecosystem for industrial growth.
- For such purposes, TN should work towards attracting more FDI. Currently 7% of the total FDI into India flows to TN.[2]

Local Bodies

- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Power Sector

- The State needs to upgrade its performance in UDAY Barometers, viz., Smart Metering (200–500 kWH), Smart Metering (above 500 kWH), and Distribution Transformer Metering (Urban).
- TN needs to be cognizant of its power purchase costs that have risen more than 5% in the last two years.[3]

Public Sector Undertakings[4]

- Tamil Nadu has 68 working PSUs, of which 29 had accounts in arrears.
- The State PSUs registered a turnover of Rs1,10,850.43 crore as per their latest finalised accounts. This turnover was equal to 8.54% of GSDP, indicating the important role played by State PSUs in the economy.
- The PSUs accumulated losses of Rs 78,854.25 crore as per their latest finalised accounts.
- The overall budgetary support of the State to PSUs increased from Rs 13,918 crore in 2012–13 to Rs 46,127 crore in 2016–17.
- Given the outstanding liabilities and substantial budgetary support to SPSUs, the State needs to closely monitor them to avoid contingent liabilities imposing additional fiscal burden on the State.
- A time bound programme of restructuring the SPSUs should be adopted soon to remove the major hurdles in their performance.

Declining Industrial Growth

- According to the study on State finances undertaken by the Madras School of Economics for FC-XV, growth in industry slowed down from 10.9% (2005–2011) to 4.6% (2011–2017) led by shrinking of manufacturing and construction activities.
- This is a major concern because both sectors are significant for employment generation.

Poor Learning Outcomes[5]

- The State is below the all India average on two key learning outcomes.

	Learning outcome I[a]	*Learning outcome II*[b]
Tamil Nadu	10.2	25.9
India	**27.3**	**28.2**

[a] Percentage Children in Class III (of government and private schools) who can read Class II Text (2018)
[b] Percentage Children in Class III (of government and private schools) who can at least do subtraction (2018)

Demographic Challenges

- According to Census 2011, at 48.5%, TN has one of the highest urbanisation rates across Indian States. It therefore faces attendant challenges of urban poverty, infrastructure deficit, and pollution.

- Approximately 14 lakh persons have migrated to TN from other States in 2001–2011.[6] The development strategy of TN must aim at ensuring that its migrant population remains more of an asset than a liability.
- With 10.4% of its population 60 plus in years, TN ranks third after Kerala (12.6%) and Goa (11.2%) as an ageing State.

Million-Plus Cities

- Million-plus cities in TN include urban agglomerations of Chennai, Coimbatore, Madurai, and Tiruchirappalli.
- Better infrastructure and logistics in these cities could improve investment climate and ensure quality of life for the citizens, thus developing them as economic centres.
- While cities like Chennai have ample internal resources, local bodies need to generate more Own Tax Receipts (OTR) for creating, upgrading, and maintaining critical infrastructure for better investment climate. Upgrading of roads, bridges, rail, and sewerage systems, urban flood management, solid waste management, improvement of slums, open spaces and parks, etc., need to be viewed comprehensively through the sustainable cities framework. This will entail putting the ULBs in the driver's seat.

Freshwater Deficit[7]

- Tamil Nadu is home to nearly 6% of India's population which survives on only 3% of the nation's freshwater resources.
- The average annual rainfall in TN is only 921 mm (compared to national average of 1,200 mm).
- The per capita water availability is 750 cubic metres per year (where availability below 1,700 cubic metres per capita per annum indicates 'water stress').
- Water stress and seasonal fluctuations result in uncertainty in agriculture production.
- The State has a net irrigated area of 2.84 million hectare (ha) (2016–17). Its irrigation intensity is low as compared to the national average.
- Net sown area declined from 61.7 lakh ha (47.4% of total area) in 1970–71 to 43.5 lakh ha (38.9% of total area) in 2016–17 due to urbanisation and drought.
- The State needs a sustainable framework to ensure management of fresh water as a critical resource.

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Tamil Nadu is part of the group which includes Gujarat, Telangana, Maharashtra, Kerala, Karnataka, Haryana, and Goa.

Reform Signposts

- Though TN is one of the most progressive States of India contributing substantially to the national GDP and reporting good social indicators, it compares poorly to some of the other States in its class.
- The State's fiscal indicators have deteriorated drastically from 2012–13 (latest year of analysis used for FC-XIV projections) to 2018–19 (latest year available for FC-XV).
- Tamil Nadu moved from a revenue surplus to a revenue deficit State post 2012–13.

- Profligacy during 2014–2016 (in the run up to the elections in May 2016) had perhaps had a telling effect on the fiscal indicators of the State.
- Capital expenditure–GSDP ratio has fallen between 2011 and 2019 (except UDAY year of 2016–17).
- Revenue deficit–fiscal deficit (RD–FD) ratio has approached 50% in the recent years implying that most of the borrowings were being used to finance revenue deficit.
- The State experienced low growth in the major sources of revenue (VAT/GST, Stamp Duty and Registration, and State Excise) during the period 2014–2016.

Reasons for Low Growth in Revenue

2012–13	Electricity duty is a meagre amount; therefore, its reduction did not affect growth.
2013–14	During 2012–13, Excise duty constituted 17% of OTR. The State abolished Vend fee and Special Privilege fee and reduced the Annual Privilege fee. These steps reduced Excise by around 60%, despite increased VAT on liquor. Dip in Excise duty and other taxes impeded OTR growth.
2015–16	The State Budget 2015–16 announced prior to elections in May 2016, made many concessions and exemptions in VAT. This was the major reason for poor VAT growth.
2016–17	Stamp duty and Registration fees constituted 11% OTR during 2015–16. During 2016–17, Madras High Court's ban on sale of unapproved residential plots reduced the collection of Stamp duty and Registration fees, pulling down OTR growth.
2017–18	Supreme Court ban on liquor sales on national highways led to the closure of a 1,000 outlets, dealing a blow to State Excise.

- Post 2017–18, TN has taken significant steps to increase its OTR.
  - » Government of Tamil Nadu has increased Excise duty and levied special fee on liquor.
  - » VAT/GST on petroleum products was increased in March 2017.
  - » After a decade, TN increased in water tariff (in 2017) and sewerage charges (in 2018) building an annual increase of @5% for domestic and @10% for commercial consumers into the tariff structure.
  - » After nearly 20 years TN increased property taxes in Chennai in 2018, subject to the condition that the general revision of property tax would not be more than 50% for residential and 100% for non-residential buildings.
- Consequent to above efforts in 2017–18 and 2018–19, TN achieved 13% growth in OTR and 15% growth in ORR in 2018–19.
- **The State may use this additional capacity to reverse the pandemic-driven out-migration of labour and spur industrial activity to revive the State's economy by innovatively deploying such additional resources.**
- **The State needs to revert to its pre-2014 RD–FD ratio and invest the borrowings fully into capital expenditure.**
- **It also needs to improve the OTR–GSDP ratio further.**

Notes

1 GOI (2017), *Energy Statistics 2017*, Ministry of New and Renewable Energy, Government of India.

2 GOI (2019), *Fact Sheet on Foreign Direct Investment (April 2000 to March 2019)*, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India.

3 GOI (2019), *Newsletter on UDAY*, January, Ministry of Power, Government of India.

4 CAG (2017), *Report 5: Report of the Comptroller and Auditor General of India on Public Sector Undertaking for the year ended 31st March 2017,* Government of Tamil Nadu.

5 ASER (2019), *Annual Status of Education Report 2018,* ASER Centre.

6 Government of Tamil Nadu Memorandum to FC-XV.

TL-1.A: Overview

POPULATION
35.0 million
2.9%
Of population across all States

AREA
1,12,112 sq km
3.4%
Of area across all States

2.9%
Of forest area across all States

FOREST COVER
20,582 sq km
18.4%
Of the State's own area is under forest

0.8% ↑
Forest cover changed from 2017 to 2019

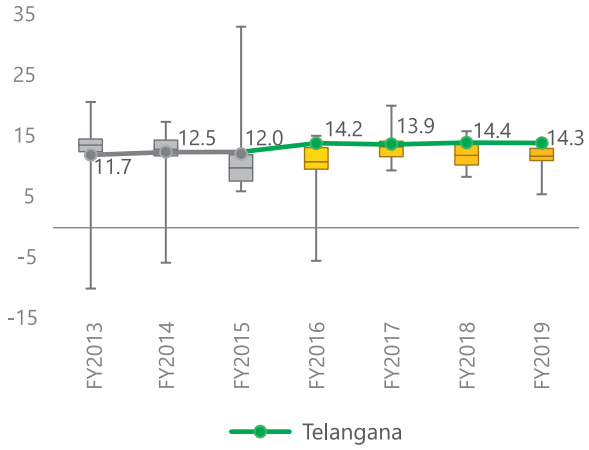
PER CAPITA GSDP
Rs 2,25,047
Rs 1,40,422
Average across all States

TAX TO GSDP
7.5%
6.3%
Average across all States

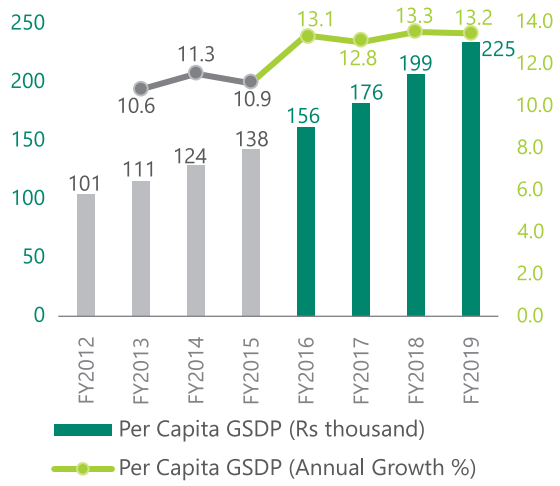
CHILDREN PER WOMAN
1.8
2.2
Average across all States

URBANISATION RATE
N.A.
31.1%
All India average

TL-1.B: Growth rate of GSDP (at current prices, %)



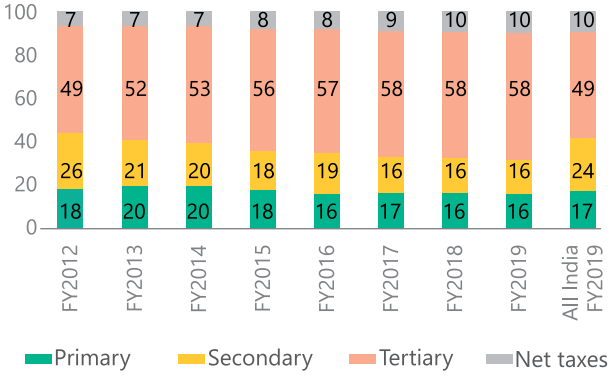
TL-1.C: Per capita GSDP (at current prices)



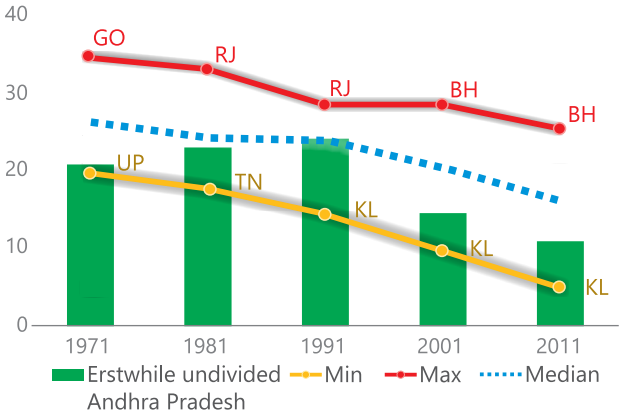
TL-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	3,59,434	77,44,945	4.6
2012–13	4,01,594	88,27,195	4.6
2013–14	4,51,580	1,00,07,392	4.5
2014–15	5,05,849	1,09,93,257	4.6
2015–16	5,77,902	1,21,91,256	4.7
2016–17	6,58,325	1,37,80,737	4.8
2017–18	7,53,127	1,54,20,126	4.9
2018–19	8,61,031	1,72,83,813	5.0

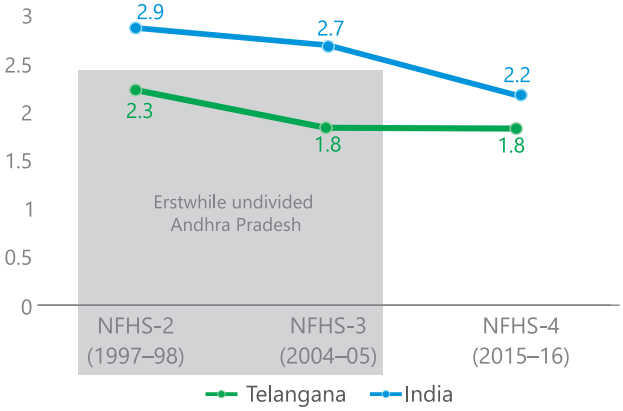
TL-1.E: Sectoral Contribution to GSDP (at current prices, %)



TL-2.A: Decadal Growth in Population (%)

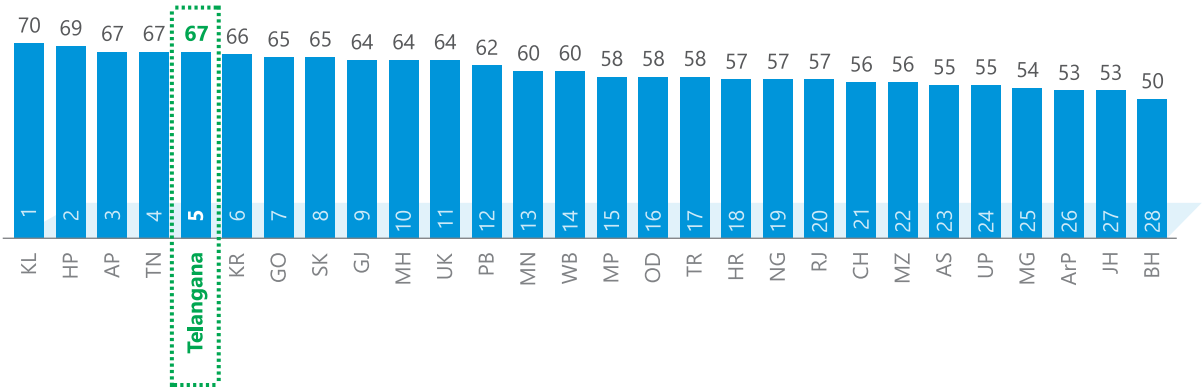


TL-2.B: Total Fertility Rate (children per woman)



Note: NFHS-2 and NFHS-3 data for Andhra Pradesh pertains to the erstwhile undivided State.

TL-2.C: SDG Index of NITI Aayog (2019)



TL-2.D: Key Social Indicators

EDUCATION

	TL	INDIA
Literacy rate (%)[a]	N.A.	73.0
Pupil–Teacher ratio[b] (in Primary)	23.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	50.6	55.4

WATER & SANITATION

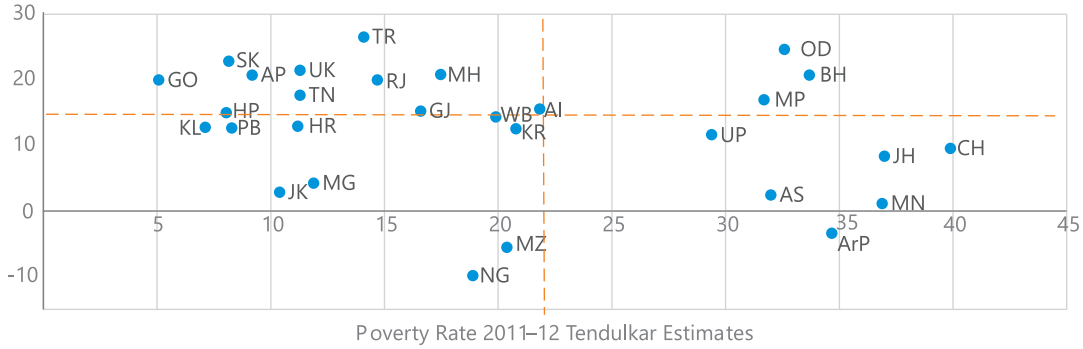
	TL	INDIA
Availability of safe drinking water[d] (household %)	77.9	89.9
Availability of toilets[d] (household %)	69.0	61.1

HEALTH

	TL	INDIA
Sex ratio[a] (females per 1000 males)	N.A.	943
Underweight children (%)[d]	28.4	35.8
Stunting among children (%)[d]	28.0	38.4
Anaemia among children (%)[d]	60.7	58.6
Women with below normal BMI (%)[e,d]	22.9	22.9
Anaemia among Women (%)[d]	56.6	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	27.0	32.0
Institutional Deliveries (%)[d]	91.5	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	4.2	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,405	1,218 *(All States)*

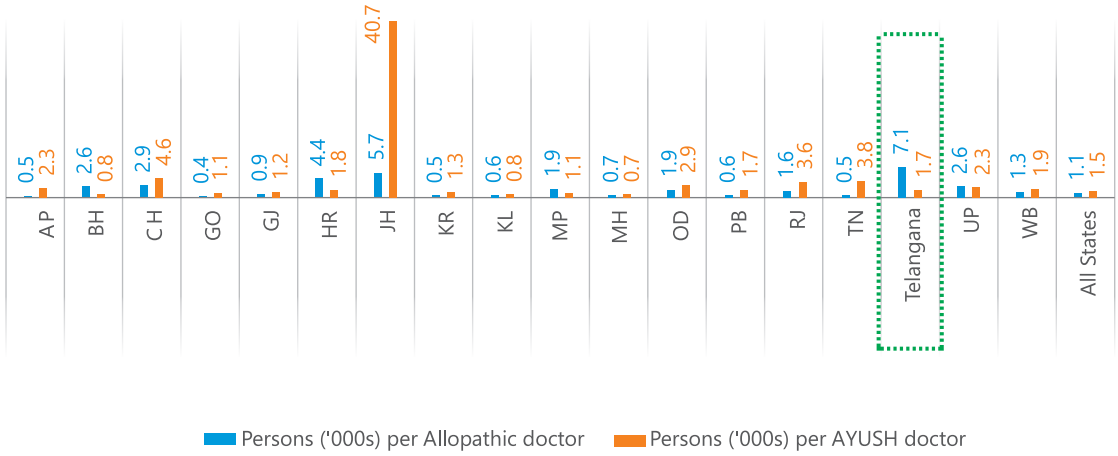
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018

TL-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012 Telangana did not exist in the comparison period. However, AP offers a good approximation.



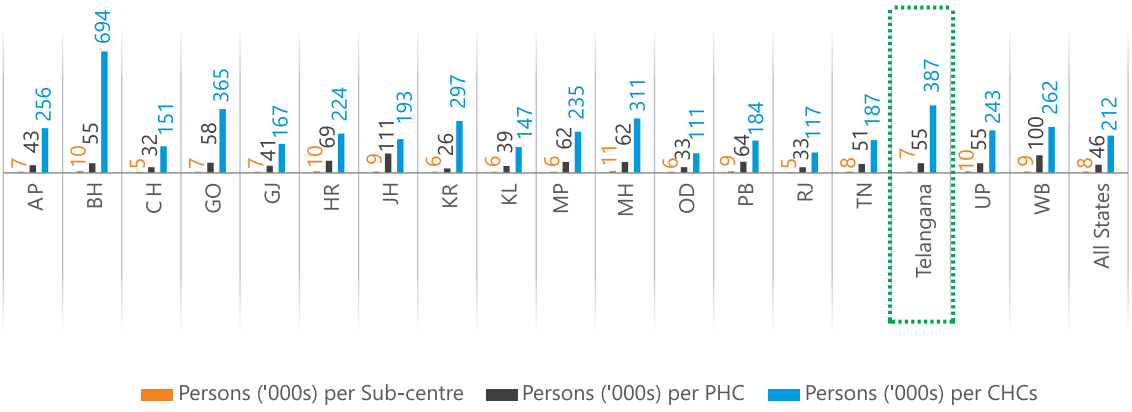
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

TL-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



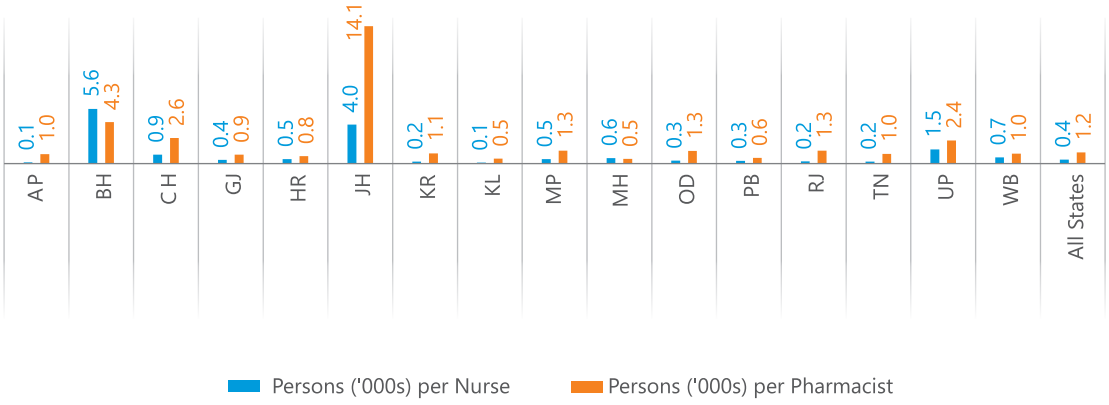
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

TL-3.B: Persons ('000s) per Sub-centre/PHC/CHC



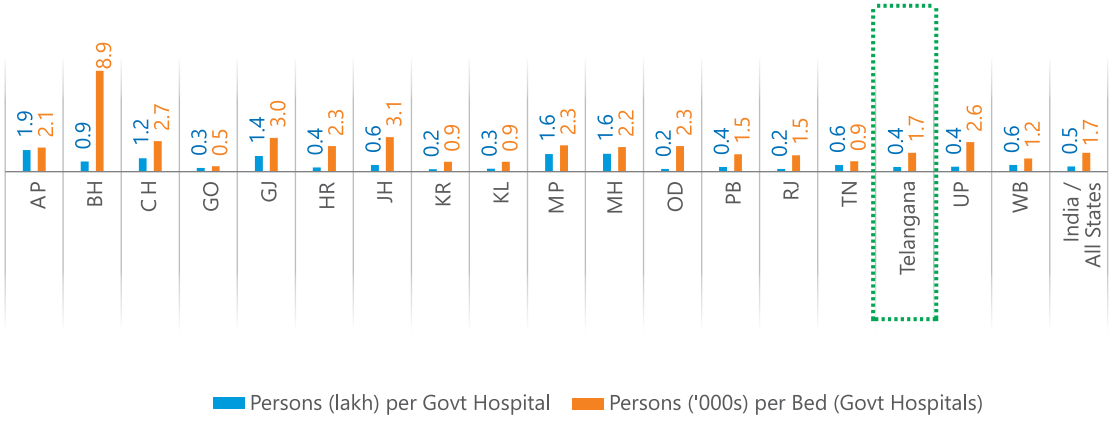
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

TL-3.C: Persons ('000s) per Nurse/ Pharmacist



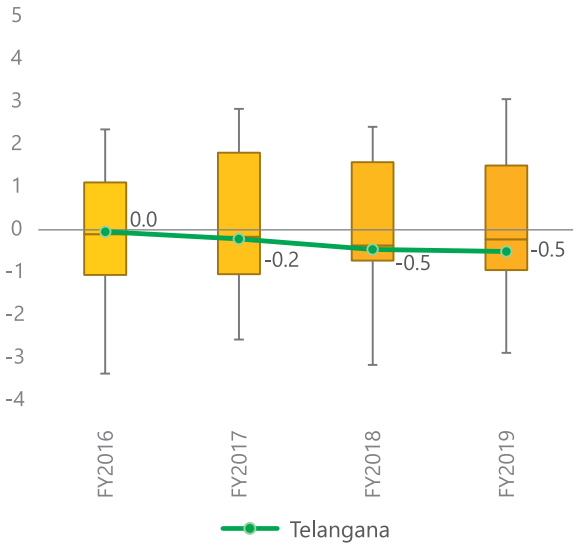
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

TL-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

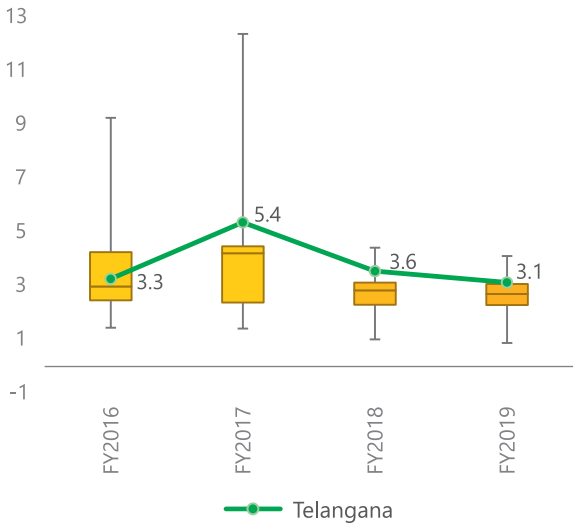


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

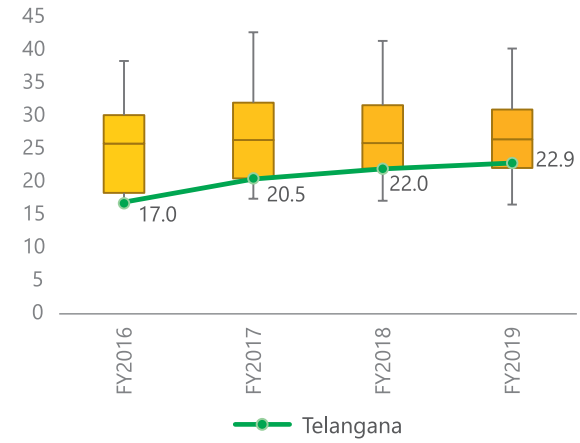
TL-4.A: Revenue Deficit as % of GSDP



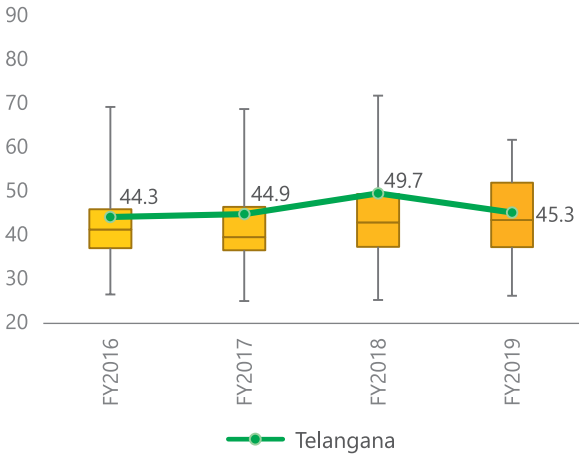
TL-4.B: Fiscal Deficit as % of GSDP



TL-4.C: Outstanding Debt as % of GSDP

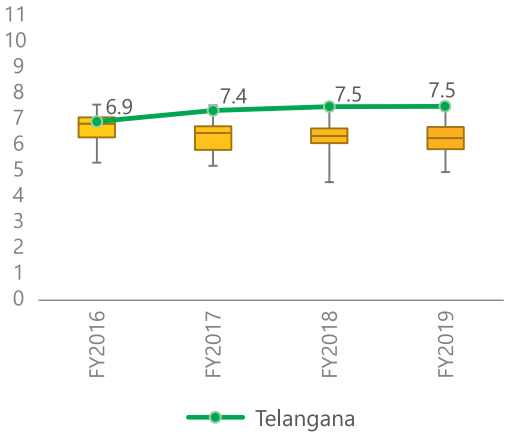


TL-4.D: Committed Expenditure as a % of Revenue Expenditure

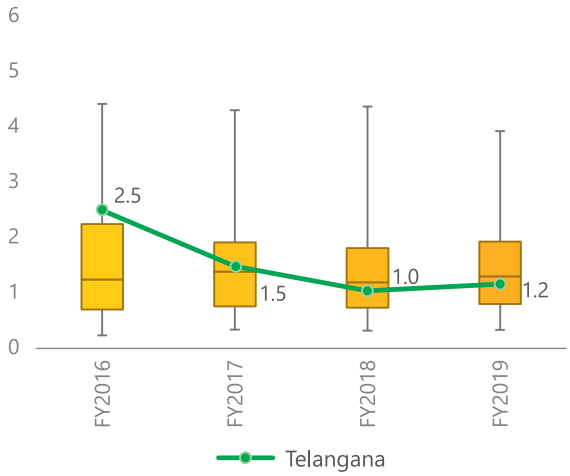


Note: Committed expenditure includes salaries, interest payments, and pensions

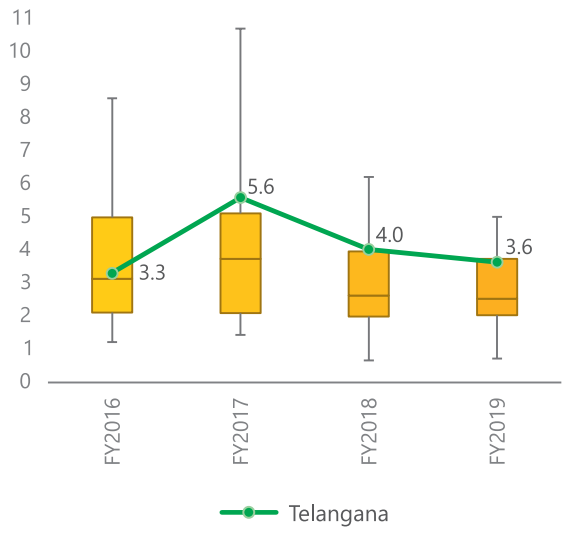
TL-4.E: OTR as % of GSDP



TL-4.F: NTR as % of GSDP



TL-4.G: Capital Expenditure to GSDP Ratio



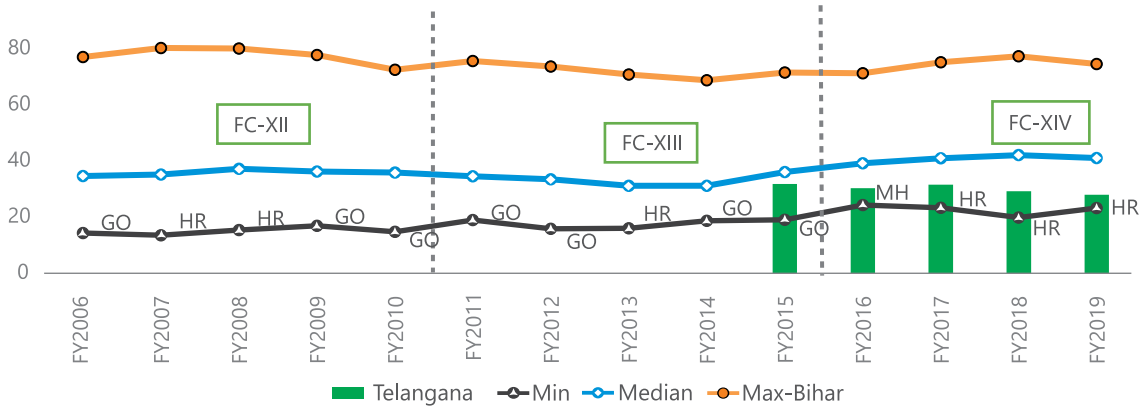
TL-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	2,25,047	1,41,099
Indicators as a percentage of GSDP		
TRR	11.8	13.4
OTR	7.5	6.4
NTR	1.2	1.1
TE	14.9	16.1
ES	2.7	3.1
SS	4.6	5.4
GS	4.0	4.7
Committed Expenditure	5.1	5.8
Capital Expenditure	3.6	2.5
FD	3.1	2.5
RD	–0.5	0.2
OD	22.9	25.0

TL-4.I: TRE and ORR Gap

TGR %, 2015–2019	*TRE*	*TRR*	*ORR*
Telangana	8.2	9.8	11.1
GS average	11.9	11.8	11.1

TL-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions envisaged in the Eleventh Schedule of the Constitution, 10 have been devolved to the RLBs.
- Of the 18 functions envisaged in Twelfth Schedule of the Constitution, 17 have been devolved to the ULBs.

Auditing Status

- Audit of accounts of RLBs and ULBs has been completed till 2017–18.

Property Tax Board

- Government of Telangana has not set up the PTB recommended by FC-XIII.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
6	12	4	5

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

First SFC (2020–21 to 2024–25)

- After the creation of the new State, the First SFC was constituted in 2015. However, its report is yet to be submitted.

Other Observations

- The State Government did not provide information on current norms of resource devolution to local bodies.
- The State Government is not strictly complying with the constitutional provisions of constituting SFCs and the timely implementation of their recommendations.

Debt and Losses

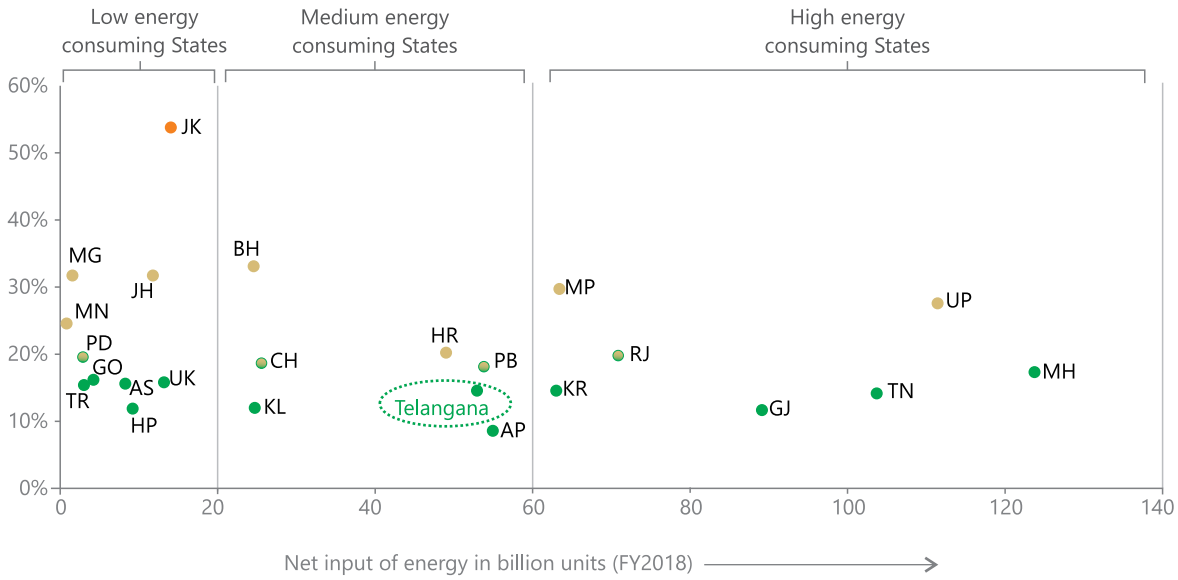
- Total borrowings of DISCOMs as on 31 March 2019 are Rs 17,121 crore of which State Government borrowing is Rs 11 crore.
- Under UDAY, the State Government has taken over outstanding loans of DISCOMs to the tune of Rs 8,923 crore in 2016–17 through the issuance of bonds.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	20.0	10.0
ACS–ARR Gap (Rs per unit)	1.5	0

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

TL-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Telangana proposed that the share of States in divisible pool be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Weights (%)*
i)	Population (2011)	20.0
ii)	Area	20.0
iii)	Income Distance	30.0
iv)	Fiscal Self Reliance	10.0
v)	Quality of Public Expenditure	7.5
vi)	Demographic Performance	12.5

Low Dependence on Central Transfers

- In 2018–19, the Central transfers constituted less than 27% of TRR of the State Government, indicating greater reliance on own resources than most other States.
- The State also achieved a relatively high OTR–GSDP ratio of 7.5% in the same year.
- The State should continue its efforts to sustain the higher revenue from its own sources—both tax and non-tax.

Health Indicators

- Telangana is ahead of the national average in most of the key health indicators. A few are listed below (for others, see TL-2.B and D).
  - » According to SRS 2018, Under-5 (0 to 4 years) mortality per 1,000 live births: 30 (national average, 36)
  - » Percentage children covered by basic vaccination (12–23 months): 68 (national average, 62)
  - » Percentage children wasted: 18.1 (national average, 21.0)
  - » Maternal mortality per 100,000 deliveries (SRS, 2016–18): 63 (national average, 113)

Ranking on the SDG Index of NITI Aayog (2019)

- Telangana ranks 5th among the Indian States on the SDG Index 2019.
- The State is a frontrunner on SDG–3 Good Health and Wellbeing, SDG–8 Decent Work and Economic Growth, and SDG–10 Reduced Inequality.
- However, it needs to improve its performance on SDG–1 No Poverty, SDG–2 Zero Hunger, SDG–6 Clean Water and Sanitation, SDG–9 Industry, Innovation and Infrastructure, and SDG–16 Peace, Justice and Strong Institutions.

Ease of Doing Business

- The State Government has implemented numerous investor-friendly policies such as TS-iPASS (for single window clearance), T-HUB (to encourage start-ups), etc.
- These and other similar initiatives catapulted Telangana to the third spot in EoDB rankings of all States in 2019 (Andhra Pradesh was 1st).
- The State should continue such steps in order to promote industrial development.

Updated Land Records

- Besides Maharashtra, Telangana is the only other state to have computerised more than 99% of its land records data.
- Accurate and efficient direct benefit transfers depend in large measure on correct and updated land records information.
- Ensuring public access to land records online substantially reduces the risk of fraud and deception during land transactions.

Fiscal Discipline

- The FD–GSDP ratio of the State jumped from 3.3% in 2015–16 to 5.4% in 2016–17 and thereafter declined to 3.1% in 2018–19.
- Further, Debt–GSDP ratio rose from 17% to 22.9% between 2015–16 and 2018–19.
- Over and above 3% FD–GSDP ratio, the State resorted to additional borrowings under Article 293(3) of the Constitution in 2016–17 (0.50%), 2017–18 (0.50%), and 2018–19 (0.25%).
- The State therefore needs to bring down its deficits and debt to sustainable levels.

FRBM Compliance

- The FRBM Act, 2005 enacted by the erstwhile undivided Andhra Pradesh had been in force in Telangana since the creation of the State on 2 June 2014 and it was amended by the State Government in 2016–17.
- The State did not adhere to FRBM targets of FD–GSDP ratio during the period 2015–16 to 2017–18.
- However, the Debt–GSDP ratio remained within the target during the same period.

Ratios as %	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP			
As prescribed by the State FRBM	25.0	25.0	25.0
Actually achieved	17.0	20.5	22.0
FD–GSDP			
As prescribed by the State FRBM	3.0	3.5	3.5
Actually achieved	3.3	5.4	3.6

Source: Government of Telangana

Observations by Auditor General, Telangana

- If off-budget borrowings of the State amounting to Rs 29,965 crore in 2016–17 are accounted for, the Debt–GSDP ratio would jump by more than 5 percentage points to 24.9% in the same year.
- The State registered revenue surplus of Rs 1,386 crore during 2016–17. The revenue surplus was overstated by Rs 6,778 crore on account of irregular accounting.
- Thus, the State had, in fact, revenue deficit of Rs 5,392 crore in 2016–17.
- Fiscal deficit (Rs 35,281 crore) was understated by Rs 2,500 crore due to crediting of borrowed funds as Revenue Receipts.
- The huge investments made in irrigation have not yet resulted in commensurate returns in terms of crop yield improvements.
- The downside risks on the State's fiscal situation remain a major challenge.

High Cost of Kaleswaram Project

- At an estimated cost of Rs 80,000 crore, the Kaleshwaram lift irrigation project (a flagship programme of the Government of Telangana) aims to serve over 18 lakh acres of farmland.
- Lift irrigation invariably notches up a massive electricity bill, bringing to question, the financial viability of the project in the absence of a guaranteed revenue stream.

- The State should try to generate adequate revenue (say, through user charges) to at least cover the operations and maintenance cost of the project.

Intrastate Development Disparity

- Of the 33 districts of Telangana, only four districts—Rangareddy, Hyderabad, Medchal–Malkajgiri, and Sangareddy)—contribute 52% of the GSDP.
- All secondary and tertiary activities are concentrated in these districts.
- Telangana should invest in the development of other urban centres in the interest of inclusive and balanced development across all districts.

Unemployment Rate

- Incidence of unemployment (usual principal and subsidiary status) among persons aged 15 years and above was the 5th highest in Telangana (across GS) in 2017–18.[1]
- Thus, labour intensive sectors need to be promoted in the State to generate higher employment.

Education

- Educational outcomes of Telangana are either poorer than the national average (such as reading abilities) or have substantially deteriorated over a period of time (such as arithmetic abilities).

	% Children in Grade III who can read Grade II text		*% Children in Grade III who can at least do subtraction*	
	2016	*2018*	*2016*	*2018*
Telangana	18.6	18.1	42.2	34.5
India	25.2	27.3	27.7	28.2

Source: ASER (2018), *Annual Survey of Education Report, 2018*, ASER Centre.

- In 2016–17, the expenditure on education (general education, technical education, and capital outlay on education, sports, art and culture) as a percentage of GSDP was only 1.8% against GS average of 2.6%.

Backwardness

- Of the 33 districts of Telangana, three are identified as aspirational.
- Of these, one district figures among the 35 districts in the country most severely affected by left-wing extremism, creating serious obstacles in its development path.
- The State may like to target the development of bottom 20% blocks as aspirational blocks, on the lines of aspirational districts.

Power Sector

- To avoid fiscal risk, the State needs to substantially improve its performance on these two vital UDAY barometers along with smart metering and feeder segregation.
- Robust systemic reforms are required to ensure that the power subsidy reaches intended beneficiaries without leakage.

Local Bodies

- Measures need to be taken to devolve the remaining functions to local bodies.
- First SFC constituted in 2015 has not submitted its report despite a lapse of more than four years.

- The State needs to expedite the constitution of PTB.
- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Public Sector Undertakings[2]

- Out of 47 working PSUs (15 PSUs exclusive to the State, 28 PSUs formed due to bifurcation of the State, and 4 PSUs under demerger), 42 had arrears of 102 accounts (as on 30 September 2017) with the extent of arrears ranging from 1 to 9 years.
- As on 31 March 2017, the State Government invested Rs 58,746.19 crore (8.9% of GSDP in 2016–17) in 43 working PSUs.
- If PSU accounts are not audited on time, it could pose a serious downside risk to the State Government given the substantial budgetary support.

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. Telangana is part of the group which includes Gujarat, Tamil Nadu, Maharashtra, Kerala, Karnataka, Haryana, and Goa.
- Critical fiscal parameters of Telangana have been compared to others in its class (barring Goa which is too small).

Reform Signposts

- Though Telangana is among the developed States of India, in terms of per capita income, it is placed 5th in its class.
- According to NFHS-4 (2015–16), Telangana is the only State in its class to report a lower percentage of households with access to safe drinking water (77.9%) than the national average (89.9%).
- Telangana reported the second highest buoyancy of OTR (1.22 in FY 2018–19) in its cohort.
- Among the States in this class, the ORR–TRR ratio (2018–19) is highest for Haryana (77%) followed by Telangana (73.6%) (compared to class average of 69.5).
- ORR/TRE is observed to be highest for Telangana (76.9%) followed by Maharashtra (76.1%), and Gujarat (70.4%).
- Between 2015 and 2019, Telangana reported a healthy sign of higher TGR of ORR (11.1%) than TRE (8.2%).
- For Telangana, 86.6% of ORR comes from OTR which is mostly drawn from the four Hyderabad-centric high growth districts mentioned earlier.
- **Revenues from Stamp duty are very low (8% of OTR against 15% in Maharahstra). This presents scope for vast improvement.**
- **The current level of loan debt repayments is also a cause for worry, which needs to be addressed promptly.**
- The interest repayment at 13% of TRE in 2018–19, is higher than the class average and growing fast.

- The State resorted to borrowing for critical social infrastructure like drinking water and irrigation. The mounting interest payments for such huge off-budget borrowings (without a provision for cost recovery) is expected to create fiscal challenges very soon.
- **Finally, off-budget borrowings through parastatals need to be accounted for in order to avoid possible fiscal shocks.**

Notes

1 GOI (2018), *Annual Report of Periodic Labour Force Survey, 2017–18*, Ministry of Statistics and Programme Implementation, Government of India.

2 CAG (2017), *Report No 2 of 2017 - Public Sector Undertakings Telangana*, report of the Comptroller and Auditor General of India, published by the Government of Telangana.

TR-1.A: Overview

POPULATION
3.7 million
0.3%
Of population across all States

AREA
10,486 sq km
0.3%
Of area across all States

1.1%
Of forest area across all States

FOREST COVER
7,726 sq km
73.7%
Of the State's own area is under forest

0%
Forest cover changed from 2017 to 2019

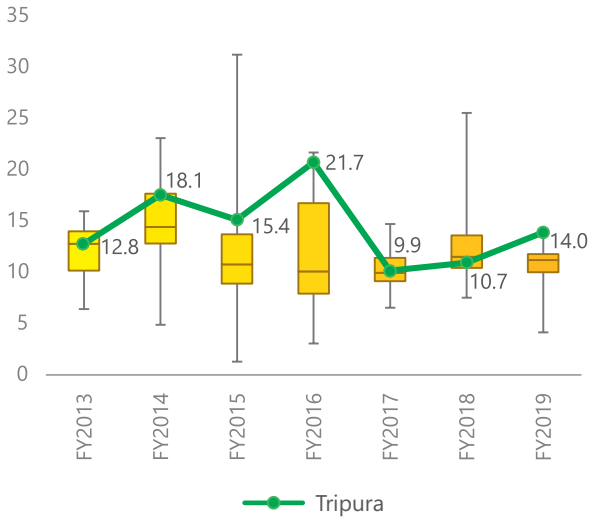
PER CAPITA GSDP
Rs 1,25,461
Rs 1,40,422
Average across all States

TAX TO GSDP
3.5%
6.3%
Average across all States

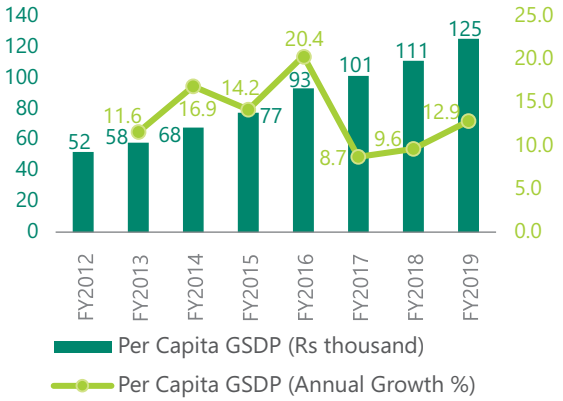
CHILDREN PER WOMAN
1.7
2.2
Average across all States

URBANISATION RATE
26.2%
31.1%
All India average

TR-1.B: Growth rate of GSDP (at current prices, %)



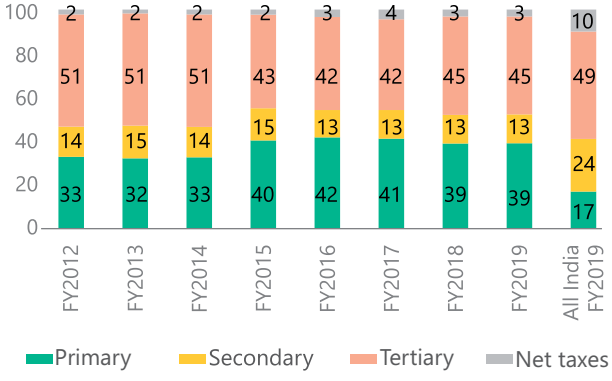
TR-1.C: Per capita GSDP (at current prices)



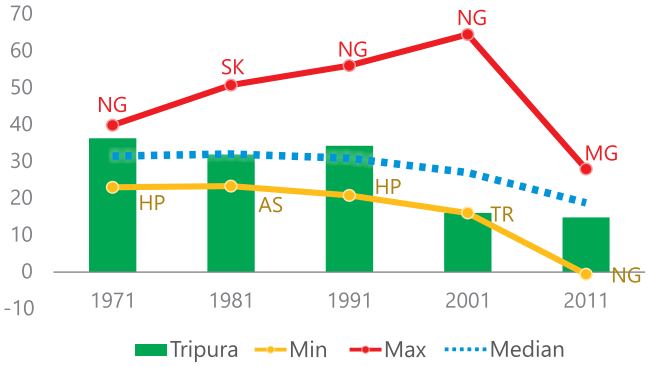
TR-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All NEHS*	*Share (%) of State in NEHS*
2011–12	19,208	5,03,182	3.8
2012–13	21,663	5,63,081	3.9
2013–14	25,593	6,37,264	4.0
2014–15	29,533	6,95,474	4.3
2015–16	35,938	7,88,321	4.6
2016–17	39,479	8,67,648	4.6
2017–18	43,716	9,74,240	4.5
2018–19	49,845	10,82,901	4.6

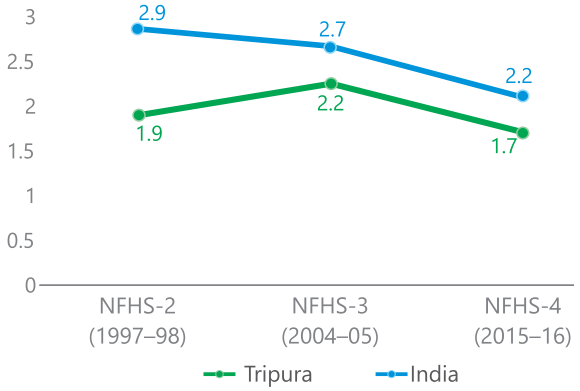
TR-1.E: Sectoral Contribution to GSDP (at current prices, %)



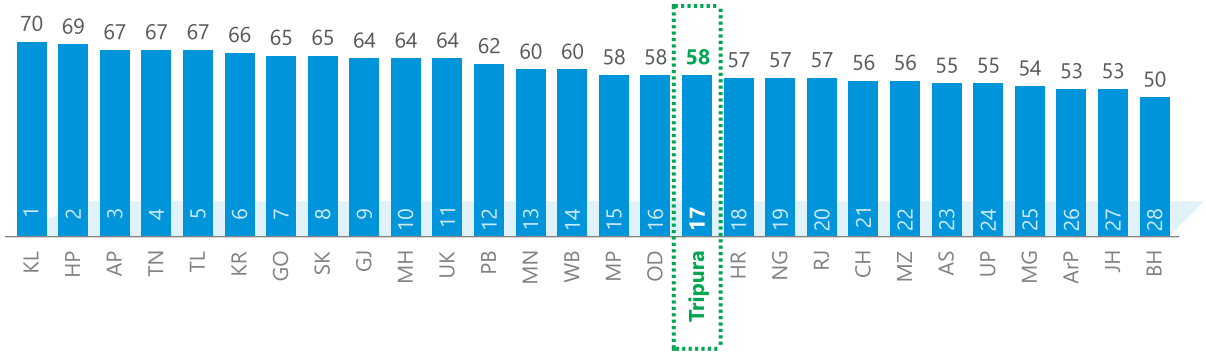
TR-2.A: Decadal Growth in Population (%)



TR-2.B: Total Fertility Rate (children per woman)



TR-2.C: SDG Index of NITI Aayog (2019)



TR-2.D: Key Social Indicators

EDUCATION

	TR	INDIA
Literacy rate (%)[a]	87.2	73.0
Pupil–Teacher ratio[b] (in Primary)	10.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	41.9	55.4

WATER & SANITATION

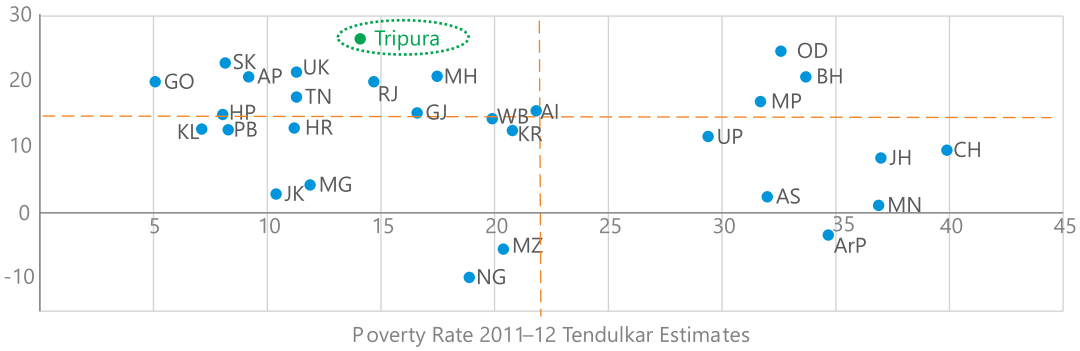
	TR	INDIA
Availability of safe drinking water[d] (household %)	87.3	89.9
Availability of toilets[d] (household %)	97.9	61.1

HEALTH

	TR	INDIA
Sex ratio[a] (females per 1000 males)	960	943
Underweight children (%)[d]	24.1	35.8
Stunting among children (%)[d]	24.3	38.4
Anaemia among children (%)[d]	48.3	58.6
Women with below normal BMI (%)[e,d]	18.9	22.9
Anaemia among Women (%)[d]	54.5	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	27.0	32.0
Institutional Deliveries (%)[d]	79.9	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	7.0	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	2,340	1,218 *(All States)*

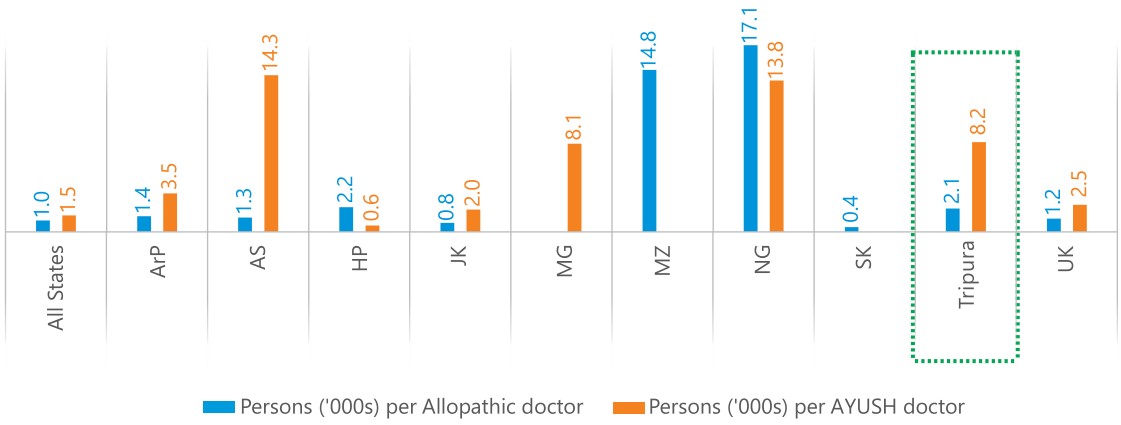
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018

TR-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



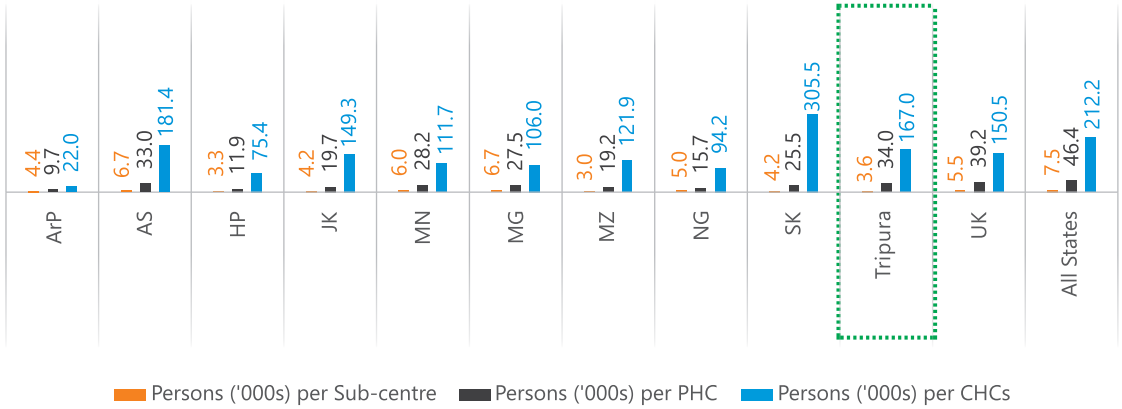
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

TR-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



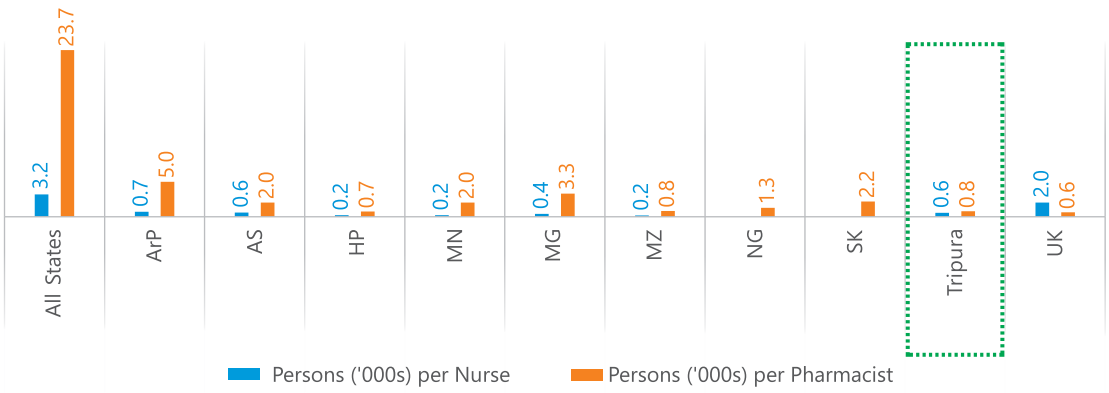
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

TR-3.B: Persons ('000s) per Sub-centre/PHC/CHC



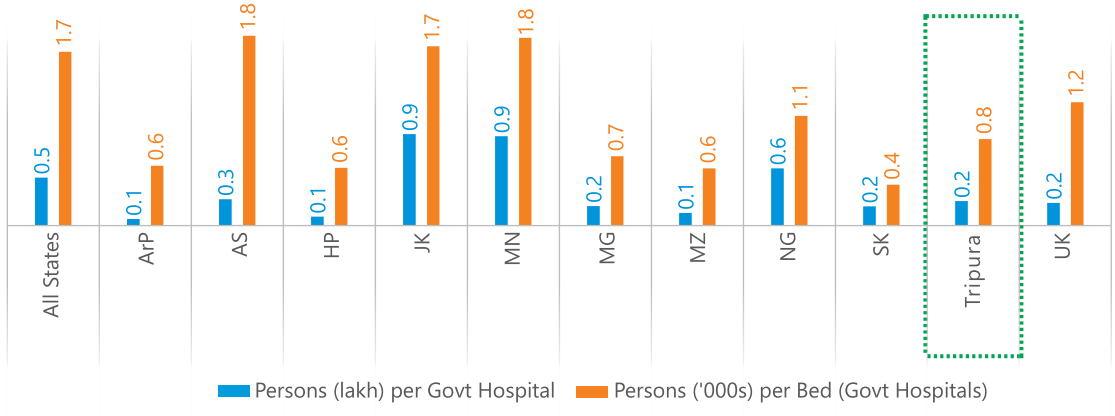
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

TR-3.C: Persons ('000s) per Nurse/ Pharmacist



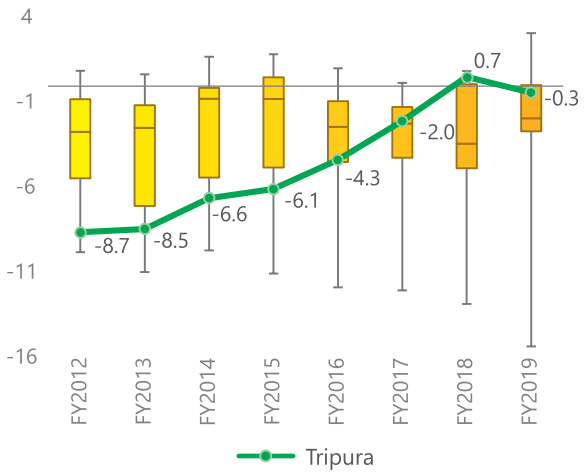
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

TR-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

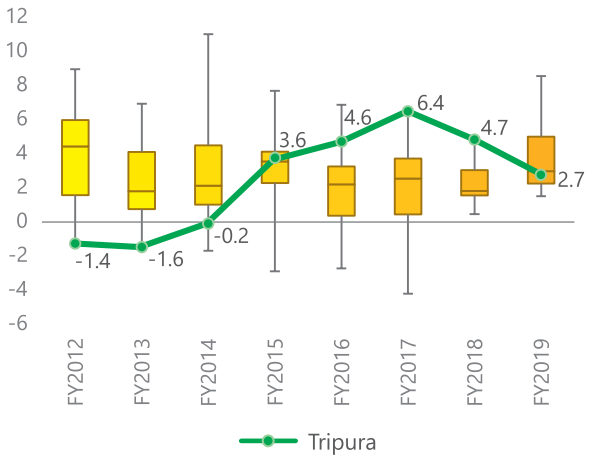


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

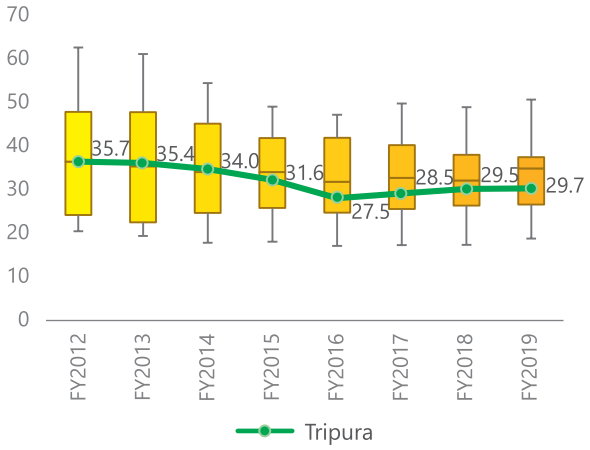
TR-4.A: Revenue Deficit as % of GSDP



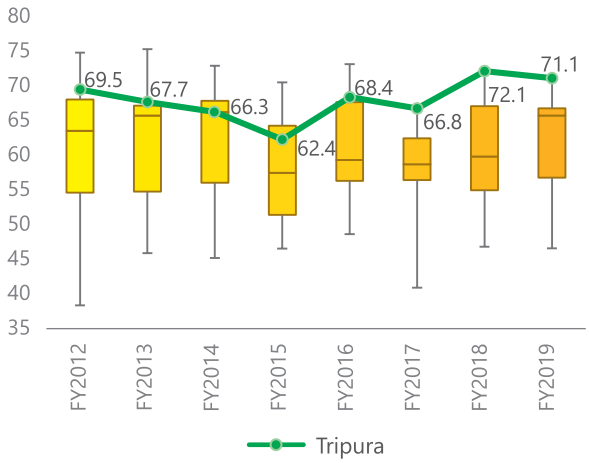
TR-4.B: Fiscal Deficit as % of GSDP



TR-4.C: Outstanding Debt as % of GSDP

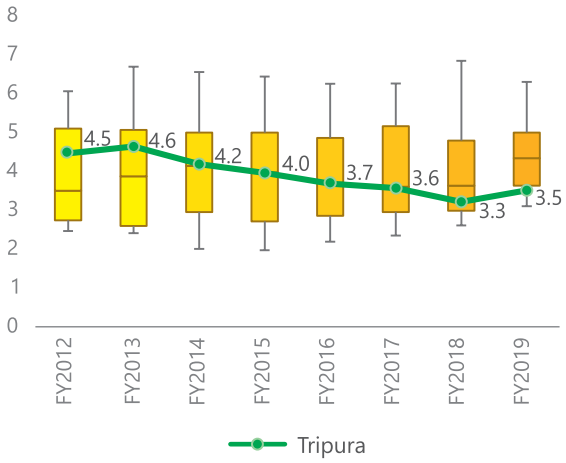


TR-4.D: Committed Expenditure as a % of Revenue Expenditure

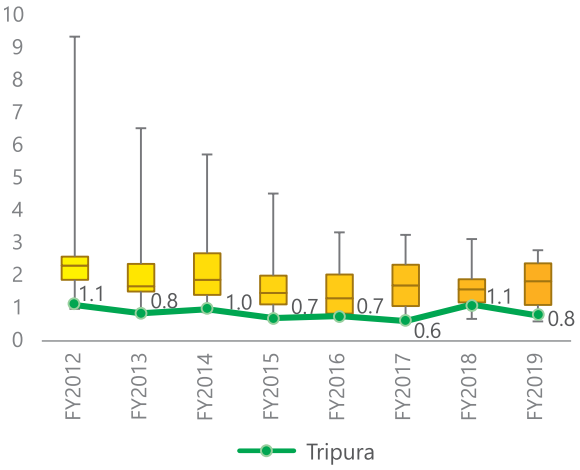


Note: Committed expenditure includes salaries, interest payments, and pensions

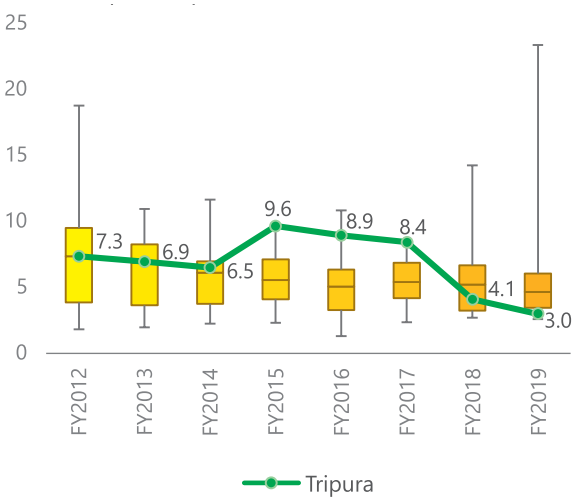
TR-4.E: OTR as % of GSDP



TR-4.F: NTR as % of GSDP



TR-4.G: Capital Expenditure to GSDP Ratio



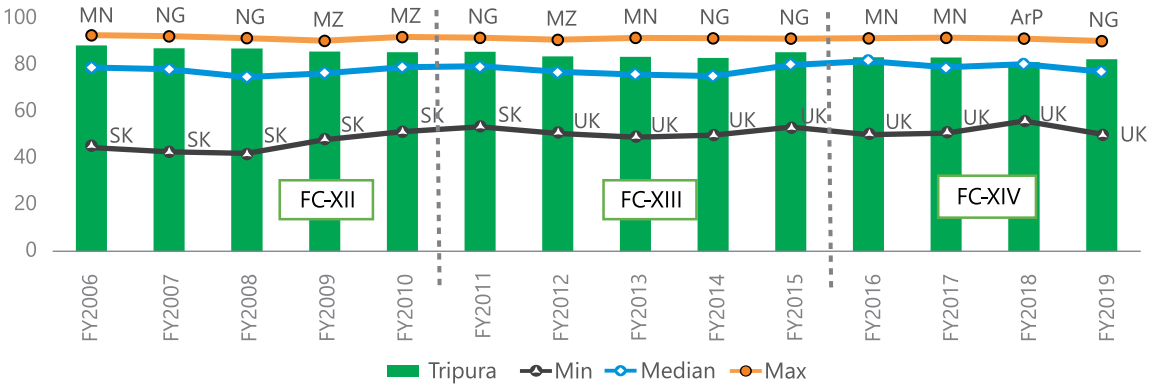
TR-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	1,25,461	1,30,427
Indicators as a percentage of GSDP		
TRR	24.1	23.3
OTR	3.5	5.0
NTR	0.8	2.0
TE	26.8	26.7
ES	3.1	5.0
SS	10.5	8.7
GS	9.8	8.5
Committed Expenditure	17.0	14.4
Capital Expenditure	3.0	4.3
FD	2.7	3.4
RD	–0.3	–0.9
OD	29.7	29.6

TR-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Tripura	14.0	8.5	10.0
NEHS	12.6	12.1	10.7

TR-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



The Third Tier

- Besides 634 PRIs and 20 ULBs, the State has one ADC, the Tripura Tribal Areas Autonomous District Council or TTAADC, under the Sixth Schedule of the Constitution of India.

Functions Devolved

- Of the 29 functions under the Eleventh Schedule of the Constitution, 5 have been devolved to PRIs.
- Of 18 functions as envisaged in Twelfth Schedule of the Constitution, 13 have been devolved to ULBs.

Auditing Status

- RLB accounts have been audited till 2017–18.
- TTAADC accounts have been audited till 2017-18.
- Information on the auditing of ULB accounts is not available.

Property Tax Board

- PTB has been constituted by the State Government.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
8	13	13	9

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India

Third SFC (2009–10 to 2014–15)

- The Third SFC did not recommend any specific devolution percentage for local bodies from the State's OTR and NTR.
- Instead, it computed the pre-devolution gap by assessing expenditure required for the establishment, maintenance, and development of RLBs.

- Then, based on the projected OTR and NTR of Tripura and the expenditure gap therein, it recommended that a specified amount be devolved per annum towards the bridging the pre-devolution gap during 2010–11 to 2014–15.

Fourth SFC (2015–16 to 2019-20)

- The report of the Fourth SFC is currently being examined by the Government of Tripura.
- While the award period of the Fourth SFC report is complete, the ATR has not been tabled yet.

Debt and Losses

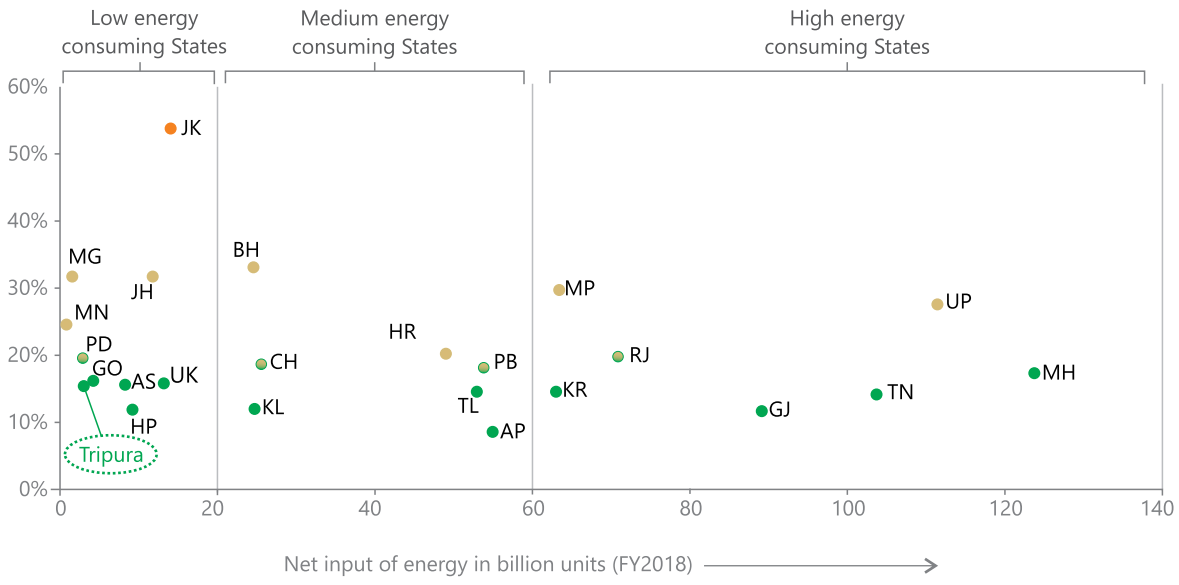
- The Tripura State Electricity Corporation Ltd. (TSEC), the successor to the Department of Power, Government of Tripura, is fully state-owned entity in charge of power generation, transmission, and distribution in the State.
- While the State is a signatory to UDAY agreement for operational efficiency of TSEC, it has not incurred any debt under the scheme.
- Total borrowing of TSEC as on 31 March 2019 is Rs 465 crore of which State Government borrowing is Rs 77 crore.
- While Tripura achieved the UDAY ACS–ARR gap target in 2018–19, it lagged far behind on AT&C losses.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	35.48	20.0
ACS–ARR Gap (Rs per unit)	–0.06	0.03

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

TR-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Tripura has recommended that vertical tax devolution to States be increased from 42% to 50% in light of rising share of cesses and surcharges and discontinuation of central grants such as normal, special, and special plan assistance.
- Tripura has also recommended that at least 10% of the total devolution of taxes to the States be earmarked for North Eastern and Himalayan States (NEHS).

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population	10
ii)	Demographic Change	10
iii)	Income Distance	50
iv)	Area	5
v)	Forest Cover	10
vi)	Accessibility and Availability of Infrastructure	5
vii)	International Border	10

GSDP Growth

- The State had a nominal GSDP TGR of 14.9% from 2011–12 to 2018–19 (all States average 11.9%).
- However, the growth rate has been quite volatile, rising from 15.4% in 2014–15 to 21.7% in 2015–16 before dipping to 9.9% in 2016–17. The peak in 2015–16 was mainly because two gas-based 726 MW power plants were commissioned in 2013–14 and 2014–15. These increased GSDP under the heads 'Mines and Minerals' and 'Electricity, gas, water supply & other utility services'.

Physical and Digital Connectivity

- Tripura has the potential to develop an IT hub in the Northeast as it has good internet connectivity.
- It has a full-fledged airport and road density of 1,815 km per 1,000 sq km as against national average of 952.8 km/sq km.
- However, road connectivity with rest of India can be improved.
- In addition to air connectivity, if Tripura can establish sea link through Bangladesh, it could become a trade gateway linking India and the Northeast to the Association of South East Asian Nations.

Human Development Indicators

- Of the 17 SDGs, Tripura has been classified as a front-runner in SDG–1 Poverty Reduction, SDG–10 Reduced Inequality, SDG–15 Life on Land, and SDG–16 Peace, Justice and Strong Institutions by the SDG India Index Baseline Report, 2018 of the NITI Aayog.
- Tripura reduced incidence of poverty by 26.6% between 2004–05 and 2011–12 (highest rate of reduction across all States) to 14% of its population (Tendulkar estimates).

- Other human development indicators are also better than national averages (see TR-2.D).
- With good connectivity and educational indicators, its capital Agartala has the potential to develop biotechnology firms and medical tourism.

Tourism

- With 8 of the 10 historical monuments of the Northeast in Tripura, the State has ample scope for developing tourism.
- Government of Tripura has requested Archaeological Survey of India to establish an office in the State.
- Aspiring to be a trade and tourism gateway to the Northeast, the State Government is exploring ways to start a direct Delhi–Agartala flight.
- While Tripura does not have many hotels, e-commerce platforms for homestays are operational in Tripura. These should be promoted to enhance tourism.

Natural Resources

- Tripura is a power surplus State with adequate natural gas resources, which could be harnessed for sale to neighbouring States to generate revenue streams.
- Tripura is a large producer of rubber but the rubber processing units are not developed in the State.
- The State could develop industries based on bamboo, rubber, tobacco, and food processing industries.
- There should be an online portal to facilitate hassle-free access to the bamboo-processing subsidy.

Fiscal Discipline

- While Tripura had fiscal surplus in 2013–14, its FD–GSDP ratio shot up in 2015–2017 before reducing to 2.69% in 2018–19.
- Tripura had very high Debt–GSDP ratio of 29.7% in 2018–19.
- This needs to be reduced in line with recommendations of FC-XV.

Ratios in %	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
FD–GSDP						
Tripura	-0.2	3.6	4.6	6.4	4.7	2.7
NEHS	2.8	3.5	2.1	3.1	2.9	3.4
Debt–GSDP						
Tripura	34.0	31.6	27.5	28.5	29.5	29.7
NEHS	28.7	29.2	28.5	29.2	29.0	29.6

Source: Finance Accounts.

High Dependence on Union Government

- 82.23% of the State'sTRR comes from the Union Government.
- Tripura has very low ORR/GSDP ratio (4.3%) compared to NEHS (7.0%) and all States average (7.5%).

Particulars (2018–19, %)	*Tripura*	*NEHS*	*All States*
OTR/GSDP	3.5	5.0	6.3
NTR/GSDP	0.7	2.0	1.2
ORR/GSDP	4.3	7.0	7.5

- The buoyancy of OTR from 2011–12 to 2018–19 was only 0.63 against NEHS average of 0.95.
- Collections by the State from VAT/GST, Stamp Duty, and Excise as percentage of GSDP are lower than the NEHS average.
- The State should try to increase revenues from these sources while developing innovative sources of revenue.

States	*As percentage of GSDP*				
	VAT/GST	*Stamp Duty*	*Excise*	*Electricity Duty*	*Others*
Tripura	2.7	0.1	0.4	0	0.3
NEHS	3.5	0.2	0.7	0.1	0.5
All States	4.2	0.7	0.8	0.2	0.5

High Committed Expenditure

- Tripura has committed expenditure (including GIA Salary) of 71.5% of TRE (against NEHS average of 67.6% in 2018–19) with a TGR of 14.7% between 2011–12 and 2018–19 (NEHS average 12.1).
- The State needs to reduce committed expenditure and re-prioritise and revamp its expenditure so that more space is left for development expenditure.

Low Share of Secondary Sector

- The secondary sector contributes 13.0% of Tripura's GSDP. The contribution from manufacturing sector is only 3.43%. This compares poorly with other NEHS such as HP, Uttarakhand, Sikkim, and Assam.

Local Bodies

- State should ensure timely constitution of SFCs and act upon their recommendations.
- Property tax rates are specified by the State Government and local bodies don't have the flexibility to change it.
- Measures should be taken to devolve all functions as prescribed in the Constitution to PRIs, ULBs, and TTAADC.

Public Sector Undertakings[1]

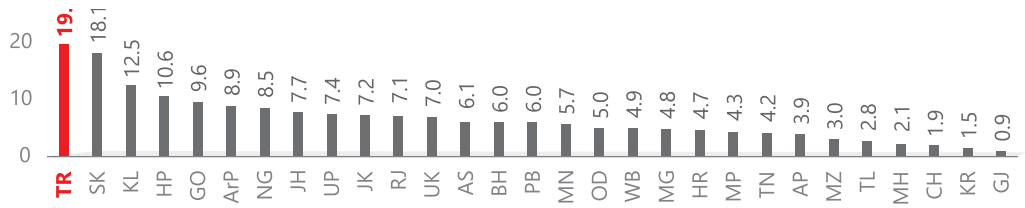
- Only 2 out of 13 working SPSUs had prepared their up-to-date accounts as on 30 September 2017.
- The remaining 11 had a backlog of 20 accounts for periods ranging from 1 to 3 years.
- The State Government had invested Rs 237.23 crore in nine SPSUs during the years for which these SPSUs had not finalised their accounts.
- Without account finalisation and audit, whether the investments and expenditure incurred were properly accounted for and their purpose achieved, could not verified.

- The paid-up capital of 13 working SPSUs as on 30 September 2017 was Rs 1,324.59 crore and accumulated losses were Rs 773.39 crore.
- Accumulation of huge losses by these SPSUs has eroded public wealth.
- The non-auditing of accounts could pose serious downside risks given the substantial budgetary support.
- TESC could operate only seven power generating units with 115 MW capacity out of the installed capacity of 152 MW in 12 units due to inefficiencies in ageing generating stations.
- The Company lost net potential sales revenue of Rs 79.38 crore during 2012–13 to 2016–17 due to non-achievement of generation targets fixed by Central Electricity Authority.

High Unemployment Rate

- Tripura had the highest unemployment rate in the country of 19.7% (as against the all India level of 5%).[2]

TR-5.B: Unemployment rate in major States in India, Usual Principal Status Approach, in %



Source: GOI (2016), *Fifth Annual Employment–Unemployment Survey 2015–16*, Labour Bureau, Ministry of Labour and Employment, Government of India.

Reform Signposts

- Tripura had very high Debt–GSDP ratio of 29.7% in 2018–19. This needs to be reduced in line with recommendations of FC-XV.
- Tripura has very low ORR/GSDP ratio as compared to NEHS average. Its dependence on the Union Government is very high as 82.23% of its TRR comes from the Centre. Collections by the State from VAT/GST, Stamp Duty, and Excise as percentage of GSDP are lower than the NEHS average. **As the State is blessed with natural resources it needs to encourage and boost its secondary sector with favourable policies. This will also help the State to enhance own revenues.**
- Tripura has very high committed expenditure which has also grown at a relatively higher rate in the last few years. **The State needs to reduce committed expenditure and re-prioritise and revamp its spends to create fiscal space for development expenditure.**

Notes

1 CAG (2018), *Report No 1 of 2018 - Public Sector Undertakings Tripura*, report by the Comptroller and Auditor General of India, published by the Government of Tripura.

2. GOI (2016), *Fifth Annual Employment–Unemployment Survey 2015–16*, Labour Bureau, Ministry of Labour and Employment, Government of India.

UTTAR PRADESH

UP-1.A: Overview

POPULATION
199.8 million
16.8%
Of population across all States

AREA
2,40,928 sq km
7.4%
Of area across all States

FOREST COVER
14,806 sq km
2.1%
Of forest area across all States
6.1%
Of the State's own area is under forest
0.9% ↑
Forest cover changed from 2017 to 2019

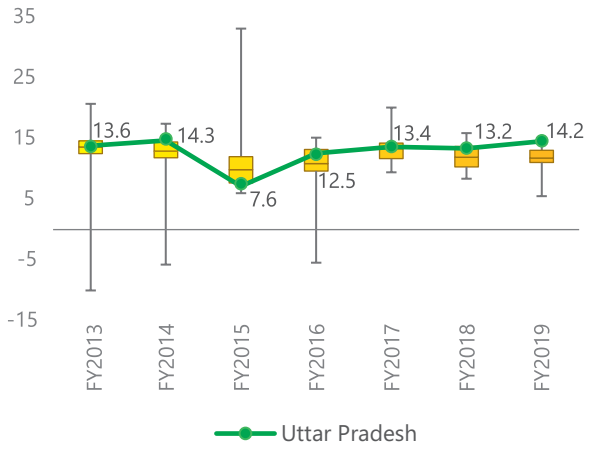
PER CAPITA GSDP
Rs 74,402
Rs 1,40,422
Average across all States

TAX TO GSDP
7.2%
6.3%
Average across all States

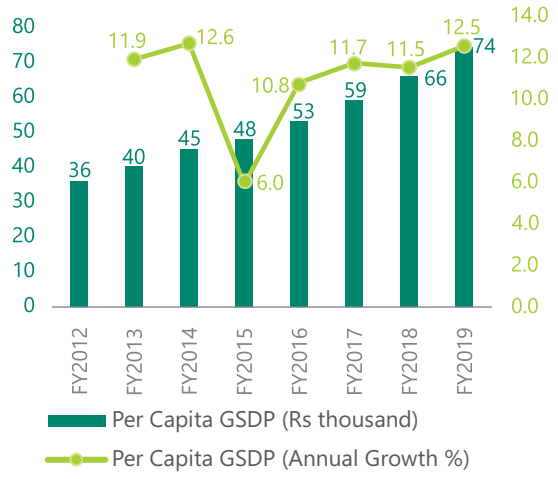
CHILDREN PER WOMAN
2.7
2.2
Average across all States

URBANISATION RATE
22.3%
31.1%
All India average

UP-1.B: Growth rate of GSDP (at current prices, %)



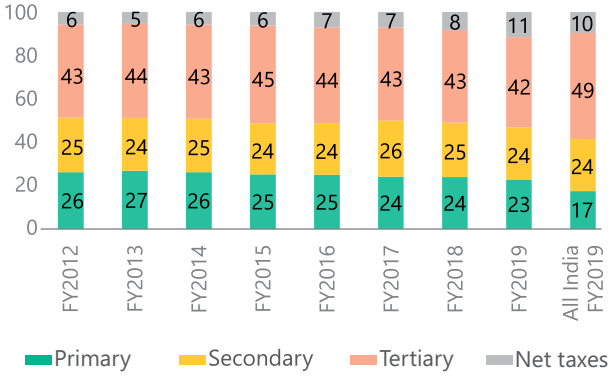
UP-1.C: Per capita GSDP (at current prices)



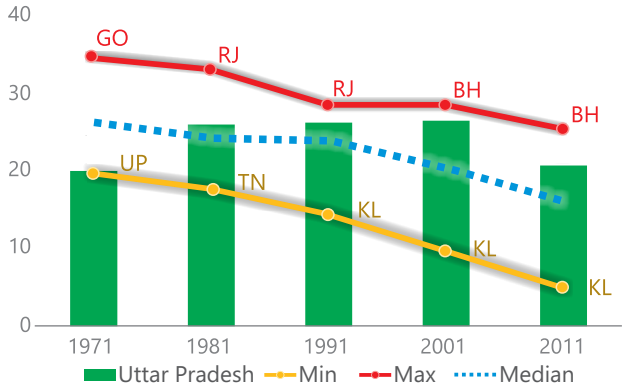
UP-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	7,24,050	77,44,945	9.3
2012–13	8,22,393	88,27,195	9.3
2013–14	9,40,356	1,00,07,392	9.4
2014–15	10,11,790	1,09,93,257	9.2
2015–16	11,37,808	1,21,91,256	9.3
2016–17	12,90,289	1,37,80,737	9.4
2017–18	14,60,443	1,54,20,126	9.5
2018–19	16,68,229	1,72,83,813	9.7

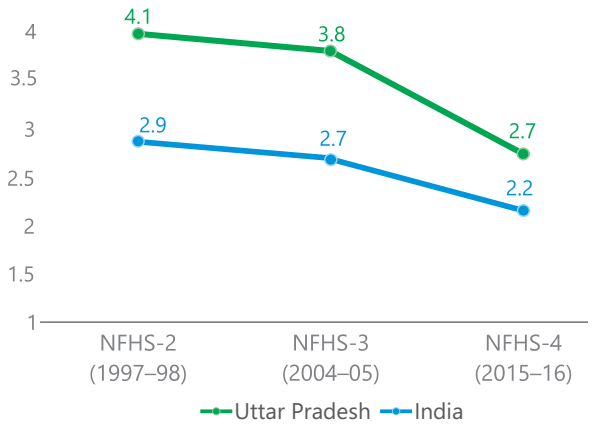
UP-1.E: Sectoral Contribution to GSDP (at current prices, %)



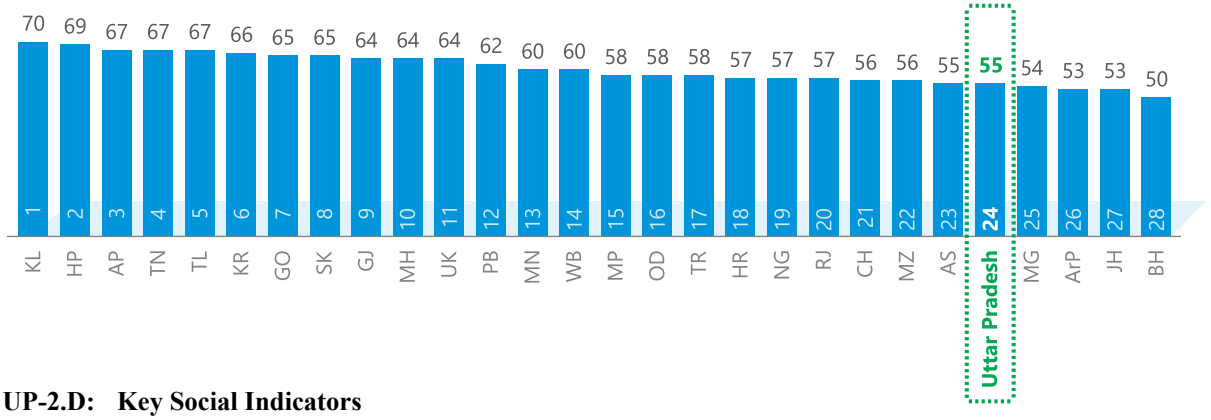
UP-2.A: Decadal Growth in Population (%)



UP-2.B: Total Fertility Rate (children per woman)



UP-2.C: SDG Index of NITI Aayog (2019)



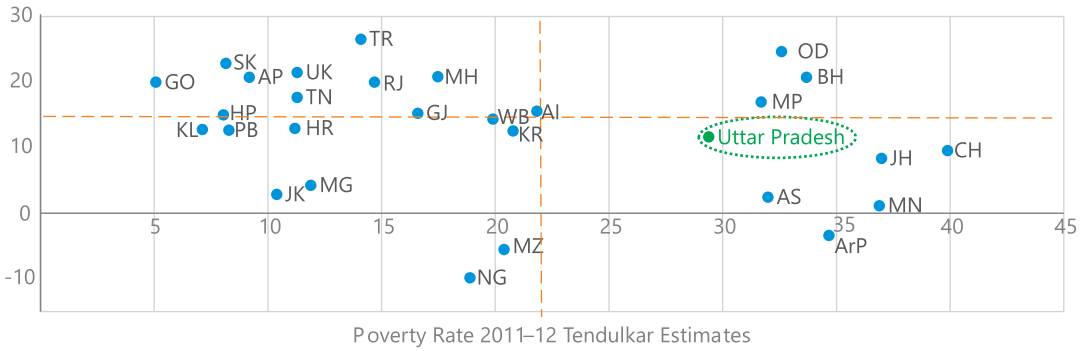
UP-2.D: Key Social Indicators

	UP	INDIA
EDUCATION		
Literacy rate (%)[a]	67.7	73.0
Pupil–Teacher ratio[b] (in Primary)	33.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	59.0	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	96.4	89.9
Availability of toilets[d] (household %)	45.8	61.1

	UP	INDIA
HEALTH		
Life expectancy (years)[g]	65.0	69.0
Sex ratio (♀ per 1000 ♂)[a]	912	943
Underweight children (%)[d]	39.5	35.8
Stunting among children (%)[d]	46.3	38.4
Anaemia among children (%)[d]	63.2	58.6
Women with below normal BMI (%)[e,d]	25.3	22.9
Anaemia among Women (%)[d]	52.4	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	43.0	32.0
Institutional Deliveries (%)[d]	67.8	78.9
Expenditure on Health Sector (revenue+capital) as % of total expenditure (FY2019)	4.9	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	807	1,218 *(All States)*

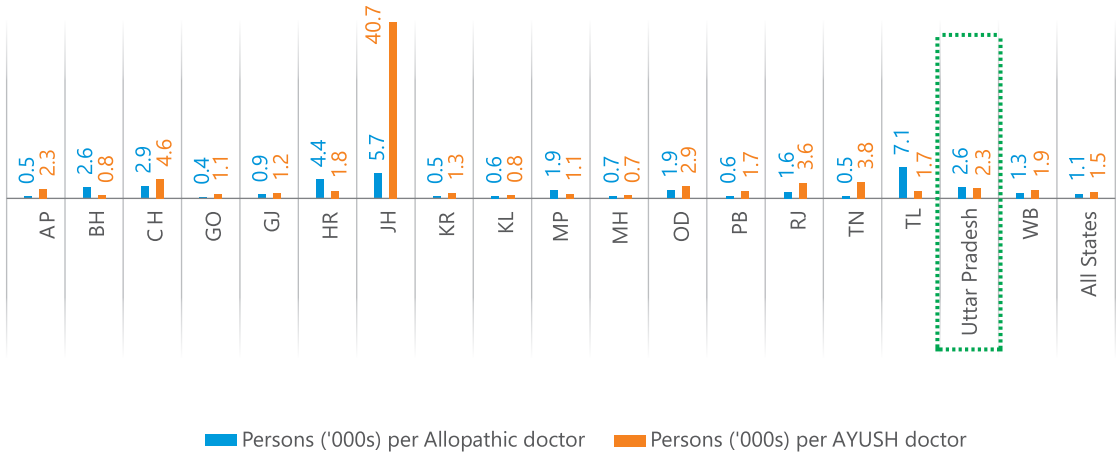
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

UP-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



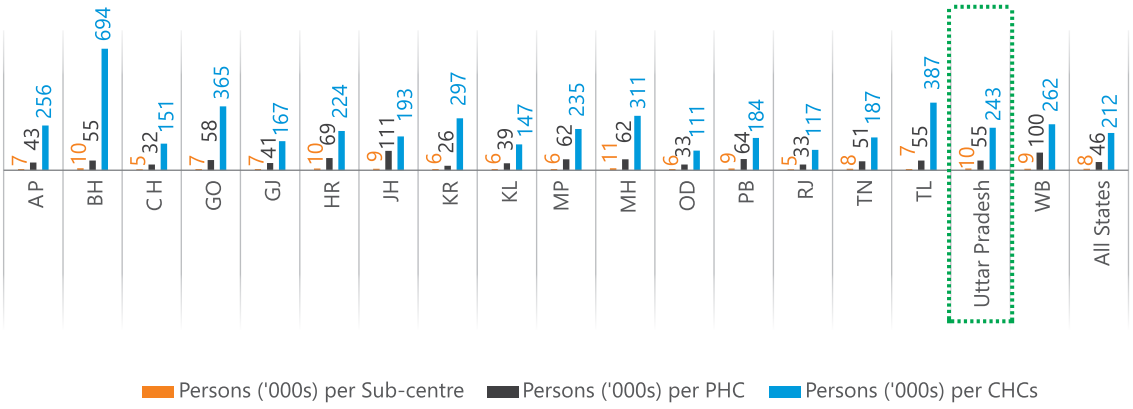
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

UP-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



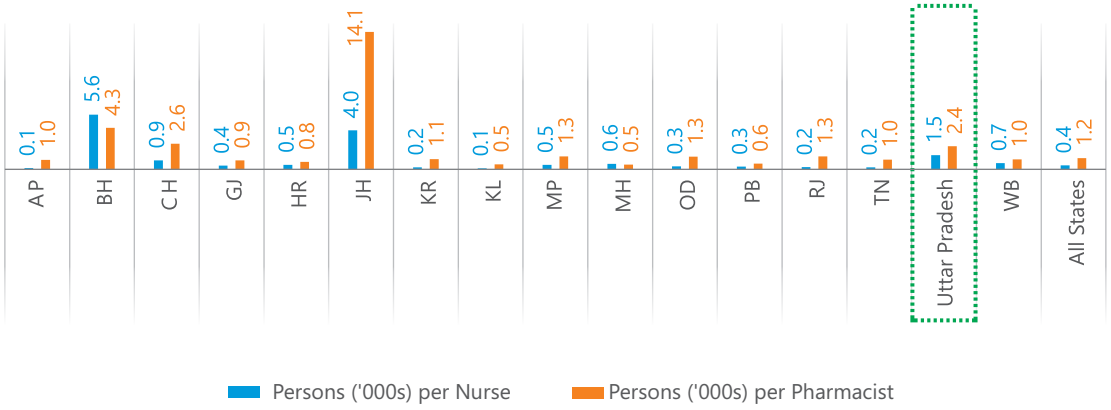
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

UP-3.B: Persons ('000s) per Sub-centre/PHC/CHC



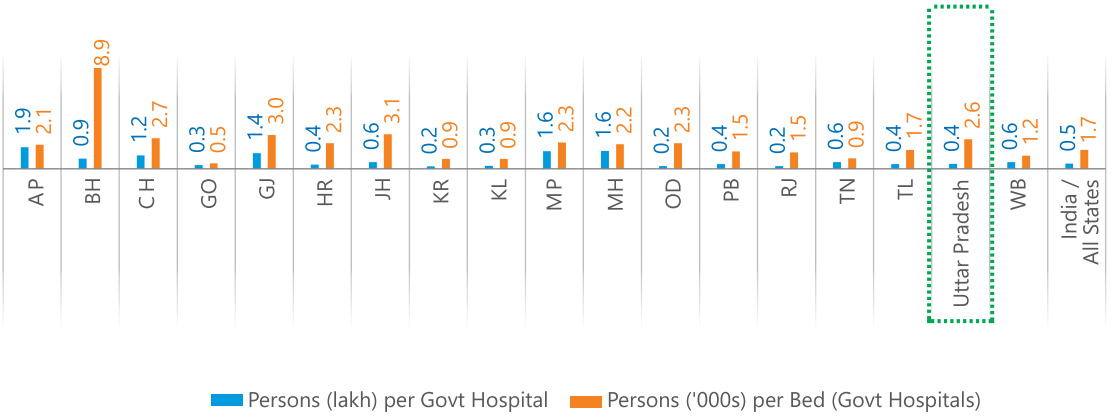
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

UP-3.C: Persons ('000s) per Nurse/ Pharmacist



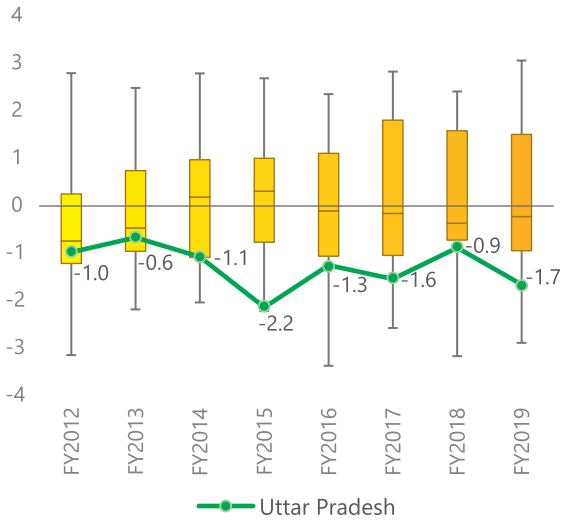
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

UP-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

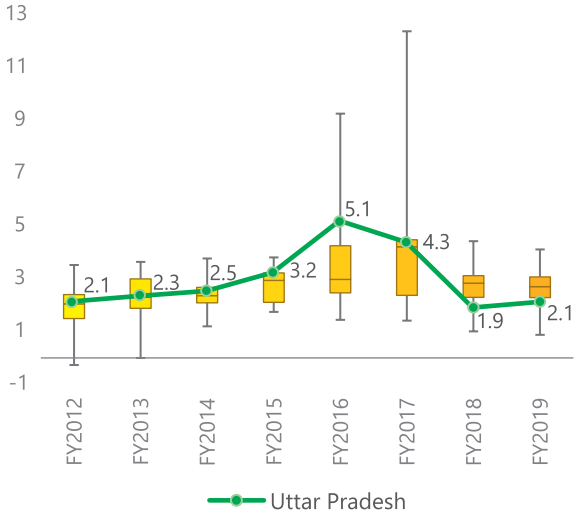


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

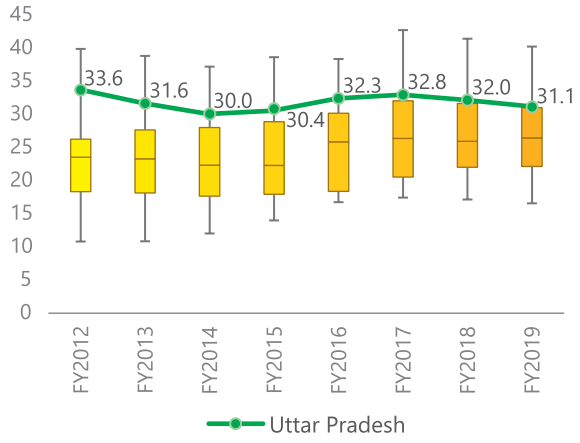
UP-4.A: Revenue Deficit as % of GSDP



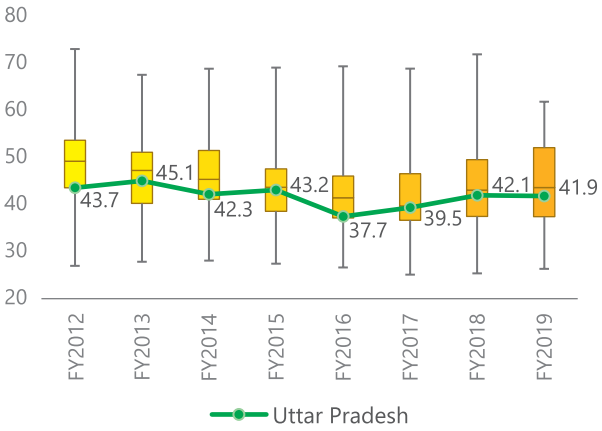
UP-4.B: Fiscal Deficit as % of GSDP



UP-4.C: Outstanding Debt as % of GSDP

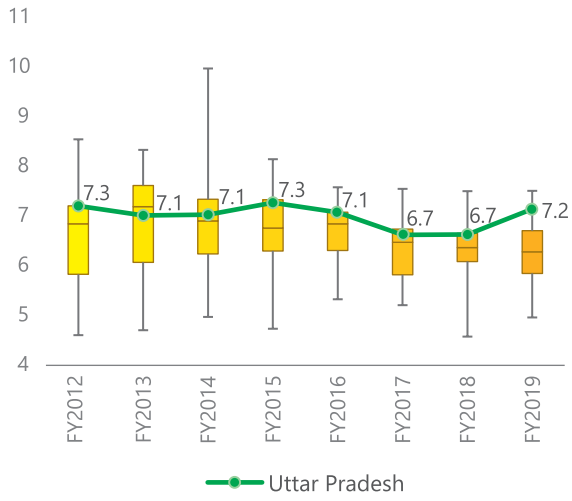


UP-4.D: Committed Expenditure as a % of Revenue Expenditure

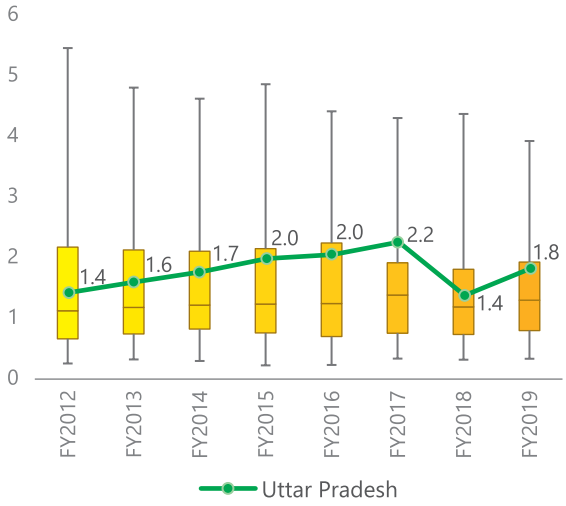


Note: Committed expenditure includes salaries, interest payments, and pensions

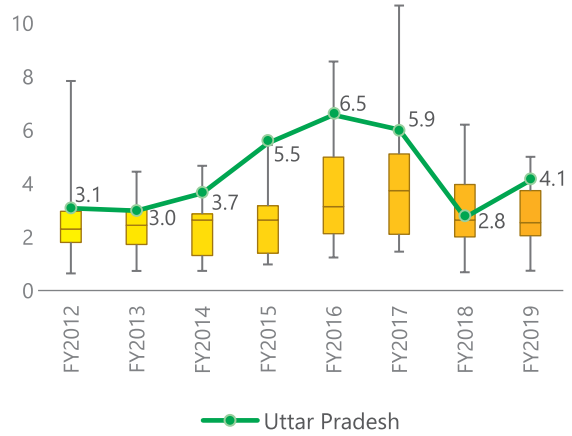
UP-4.E: OTR as % of GSDP



UP-4.F: NTR as % of GSDP



UP-4.G: Capital Expenditure to GSDP Ratio



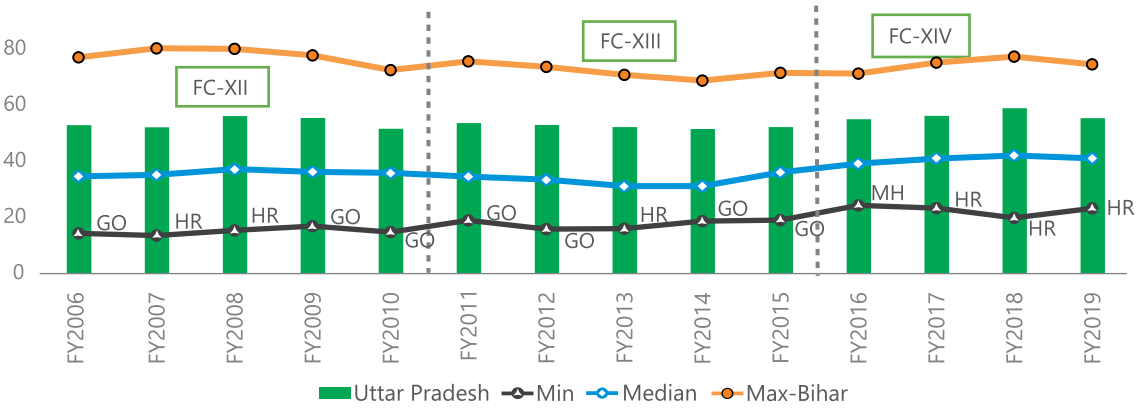
UP-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	74,402	1,41,099
Indicators as a percentage of GSDP		
TRR	19.8	13.4
OTR	7.2	6.4
NTR	1.8	1.1
TE	22.2	16.1
ES	4.0	3.1
SS	5.5	5.4
GS	7.8	4.7
Committed Expenditure	7.6	5.8
Capital Expenditure	4.1	2.5
FD	2.1	2.5
RD	–1.7	0.2
OD	31.1	25.0

UP-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Uttar Pradesh	13.8	14.2	12.2
GS Average	13.6	13.1	10.3

UP-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Census of India 2011 reports the total population of Uttar Pradesh to be 19.98 crore, of which 77.72% resides in rural areas.
- Of the 2.41 lakh Gram Panchayats (GPs) in India, 24.48% (0.59 lakh) are located in Uttar Pradesh.
- Of the 29 functions envisaged in the Eleventh Schedule of the Constitution, 26 functions have been devolved to RLBs/PRIs in Uttar Pradesh.[1]
- Of the 18 functions envisaged in the Twelfth Schedule of the Constitution, 12 have been devolved to ULBs.

Auditing Status

- Chief Audit & Account Officers Co-Operative Society and Panchayat, Lucknow is entrusted with the task of auditing PRI Accounts of Uttar Pradesh. Accounts of PRIs have been audited up to 2016–17.
- Director, Local Fund Audit is responsible for auditing accounts of ULBs. Accounts of ULBs are audited up to 2016–17.

Property Tax Board

- As recommended by FC-XIII, Government of Uttar Pradesh set up its PTB in 2011.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
13	6	16	17

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Fourth SFC (2011–12 to 2015–16)

- The Fourth SFC recommended that 15% of UP's tax and non-tax revenues (net of cost of collection) be devolved.

Fifth SFC (2015–16 to 2020–21)

- 12.5% of net tax revenue to be distributed to local bodies. This translates to 7.5% going to ULBs (60% of 12.5%) and 5% to PRIs (40% of 12.5%).

Debt and Losses

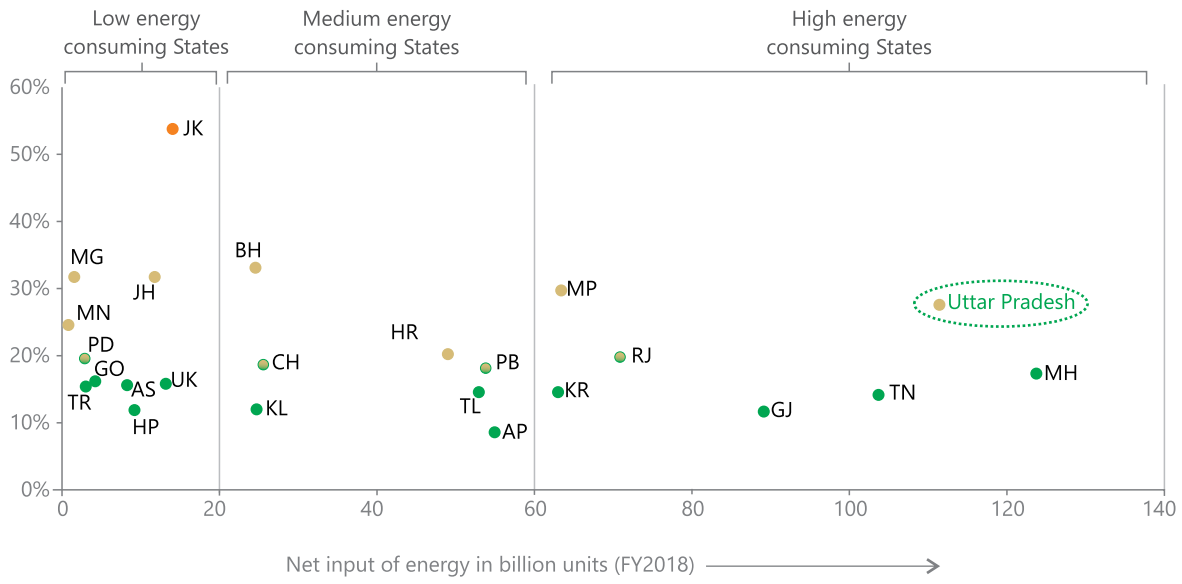
- Uttar Pradesh has neither met target for AT&C losses nor for ACS–ARR gap in the year 2018–19.
- The State has taken over of DISCOM debt under UDAY to the tune of Rs 39,134 crore during 2015–2017.
- As on 31 March 2019, the total borrowings by the DISCOMs (including borrowings from the State Government of Rs 2,780 crore) are Rs 59,212 crore (12.4% of the total DISCOM borrowings of all States).

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	33.15	19.36
ACS–ARR Gap (Rs per unit)	0.60	0.22

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.

Source: Ministry of Power, Government of India.

UP-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Uttar Pradesh has recommended that the State share in the overall divisible pool of taxes be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population	30
ii)	Income Distance	50
iii)	Area	5
iv)	Fiscal discipline	15

Achievement on SDG–1 No Poverty

- The State has shown significant improvement in SDG–1 with poverty declining from 40.9% in 2004–05 to 29.4% in 2011–12 (according to Tendulkar Methodology).

Tourism and Linked Sectors

- Tourism (both Pilgrimage and Heritage) is vital for the State economy as are the related sectors of handloom, handicraft, education, hospitality, etc., generating both growth and employment.
- According to *Tourism Statistics at a Glance 2020*,[2] with 15.1% of all foreign visits to India also being made to UP, it is ranked third across all States in terms of international tourism (2019).
- Similarly, with 23.1% of all domestic tourist visits being made to UP, it is ranked first across all States in terms of domestic tourism (2019).

Increasing Tax–GSDP Ratio

- The tax–GSDP ratio of UP is 7.20% in 2018–19 (among the highest across GS). The State shall continue to pursue this path of high buoyancy.
- High OTR–GSDP ratio indicates increase in tax efforts.

Micro, Small, and Medium Enterprises

- According to the Ministry of MSMEs, 14.2% of all Indian MSMEs (the largest number across all States) are located in UP.
- The State needs to facilitate access to credit, technology, raw materials, and marketing avenues for MSMEs to encourage entrepreneurship, generate employment and livelihood opportunities, and enhance their competitiveness in the changing economic scenario.

FRBM Compliance

- The State implemented its FRBM Act in 2004, amending it in 2011 (twice) and 2016.
- Uttar Pradesh has not been adhering to its debt limit in the recent years.
- It needs a credible debt path and careful calibration of expenditure for generating future stream of income.
- The State needs to note this issue and review the matter seriously to take timely action to avoid fiscal slippages.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	46.9	45.1	43.4	41.9	31.0	31.0	30.5
Actually achieved	33.6	31.6	30.0	30.4	32.3	32.8	32.0
FD–GSDP							
As prescribed by the State FRBM	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Actually achieved	2.1	2.3	2.5	3.2	5.1	4.3	1.9

Source: Government of Uttar Pradesh Memorandum.

Public Sector Undertakings[3]

- As on 31 March 2018, Uttar Pradesh had 107 State PSUs (six Statutory Corporations and 101 State-owned companies, which included 46 non-functional ones) under the audit jurisdiction of the Comptroller and Auditor General of India.
- As on 31 March 2018, the total investment (capital and long term loans) in 107 PSUs was Rs 1,99,807.67 crore.
- The power sector received 85.6% of the total investment of Rs 69,554.02 crore made from 2015–16 to 2017–18.
- Of the 61 functional PSUs, 54 had arrears in their accounts as on 30 September 2018.
- The overall loss of Rs 18,127.40 crore incurred by power sector PSUs in 2015–16 increased to Rs 18,535 crore in 2017–18.
- Given the outstanding liabilities, substantial budgetary support to SPSUs, and huge arrears in accounts, the State needs to be cautious about contingent liabilities.
- A time-bound programme of restructuring the PSUs should be adopted to tackle the major hurdles in their performance.

Power Sector

- The State is a high consumer of power and its AT&C losses are much higher than the target.
- The State's performance on the key barometers of UDAY is poor and it needs to take definite steps towards improving (see table below).

Parameter	*Target period as per MoU*	*Target*	*Achievement (as on 31 March 2018)*
Financial Performance			
Billing efficiency (%)	2015–16	76.4	78.3 (achieved)
	2016–17	78.3	78.9 (achieved)
	2017–18	80.8	79.2 (partially achieved)
Collection efficiency (%)	2015–16	88.5	78.6 (not achieved)
	2016–17	91.6	88.4 (partially achieved)
	2017–18	94.5	91.4 (partially achieved)

Parameter	*Target period as per MoU*	*Target*	*Achievement (as on 31 March 2018)*
Tariff revision in time	2015–16	November 2014	November 2014
	2016–17	November 2015	December 2015
	2017–18	November 2016	June 2017
Operational Performance			
Distribution transformer metering (in no.s)	100% by 30 September 2017	3.8 lakh	2.0 lakh (not achieved)
Feeder metering (in no.s)	100% by 30 September 2016	16,072	16,072 (achieved)
Feeder segregation (in no.s)	2016–17	1,660 (30%)	0 (not achieved)
	2017–18	3,597 (65%)	374 (not achieved)
Rural feeder audit, 11 kV (in no.s)	2016–17	847 (10%)	2,515 (achieved)
	2017–18	2,542 (30%)	6,505 (achieved)
Smart metering, 200 kWH–500 kWH (in no.s)	2017–18	1.6 lakh	0 (not achieved)
Implementation of UDAY by DISCOMs			
Smart metering equal to or above 500 kWh (in no.s)	2016–17	1.1 lakh	0 (not achieved)
	2017–18	1.1 lakh	0 (not achieved)
Electricity access to unconnected households (in no.s)	2019–20	143.5	Under implementation
Distribution of LEDs under UJALA scheme (in no.s)	2016–17	50 lakh	148.3 lakh (achieved)
	2017–18	80 lakh	82.3 lakh (achieved)

Source: CAG (2018), *Report of the Comptroller and Auditor General of India on Public Sector Undertakings for the year ending 31 March 2017*, Government of Uttar Pradesh.

Ranking on the SDG Index of NITI Aayog (2019)

- The State has an SDG Index value of 55 (as compared to the national average 60) and ranks 24th among the Indian States.
- Uttar Pradesh needs to improve on SDG–2 Zero Hunger, SDG–3 Good Health and Well Being, SDG–5 Gender Equality, SDG–10 Reduced Inequality, and SDG–13 Climate Action.

Social Indicators

- Although, the State has shown significant improvement in key outcomes of health and education in NFHS–4 (over NFHS–3), the State lags behind the national average on all counts (see UP-2.D).

High Pollution (PM 10) as Monitored under NAMP

- Cities with million-plus population have far exceeded the NAMP threshold for PM 10 (of less than 90 micrograms per cubic metre).

- The State needs to chalk out a plan to improve the ease of breathing in such cities while they emerge as economic centres and investment hubs.

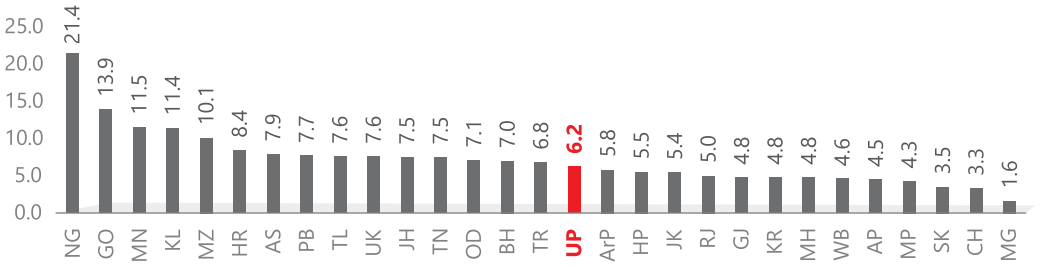
PM10 Micrograms Per Cubic Metre

City	*2016*	*2017*	*2018*	*Average*
Agra	198	185	209	197.3
Allahabad (Prayagraj)	196	140	231	189.0
Ghaziabad	235	280	245	253.3
Kanpur	217	224	218	219.7
Lucknow	214	246	217	225.7
Meerut	157	153	177	162.3
Varanasi	256	244	189	229.7

Unemployment

- Among major Indian States, UP has one of the highest rates of unemployment 6.2% (as against the all India level of 6%).[4]
- Uttar Pradesh has a substantial youth population not only in need of education and health services but also job opportunities.
- Towards this goal, the ongoing programmes for skill development and employment generation should be effectively implemented.

UP-5.B: Usual Status (Principal and Subsidiary) Unemployment (%) by State, 2017–18



Source: GOI (2019), *Annual Report of Periodic Labour Force Survey, 2017–18*, Ministry of Statistics and Programme Implementation, Government of India.

Local Bodies

- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Reform Cohort of the State

- For the purpose of analysis, the States were grouped on the basis of per capita income. UP is part of the group which includes Bihar, Jharkhand, MP, and Odisha.

Reform Signposts

- Among the five States in the class, Bihar and UP were the worst performers as far as trend growth rate of VAT in 2011–2016 is concerned.
- Performance of UP compares well with other States in its class as far as collections in Stamp Duty and Excise are concerned. However, the State needs to improve on its VAT/GST collections.

States of Cohort	*As % of GSDP*					*As % of OTR*				
2018–19	*VAT/ GST*	*Stamp Duty*	*Excise*	*Elec. Duty*	*Others*	*VAT/ GST*	*Stamp Duty*	*Excise*	*Elec. Duty*	*Others*
Bihar	4.1	0.8	0	0.1	0.6	74.4	14.2	0	0.9	10.5
Jharkhand	3.9	0.2	0.4	0.1	0.4	79.1	3.1	7.3	1.4	9.0
Madhya Pradesh	3.5	0.7	1.2	0.3	0.6	55.9	10.4	18.7	5.1	9.9
Odisha	3.9	0.3	0.8	0.7	0.5	63.5	4.1	12.9	10.7	8.7
Uttar Pradesh	4.2	0.9	1.4	0.2	0.5	58.2	13.1	19.9	2.5	6.3
Cohort Average	**3.9**	**0.7**	**1.0**	**0.2**	**0.5**	**61.6**	**10.9**	**15.7**	**3.8**	**8.0**
All States	**4.1**	**0.7**	**0.8**	**0.2**	**0.5**	**65.8**	**10.4**	**12.4**	**3.5**	**7.7**

- On social indicators UP compares poorly not just with national averages but also the indicators reported by low income States. It needs to improve both expenditure and efficiency to ensure best outcomes in the shortest possible time. Accordingly, the State may prepare a roadmap with annual targets and earmarked financial allocations during the five-year award period of FC-XV.
- **Thus, FC-XV recommends that UP comprehensively deal with these issues over the next five years along with fiscal reforms and investment in social sector to bridge the gap between its socioeconomic indicators and the national average.**

Notes

1 CAG (2015), *Panchayati Raj Institutions and Urban Local Bodies*, report by Comptroller and Auditor General of India, published by Government of Uttar Pradesh.

2 GOI (2020), *Tourism Statistics at a Glance 2020*, Ministry of Tourism, Government of India.

3 CAG (2020), *Report No 1 of 2020, report of Comptroller and Auditor General of India on Public Sector Undertakings for the year ended 31st March 2018*, Government of Uttar Pradesh.

4 GOI (2019), *Annual Report of Periodic Labour Force Survey, 2017–18,* Ministry of Statistics and Programme Implementation, Government of India.

UK-1.A: Overview

POPULATION
10.1 million
0.9%
Of population across all States

AREA
53,483 sq km
1.6%
Of area across all States

3.5%
Of forest area across all States

FOREST COVER
24,303 sq km
45.4%
Of the State's own area is under forest

0%
Forest cover changed from 2017 to 2019

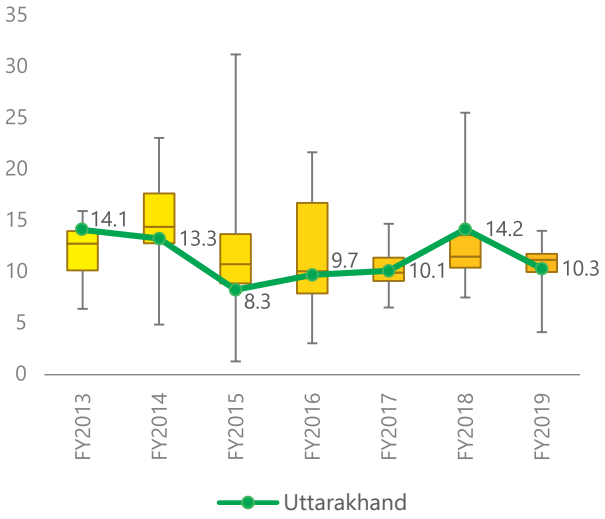
PER CAPITA GSDP
Rs 2,20,257
Rs 1,40,422
Average across all States

TAX TO GSDP
5.0%
6.3%
Average across all States

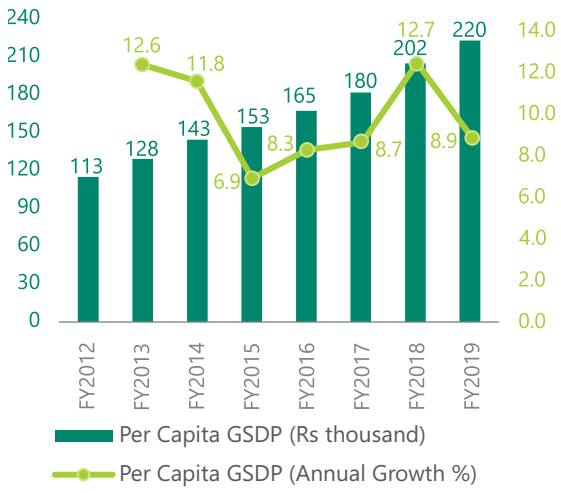
CHILDREN PER WOMAN
2.1
2.2
Average across all States

URBANISATION RATE
30.6%
31.1%
All India average

UK-1.B: Growth rate of GSDP (at current prices, %)



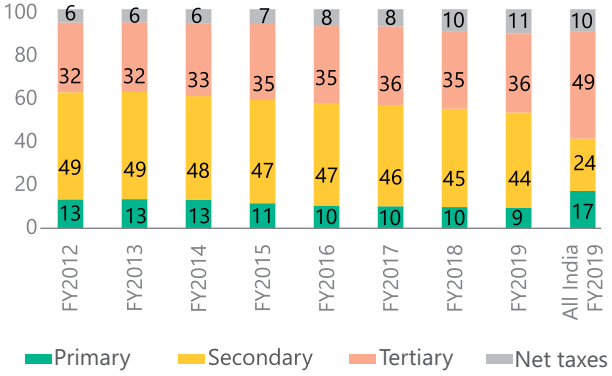
UK-1.C: Per capita GSDP (at current prices)



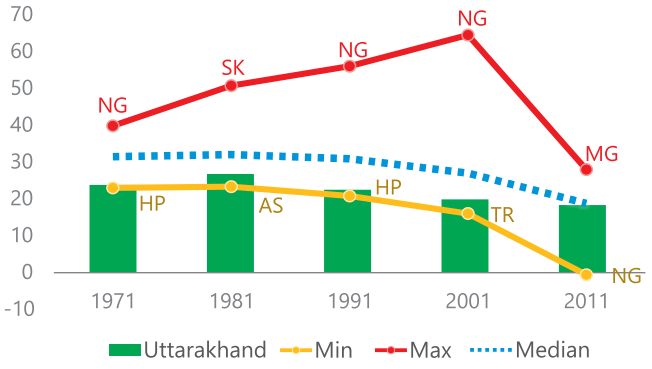
UK-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All NEHS*	*Share (%) of State in NEHS*
2011–12	1,15,328	5,03,182	22.9
2012–13	1,31,613	5,63,081	23.4
2013–14	1,49,074	6,37,264	23.4
2014–15	1,61,439	6,95,474	23.2
2015–16	1,77,163	7,88,321	22.5
2016–17	1,95,125	8,67,648	22.5
2017–18	2,22,836	9,74,240	22.9
2018–19	2,45,895	10,82,901	22.7

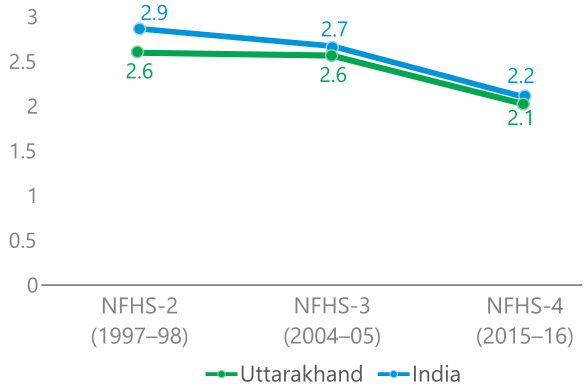
UK-1.E: Sectoral Contribution to GSDP (at current prices, %)



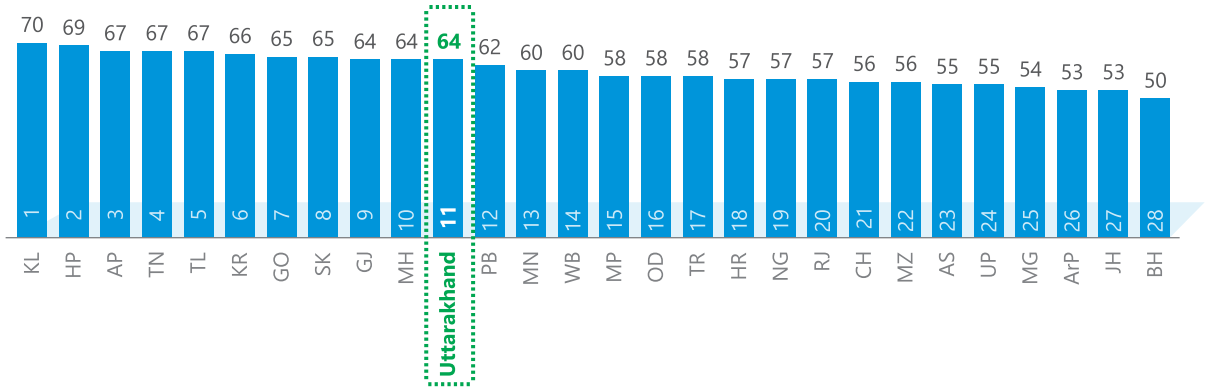
UK-2.A: Decadal Growth in Population (%)



UK-2.B: Total Fertility Rate (children per woman)



UK-2.C: SDG Index of NITI Aayog (2019)



UK-2.D: Key Social Indicators

EDUCATION

	UK	INDIA
Literacy rate (%)[a]	78.8	73.0
Pupil–Teacher ratio[b] (in Primary)	16.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	77.1	55.4

WATER & SANITATION

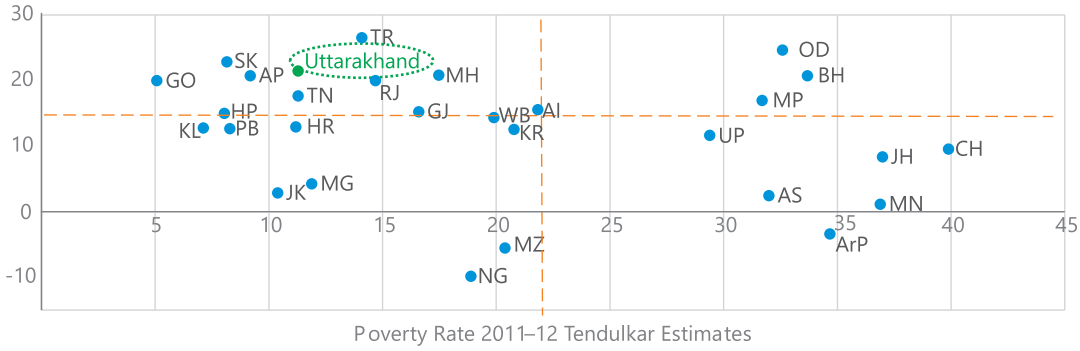
	UK	INDIA
Availability of safe drinking water[d] (household %)	92.9	89.9
Availability of toilets[d] (household %)	82.9	61.1

HEALTH

	UK	INDIA
Life expectancy (years)[g]	71.0	69.0
Sex ratio (♀ per 1000 ♂)[a]	963	943
Underweight children (%)[d]	26.6	35.8
Stunting among children (%)[d]	33.5	38.4
Anaemia among children (%)[d]	59.8	58.6
Women with below normal BMI (%)[e,d]	18.4	22.9
Anaemia among Women (%)[d]	45.2	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	31.0	32.0
Institutional Deliveries (%)[d]	68.6	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	5.4	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	1,878	1,218 *(All States)*

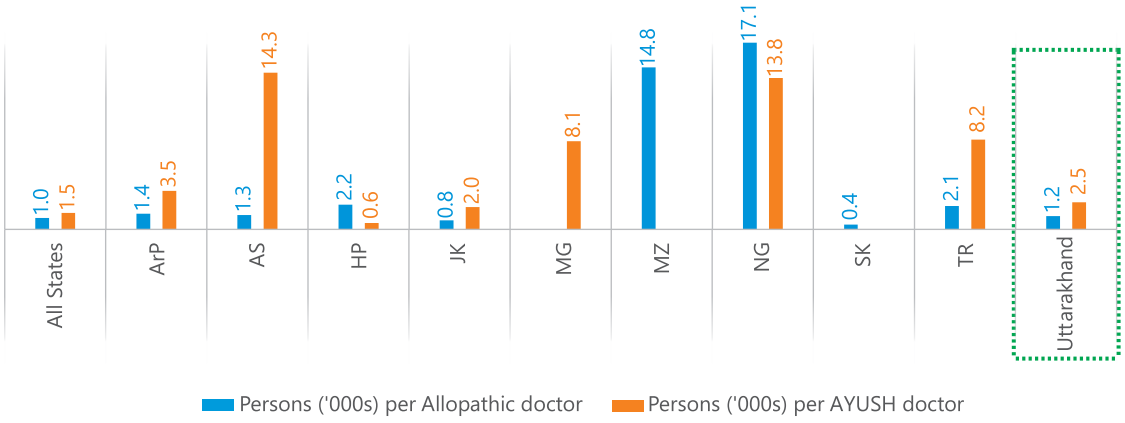
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

UK-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



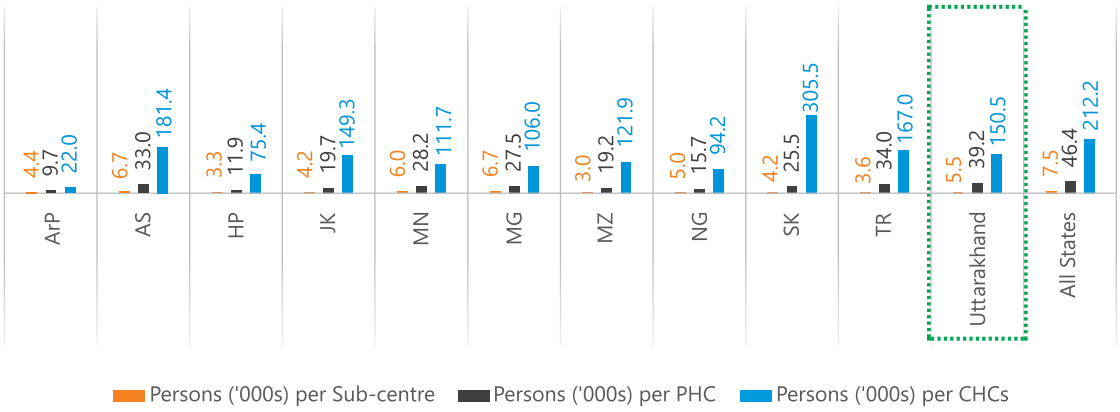
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

UK-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



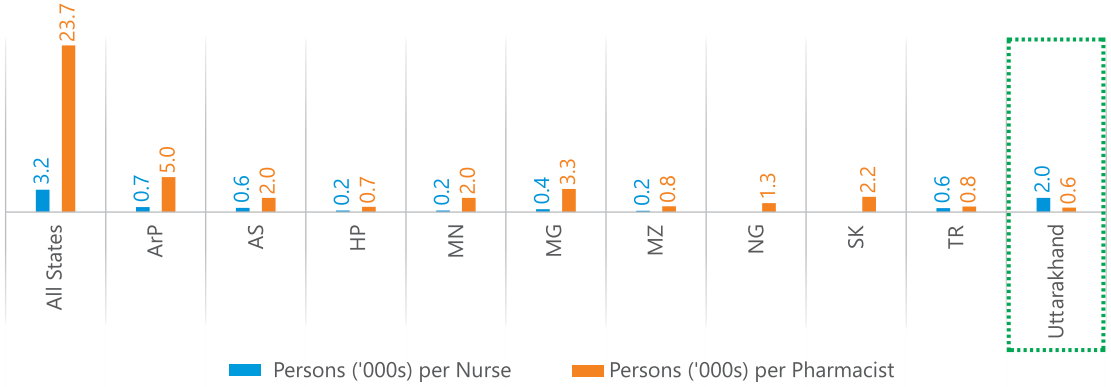
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

UK-3.B: Persons ('000s) per Sub-centre/PHC/CHC



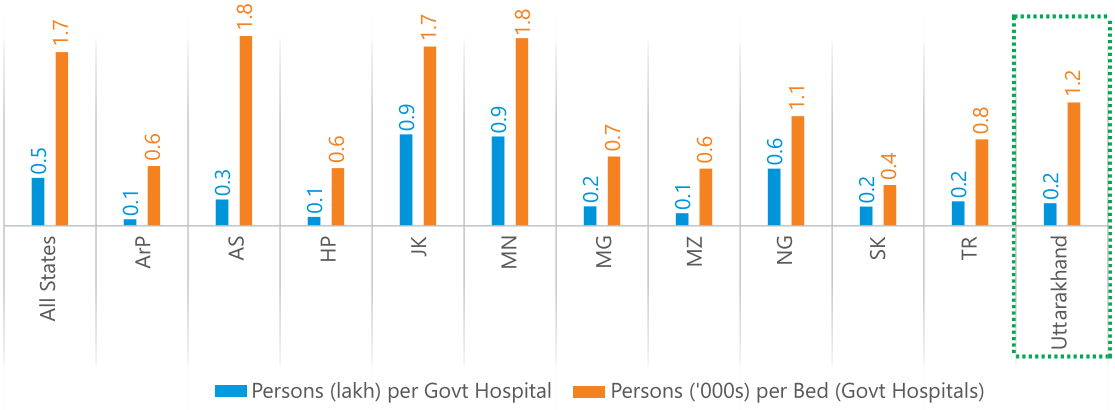
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

UK-3.C: Persons ('000s) per Nurse/ Pharmacist



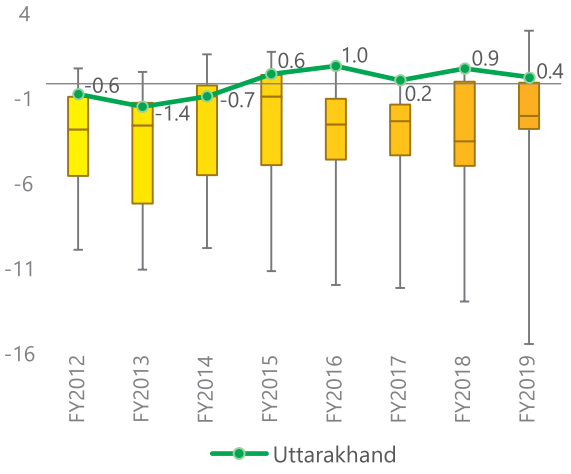
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

UK-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

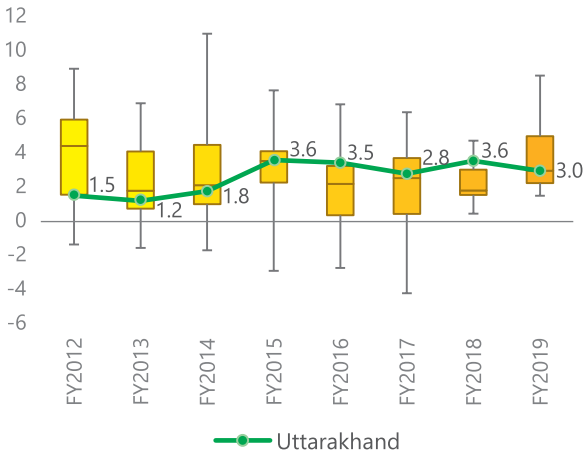


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

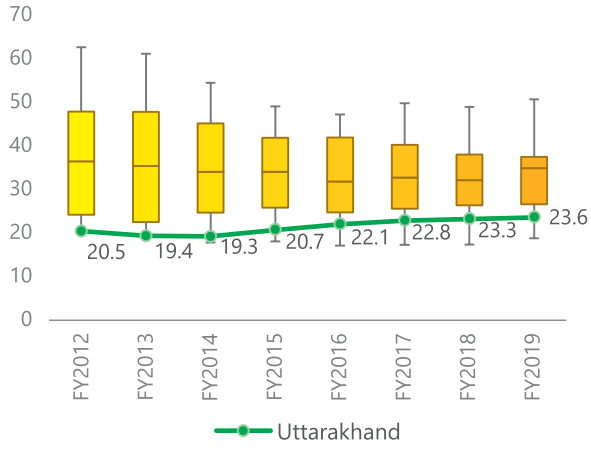
UK-4.A: Revenue Deficit as % of GSDP



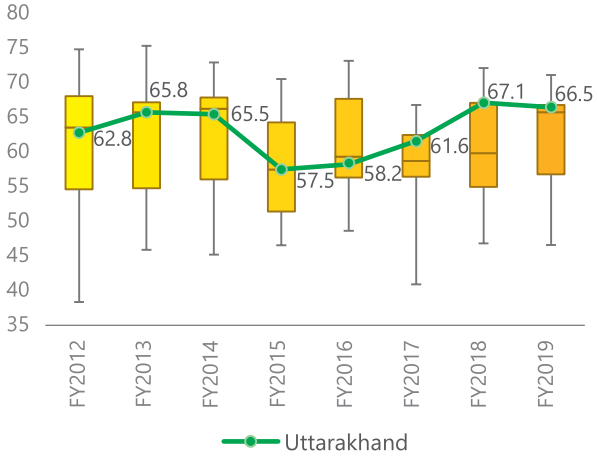
UK-4.B: Fiscal Deficit as % of GSDP



UK-4.C: Outstanding Debt as % of GSDP

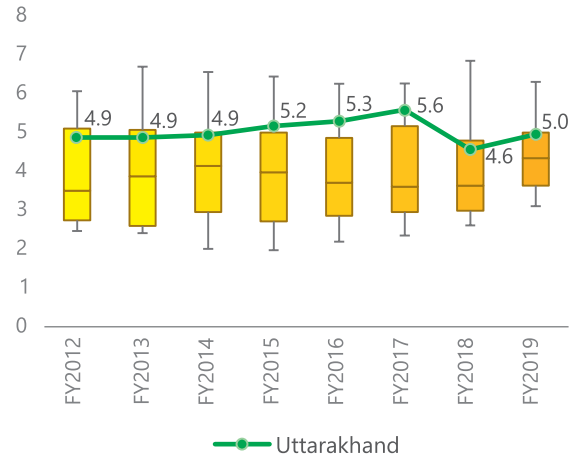


UK-4.D: Committed Expenditure as a % of Revenue Expenditure

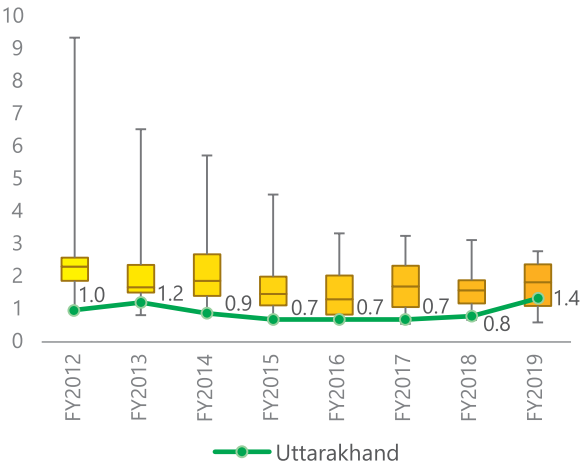


Note: Committed expenditure includes salaries, interest payments, and pensions

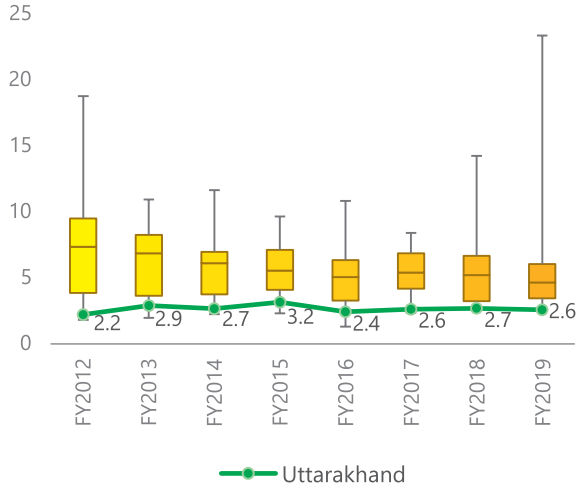
UK-4.E: OTR as % of GSDP



UK-4.F: NTR as % of GSDP



UK-4.G: Capital Expenditure to GSDP Ratio



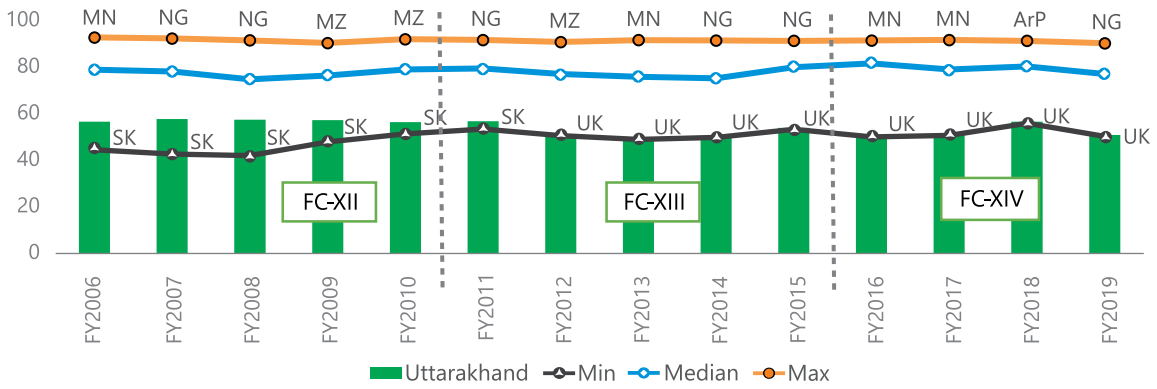
UK-4.H: Key Fiscal Indicators—State vs NEHS

Fiscal indicators (2018–19)	*State*	*NEHS*
Per Capita GSDP in Rs per annum	2,20,257	1,30,427
Indicators as a percentage of GSDP		
TRR	12.7	23.3
OTR	5.0	5.0
NTR	1.4	2.0
TE	15.7	26.7
ES	2.0	5.0
SS	5.2	8.7
GS	5.3	8.5
Committed Expenditure	8.7	14.4
Capital Expenditure	2.6	4.3
FD	3.0	3.4
RD	0.4	–0.9
OD	23.6	29.6

UK-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
Uttarakhand	14.6	12.1	11.2
NEHS	12.6	12.1	10.7

UK-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions envisaged in Eleventh Schedule of the Constitution, none have been devolved to RLBs.
- Of the 18 functions envisaged in Twelfth Schedule of the Constitution, 8 have been fully devolved to ULBs and 5 partially devolved.

Auditing Status

- Auditing of RLB and ULB accounts has been completed till 2017–18.

Property Tax Board

- The State set up PTB in March 2013.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
16	11	9	12

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Fourth SFC (2016–17 to 2020–21)

- The Fourth Commission recommended that 11% of the State's OTR be devolved to local bodies.
- Share of ULBs be 55% and of PRIs be 45%.
- The State, must constitute SFCs, act upon their recommendations and lay the explanatory memorandum as to the action taken thereon before the State legislature on or before March 2024.

Debt and Losses

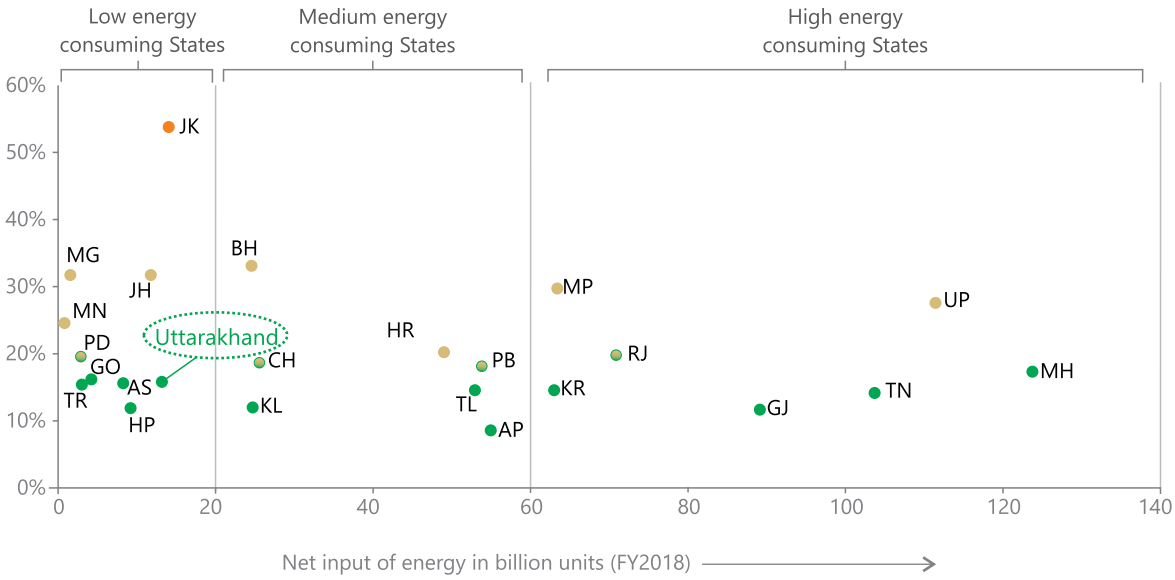
- Uttarakhand has signed an UDAY MoU for operational parameters only, without any debt takeover commitment.
- The State neither achieved AT&C loss target in 2018–19 nor the ACS–ARR gap target.

Key UDAY barometers (2018–19)	*Achievement*	*Target*
AT&C Losses (%)	16.20	15.0
ACS–ARR Gap (Rs per unit)	0.38	–0.03

Note: (–) ACS–ARR gap indicates that per unit average revenue realised is greater than average cost of supply.
Source: Ministry of Power, Government of India.

- The State needs to substantially improve its performance on UDAY barometers to avoid future fiscal risk.

UK-5.A: AT&C Losses (%), FY2018



Source: GOI (2019), *Newsletter of UDAY*, January, Ministry of Power, Government of India.

Vertical Devolution

- Uttarakhand has recommended that the vertical devolution be raised from 42% to 50% of net proceeds of taxes.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Sub-Weights (%)*	*Total Weight*
i)	Economic Considerations		40
	a. Income Distance	25	
	b. Credit–Deposit ratio	15	
ii)	Population		25
	a. Population 2011	15	
	b. Replacement rate achievement	10	
iii)	Ecosystem services and conservation of ecosystem		15
iv)	Area weighted by share of hilly area		20

Low Debt–GSDP Ratio and FRBM Compliance

- The State has lower debt–GSDP ratio than other North Eastern and Himalayan States (NEHS).
- It has also maintained a debt–GSDP ratio far below the target prescribed by its FRBM Act.
- However, the debt has increased slightly in recent years.
- The State should continue to maintain sustainable debt and FD to GSDP ratio on lines with the new FRBM Act.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	41.1	40.0	38.5	37.5	–	–	–
Actually achieved	20.5	19.4	19.3	20.7	22.1	22.8	23.3
FD–GSDP							
As prescribed by the State FRBM	3.5	3.5	3.0	3.0	3.0	3.0	3.0
Actually achieved	1.5	1.2	1.8	3.6	3.5	2.8	3.6

Source: Government of Uttarakhand.

High Share of Secondary Sector in GSDP

- The State has a well-established industrial sector. It receives 43.51% of its GSDP from secondary sector (second highest among NEHS after Sikkim).
- The share of GSDP from manufacturing is also quite high at 33.36% in 2018–19.
- The State also has second highest per capita GSDP across NEHS (after Sikkim).

Tourism

- Tourism has potential to generate employment opportunities in the State and help resolve the problem of outmigration. Some measures to boost tourism are mentioned below:
  - » Poor connectivity has been the main bottleneck to developing tourism in the State. Road network connecting Uttarakhand with neighbouring areas needs immediate improvement. Intra-State road network and support infrastructure development while prioritising last mile connectivity is also important.
  - » Heli-taxi services to offbeat hill-stations may be started on PPP mode.
  - » Uttarakhand has various Eco-Spiritual, Wellness and Religious (EWR) hotspots. Places like Kasauni, Almora, Nainital, Bageshwar, Pithoragarh, and Champawat have the right mix of experiences and should be developed as EWR hotspots.
  - » Destinations in the State may be converted into adventure-oriented theme locations such as Har ki Dun Trek, Valley of Flowers, Chandrashila trek etc. Development and formalisation of integrated adventure circuits may be done through incentives or PPP mode.
  - » Eco-tourism along with rural tourism should be ensured to increase the period of stay at destinations. Homestays, individual as well as community-based, may be promoted as viable alternate source of income for local people. Since homestays are primarily run by women, they are also instrumental in their economic empowerment. The State Government may take active measures to link homestays with e-commerce players.

Power Sector

- Uttarakhand was conceived of as an energy State or 'Urja Pradesh' owing to its rich hydrological resources that could be commercially exploited. It is blessed with estimated hydropower

potential of approximately 25,000 MW. Out of this only 3,987 MW has been harnessed so far and 2,578 MW is under execution by Central power PSUs, State-owned utilities, and Independent Power Producers (IPPs).

- Overall 33 hydroelectric projects, with total capacity of about 4,084 MW and project cost of Rs 22,607 crore have been stalled due to environment concerns.
- The State should speed up the execution of the ongoing hydel projects to exploit the potential and to increase revenue earnings.

Declining Revenues from GST

- The State reported an OTR–GSDP ratio of 4.96% in 2018–19 (NEHS average 4.95%).
- Its collections from Stamp Duty, Excise, and Electricity Duty have remained higher than the NEHS average.

States	*As percentage of GSDP (2018–19)*				
	VAT/GST	*Stamp Duty*	*Excise*	*Electricity Duty*	*Others*
Uttarakhand	2.7	0.4	1.2	0.2	0.5
NEHS	3.5	0.2	0.7	0.1	0.5
All States	4.2	0.7	0.8	0.2	0.5

- However, the State witnessed sharp decline in collections from GST or VAT from 3.67% of GSDP in 2016–17 to 2.55% in 2017–18. The collections reduced by 20.68% in 2017–18.
- It received a GST compensation of Rs 1,283 crore in 2017–18, Rs 2,037 crore in 2018–19, and Rs 2,477 crore in 2019–20.

Committed Expenditure

- The State has high committed expenditure (including grants-in-aid Salary). Its total expenditure on salaries, pension, and interests accounted for 71.16% of TRE in 2018–19 (NEHS average 67.62%, all States average 50.6%).

States	*As % of TRE*			
	IP	*Pension*	*Salary*	*Committed*
Uttarakhand	13.9	16.8	40.5	71.2
NEHS	9.0	14.3	44.3	67.6
All States	12.2	12.1	26.3	50.6

- Measures should be taken to reduce burden of committed expenditure so that more space is left for development spends.

Low Per Capita Expenditure

- At Rs 28,839 in 2018-19, Uttarakhand has the second lowest per capita revenue expenditure after Assam, across the NEHS (average per capita revenue expenditure Rs 29,220).
- In 2018-19, its per capita revenue expenditure on health (Rs 1,710) too was lower than NEHS (Rs 1,987).
- The State should prioritise social sector expenditure, using its fiscal space wisely to enhance development.

Migration

- Lack of economic development in hill States results in large-scale out-migration. The State Government reports 1,048 'Ghost Villages' in Uttarakhand. This has security implications for border areas.
- Migration from Uttarakhand, though partly aspirational, is predominantly due to distress caused by poor employment opportunities, education facilities, health facilities, etc.
- Most of the rural migrants from the hill States find employment in unskilled low paying jobs as domestic servants, security guards, office attendants, etc., in the plains. Remittances are significant for the survival of the poor households and largely spent on daily consumption. There is hardly any multiplier effect in the village economy.
- The State needs to actively promote horticulture, floriculture, hydropower, tourism, and wellness services to generate employment opportunities and arrest out-migration.

Inequality

- Huge inter-district and intra-district disparity has been observed. The per capita income of districts lying in the plains, like Haridwar, Dehradun, and Udham Singh Nagar is much higher than the hill districts of Uttarkashi, Tehri Garhwal, and Rudraprayag.
- Disparity in physical infrastructure like roads is also observed across districts, depending on the terrain and locational disadvantages.
- Poor connectivity of villages is associated with low penetration of government services like health, education, agriculture extension, etc., in the hill areas and reluctance on the part of the government employees to serve in there.
- Sustained efforts and investment in physical and social infrastructure are required to reduce intra-State development disparity.

Drinking Water

- Supply of drinking water in hilly areas remains a challenge. The problem worsens during peak tourism months when 5–6 crore of floating population imposes on the State's resources.
- Uttarakhand receives 1,600 mm of average rainfall annually and needs a roof top rain water harvesting project to hold and utilise this water.

Local Bodies

- The remaining functions should be devolved to local bodies as envisaged in the Constitution.

Natural Calamities

- Uttarakhand, by virtue of its geo-tectonic setting, physiographic condition, and extreme seasonal precipitation, is vulnerable to a number of disasters that include earthquakes, landslides, floods, flash floods, cloudbursts, and drought.
- Raised river bed and melting of glaciers have made many habitations on the banks of major rivers prone to floods and incidence of excessive rainfall in years to come can devastate many areas.
- The State needs active adaptation and mitigation efforts especially with the rising threats of climate change.
- Risk insurance instruments may be explored that provide support to the community and lead to sharing and spreading of risks across stakeholders.

Public Sector Undertakings[1]

- Across the 22 working State PSUs, accounts of 19 were in arrears in 2016–17.
- The State Government had invested Rs127.1 crore—in the form of share capital, loans, and grants—across six PSUs for which accounts were yet to be finalised.
- The non-auditing of accounts could pose serious downside risks given the substantial budgetary support.

Reform Signposts

- Uttarakhand has moderate debt to GSDP ratio. **However, the debt has been increasing in recent years. This trend should be reversed.**
- Uttarakhand has a large industrial base and it receives a high share of its GSDP from the secondary sector. However, the State has not done well in terms of GST collections in recent years. **The State needs to find innovative ways of increasing its OTR further.**
- The State has high committed expenditure. **Measures should be taken to reduce burden of committed expenditure so that more fiscal space is left for development spends.**

Notes

1 CAG (2018), *Report No 1 of 2018: Report of the Comptroller and Auditor General of India for the year ended 31 March 2017*, Government of Uttarakhand.

WB-1.A: Overview

POPULATION
91.3 million
7.7%
Of population across all States

AREA
88,752 sq km
2.7%
Of area across all States

2.4%
Of forest area across all States

FOREST COVER
16,902 sq km
19.0%
Of the State's own area is under forest

0.3% ↑
Forest cover changed from 2017 to 2019

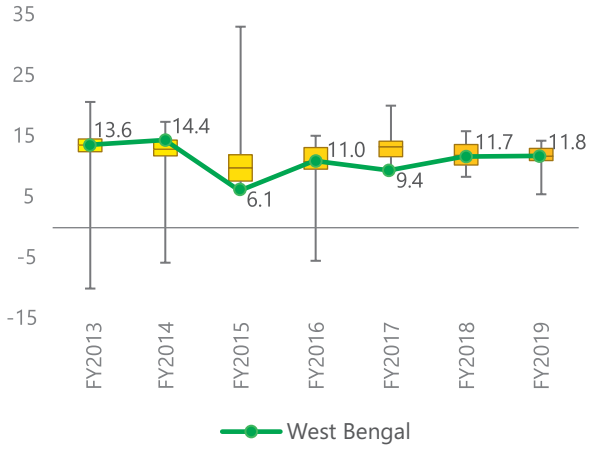
PER CAPITA GSDP
Rs 1,10,728
Rs 1,40,422
Average across all States

TAX TO GSDP
5.6%
6.3%
Average across all States

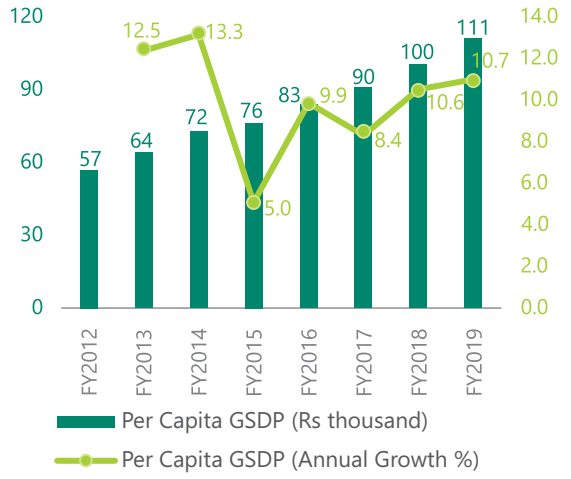
CHILDREN PER WOMAN
1.8
2.2
Average across all States

URBANISATION RATE
31.9%
31.1%
All India average

WB-1.B: Growth rate of GSDP (at current prices, %)



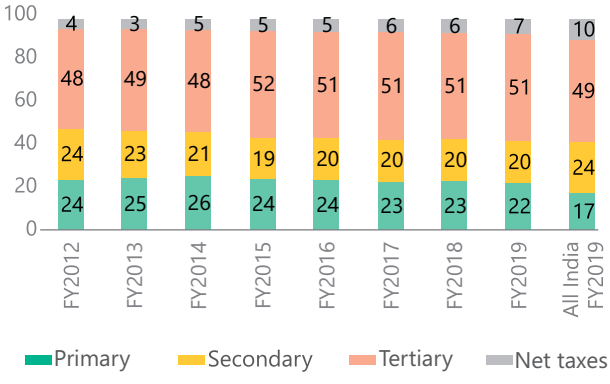
WB-1.C: Per capita GSDP (at current prices)



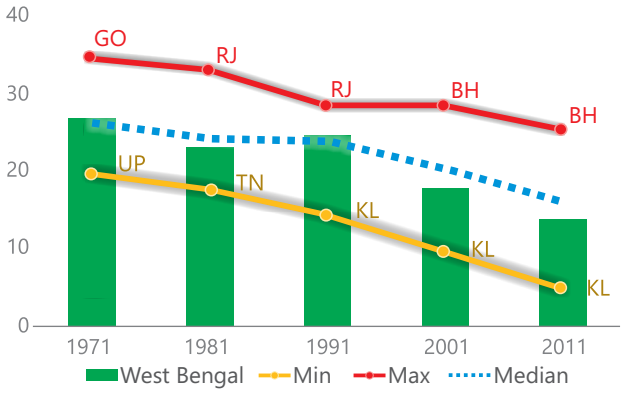
WB-1.D: GSDP Current, 2011–12 series (Rs crore)

	State	*All GS*	*Share (%) of State in GS*
2011–12	5,20,845	77,44,945	6.7
2012–13	5,91,464	88,27,195	6.7
2013–14	6,76,848	1,00,07,392	6.8
2014–15	7,18,082	1,09,93,257	6.5
2015–16	7,97,300	1,21,91,256	6.5
2016–17	8,72,527	1,37,80,737	6.3
2017–18	9,74,700	1,54,20,126	6.3
2018–19	10,89,898	1,72,83,813	6.3

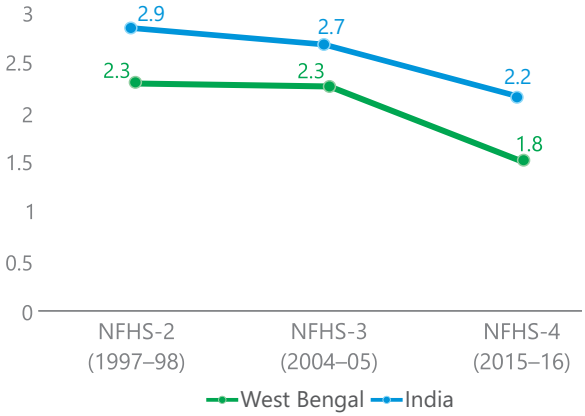
WB-1.E: Sectoral Contribution to GSDP (at current prices, %)



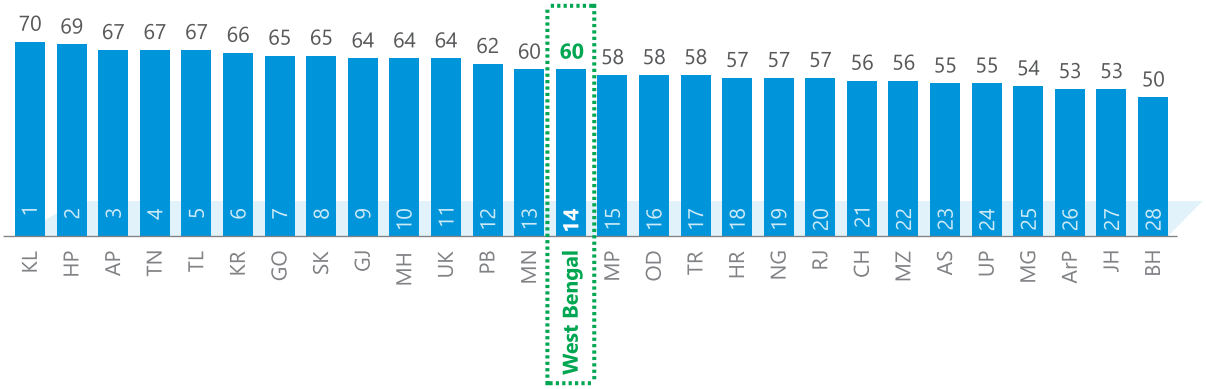
WB-2.A: Decadal Growth in Population (%)



WB-2.B: Total Fertility Rate (children per woman)



WB-2.C: SDG Index of NITI Aayog (2019)



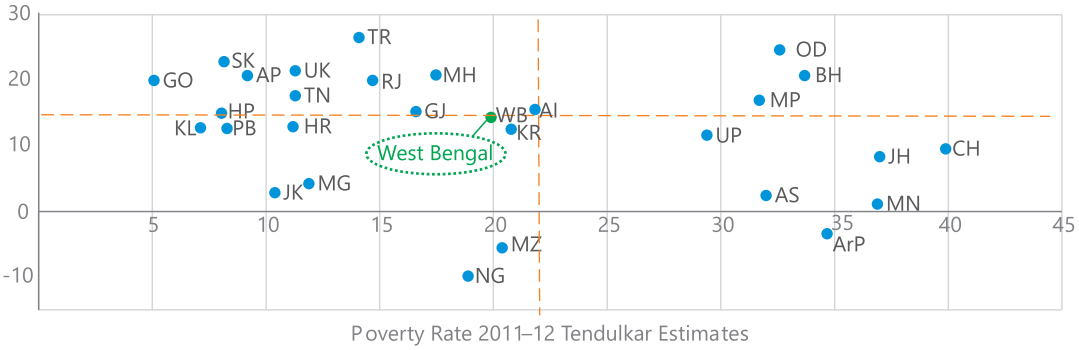
WB-2.D: Key Social Indicators

	WB	INDIA
EDUCATION		
Literacy rate (%)[a]	76.3	73.0
Pupil–Teacher ratio[b] (in Primary)	20.0	25.0
Gross Enrolment Ratio[c] (for Higher Secondary)	50.9	55.4
WATER & SANITATION		
Availability of safe drinking water[d] (household %)	94.6	89.9
Availability of toilets[d] (household %)	74.9	61.1

	WB	INDIA
HEALTH		
Life expectancy (years)[g]	71.2	69.0
Sex ratio (♀ per 1000 ♂)[a]	950	943
Underweight children (%)[d]	31.6	35.8
Stunting among children (%)[d]	32.5	38.4
Anaemia among children (%)[d]	54.2	58.6
Women with below normal BMI (%)[e,d]	21.3	22.9
Anaemia among Women (%)[d]	62.5	53.1
Infant Mortality Rate[f] (deaths per 1000 live births)	22.0	32.0
Institutional Deliveries (%)[d]	75.2	78.9
Expenditure on Health Sector (revenue+capital) **as % of total expenditure** (FY2019)	5.4	5.2 *(All States)*
Per Capita Health Expenditure (FY2019 in Rs)	983	1,218 *(All States)*

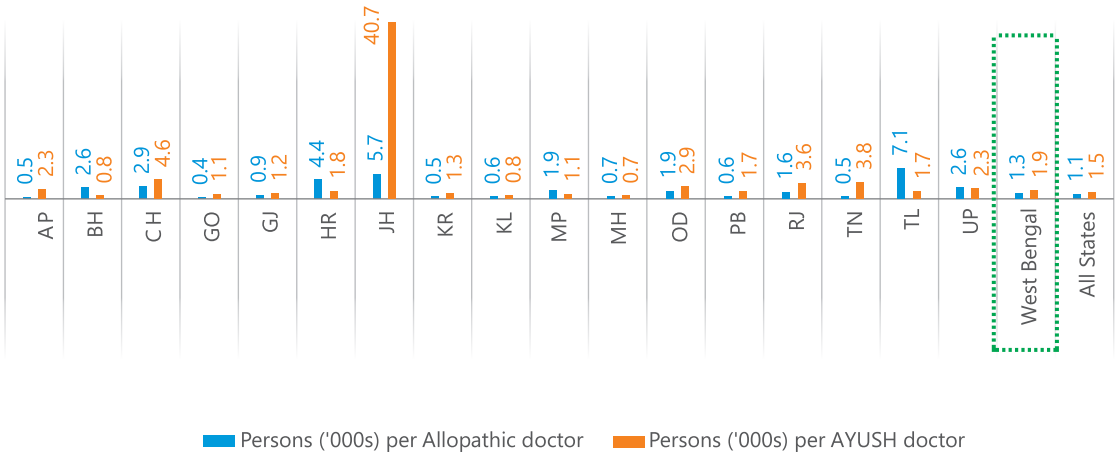
[a] Census, 2011 | [b] DISE, 2016–17 (Analytical Tables) | [c] DISE, 2016–17 (Flash Statistics) | [d] NFHS-4, 2015–16 | [e] Body Mass Index | [f] SRS, 2018 | [g] SRS 2013–2017 | ♀: Female, ♂: Male

WB-2.E: Poverty Reduction (percentage points) between FY2005 and FY2012



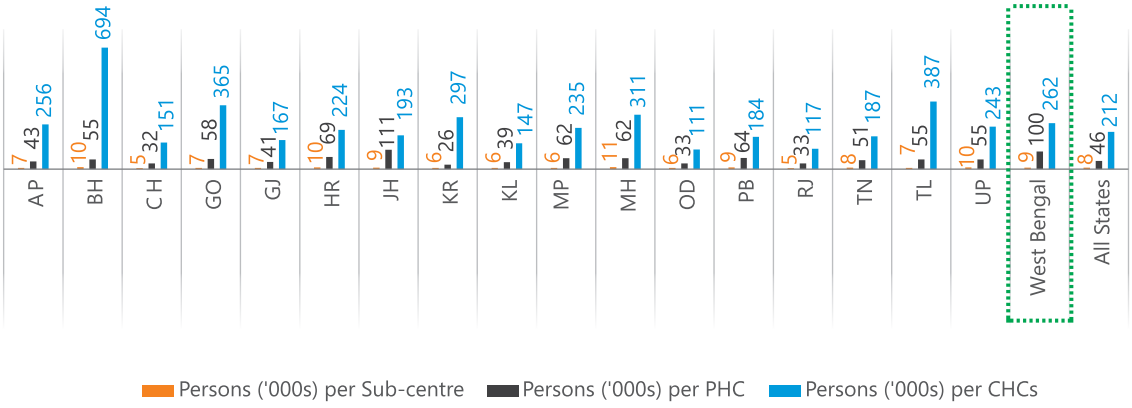
Note: Positive values on Y axis denote reduction in poverty in FY2012 over FY2005

WB-3.A: Persons ('000s) per Allopathic and AYUSH Doctor



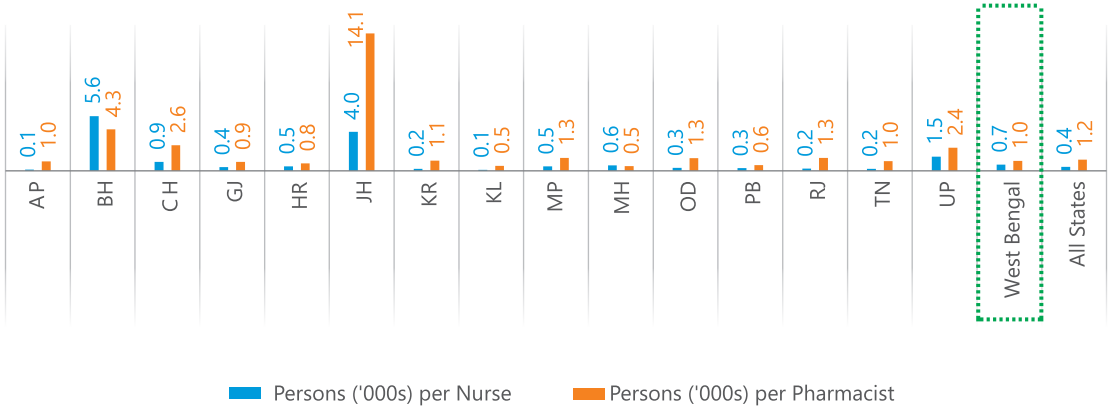
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

WB-3.B: Persons ('000s) per Sub-centre/PHC/CHC



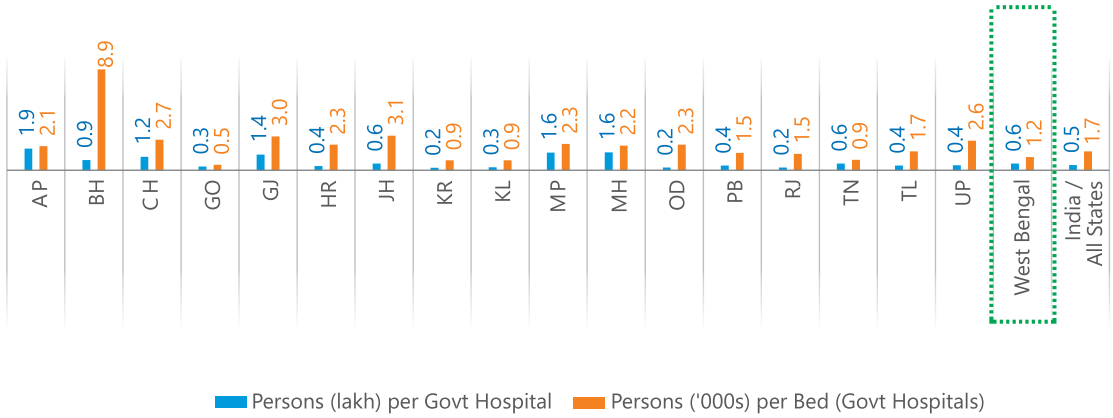
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

WB-3.C: Persons ('000s) per Nurse/ Pharmacist



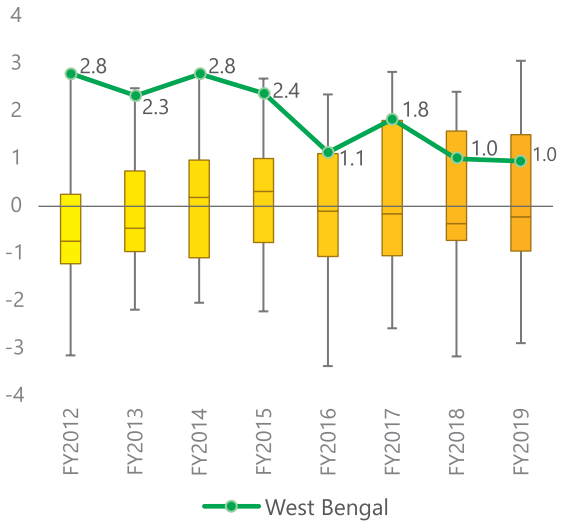
Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

WB-3.D: Persons (lakh) per Government Hospital and Persons ('000s) per Bed

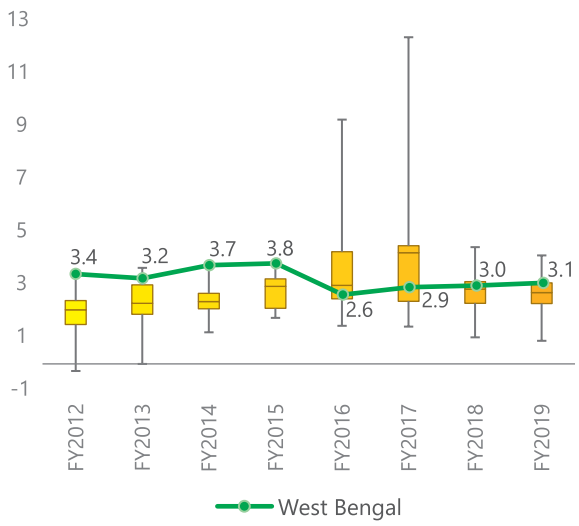


Source: GOI (2019), *National Health Profile 2019*, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

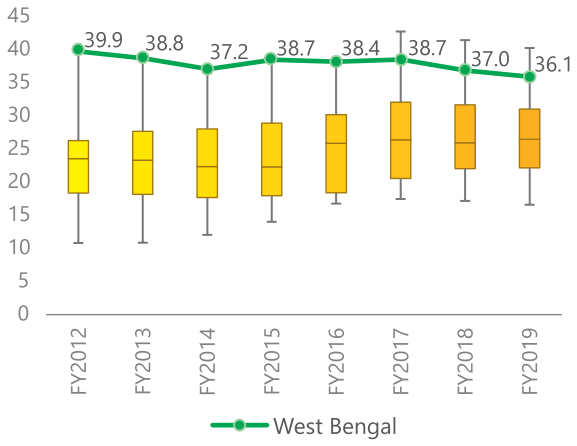
WB-4.A: Revenue Deficit as % of GSDP



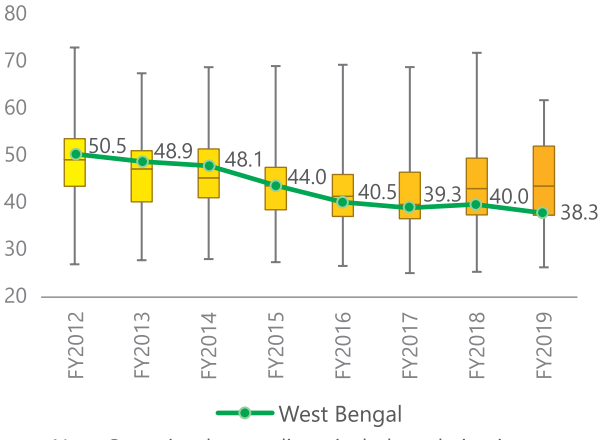
WB-4.B: Fiscal Deficit as % of GSDP



WB-4.C: Outstanding Debt as % of GSDP

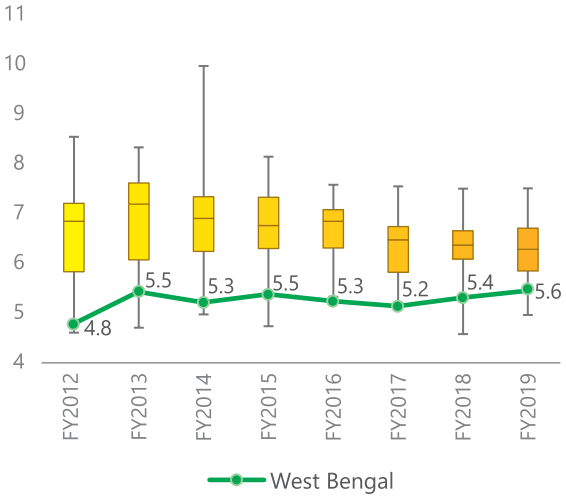


WB-4.D: Committed Expenditure as a % of Revenue Expenditure

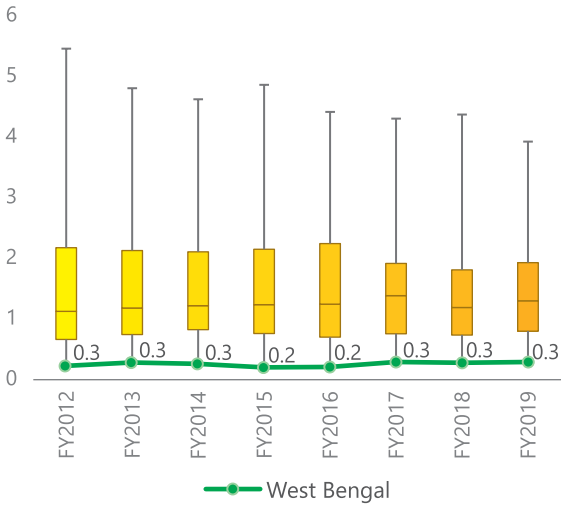


Note: Committed expenditure includes salaries, interest payments, and pensions

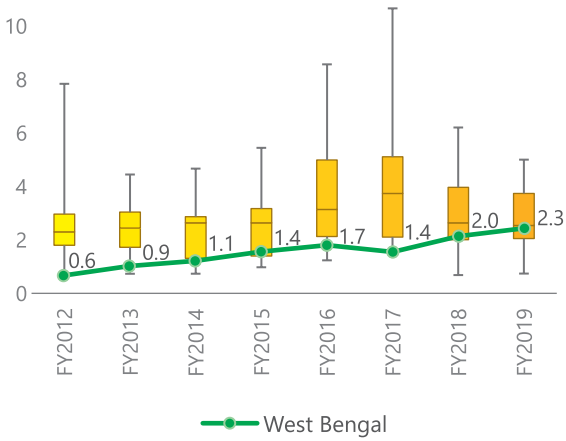
WB-4.E: OTR as % of GSDP



WB-4.F: NTR as % of GSDP



WB-4.G: Capital Expenditure to GSDP Ratio



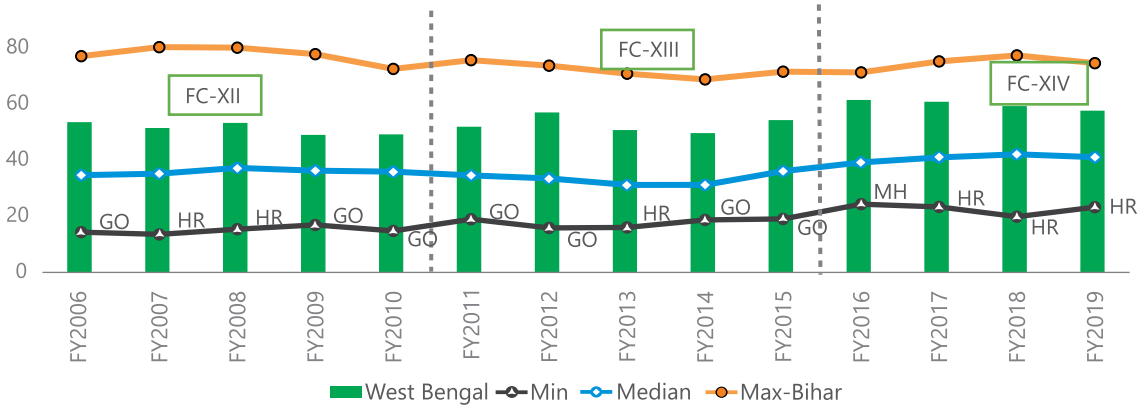
WB-4.H: Key Fiscal Indicators—State vs GS

Fiscal indicators (2018–19)	*State*	*GS*
Per Capita GSDP in Rs per annum	1,10,728	1,41,099
Indicators as a percentage of GSDP		
TRR	13.4	13.4
OTR	5.6	6.4
NTR	0.3	1.1
TE	16.6	16.1
ES	2.8	3.1
SS	6.4	5.4
GS	5.2	4.7
Committed Expenditure	5.5	5.8
Capital Expenditure	2.3	2.5
FD	3.1	2.5
RD	1.0	0.2
OD	36.1	25.0

WB-4.I: TRE and ORR Gap

TGR %, 2011–2019	*TRE*	*TRR*	*ORR*
West Bengal	11.7	14.4	11.9
GS Average	13.6	13.1	10.3

WB-4.J: Central Transfer {Tax Devolution & Grants-in-aid (FC and Non-FC)} as % of TRR



Functions Devolved

- Of the 29 functions envisaged in the Eleventh Schedule of the Constitution of India, 28 functions were devolved to RLBs/PRIs.
- Of the 18 functions envisaged in the Twelfth Schedule of the Constitution, 17 were devolved to ULBs.[1]

Auditing Status

- The PRIs maintain accounts in accordance with the formats prescribed in the State financial rules for them.
- The Examiner of Local Accounts (ELA) conducts audit of annual accounts as per the mandate stipulated under the West Bengal Municipal Act, 1993.
- Accounts of PRIs and ULBs have been audited until 2017–18.

Property Tax Board

- West Bengal Valuation Board functioning since 1978 also operates as the State PTB.

Devolution Index Rank across All States

Functions Rank	*Functionaries Rank*	*Finances Rank*	*Aggregate Devolution in Policy Rank*
9	13	8	7

Source: GOI (2016), *Devolution Index Report 2015–16*, Ministry of Panchayati Raj, Government of India.

Fourth SFC (2015–16 to 2019–20)

- According to the *Overview of State Finance Commission Reports* by the National Institute of Public Finance and Policy, the recommendations of the Fourth SFC currently under implementation in the State are as follows:
  - » Rs 900 crore be devolved to the local bodies for 2016–17 from State's own tax revenues with an annual increase of 3% from 2017–18 to 2019–20.

» Of the funds devolved to RLBs and ULBs, 60% be earmarked for capital expenditure and remaining 40% for maintenance of assets, payment of electricity bill, O&M of water supply schemes, etc.

Debt and Losses

- West Bengal is not a signatory under UDAY
- As of 31 March 2019, the total borrowing by DISCOMs in West Bengal was Rs 12,803 crore (including borrowing from the State Government of Rs 271 crore), which was 2.7% of the total borrowings by DISCOMs of all States.
- According to the AG, West Bengal, the West Bengal State Electricity Board has not been able to achieve the target of AT&C losses prescribed by the West Bengal Electricity Regulatory Commission (WBERC).

AT&C Loss (%)	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*
Admissible by WBERC	17.5	17.5	17.5	17.5	17.5
Achieved by WBSEB	31.6	30.5	30.0	29.8	29.0

Source: AG, Government of West Bengal

Vertical Devolution

- West Bengal has recommended that the State share in overall divisible pool of taxes be increased to 50%.

Formula for Horizontal Devolution

S.No.	*Criteria*	*Suggested Weights (%)*
i)	Population adjusted for minorities and backward sections	27.5
ii)	Area adjusted with locational complexities	7.5
iii)	Income distance (scaled using 1971 Population)	50.0
iv)	Fiscal discipline	7.5
v)	Distance from Index for Social Progress	7.5

Foreign Direct Investment

- The State needs to attract more FDI, particularly into Artificial Intelligence and Machine Learning. Its capital Kolkata lags behind in investment as compared to other metros.
- Kolkata currently attracts only 1% of the total FDI in India.[2]

Ease of Doing Business

- In terms of EoDB, West Bengal is ranked 9th (out of 36 States and UTs) in 2019 up from 11th rank (out of 32 States and UTs) in 2015.
- The West Bengal Single Window System (Management Control and Miscellaneous Provisions) Act, 2017 was enacted to promote EoDB.

- For various G2B services and applications, Single Window portal 'Silpa Sathi' has been launched.

Efforts in Deepening Tax Base

- According to AG, West Bengal, the State has taken significant steps in the implemention of e-governance measures to simplify tax returns. The State has achieved the highest growth in number of new registrations under GST in the whole country.

Tourism Potential

- The State offers vast and unexploited tourism potential (for both domestic and foreign visitors), which could be exploited to expand employment opportunities and spur economic growth.
- According to the *Tourism Statistics at a Glance 2020*, West Bengal attracted 5.3% of all visits made by foreigners to India in 2019.[3]
- The State ranked 6th (2019) amongst all States and UTs in domestic tourism by virtue of attracting 4% of all Indian tourists.[4]

Fiscal Indicators

- Interest payments are a huge liability on the Government of West Bengal. Between 2012–13 and 2018–19, interest payment as percentage of TRE has been in the range of 18%–23%. The State has one of the highest interest burdens in the country along with Punjab.

FRBM Compliance

- The State implemented its FRBM Act in 2010 and has not been adhering to its FRBM limit of Debt–GSDP ratio in recent years. However, FD–GSDP ratio is well within the target limits in 2016–17 and 2017–18. Hence, the State needs a credible debt path and careful calibration of expenditure for generating future streams of income.

Ratios as %	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*
Debt–GSDP							
As prescribed by the State FRBM	40.6	39.1	37.7	35.9	34.3	25.0	25.0
Actually achieved	39.9	38.8	37.2	38.7	38.4	38.7	37.0
FD–GSDP							
As prescribed by the State FRBM	3.5	3.5	3.0	3.0	3.0	3.0	3.0
Actually achieved	3.4	3.2	3.7	3.8	2.6	2.9	3.0

Source: Government of West Bengal Memorandum

Low NTR–GSDP RATIO

- The State has low NTR–GSDP ratio as compared to GS**.** The State needs to take measures to enhance cost recoveries from provision of economic and social services.

NTR–GSDP Ratio 2018–19

West Bengal	*GS*	*Quartile 1*	*Median*	*Quartile 3*	*All States*
0.3	1.1	0.8	1.3	1.93	1.2

Public Sector Undertakings[5]

- As on 31 March 2017, there were 92 State Public Sector Undertakings (PSUs) in West Bengal. These comprised of 73 working PSUs (including nine Statutory Corporations) and 19 non-working PSUs (including one Statutory Corporation). Employing around 47,000 employees, the total turnover of these working State PSUs was 89.4% of the aggregate investment of Rs 39,443.4 crore. The return on equity in these entities stood at -1.77%.
- Of the 73 working PSUs in West Bengal, the accounts of 40 were in arrears for periods ranging from one to nine years. Of the 19 non-working PSUs, 13 had arrears for one to 11 years.
- As on 31 March 2017, total investment of the Government in 92 PSUs was Rs 40,611.43 crore. Power sector accounted for 72.40% of total investment in 2016–17. During 2016–17, the State Government provided financial support of Rs 3,894.34 crore to PSUs towards equity, loans, and grants/ subsidies.
- Audit reports were not laid before the Legislature in time. Audit reports pertaining to 2011–12 and 2012–13 were laid together in July 2014. Similarly, audit reports of 2013–14 and 2014–15 were laid together in July 2016. The pattern indicates that the State Government had reduced the laying of audit reports to a biennial exercise. This is in contravention of the constitutional and statutory obligations of the State Government.
- Given the outstanding liabilities and substantial budgetary support to SPSUs, the State needs to closely monitor them to avoid contingent liabilities imposing additional fiscal burden on the State. A time bound programme of restructuring the SPSUs should be adopted soon to remove the major hurdles in their performance.

Local Bodies

- As enshrined in Article 280(3) (bb) and (c) of the Constitution, the Finance Commission of India makes grant recommendations to local bodies based on the recommendations of SFCs. The State Government must constitute SFCs, act upon their recommendations, and lay the explanatory memorandum pertaining to the action taken thereon before the State legislature on or before March 2024.

Locational Complexities

- As highlighted by the State Government Memorandum, West Bengal is situated in the eastern part of India and shares its borders with Jharkhand, Bihar, Odisha, Sikkim, and Assam. The State also shares 2,509 km of sensitive international borders with Bangladesh, Bhutan, and Nepal.
- The State has a varied topography with highest mountains, wetlands, Sunderbans, inaccessible hilly and forest areas, coastal areas, and the plains.
- The borders of West Bengal are highly porous and impose an additional burden of surveillance.

Rank on the SDG Index of NITI Aayog (2019)

- With an SDG Index of 60—the same as the national average, West Bengal is placed 14th among the 28 Indian States.
- The State is a front runner in SDG-3 Good Health and Well Being, SDG–6 Clean Water and Sanitation, SDG–8 Decent Work and Economic Growth, SDG–9 Industry, Innovation and Infrastructure, SDG–10 Reduced Inequality, SDG–15 Life on Land, and SDG–16 Peace, Justice and Strong Institutions. However, the State needs to improve on SDG–2 Zero Hunger, SDG–5 Gender Equality, SDG–11 Sustainable Cities and Communities, SDG–13 Climate Action, and SDG–14 Life Below Water.

High Pollution (PM 10) as Monitored under NAMP

- Cities with million-plus population have far exceeded the NAMP threshold for PM 10 (of less than 90 micrograms per cubic metre). The State needs to chalk out a plan to increase the ease of breathing in these cities while they emerge as economic centres and investment hubs.

PM10 Micrograms Per Cubic Metre

City	*2016*	*2017*	*2018*	*Average*
Asansol	211	163	146	173.3
Kolkata	113	120	148	127.0

Swachhta Campaign

- As per *Swachh Survekshan 2018* conducted by Ministry of Housing and Urban Affairs, West Bengal was home to 18 of the 25 poorest performing cities in the country.
- Since its 28th rank by total weighted score (combining weighted score for both >1 lakh and < 1 lakh population ULBs) among the 30 States surveyed in 2018 (28 States + NCT of Delhi and Jammu & Kashmir), West Bengal has not participated in the subsequent surveys.

Reform Roadmap

Reform Cohort of the State

- For the purpose of analysis, the States have been grouped on the basis of per capita income. West Bengal is part of the group which includes Chhattisgarh, AP, Rajasthan, and Punjab.

Reform Signposts

- Though almost all FCs in the last two decades have recommended various fiscal reforms in the State, West Bengal has not improved its fiscal status.
- Capital expenditure is very low in West Bengal. In 2011, the capital outlay of West Bengal was the lowest in the country at 0.6% of GSDP as against the group average of 1.3%. However the State has shown significant improvement in the recent years.
- The State has placed objective, transparent and efficient systems in tax collection and revenue mobilisation.
  - **e-Nathikaran:** The centralised web-based registration system has been introduced in phases since December 2014, replacing the standalone Computerisation of Registration of Documents (CoRD) systems. e-Nathikaran is running in all registration offices in the State in Public Private Partnership mode under BOOT. The State has implemented Online Integration of Registration with the Land and Land Records Department, Kolkata Municipal Corporation, and West Bengal Valuation Board.
  - **Financial implications:** The collection of revenue from Stamp Duty and Registration Fees has gone up from Rs 2,732 crore in 2011–12 to Rs 5,620 crore in 2018–19.
  - **Reforms in country spirits segment:** The Administered Price Control and the system of grant of Exclusive Privilege Areas to the bottling plants for the sale of country spirits was abolished 2010–11.This has led to significant growth in consumption of country spirits.
- **Thus, FC-XV recommends that the State comprehensively consider these and related issues (including fiscal reform) to ensure a sustainable stream of improved resources by investing in durable capital infrastructure. Matching investments in critical social sector initiatives could improve the socioeconomic indicators of West Bengal over the next five years bringing them closer to the national average.**

Notes

1 CAG (2015), *Panchayati Raj Institutions and Urban Local Bodies,* report by Comptroller and Auditor General of India, published by Government of West Bengal.

2 GOI (2019), *Fact Sheet on Foreign Direct Investment (April 2000 to March 2019)*, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India.

3 GOI (2020), *Tourism Statistics at a Glance 2020,* Ministry of Tourism, Government of India.

4 Ibid.

5 CAG (2018), *Report No.2 of 2020: Public Sector Undertakings, for the year ended 31 March 2017*, report by the Comptroller and Auditor General of India, published by Government of West Bengal.

REFERENCES AND DATA SOURCES

Indicator	*Short source reference*	*Detailed citation*
	Macroeconomic Indicators	
GSDP	MOSPI	GSDP Series, Base 2011–12, as on 31 July 2020, National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.
Sectoral contribution to GSDP measured by Gross State Value Added (GSVA) and Net State Value Added (NSVA) by economic activities	MOSPI	www.mospi.gov.in National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.
Per capita GSDP	MOSPI	www.mospi.gov.in National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.
Population	Census 2011	GOI (2011), Census of India 2011, Office of the Registrar General and Census Commissioner of India, Ministry of Home Affairs, Government of India.
	MOSPI	MoSPI estimates (2011–12 to 2018–19)
Total Fertility Rate	NFHS 2/3/4	NFHS-2 GOI (2000): National Family Health Survey 1998–99, led by Ministry of Health and Family Welfare, Government of India. NFHS-3 GOI (2007), National Family Health Survey 2005–06, led by Ministry of Health and Family Welfare, Government of India. NFHS-4 GOI (2017), National Family Health Survey 2015–16, led by Ministry of Health and Family Welfare, Government of India.
	Socioeconomic, Education, and Health indicators	
SDG Index	SDG Index	GOI (2019), SDG India Index and Dashboard 2019–20, NITI Aayog, Government of India.
Literacy rate	Census 2011	GOI (2011), Census of India 2011, Office of the Registrar General and Census Commissioner of India, Ministry of Home Affairs, Government of India.
Life Expectancy	SRS 2013–2017	GOI (2013 to 2017), Sample Registration System, Bulletin, Office of the Registrar General and Census Commissioner of India, Ministry of Home Affairs, Government of India.
Pupil–teacher ratio (Primary)	DISE 2016–17	NIEPA (2017), Elementary Education in India: Where Do We Stand?, State Report Cards 2016–17, National Institute of Educational Planning and Administration, New Delhi.
Underweight children (%)	NFHS-4	GOI (2017), National Family Health Survey 2015–16, led by Ministry of Health and Family Welfare, Government of India.
Stunting among children (%)	NFHS-4	Ibid.
Anaemia among children (%)	NFHS-4	Ibid.
Underweight women (%)	NFHS-4	Ibid.
Anaemia among women (%)	NFHS-4	Ibid.
Infant Mortality Rate (deaths per 1,000 live births)	SRS 2018	GOI (2018), Sample Registration System, Statistical Report 2018, Office of the Registrar General and Census Commissioner of India, Ministry of Home Affairs, Government of India.

Indicator	*Short source reference*	*Detailed citation*
Households (%) with improved source of drinking water	NFHS-4	GOI (2017), National Family Health Survey 2015–16, led by Ministry of Health and Family Welfare, Government of India.
Household (%) with toilet facility	NFHS-4	Ibid.
Deprived households (%)	SECC 2011	GOI (2011), Socio Economic and Caste Census 2011, Ministry of Rural Development, Government of India.
Incidence of poverty (percentage household below poverty line)	Tendulkar Methodology/ Estimates	Tendulkar Estimates, Planning Commission
Expenditure on health sector (revenue +capital) as a percentage of total expenditure	CAG State Governments	Finance Accounts State Budget Documents
Per capita health expenditure (Rs)	CAG State Governments	Finance Accounts State Budget Documents
Fiscal Indicators		
All fiscal indicators are compiled from State finance accounts and budget documents.		
Health Infrastructure Indicators		
Availability of health centres and healthcare professionals	CBHI	GOI (2019), National Health Profile 2019, 14th Issue, Central Bureau of Health Intelligence, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

Annex-GI.1: Area, Forest Area, Population, Sex Ratio, Urbanization Rate and Literacy Rate as per Census 2011 and FSI 2019

SN	*Name of the State*	*Area ('000 sq km)*	*Population (million)*	*Sex (females per 1000 males)*	*Urbanization (%)*	*Literacy (%)*	*Forest Area (sq km)*
1	Andhra Pradesh	162.923	49.577	993	33.5	67.0	29137
2	Arunachal Pradesh	83.743	1.384	938	22.7	65.4	66688
3	Assam	78.438	31.206	958	14.1	72.2	28327
4	Bihar	94.163	104.099	918	11.3	61.8	7306
5	Chhattisgarh	135.192	25.545	991	23.2	70.3	55611
6	Goa	3.702	1.459	973	62.2	88.7	2237
7	Gujarat	196.244	60.440	919	42.6	78.0	14857
8	Haryana	44.212	25.351	879	34.8	75.6	1602
9	Himachal Pradesh	55.673	6.865	972	10.0	82.8	15434
10	Jammu & Kashmir	222.236	12.541	889	27.2	67.2	23612
11	Jharkhand	79.716	32.988	949	24.1	66.4	23611
12	Karnataka	191.791	61.095	973	38.6	75.4	38575
13	Kerala	38.852	33.406	1084	47.7	94.0	21144
14	Madhya Pradesh	308.252	72.627	931	27.6	69.3	77482
15	Maharashtra	307.713	112.374	929	45.2	82.3	50778
16	Manipur	22.327	2.856	985	30.2	79.2	16847
17	Meghalaya	22.429	2.967	989	20.1	74.4	17119
18	Mizoram	21.081	1.097	976	51.5	91.3	18006
19	Nagaland	16.579	1.979	931	29.0	79.6	12486
20	Odisha	155.707	41.974	979	16.7	72.9	51619
21	Punjab	50.362	27.743	895	37.5	75.8	1849
22	Rajasthan	342.239	68.548	928	24.9	66.1	16630
23	Sikkim	7.096	0.611	890	25.0	81.4	3342
24	Tamil Nadu	130.060	72.147	996	48.5	80.1	26364
25	Telangana	112.122	35.004	0	0.0	N.A	20582
26	Tripura	10.486	3.674	960	26.2	87.2	7726
27	Uttar Pradesh	240.928	199.812	912	22.3	67.7	14806
28	Uttarakhand	53.483	10.086	963	30.6	78.8	24303
29	West Bengal	88.752	91.276	950	31.9	76.3	16902
	All States/India	**3276.501**	**1190.732**	**943**	**31.1**	**73.0**	**704982**

Annex-GI.2: Health and Social Indicators as per NFHS 2015–16

SN	*Name of the State*	*Underweight Children*	*Stunting Among Children*	*% Women whose BMI is below Normal*	*Anaemia Among Women*	*Institutional Deliveries*	*% Household with improved source of Drinking Water*	*% Household with Toilet Facility*	*IMR (SRS 2018)*
1	Andhra Pradesh	31.9	31.4	17.6	60.0	91.5	72.7	61.3	29.0
2	Arunachal Pradesh	19.4	29.4	8.5	43.2	52.2	87.5	90.8	37.0
3	Assam	29.8	36.4	25.7	46.0	70.6	83.8	88.9	41.0
4	Bihar	43.9	48.3	30.4	60.3	63.8	98.2	33.5	32.0
5	Chhattisgarh	37.7	37.6	26.7	47.0	70.2	91.1	41.3	41.0
6	Goa	23.8	20.1	14.7	31.3	96.9	96.3	89.1	7.0
7	Gujarat	39.3	38.5	27.2	54.9	88.5	90.9	71.0	28.0
8	Haryana	29.4	34.0	15.8	62.7	80.4	91.6	89.8	30.0
9	Himachal Pradesh	21.2	26.3	16.2	53.5	76.4	94.9	85.7	19.0
10	Jammu & Kashmir	16.6	27.4	12.1	49.4	85.6	89.2	79.3	22.0
11	Jharkhand	47.8	45.3	31.5	65.2	61.9	77.7	30.0	30.0
12	Karnataka	35.2	36.2	20.7	44.8	94.0	89.3	65.8	23.0
13	Kerala	16.1	19.7	9.7	34.3	99.8	94.3	99.2	7.0
14	Madhya Pradesh	42.8	42.0	28.4	52.5	80.8	84.7	42.8	48.0
15	Maharashtra	36.0	34.4	23.5	48.0	90.3	91.5	71.2	19.0
16	Manipur	13.8	28.9	8.8	26.4	69.1	41.6	98.7	11.0
17	Meghalaya	28.9	43.8	12.1	56.2	51.4	67.9	92.4	33.0
18	Mizoram	12.0	28.1	8.4	24.8	79.7	91.4	99.1	5.0
19	Nagaland	16.7	28.6	12.3	27.9	32.8	80.6	98.3	4.0
20	Odisha	34.4	34.1	26.5	51.0	85.3	88.8	35.0	40.0
21	Punjab	21.6	25.7	11.7	53.5	90.5	99.1	92.9	20.0
22	Rajasthan	36.7	39.1	27.0	46.8	84.0	85.5	54.0	37.0
23	Sikkim	14.2	29.6	6.4	34.9	94.7	97.6	99.7	7.0
24	Tamil Nadu	23.8	27.1	14.6	55.0	98.9	90.6	61.7	15.0
25	Telangana	28.4	28.0	22.9	56.6	91.5	77.9	69.0	27.0
26	Tripura	24.1	24.3	18.9	54.5	79.9	87.3	97.9	27.0
27	Uttar Pradesh	39.5	46.3	25.3	52.4	67.8	96.4	45.8	43.0
28	Uttarakhand	26.6	33.5	18.4	45.2	68.6	92.9	82.9	31.0
29	West Bengal	31.6	32.5	21.3	62.5	75.2	94.6	74.9	22.0
	All States/India	**35.8**	**38.4**	**22.9**	**53.1**	**78.9**	**89.9**	**61.1**	**32.0**

Annex-GI.3: Total Fertility Rate

SN	*Name of the State*	*NFHS–2*	*NFHS–3*	*NFHS–4*
1	Andhra Pradesh	2.3	1.8	1.8
2	Arunachal Pradesh	2.5	3.0	2.1
3	Assam	2.3	2.4	2.2
4	Bihar	3.7	4.0	3.4
5	Chhattisgarh	2.8	2.6	2.2
6	Goa	1.8	1.8	1.7
7	Gujarat	2.7	2.4	2.0
8	Haryana	2.9	2.7	2.1
9	Himachal Pradesh	2.1	1.9	1.9
10	Jammu & Kashmir	2.7	2.4	2.0
11	Jharkhand	2.8	3.3	2.6
12	Karnataka	2.1	2.1	1.8
13	Kerala	2.0	1.9	1.6
14	Madhya Pradesh	3.3	3.1	2.3
15	Maharashtra	2.5	2.1	1.9
16	Manipur	3.0	2.8	2.6
17	Meghalaya	4.6	3.8	3.0
18	Mizoram	2.9	2.9	2.3
19	Nagaland	3.8	3.7	2.7
20	Odisha	2.5	2.4	2.1
21	Punjab	2.2	2.0	1.6
22	Rajasthan	3.8	3.2	2.4
23	Sikkim	2.8	2.2	1.2
24	Tamil Nadu	2.2	1.8	1.7
25	Telangana	NA	NA	1.8
26	Tripura	1.9	2.2	1.7
27	Uttar Pradesh	4.1	3.8	2.7
28	Uttarakhand	2.6	2.6	2.1
29	West Bengal	2.3	2.3	1.8
	All States/India	**2.9**	**2.7**	**2.2**

Annex-GI.4: Pupil Teacher Ratio (Primary) and Gross Enrolment Ratio (Higher Secondary)

SN	*Name of the State*	*Pupil Teacher Ratio (Primary School)*	*Gross Enrolment Ratio (Higher Secondary)*
1	Andhra Pradesh	22.0	60.6
2	Arunachal Pradesh	12.0	51.2
3	Assam	24.0	39.7
4	Bihar	44.0	28.8
5	Chhattisgarh	20.0	54.5
6	Goa	19.0	78.7
7	Gujarat	22.0	43.2
8	Haryana	25.0	60.8
9	Himachal Pradesh	12.0	92.0
10	Jammu & Kashmir	10.0	52.9
11	Jharkhand	28.0	37.1
12	Karnataka	16.0	41.9
13	Kerala	16.0	79.4
14	Madhya Pradesh	22.0	47.1
15	Maharashtra	24.0	70.7
16	Manipur	9.0	64.4
17	Meghalaya	19.0	40.6
18	Mizoram	12.0	54.6
19	Nagaland	6.0	36.3
20	Odisha	18.0	40.1
21	Punjab	20.0	72.2
22	Rajasthan	20.0	60.3
23	Sikkim	4.0	64.2
24	Tamil Nadu	20.0	83.7
25	Telangana	23.0	50.6
26	Tripura	10.0	41.9
27	Uttar Pradesh	33.0	59.0
28	Uttarakhand	16.0	77.1
29	West Bengal	20.0	50.9
	All States/India	**25.0**	**55.4**

Annex-GI.5: Poverty Ratio Rate (%)

SN	*Name of the State*	*2004–05*	*2011–12*
1	Andhra Pradesh	29.9	9.2
2	Arunachal Pradesh	31.1	34.7
3	Assam	34.4	32.0
4	Bihar	54.4	33.7
5	Chhattisgarh	49.4	39.9
6	Goa	25.0	5.1
7	Gujarat	31.8	16.6
8	Haryana	24.1	11.2
9	Himachal Pradesh	22.9	8.1
10	Jammu & Kashmir	13.2	10.3
11	Jharkhand	45.3	37.0
12	Karnataka	33.4	20.9
13	Kerala	19.7	7.1
14	Madhya Pradesh	48.6	31.6
15	Maharashtra	38.1	17.4
16	Manipur	38.0	36.9
17	Meghalaya	16.1	11.9
18	Mizoram	15.3	20.4
19	Nagaland	9.0	18.9
20	Odisha	57.2	32.6
21	Punjab	20.9	8.3
22	Rajasthan	34.4	14.7
23	Sikkim	31.1	8.2
24	Tamil Nadu	28.9	11.3
25	Telangana	NA	0.0
26	Tripura	40.6	14.0
27	Uttar Pradesh	40.9	29.4
28	Uttarakhand	32.7	11.3
29	West Bengal	34.3	20.0
	All States/India	**37.2**	**21.9**

Annex-GI.6: Statewise AT&C Losses and ACS–ARR GAP (Achievement data excluding Regulatory Income and UDAY grants)

SN	*Name of the State*	*AT&C Losses 2018–19*		*ACS – ARR GAP 2018–19*	
		Target	*Achievement*	*Target*	*Achievement*
1	Andhra Pradesh	8.95	25.67	–0.03	2.69
2	Arunachal Pradesh	39.00	55.50	0.00	4.27
3	Assam	16.10	19.87	0.19	0.02
4	Bihar	21.00	30.94	0.41	0.39
5	Chhattisgarh	15.00	27.33	–0.52	0.35
6	Goa	15.00	15.69	–0.15	0.39
7	Gujarat	13.00	13.98	–0.06	–0.02
8	Haryana	15.00	18.08	0.12	–0.05
9	Himachal Pradesh	12.75	11.39	–0.05	–0.07
10	Jammu & Kashmir	25.00	49.94	0.49	1.72
11	Jharkhand	15.00	28.60	0.00	0.58
12	Karnataka	14.02	19.82	0.00	0.68
13	Kerala	11.00	9.10	–0.06	0.11
14	Madhya Pradesh	17.00	36.01	0.03	1.41
15	Maharashtra	14.98	14.73	–0.39	–0.16
16	Manipur	15.00	29.79	–0.36	0.10
17	Meghalaya	21.50	35.22	0.35	0.85
18	Mizoram	20.30	16.20	0.00	1.18
19	Nagaland	32.00	40.06	2.11	4.09
20	Odisha	NA	29.17	NA	0.60
21	Punjab	14.00	11.28	–0.09	–0.05
22	Rajasthan	15.00	28.26	–0.12	1.50
23	Sikkim	15.00	31.83	–0.09	0.02
24	Tamil Nadu	13.50	17.47	–0.07	1.88
25	Telangana	10.00	19.99	0.00	1.45
26	Tripura	20.00	35.48	0.03	–0.06
27	Uttar Pradesh	19.36	33.15	0.22	0.60
28	Uttarakhand	14.50	16.20	–0.03	0.38
29	West Bengal	NA	23.00	NA	0.30
	National Average		**22.03**		**0.72**

*The States of West Bengal and Odisha are non participating States under UDAY,
NA: Not Available
Source: Ministry of Power, Government of India

Annex-GI.7: Health (per '000 persons)

SN	Name of the State	Allopathic Doctor	Ayush Doctor	Nurse	Pharmacist	Sub Centre	Primary Health Centre	Community Health Centre
1	Andhra Pradesh	0.5	2.2	0.1	1.0	6.6	43.1	255.9
2	Arunachal Pradesh	1.4	3.5	0.7	5.0	4.4	9.7	22.0
3	Assam	1.3	14.3	0.6	2.0	6.7	33.0	181.4
4	Bihar	2.6	0.8	5.6	4.3	10.5	54.8	694.0
5	Chhattisgarh	2.9	4.6	0.9	2.6	4.9	32.2	151.2
6	Goa	0.4	1.1	NA	0.4	6.8	58.4	364.8
7	Gujarat	0.9	1.2	0.4	0.9	6.6	41.0	166.5
8	Haryana	4.4	1.8	0.5	0.8	9.8	68.9	224.3
9	Himachal Pradesh	2.2	0.6	0.2	0.7	3.3	11.9	75.4
10	Jammu & Kashmir	0.8	2.0	NA	NA	4.2	19.7	149.3
11	Jharkhand	5.7	40.7	4.0	14.1	8.6	110.7	192.9
12	Karnataka	0.5	1.3	0.2	1.1	6.5	25.9	296.6
13	Kerala	0.6	0.8	0.1	0.5	6.2	39.3	147.2
14	Madhya Pradesh	1.9	1.1	0.5	1.3	6.5	62.0	235.0
15	Maharashtra	0.6	0.7	0.6	0.5	10.6	61.6	311.3
16	Manipur	2.3	NA	0.2	2.0	6.0	28.2	111.7
17	Meghalaya	5.1	8.1	0.4	3.3	6.7	27.5	106.0
18	Mizoram	14.8	NA	0.2	0.8	3.0	19.2	121.9
19	Nagaland	17.1	13.8	NA	1.3	5.0	15.7	94.2
20	Odisha	1.9	2.9	0.3	1.3	6.3	32.6	111.3
21	Punjab	0.6	1.7	0.3	0.6	9.4	64.2	183.7
22	Rajasthan	1.6	3.6	0.2	1.3	4.8	33.0	116.6
23	Sikkim	0.4	NA	1.9	2.2	4.2	25.5	305.5
24	Tamil Nadu	0.5	3.8	0.2	1.0	8.3	50.8	187.4
25	Telangana	7.1	1.7	NA	NA	7.4	54.7	386.7
26	Tripura	2.1	8.2	0.6	0.8	3.6	34.0	167.0
27	Uttar Pradesh	2.6	2.3	1.5	2.4	9.7	55.2	243.1
28	Uttarakhand	1.2	2.5	2.0	0.6	5.5	39.2	150.5
29	West Bengal	1.3	1.9	0.7	1.0	8.8	100.0	262.3
	All States/India	**1.0**	**1.5**	**0.4**	**1.2**	**7.5**	**46.4**	**212.2**

Health Data from National Health Profile 2019
Allopathic Doctors are the Registered doctors with State Medical Councils/Medical Council of India from the year upto 2010 to 2018 (As on 31st December of concerned year)
Nagaland the registration are captured from 2015
Mizoram the registration are captured from 2014
Tripura the registration are captured from 2013
Telangana the registrations are captured from 2015
Haryana the registrations are captured till 2011
All other states are captured till 2018

Annex-GI.8: Life Expectancy of population in Major States (years)

State/Union Territory	*2012–16*			*2013–17*		
	Male	*Female*	*Total*	*Male*	*Female*	*Total*
Andhra Pradesh	68.0	71.4	69.6	68.3	71.2	69.7
Assam	64.4	66.8	65.5	65.4	67.3	66.2
Bihar	68.9	68.5	68.7	69.2	68.6	68.9
Chhattisgarh	63.6	66.8	65.2	63.8	66.6	65.2
Delhi	72.7	75.9	74.2	73.3	76.3	74.7
Gujarat	67.4	71.8	69.5	67.6	72.0	69.7
Haryana	67.2	72.0	69.4	67.6	72.3	69.7
Himachal Pradesh	69.4	75.5	72.3	69.8	75.6	72.6
Jammu and Kashmir	71.6	76.2	73.5	72.1	76.7	74.1
Jharkhand	67.8	68.0	67.9	68.8	68.4	68.6
Karnataka	67.6	70.7	69.1	67.7	70.8	69.2
Kerala	72.2	77.9	75.1	72.5	77.8	75.2
Madhya Pradesh	63.7	67.2	65.4	64.2	67.9	66.0
Maharashtra	70.8	73.7	72.2	71.2	73.9	72.5
Odisha	66.2	69.1	67.6	67.1	69.9	68.4
Punjab	71.0	74.2	72.5	71.0	74.0	72.4
Rajasthan	66.1	70.7	68.3	66.3	70.9	68.5
Tamil Nadu	69.5	73.4	71.4	69.9	73.7	71.7
Uttar Pradesh	63.9	65.6	64.8	64.3	65.6	65.0
Uttarakhand	68.5	74.8	71.5	68.8	74.2	71.0
West Bengal	69.8	71.9	70.8	70.4	72.2	71.2
All INDIA	**67.4**	**70.9**	**68.7**	**67.8**	**70.4**	**69.0**

*Quinquennial Survey.
Source: Sample Registration System, Bulletin, Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India.

Annex-FI.1: GSDP (Rs Crore)

SN	*Name of the State*	*201–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	379402	411404	464272	524976	604229	684416	793186	862957
2	Arunachal Pradesh	11063	12547	14581	17959	18509	19845	22432	24603
3	Assam	143175	156864	177745	195723	227959	254382	283165	315881
4	Bihar	247144	282368	317101	342951	371602	421052	468746	530363
5	Chhattisgarh	158074	177511	206833	221118	225163	250882	274042	304063
6	Goa	42367	38120	35921	47814	55054	62976	69352	73170
7	Gujarat	615606	724495	807623	921773	1029010	1167156	1329095	1502899
8	Haryana	297539	347032	399268	437145	495504	561610	649592	734163
9	Himachal Pradesh	72720	82820	94764	103772	114239	125634	138351	153845
10	Jammu & Kashmir	78256	87138	95619	98367	117168	124848	139240	155956
11	Jharkhand	150918	174724	188567	218525	206613	236250	269816	297204
12	Karnataka	606010	695413	816666	913923	1045168	1209136	1357579	1544399
13	Kerala	364048	412313	465041	512564	561994	634886	701577	781653
14	Madhya Pradesh	315562	380925	439483	479939	541068	649823	724729	809592
15	Maharashtra	1280369	1459629	1649647	1779138	1966225	2198324	2382570	2632792
16	Manipur	12915	13743	16182	18129	19531	21294	25789	27869
17	Meghalaya	19918	21872	22938	23235	25117	27439	29508	33481
18	Mizoram	7259	8362	10293	13509	15139	17192	18740	19520
19	Nagaland	12177	14121	16612	18401	19524	21722	24492	27283
20	Odisha	230987	261700	296475	314250	328550	392708	440517	492229
21	Punjab	266628	297734	332147	355102	390087	426988	470834	526376
22	Rajasthan	434837	493551	551031	615642	681482	760750	835170	942586
23	Sikkim	11165	12338	13862	15407	18034	20687	25971	28723
24	Tamil Nadu	751486	854825	968530	1072678	1176500	1302639	1465051	1630208
25	Telangana	359434	401593	451580	505848	577902	658325	753127	861031
26	Tripura	19208	21663	25593	29533	35938	39479	43716	49845
27	Uttar Pradesh	724050	822393	940356	1011790	1137808	1290289	1460443	1668229
28	Uttarakhand	115328	131613	149074	161439	177163	195125	222836	245895
29	West Bengal	520485	591464	676848	718082	797300	872527	974700	1089898
	All States	**8248127**	**9390276**	**10644655**	**11688732**	**12979577**	**14648384**	**16394367**	**18366714**
	Genl. States	**7744945**	**8827195**	**10007392**	**10993257**	**12191256**	**13780737**	**15420126**	**17283813**
	NE & HS	**503182**	**563081**	**637264**	**695474**	**788321**	**867648**	**974240**	**1082901**

Annex-FI.2: Annual Growth Rate of GSDP %

SN	*Name of the State*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	8.4	12.9	13.1	15.1	13.3	15.9	8.8
2	Arunachal Pradesh	13.4	16.2	23.2	3.1	7.2	13.0	9.7
3	Assam	9.6	13.3	10.1	16.5	11.6	11.3	11.6
4	Bihar	14.3	12.3	8.2	8.4	13.3	11.3	13.1
5	Chhattisgarh	12.3	16.5	6.9	1.8	11.4	9.2	11.0
6	Goa	–10.0	–5.8	33.1	15.1	14.4	10.1	5.5
7	Gujarat	17.7	11.5	14.1	11.6	13.4	13.9	13.1
8	Haryana	16.6	15.1	9.5	13.4	13.3	15.7	13.0
9	Himachal Pradesh	13.9	14.4	9.5	10.1	10.0	10.1	11.2
10	Jammu & Kashmir	11.4	9.7	2.9	19.1	6.6	11.5	12.0
11	Jharkhand	15.8	7.9	15.9	–5.5	14.3	14.2	10.2
12	Karnataka	14.8	17.4	11.9	14.4	15.7	12.3	13.8
13	Kerala	13.3	12.8	10.2	9.6	13.0	10.5	11.4
14	Madhya Pradesh	20.7	15.4	9.2	12.7	20.1	11.5	11.7
15	Maharashtra	14.0	13.0	7.8	10.5	11.8	8.4	10.5
16	Manipur	6.4	17.7	12.0	7.7	9.0	21.1	8.1
17	Meghalaya	9.8	4.9	1.3	8.1	9.2	7.5	13.5
18	Mizoram	15.2	23.1	31.2	12.1	13.6	9.0	4.2
19	Nagaland	16.0	17.6	10.8	6.1	11.3	12.7	11.4
20	Odisha	13.3	13.3	6.0	4.6	19.5	12.2	11.7
21	Punjab	11.7	11.6	6.9	9.9	9.5	10.3	11.8
22	Rajasthan	13.5	11.6	11.7	10.7	11.6	9.8	12.9
23	Sikkim	10.5	12.3	11.1	17.1	14.7	25.5	10.6
24	Tamil Nadu	13.8	13.3	10.8	9.7	10.7	12.5	11.3
25	Telangana	11.7	12.4	12.0	14.2	13.9	14.4	14.3
26	Tripura	12.8	18.1	15.4	21.7	9.9	10.7	14.0
27	Uttar Pradesh	13.6	14.3	7.6	12.5	13.4	13.2	14.2
28	Uttarakhand	14.1	13.3	8.3	9.7	10.1	14.2	10.3
29	West Bengal	13.6	14.4	6.1	11.0	9.4	11.7	11.8
	All States	**13.8**	**13.4**	**9.8**	**11.0**	**12.9**	**11.9**	**12.0**
	Genl. States	**14.0**	**13.4**	**9.9**	**10.9**	**13.0**	**11.9**	**12.1**
	NE & HS	**11.9**	**13.2**	**9.1**	**13.4**	**10.1**	**12.3**	**11.2**

Annex-FI.3: Per Capita GSDP (Rs)

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	76997	83001	93121	104679	119777	134879	155402	168083
2	Arunachal Pradesh	79019	87861	100076	120776	122092	128283	142068	152718
3	Assam	45538	49254	55098	59894	68868	75869	83871	92533
4	Bihar	23525	26459	29251	31142	33218	37052	40065	44652
5	Chhattisgarh	61305	67750	77687	81735	81907	89816	96548	105424
6	Goa	289192	258441	241893	319827	365806	415411	454172	476370
7	Gujarat	101075	117398	129158	145484	160284	179427	199492	222487
8	Haryana	116408	133875	151871	163958	183249	204795	233574	260286
9	Himachal Pradesh	105376	118960	134934	146488	159842	174249	191278	211325
10	Jammu & Kashmir	61852	67838	73322	74301	87172	91491	100505	110890
11	Jharkhand	45318	51620	54813	62496	58139	65405	73628	79936
12	Karnataka	98567	111891	129986	143902	162796	186308	206929	232874
13	Kerala	108666	122471	137515	150824	164554	184979	203396	225484
14	Madhya Pradesh	43023	51073	57965	62285	69110	81768	89901	99025
15	Maharashtra	113192	127606	142634	152158	166351	184125	197666	216376
16	Manipur	44649	46491	53565	58721	61906	66050	78284	82792
17	Meghalaya	66304	71268	73168	72563	76788	82127	86459	96016
18	Mizoram	65347	73708	88843	115366	127004	141614	159491	164586
19	Nagaland	61159	70185	81670	89541	94001	104586	117919	129981
20	Odisha	54855	61809	69644	73421	76350	90833	101467	112907
21	Punjab	95379	105129	115765	122165	132467	143124	155781	171907
22	Rajasthan	62907	70385	77464	85315	93094	102444	110864	123343
23	Sikkim	181842	198686	221083	243392	281780	319740	397107	435204
24	Tamil Nadu	103743	117204	131893	145094	158072	174054	194834	215784
25	Telangana	100733	111430	124057	137586	155626	175530	198814	225047
26	Tripura	51999	58016	67814	77434	93248	101385	111151	125461
27	Uttar Pradesh	35917	40180	45250	47953	53113	59322	66132	74402
28	Uttarakhand	113456	127755	142778	152560	165202	179524	202284	220257
29	West Bengal	56693	63786	72272	75916	83456	90426	100014	110728
	All States	**68771**	**77330**	**86585**	**93914**	**103008**	**114855**	**126832**	**140422**
	Genl. States	**68936**	**77609**	**86914**	**94315**	**103322**	**115399**	**127374**	**141099**
	NE & HS	**66326**	**73212**	**81730**	**87999**	**98395**	**106856**	**118824**	**130427**

Annex-FI.4: Own Tax Revenue as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	7.2	7.4	7.0	7.0	6.6	6.5	6.2	6.7
2	Arunachal Pradesh	2.9	2.5	3.0	2.6	2.9	3.6	3.6	4.3
3	Assam	5.3	5.3	5.1	4.8	4.4	4.7	4.7	5.0
4	Bihar	5.1	5.8	6.3	6.1	6.8	5.6	4.9	5.5
5	Chhattisgarh	6.8	7.3	6.9	7.1	7.6	7.6	7.3	7.0
6	Goa	6.0	7.7	10.0	8.1	7.2	6.8	6.8	6.7
7	Gujarat	7.2	7.4	7.0	6.7	6.1	5.5	5.4	5.3
8	Haryana	6.9	6.8	6.4	6.3	6.2	6.1	6.3	5.8
9	Himachal Pradesh	5.6	5.6	5.4	5.7	5.9	5.6	5.1	4.9
10	Jammu & Kashmir	6.1	6.7	6.6	6.4	6.3	6.3	6.8	6.3
11	Jharkhand	4.6	4.7	5.0	4.7	5.6	5.6	4.6	5.0
12	Karnataka	7.7	7.7	7.7	7.7	7.2	6.9	6.4	6.3
13	Kerala	7.1	7.3	6.9	6.9	6.9	6.6	6.6	6.5
14	Madhya Pradesh	8.5	8.0	7.6	7.6	7.4	6.8	6.2	6.3
15	Maharashtra	6.8	7.1	6.6	6.5	6.4	6.2	7.0	7.1
16	Manipur	2.9	2.4	2.9	2.9	2.8	2.8	3.1	3.8
17	Meghalaya	3.5	3.9	4.1	4.0	4.2	4.3	4.9	5.4
18	Mizoram	2.5	2.7	2.2	2.0	2.4	2.6	2.9	3.7
19	Nagaland	2.5	2.4	2.0	2.1	2.2	2.4	2.6	3.1
20	Odisha	5.8	5.7	5.7	6.3	6.9	5.8	6.3	6.2
21	Punjab	7.1	7.6	7.2	7.2	6.8	6.5	6.5	6.0
22	Rajasthan	5.8	6.2	6.1	6.3	6.3	5.8	6.1	6.1
23	Sikkim	2.6	3.5	3.8	3.4	3.1	3.2	2.7	3.1
24	Tamil Nadu	7.9	8.3	7.6	7.3	6.8	6.6	6.4	6.5
25	Telangana	NA	NA	NA	NA	6.9	7.4	7.5	7.5
26	Tripura	4.5	4.6	4.2	4.0	3.7	3.6	3.3	3.5
27	Uttar Pradesh	7.3	7.1	7.1	7.3	7.1	6.7	6.7	7.2
28	Uttarakhand	4.9	4.9	4.9	5.2	5.3	5.6	4.6	5.0
29	West Bengal	4.8	5.5	5.3	5.5	5.3	5.2	5.4	5.6
	All States	**6.8**	**7.0**	**6.7**	**6.7**	**6.5**	**6.2**	**6.2**	**6.3**
	Genl. States	**6.9**	**7.1**	**6.8**	**6.8**	**6.6**	**6.3**	**6.3**	**6.4**
	NE & HS	**5.0**	**5.1**	**5.0**	**4.9**	**4.9**	**5.0**	**4.8**	**5.0**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.5: Non-Tax Revenue as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	1.6	2.0	1.7	1.7	0.8	0.8	0.5	0.5
2	Arunachal Pradesh	3.3	2.3	2.8	2.5	2.1	2.7	1.6	2.5
3	Assam	2.0	1.6	1.5	1.2	1.2	1.7	1.4	2.6
4	Bihar	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8
5	Chhattisgarh	2.6	2.6	2.5	2.2	2.3	2.3	2.3	2.5
6	Goa	5.5	4.8	4.6	4.9	4.4	4.3	4.4	3.9
7	Gujarat	0.9	0.8	0.9	1.0	1.0	1.1	1.1	0.9
8	Haryana	1.6	1.3	1.2	1.1	1.0	1.1	1.4	1.1
9	Himachal Pradesh	2.6	1.7	1.9	2.0	1.6	1.4	1.7	1.8
10	Jammu & Kashmir	2.6	2.5	3.0	2.0	3.3	3.3	3.1	2.8
11	Jharkhand	2.0	2.0	2.0	2.0	2.8	2.3	2.9	2.8
12	Karnataka	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.4
13	Kerala	0.7	1.0	1.2	1.4	1.5	1.5	1.6	1.5
14	Madhya Pradesh	2.4	1.8	1.8	2.2	1.6	1.4	1.3	1.6
15	Maharashtra	0.6	0.7	0.7	0.7	0.7	0.6	0.7	0.6
16	Manipur	2.4	1.7	1.6	1.0	0.8	0.8	0.7	0.6
17	Meghalaya	1.8	2.2	2.6	1.5	0.9	2.5	1.2	1.3
18	Mizoram	2.3	2.5	1.9	1.8	2.0	2.1	2.1	2.3
19	Nagaland	1.9	1.5	1.3	1.5	1.3	1.6	1.6	0.9
20	Odisha	2.8	3.1	2.8	2.6	2.7	2.0	1.9	2.9
21	Punjab	0.5	0.9	1.0	0.8	0.7	1.4	0.9	1.4
22	Rajasthan	2.1	2.5	2.5	2.1	1.6	1.5	1.9	2.0
23	Sikkim	9.4	6.5	5.7	4.5	2.3	2.2	2.5	2.3
24	Tamil Nadu	0.8	0.8	1.0	0.8	0.8	0.8	0.7	0.9
25	Telangana	NA	NA	NA	NA	2.5	1.5	1.0	1.2
26	Tripura	1.1	0.8	1.0	0.7	0.7	0.6	1.1	0.7
27	Uttar Pradesh	1.4	1.6	1.7	2.0	2.0	2.2	1.4	1.8
28	Uttarakhand	1.0	1.2	0.9	0.7	0.7	0.7	0.8	1.3
29	West Bengal	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3
	All States	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**	**1.1**	**1.2**
	Genl. States	**1.1**	**1.2**	**1.2**	**1.2**	**1.2**	**1.1**	**1.1**	**1.1**
	NE & HS	**2.1**	**1.8**	**1.8**	**1.4**	**1.5**	**1.6**	**1.6**	**2.0**

Note: In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.

Annex-FI.6: Central Transfers as % of Total Revenue Receipts

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	30.5	26.9	28.1	37.0	49.4	50.1	49.3	45.6
2	Arunachal Pradesh	87.7	89.6	85.6	89.9	91.2	89.4	91.4	89.6
3	Assam	61.7	65.1	63.7	68.9	69.7	66.6	68.1	62.0
4	Bihar	73.7	70.8	68.8	71.6	71.3	75.2	77.3	74.6
5	Chhattisgarh	42.9	40.3	39.3	45.7	51.6	54.2	56.0	55.2
6	Goa	15.8	18.4	18.7	19.1	25.1	27.1	29.8	32.3
7	Gujarat	21.3	20.4	20.7	22.9	25.3	29.2	29.7	31.2
8	Haryana	17.8	16.1	19.7	21.0	25.0	23.4	19.9	23.3
9	Himachal Pradesh	58.6	61.5	56.0	55.0	63.6	66.7	65.4	66.4
10	Jammu & Kashmir	72.8	69.5	66.3	71.3	68.6	71.7	71.3	72.3
11	Jharkhand	55.4	52.5	49.8	53.5	57.4	60.4	61.7	59.0
12	Karnataka	27.6	26.2	25.6	28.1	31.9	33.4	36.3	37.2
13	Kerala	25.5	22.3	23.6	26.6	31.3	31.4	30.5	32.8
14	Madhya Pradesh	45.0	46.6	45.5	47.0	53.8	56.8	60.1	57.3
15	Maharashtra	21.0	20.6	19.9	22.8	24.3	27.0	24.2	27.1
16	Manipur	88.0	91.7	89.9	91.2	91.5	91.8	90.7	88.5
17	Meghalaya	77.1	75.9	75.3	80.0	81.7	79.1	80.4	77.1
18	Mizoram	90.9	90.4	91.1	90.8	90.2	89.1	89.1	87.0
19	Nagaland	90.4	91.2	91.5	91.4	91.5	90.9	90.7	90.4
20	Odisha	50.6	47.4	48.4	51.1	54.7	58.4	57.4	55.2
21	Punjab	22.9	21.3	22.3	27.1	29.3	30.0	34.5	37.1
22	Rajasthan	39.4	36.3	36.8	43.2	46.5	48.6	47.9	44.9
23	Sikkim	63.6	67.2	69.5	72.5	74.1	76.0	74.2	73.8
24	Tamil Nadu	23.5	21.3	23.1	28.9	30.7	31.6	28.6	31.1
25	Telangana	NA	NA	NA	NA	28.6	29.7	27.6	26.4
26	Tripura	83.4	83.2	82.7	85.2	83.1	83.0	81.0	82.2
27	Uttar Pradesh	52.0	51.3	50.6	51.3	54.1	55.3	58.0	54.5
28	Uttarakhand	50.7	49.1	49.9	53.3	50.1	50.8	56.0	50.4
29	West Bengal	55.3	49.2	48.1	52.6	59.6	58.9	57.5	55.9
	All States	**40.2**	**38.4**	**38.3**	**42.0**	**45.4**	**47.1**	**47.2**	**46.4**
	Genl. States	**36.8**	**34.8**	**35.0**	**38.8**	**42.6**	**44.4**	**44.4**	**43.8**
	NE & HS	**69.1**	**69.8**	**68.0**	**71.5**	**71.7**	**71.7**	**72.6**	**70.1**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.7: Total Revenue Receipts as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	12.7	12.8	12.1	13.7	14.7	14.5	13.2	13.3
2	Arunachal Pradesh	49.7	45.9	39.9	50.9	57.0	59.4	61.4	65.8
3	Assam	19.2	19.6	18.1	19.5	18.6	19.3	19.1	20.1
4	Bihar	20.8	21.1	21.7	22.9	25.9	25.1	25.1	24.8
5	Chhattisgarh	16.4	16.7	15.5	17.2	20.5	21.4	21.8	21.4
6	Goa	13.6	15.3	18.0	16.1	15.5	15.2	15.9	15.6
7	Gujarat	10.2	10.4	9.9	10.0	9.5	9.4	9.3	9.0
8	Haryana	10.3	9.7	9.5	9.3	9.6	9.3	9.7	9.0
9	Himachal Pradesh	20.0	18.8	16.6	17.2	20.5	20.9	19.8	20.1
10	Jammu & Kashmir	31.7	30.1	28.4	29.4	30.5	33.6	34.8	32.8
11	Jharkhand	14.9	14.2	13.9	14.4	19.7	19.9	19.6	18.9
12	Karnataka	11.5	11.2	11.0	11.4	11.4	11.0	10.8	10.7
13	Kerala	10.4	10.7	10.6	11.3	12.3	11.9	11.8	11.9
14	Madhya Pradesh	19.8	18.5	17.2	18.5	19.5	19.0	18.6	18.6
15	Maharashtra	9.5	9.8	9.1	9.3	9.4	9.3	10.2	10.6
16	Manipur	43.8	49.6	45.0	44.1	42.4	42.9	40.2	37.9
17	Meghalaya	23.4	25.3	27.3	27.7	28.0	32.6	31.4	29.0
18	Mizoram	52.7	54.3	46.3	40.8	44.1	43.0	45.8	46.3
19	Nagaland	45.9	43.9	39.1	41.6	41.2	43.5	45.0	41.9
20	Odisha	17.4	16.8	16.5	18.1	21.0	18.9	19.3	20.2
21	Punjab	9.8	10.8	10.6	11.0	10.6	11.2	11.3	11.8
22	Rajasthan	13.1	13.6	13.5	14.8	14.7	14.3	15.2	14.6
23	Sikkim	32.9	30.7	31.2	29.0	21.0	22.3	20.1	20.6
24	Tamil Nadu	11.3	11.6	11.2	11.4	11.0	10.8	10.0	10.7
25	Telangana	NA	NA	NA	NA	13.2	12.6	11.8	11.8
26	Tripura	33.7	32.5	29.9	31.3	26.2	24.4	23.0	24.1
27	Uttar Pradesh	18.1	17.7	17.9	19.1	20.0	19.9	19.1	19.8
28	Uttarakhand	11.9	12.0	11.6	12.5	12.0	12.8	12.2	12.7
29	West Bengal	11.3	11.5	10.8	12.0	13.8	13.5	13.5	13.4
	All States	13.3	13.3	12.9	13.6	14.1	14.0	13.9	14.0
	Genl. States	12.7	12.7	12.3	13.1	13.6	13.4	13.3	13.4
	NE & HS	23.0	22.7	21.2	22.4	22.4	23.4	23.1	23.3

Note: In respect of Andhra Pradesh, the data up to 2014-15 is for the undivided State.

Annex-FI.8: Revenue Expenditure: General Services as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	4.0	4.0	4.0	4.1	4.7	4.8	4.9	4.7
2	Arunachal Pradesh	10.5	10.4	11.2	10.6	12.7	12.8	14.4	14.4
3	Assam	6.6	6.6	6.0	6.4	5.5	6.6	7.7	6.6
4	Bihar	7.1	6.5	6.8	7.6	7.4	7.2	7.0	7.2
5	Chhattisgarh	3.6	3.6	3.7	4.0	4.5	4.5	4.6	4.9
6	Goa	3.7	4.7	5.6	4.8	4.5	4.4	4.9	5.0
7	Gujarat	3.5	3.3	3.3	3.2	3.2	3.0	3.1	3.1
8	Haryana	3.4	3.4	3.4	3.8	3.7	3.8	4.1	3.8
9	Himachal Pradesh	7.5	7.8	7.2	7.1	7.5	7.5	7.7	7.3
10	Jammu & Kashmir	12.0	11.7	11.4	11.9	11.3	11.7	11.8	14.2
11	Jharkhand	5.1	4.9	5.2	4.8	5.8	5.5	6.1	5.9
12	Karnataka	2.6	2.8	3.0	3.0	2.9	2.5	2.5	2.7
13	Kerala	5.5	5.5	5.7	6.1	6.4	6.5	6.5	6.5
14	Madhya Pradesh	5.0	4.6	4.6	4.6	4.7	4.2	4.4	4.6
15	Maharashtra	3.3	3.2	3.2	3.3	3.2	3.2	3.3	3.2
16	Manipur	16.2	16.3	14.9	15.0	14.9	15.9	14.0	14.2
17	Meghalaya	6.8	6.6	7.4	8.0	8.4	8.4	9.0	9.9
18	Mizoram	16.4	16.4	15.9	12.5	12.4	11.9	11.7	13.5
19	Nagaland	18.4	17.5	15.9	16.5	17.9	17.3	17.0	17.8
20	Odisha	4.5	4.5	4.4	4.4	4.3	4.0	4.4	4.7
21	Punjab	6.2	6.1	6.0	6.4	6.2	6.6	7.2	6.9
22	Rajasthan	4.3	4.1	4.2	4.5	4.5	5.1	5.2	5.8
23	Sikkim	13.8	11.0	10.3	10.2	6.8	6.7	5.8	6.7
24	Tamil Nadu	3.8	3.7	3.7	3.9	3.8	3.9	4.1	4.4
25	Telangana	NA	NA	NA	NA	4.0	3.8	4.1	4.0
26	Tripura	10.2	9.9	8.9	8.9	8.2	8.4	9.6	9.8
27	Uttar Pradesh	7.2	7.2	6.5	6.3	6.3	6.8	7.1	7.8
28	Uttarakhand	3.7	3.9	3.9	4.4	4.5	4.9	5.4	5.3
29	West Bengal	6.1	5.9	6.0	5.9	5.7	5.7	5.3	5.2
	All States	**4.7**	**4.6**	**4.5**	**4.6**	**4.6**	**4.7**	**4.8**	**4.9**
	Genl. States	**4.5**	**4.4**	**4.3**	**4.4**	**4.4**	**4.4**	**4.6**	**4.7**
	NE & HS	**8.0**	**7.9**	**7.5**	**7.8**	**7.5**	**8.0**	**8.5**	**8.5**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.9: Revenue Expenditure: Social Services as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	5.2	5.2	4.9	6.0	7.7	7.4	7.5	7.5
2	Arunachal Pradesh	13.7	13.0	13.2	14.0	14.8	16.5	18.8	19.3
3	Assam	8.2	8.2	8.5	9.4	7.8	9.0	7.6	8.1
4	Bihar	7.7	8.3	8.4	9.4	9.8	9.8	9.9	11.1
5	Chhattisgarh	6.8	6.6	7.0	7.1	7.4	8.6	9.0	7.9
6	Goa	4.8	6.0	7.6	6.1	5.9	5.5	6.2	5.9
7	Gujarat	4.0	4.1	4.0	4.0	4.1	3.9	3.7	3.6
8	Haryana	4.3	4.3	3.9	4.4	4.4	4.6	4.3	4.1
9	Himachal Pradesh	7.4	7.6	7.4	7.4	7.2	7.9	7.7	7.6
10	Jammu & Kashmir	8.5	8.4	8.7	9.0	10.0	9.7	9.8	12.0
11	Jharkhand	4.9	4.8	4.4	5.5	7.2	7.9	7.3	6.4
12	Karnataka	4.2	4.5	4.1	4.4	4.5	4.6	4.4	4.5
13	Kerala	4.5	4.6	4.5	4.7	4.9	5.3	5.1	4.9
14	Madhya Pradesh	6.5	6.5	6.4	6.8	8.0	7.4	8.1	7.3
15	Maharashtra	4.3	4.3	4.4	4.4	4.2	4.2	4.0	4.2
16	Manipur	11.4	11.4	10.1	11.4	10.3	9.8	10.2	9.7
17	Meghalaya	9.4	8.6	9.2	10.9	10.2	11.9	11.3	12.9
18	Mizoram	19.1	20.3	18.2	16.5	14.9	13.7	14.2	15.3
19	Nagaland	10.1	10.9	10.8	10.6	11.4	11.2	11.1	12.2
20	Odisha	6.5	6.0	6.6	6.9	7.8	7.3	6.9	7.6
21	Punjab	3.6	3.9	3.5	4.0	3.9	3.8	3.4	3.5
22	Rajasthan	5.1	5.1	5.7	6.1	6.4	6.5	6.4	7.0
23	Sikkim	9.4	7.9	9.5	8.5	7.0	6.6	6.0	7.3
24	Tamil Nadu	4.5	4.6	4.7	4.7	4.7	4.3	4.1	4.3
25	Telangana	NA	NA	NA	NA	5.3	5.4	5.0	4.6
26	Tripura	10.4	9.6	9.7	11.0	9.5	9.8	10.2	10.5
27	Uttar Pradesh	6.7	6.6	6.5	6.1	7.3	7.2	5.9	5.5
28	Uttarakhand	5.4	4.9	5.1	5.9	5.8	5.6	5.1	5.2
29	West Bengal	6.2	5.9	5.7	5.7	6.0	6.6	6.2	6.4
	All States	**5.3**	**5.3**	**5.3**	**5.5**	**5.8**	**5.8**	**5.5**	**5.5**
	Genl. States	**5.1**	**5.1**	**5.1**	**5.3**	**5.6**	**5.6**	**5.3**	**5.4**
	NE & HS	**8.1**	**7.9**	**8.0**	**8.7**	**8.2**	**8.6**	**8.1**	**8.7**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.10: Revenue Expenditure: Economic Services as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	3.0	3.4	3.1	6.0	3.4	4.8	2.9	2.7
2	Arunachal Pradesh	15.8	14.8	15.0	15.2	17.8	18.0	15.4	16.8
3	Assam	3.3	3.3	3.3	3.6	2.7	3.5	4.2	3.2
4	Bihar	4.1	4.5	4.4	4.2	5.3	5.6	5.0	5.3
5	Chhattisgarh	3.5	4.5	4.7	6.4	7.1	5.7	6.4	8.1
6	Goa	4.5	5.2	5.8	4.7	4.9	4.2	4.1	4.2
7	Gujarat	2.2	2.2	1.9	2.1	2.0	1.9	2.0	2.1
8	Haryana	3.0	3.3	3.2	3.0	3.8	3.7	2.8	2.6
9	Himachal Pradesh	4.2	4.1	3.8	4.6	4.8	4.8	4.1	4.2
10	Jammu & Kashmir	8.5	8.7	8.1	8.9	9.7	10.5	7.8	9.8
11	Jharkhand	3.9	3.7	2.8	4.2	4.7	5.7	5.5	4.8
12	Karnataka	3.2	3.1	3.3	3.3	3.2	3.3	3.2	3.1
13	Kerala	1.7	1.9	1.7	2.0	2.0	1.7	1.6	1.6
14	Madhya Pradesh	4.1	4.4	3.9	4.9	4.7	5.7	4.5	4.7
15	Maharashtra	1.9	1.9	1.7	2.1	1.9	2.0	2.3	2.0
16	Manipur	9.7	9.6	8.3	11.1	10.8	11.0	9.7	9.1
17	Meghalaya	8.1	7.7	7.6	8.0	6.8	10.0	8.3	7.8
18	Mizoram	15.4	17.2	13.7	12.9	9.5	10.7	10.9	9.6
19	Nagaland	11.5	11.3	7.9	9.6	9.6	11.3	13.5	10.1
20	Odisha	3.8	3.9	4.2	4.7	5.5	5.0	4.7	4.8
21	Punjab	2.3	3.1	2.9	2.6	2.5	2.4	2.4	3.4
22	Rajasthan	2.9	3.5	3.7	4.7	4.7	5.1	5.9	5.0
23	Sikkim	5.5	5.3	4.9	5.3	6.2	4.7	4.0	3.9
24	Tamil Nadu	1.9	2.1	2.0	2.5	2.5	2.6	2.5	2.4
25	Telangana	NA	NA	NA	NA	3.8	3.2	2.3	2.7
26	Tripura	3.9	4.1	4.1	4.7	3.7	3.7	3.4	3.1
27	Uttar Pradesh	2.5	2.6	2.7	3.4	4.2	3.6	4.4	4.0
28	Uttarakhand	1.8	1.5	1.4	2.4	2.2	2.0	1.9	2.0
29	West Bengal	1.7	2.0	1.8	2.8	3.1	3.0	2.9	2.8
	All States	**2.7**	**2.9**	**2.8**	**3.5**	**3.4**	**3.4**	**3.3**	**3.3**
	Genl. States	**2.6**	**2.8**	**2.7**	**3.4**	**3.3**	**3.3**	**3.2**	**3.1**
	NE & HS	**5.0**	**4.9**	**4.5**	**5.3**	**5.1**	**5.5**	**5.0**	**5.0**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.11: Capital Expenditure as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	2.5	2.3	2.1	2.2	2.5	2.3	2.1	2.5
2	Arunachal Pradesh	18.8	9.6	11.6	8.3	10.8	7.8	14.2	23.4
3	Assam	1.8	2.0	2.3	2.3	1.3	2.4	2.8	3.6
4	Bihar	4.4	4.1	4.7	5.4	6.6	6.5	6.2	4.2
5	Chhattisgarh	3.4	3.8	2.8	3.0	3.6	3.9	3.8	3.0
6	Goa	2.8	2.5	2.8	2.6	3.0	2.6	3.1	3.0
7	Gujarat	2.3	3.1	2.9	2.7	2.4	2.0	2.0	2.0
8	Haryana	2.0	1.8	1.2	1.0	4.1	2.0	2.3	2.2
9	Himachal Pradesh	3.2	2.9	2.5	2.8	2.9	5.4	3.1	3.3
10	Jammu & Kashmir	7.6	6.1	4.8	5.3	6.3	6.7	7.5	5.4
11	Jharkhand	2.2	2.8	2.6	2.9	7.6	5.2	5.1	4.1
12	Karnataka	2.9	2.4	2.2	2.2	2.0	2.5	2.6	2.5
13	Kerala	1.3	1.4	1.2	1.0	1.5	1.8	1.5	1.2
14	Madhya Pradesh	7.9	4.4	3.6	5.1	3.7	5.0	4.5	3.8
15	Maharashtra	1.5	1.3	1.3	1.2	1.2	1.4	1.2	1.4
16	Manipur	13.1	10.9	8.0	7.4	6.3	7.0	5.6	6.2
17	Meghalaya	4.6	4.4	4.9	5.1	5.1	4.8	3.4	4.5
18	Mizoram	8.7	7.6	6.1	6.9	4.7	5.5	10.9	9.8
19	Nagaland	10.3	8.9	7.3	5.6	5.4	5.0	5.2	5.9
20	Odisha	2.2	2.2	2.8	3.6	5.3	4.8	5.2	5.0
21	Punjab	0.7	0.7	0.7	1.0	2.3	10.7	0.7	0.7
22	Rajasthan	1.9	2.7	2.6	2.7	8.6	3.9	2.6	2.2
23	Sikkim	6.0	6.9	6.7	6.5	3.7	3.6	5.9	4.7
24	Tamil Nadu	2.9	2.3	2.0	2.1	1.8	3.6	1.8	1.9
25	Telangana	0.0	0.0	0.0	0.0	3.3	5.6	4.0	3.6
26	Tripura	7.3	6.9	6.5	9.6	8.9	8.4	4.1	3.0
27	Uttar Pradesh	3.1	3.0	3.7	5.5	6.5	5.9	2.8	4.1
28	Uttarakhand	2.2	2.9	2.7	3.2	2.4	2.6	2.7	2.6
29	West Bengal	0.6	0.9	1.1	1.4	1.7	1.4	2.0	2.3
	All States	**2.5**	**2.4**	**2.3**	**2.6**	**3.3**	**3.5**	**2.6**	**2.6**
	Genl. States	**2.4**	**2.3**	**2.2**	**2.5**	**3.2**	**3.4**	**2.5**	**2.5**
	NE & HS	**4.4**	**4.0**	**3.7**	**4.0**	**3.6**	**4.2**	**4.2**	**4.3**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.12: Total Expenditure (Revenue and Capital) as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	14.8	15.0	14.1	18.2	18.4	19.3	17.3	17.4
2	Arunachal Pradesh	58.7	47.8	51.0	48.1	56.0	55.2	62.8	73.9
3	Assam	20.3	20.5	20.3	22.3	17.5	21.8	22.4	21.6
4	Bihar	23.2	23.4	24.4	26.6	29.1	29.0	28.1	27.8
5	Chhattisgarh	17.7	19.0	18.7	20.9	23.0	23.1	24.3	24.2
6	Goa	15.8	18.4	21.8	18.1	18.2	16.7	18.3	18.1
7	Gujarat	12.0	12.7	12.2	12.1	11.7	10.9	10.9	10.8
8	Haryana	12.8	12.8	11.7	12.3	16.0	14.2	13.6	12.7
9	Himachal Pradesh	22.3	22.5	20.8	21.9	22.4	25.6	22.6	22.4
10	Jammu & Kashmir	36.6	34.9	33.1	35.1	37.4	38.6	36.8	41.4
11	Jharkhand	16.1	16.2	15.1	17.5	25.3	24.2	24.0	21.1
12	Karnataka	13.6	13.4	13.1	13.5	13.2	13.4	13.1	13.2
13	Kerala	14.0	14.4	14.2	15.0	15.5	16.1	15.7	15.4
14	Madhya Pradesh	24.6	21.0	19.5	22.2	22.1	23.4	22.5	21.3
15	Maharashtra	11.1	10.8	10.7	11.1	10.9	11.1	11.3	11.5
16	Manipur	51.9	49.6	43.3	47.4	44.1	45.5	41.5	41.2
17	Meghalaya	28.8	27.2	29.1	32.0	30.3	35.2	32.0	35.1
18	Mizoram	59.7	61.5	53.9	48.7	41.5	41.7	47.6	48.2
19	Nagaland	50.3	48.6	41.9	42.3	44.3	44.8	46.8	45.9
20	Odisha	17.2	16.8	18.2	19.9	23.2	21.3	21.5	22.3
21	Punjab	13.1	14.0	13.2	14.1	15.2	23.7	13.9	15.0
22	Rajasthan	14.2	15.5	16.3	18.1	24.2	20.6	20.1	19.9
23	Sikkim	34.9	31.3	31.6	30.8	23.9	21.9	21.9	22.9
24	Tamil Nadu	14.1	13.6	13.3	14.1	13.8	15.3	13.3	14.0
25	Telangana	0.0	0.0	0.0	0.0	16.5	18.0	15.4	14.9
26	Tripura	32.4	31.0	29.7	34.8	30.8	30.8	27.8	26.8
27	Uttar Pradesh	20.2	20.1	20.5	22.4	25.2	24.3	21.0	22.2
28	Uttarakhand	13.5	13.5	13.6	16.3	15.5	15.6	15.7	15.7
29	West Bengal	14.7	14.8	14.7	15.9	16.6	16.8	16.5	16.6
	All States	**15.6**	**15.5**	**15.3**	**16.6**	**17.4**	**17.7**	**16.6**	**16.7**
	Genl. States	**14.9**	**14.9**	**14.7**	**16.0**	**17.0**	**17.2**	**16.0**	**16.1**
	NE & HS	**25.6**	**24.9**	**24.0**	**26.1**	**24.6**	**26.5**	**26.0**	**26.7**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.13: Committed Expenditure (Interest, Pension and Salary) as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	6.0	6.0	5.9	6.2	7.4	7.5	7.3	7.1
2	Arunachal Pradesh	21.7	21.6	22.4	20.5	22.0	23.2	26.0	23.5
3	Assam	11.8	12.2	12.4	12.9	11.9	11.3	13.2	12.1
4	Bihar	9.8	9.3	9.1	9.3	9.1	8.7	8.8	8.7
5	Chhattisgarh	6.9	6.0	6.1	6.5	7.2	6.9	7.2	8.6
6	Goa	5.7	7.1	8.4	7.2	6.8	6.5	7.5	7.4
7	Gujarat	3.8	3.6	3.5	3.4	3.3	3.2	3.3	3.3
8	Haryana	5.7	5.7	5.3	5.8	5.7	5.8	5.9	5.6
9	Himachal Pradesh	14.3	14.7	13.4	13.5	13.1	13.4	13.7	13.0
10	Jammu & Kashmir	19.9	19.2	18.9	19.2	19.1	19.1	18.8	23.6
11	Jharkhand	7.2	6.7	6.9	6.3	7.5	7.3	8.1	7.7
12	Karnataka	2.9	3.1	3.1	3.1	3.0	2.7	2.7	2.8
13	Kerala	8.5	8.1	8.1	8.3	8.5	8.7	9.5	8.6
14	Madhya Pradesh	7.2	6.7	6.7	6.8	6.5	5.8	5.9	6.2
15	Maharashtra	3.5	3.4	3.4	3.4	3.3	3.2	3.3	3.2
16	Manipur	25.4	26.5	23.4	22.7	22.4	22.6	21.0	20.7
17	Meghalaya	11.4	10.5	11.4	12.5	12.7	12.4	13.4	14.8
18	Mizoram	27.9	28.5	26.4	21.5	21.1	19.9	19.1	20.9
19	Nagaland	27.0	26.4	24.9	25.7	27.2	25.2	24.9	26.6
20	Odisha	7.0	6.8	6.6	6.9	7.2	6.6	7.1	7.3
21	Punjab	9.1	9.0	8.6	9.1	8.9	8.9	9.5	8.9
22	Rajasthan	6.7	6.6	6.7	7.0	7.1	7.8	8.5	9.7
23	Sikkim	11.1	11.3	11.3	11.7	11.2	10.6	9.0	10.8
24	Tamil Nadu	6.1	5.8	6.0	6.3	6.3	6.4	6.4	6.5
25	Telangana	0.0	0.0	0.0	0.0	5.8	5.6	5.6	5.1
26	Tripura	17.4	16.3	15.4	15.7	15.0	15.0	17.1	17.0
27	Uttar Pradesh	7.5	7.7	7.1	7.3	7.0	7.2	7.7	7.6
28	Uttarakhand	7.1	7.0	7.1	7.5	7.6	8.0	8.8	8.7
29	West Bengal	7.1	6.8	6.5	6.3	6.0	6.0	5.8	5.5
	All States	**6.4**	**6.2**	**6.1**	**6.2**	**6.2**	**6.1**	**6.3**	**6.3**
	Genl. States	**5.9**	**5.7**	**5.6**	**5.7**	**5.7**	**5.7**	**5.9**	**5.8**
	NE & HS	**13.7**	**13.7**	**13.4**	**13.6**	**13.4**	**13.2**	**14.0**	**14.4**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.14: Revenue Deficit(+)/Surplus(–) as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	–0.4	–0.1	0.0	2.3	1.2	2.5	2.0	1.6
2	Arunachal Pradesh	–9.8	–7.8	–0.6	–11.0	–11.8	–12.0	–12.8	–15.3
3	Assam	–0.6	–1.0	–0.1	0.5	–2.4	0.1	0.5	–2.1
4	Bihar	–2.0	–1.8	–2.0	–1.7	–3.4	–2.6	–3.2	–1.3
5	Chhattisgarh	–2.0	–1.5	0.4	0.7	–1.1	–2.2	–1.2	–0.2
6	Goa	–0.7	0.6	1.0	–0.6	–0.2	–1.1	–0.7	–0.5
7	Gujarat	–0.5	–0.8	–0.6	–0.6	–0.2	–0.5	–0.4	–0.2
8	Haryana	0.5	1.3	1.0	1.9	2.4	2.8	1.6	1.5
9	Himachal Pradesh	–0.9	0.7	1.7	1.9	–1.0	–0.7	–0.2	–1.0
10	Jammu & Kashmir	–2.7	–1.3	–0.1	0.4	0.5	–1.7	–5.5	3.1
11	Jharkhand	–0.9	–0.8	–1.4	0.1	–2.0	–0.8	–0.7	–1.9
12	Karnataka	–0.8	–0.3	0.0	–0.1	–0.2	–0.1	–0.3	0.0
13	Kerala	2.2	2.3	2.4	2.7	1.7	2.4	2.4	2.2
14	Madhya Pradesh	–3.1	–2.0	–1.3	–1.3	–1.1	–0.6	–0.6	–1.1
15	Maharashtra	0.2	–0.3	0.3	0.7	0.3	0.4	–0.1	–0.5
16	Manipur	–5.0	–10.9	–9.7	–4.0	–4.6	–4.4	–4.2	–2.9
17	Meghalaya	0.9	–2.5	–3.1	–0.8	–2.8	–2.2	–2.9	1.6
18	Mizoram	–1.8	–0.3	1.5	1.0	–7.3	–6.8	–9.1	–7.9
19	Nagaland	–5.8	–4.3	–4.5	–4.8	–2.4	–3.6	–3.4	–1.9
20	Odisha	–2.4	–2.2	–1.1	–1.9	–3.1	–2.4	–3.0	–2.9
21	Punjab	2.6	2.5	2.0	2.1	2.2	1.7	2.0	2.5
22	Rajasthan	–0.8	–0.7	0.2	0.5	0.9	2.4	2.2	3.1
23	Sikkim	–4.0	–6.3	–6.3	–4.7	–0.8	–4.0	–4.1	–2.4
24	Tamil Nadu	–0.2	–0.2	0.2	0.6	1.0	1.0	1.5	1.4
25	Telangana	NA	NA	NA	NA	0.0	–0.2	–0.5	–0.5
26	Tripura	–8.7	–8.5	–6.6	–6.1	–4.3	–2.0	0.7	–0.3
27	Uttar Pradesh	–1.0	–0.6	–1.1	–2.2	–1.3	–1.6	–0.9	–1.7
28	Uttarakhand	–0.6	–1.4	–0.7	0.6	1.0	0.2	0.9	0.4
29	West Bengal	2.8	2.3	2.8	2.4	1.1	1.8	1.0	1.0
	All States	**–0.3**	**–0.2**	**0.1**	**0.4**	**0.0**	**0.3**	**0.1**	**0.1**
	Genl. States	**–0.2**	**–0.1**	**0.2**	**0.4**	**0.1**	**0.4**	**0.2**	**0.2**
	NE & HS	**–1.8**	**–1.8**	**–0.8**	**–0.3**	**–1.4**	**–1.2**	**–1.3**	**–0.8**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.15: Fiscal Deficit(+)/Surplus(–) as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	2.1	2.2	2.0	4.0	3.7	4.5	4.1	4.1
2	Arunachal Pradesh	9.0	1.8	11.0	–2.9	–1.0	–4.2	1.4	8.0
3	Assam	1.1	1.0	2.1	2.8	–1.3	2.4	3.3	1.5
4	Bihar	2.4	2.3	2.6	3.3	3.2	3.9	3.1	2.6
5	Chhattisgarh	0.5	1.5	2.4	3.6	2.4	1.6	2.5	2.7
6	Goa	2.1	3.0	3.8	2.0	2.7	1.5	2.3	2.5
7	Gujarat	1.8	2.3	2.3	2.0	2.2	1.4	1.6	1.8
8	Haryana	2.4	3.0	2.1	2.9	6.4	4.7	2.9	3.0
9	Himachal Pradesh	2.2	3.6	4.2	4.0	1.9	4.6	2.8	2.3
10	Jammu & Kashmir	4.7	4.8	4.8	5.7	6.9	4.9	2.0	8.6
11	Jharkhand	1.3	1.9	1.2	3.0	5.6	4.3	4.4	2.2
12	Karnataka	2.0	2.1	2.1	2.1	1.8	2.4	2.3	2.5
13	Kerala	3.5	3.6	3.6	3.6	3.2	4.2	3.8	3.4
14	Madhya Pradesh	1.8	2.5	2.2	2.4	2.6	4.3	3.1	2.7
15	Maharashtra	1.6	0.9	1.6	1.8	1.4	1.8	1.0	0.9
16	Manipur	8.1	0.0	–1.7	3.3	1.7	2.6	1.3	3.3
17	Meghalaya	5.3	1.8	1.7	4.2	2.2	2.5	0.5	6.1
18	Mizoram	6.6	6.9	7.3	7.7	–2.7	–1.5	1.7	1.8
19	Nagaland	4.4	4.6	2.8	0.7	3.1	1.3	1.8	4.0
20	Odisha	–0.3	0.0	1.6	1.7	2.1	2.4	2.1	2.1
21	Punjab	3.2	3.1	2.6	3.1	4.5	12.4	2.7	3.1
22	Rajasthan	0.8	1.7	2.8	3.1	9.3	6.1	3.0	3.7
23	Sikkim	1.6	0.5	0.4	1.8	2.9	–0.4	1.8	2.2
24	Tamil Nadu	2.3	1.9	2.1	2.5	2.8	4.3	2.7	2.9
25	Telangana	0.0	0.0	0.0	0.0	3.3	5.4	3.5	3.1
26	Tripura	–1.3	–1.6	–0.2	3.6	4.6	6.4	4.7	2.7
27	Uttar Pradesh	2.1	2.3	2.5	3.2	5.1	4.3	1.9	2.1
28	Uttarakhand	1.5	1.2	1.8	3.6	3.5	2.8	3.6	3.0
29	West Bengal	3.4	3.2	3.7	3.8	2.6	2.9	3.0	3.1
	All States	**2.0**	**2.1**	**2.3**	**2.8**	**3.2**	**3.6**	**2.5**	**2.5**
	Genl. States	**2.0**	**2.1**	**2.3**	**2.8**	**3.3**	**3.7**	**2.5**	**2.5**
	NE & HS	**2.5**	**2.1**	**2.8**	**3.5**	**2.1**	**3.1**	**2.9**	**3.4**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.16: Outstanding Debt as % of GSDP

SN	*Name of the State*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*	*2017–18*	*2018–19*
1	Andhra Pradesh	20.4	20.8	20.7	22.2	28.0	28.5	26.6	29.8
2	Arunachal Pradesh	36.5	35.4	33.8	34.1	31.8	28.3	32.1	34.9
3	Assam	22.0	19.5	17.9	18.1	17.1	17.3	17.4	18.8
4	Bihar	27.4	27.1	27.4	28.9	31.4	32.9	33.4	31.9
5	Chhattisgarh	10.8	10.9	12.0	14.0	16.8	17.6	19.3	22.0
6	Goa	22.6	29.5	35.3	29.0	28.3	26.7	26.8	27.9
7	Gujarat	24.5	23.0	22.7	21.9	21.5	20.8	19.3	19.0
8	Haryana	18.3	18.7	19.1	20.2	24.4	26.1	25.3	25.1
9	Himachal Pradesh	38.8	36.8	35.8	36.8	36.1	37.6	36.9	35.3
10	Jammu & Kashmir	46.3	46.2	46.7	49.1	47.2	49.8	49.0	50.7
11	Jharkhand	20.3	20.0	19.9	19.9	27.4	28.3	28.6	28.2
12	Karnataka	17.0	16.8	16.6	17.3	16.8	17.5	17.2	17.5
13	Kerala	25.6	26.3	26.7	27.7	28.6	29.9	30.6	30.9
14	Madhya Pradesh	25.9	23.6	22.0	22.6	23.5	23.7	23.8	23.9
15	Maharashtra	19.2	18.4	17.8	18.0	17.9	18.0	18.1	16.6
16	Manipur	49.4	49.5	43.6	40.6	41.6	41.4	37.1	37.5
17	Meghalaya	25.6	22.7	27.3	29.1	28.5	32.7	32.1	31.7
18	Mizoram	62.7	61.2	54.5	48.5	42.3	39.1	39.0	37.5
19	Nagaland	55.5	52.8	50.3	43.2	45.7	44.0	42.5	42.7
20	Odisha	18.4	16.6	15.1	16.1	18.2	18.2	22.1	22.0
21	Punjab	31.2	31.0	30.8	31.6	33.0	42.7	41.4	40.3
22	Rajasthan	24.5	23.9	23.6	24.0	30.7	33.5	33.7	33.0
23	Sikkim	22.9	22.4	22.1	22.6	22.0	22.6	21.0	22.1
24	Tamil Nadu	16.9	17.2	17.2	17.9	19.0	21.8	22.3	22.6
25	Telangana	NA	NA	NA	NA	17.0	20.5	22.0	22.9
26	Tripura	35.7	35.4	34.0	31.6	27.5	28.5	29.5	29.7
27	Uttar Pradesh	33.6	31.6	30.0	30.4	32.3	32.8	32.0	31.1
28	Uttarakhand	20.5	19.4	19.3	20.7	22.1	22.8	23.3	23.6
29	West Bengal	39.9	38.8	37.2	38.7	38.4	38.7	37.0	36.1
	All States	**23.9**	**23.2**	**22.7**	**23.3**	**24.4**	**25.6**	**25.4**	**25.3**
	Genl. States	**23.4**	**22.8**	**22.4**	**23.0**	**24.2**	**25.3**	**25.2**	**25.0**
	NE & HS	**31.0**	**29.5**	**28.7**	**29.2**	**28.5**	**29.2**	**29.0**	**29.6**

Note: In respect of Andhra Pradesh, the data up to 2014–15 is for the undivided State.

Annex-FI.17: Expenditure on Health Sector (Revenue + Capital) : 2018–19

SN	*Name of the State*	*Expenditure on Health Sector as % to Total Expenditure*	*Per Capita Health Expenditure (Rs)*
1	Andhra Pradesh	4.9	1441
2	Arunachal Pradesh	6.1	6937
3	Assam	6.8	1360
4	Bihar	5.0	616
5	Chhattisgarh	5.1	1303
6	Goa	7.2	6207
7	Gujarat	6.1	1478
8	Haryana	4.3	1422
9	Himachal Pradesh	6.5	3074
10	Jammu & Kashmir	6.9	3145
11	Jharkhand	5.4	913
12	Karnataka	4.7	1429
13	Kerala	5.9	2048
14	Madhya Pradesh	4.5	947
15	Maharashtra	4.3	1069
16	Manipur	5.3	1813
17	Meghalaya	9.1	3055
18	Mizoram	6.2	4907
19	Nagaland	5.0	2968
20	Odisha	5.2	1308
21	Punjab	4.1	1059
22	Rajasthan	6.3	1552
23	Sikkim	6.2	6165
24	Tamil Nadu	5.5	1653
25	Telangana	4.2	1405
26	Tripura	7.0	2340
27	Uttar Pradesh	4.9	807
28	Uttarakhand	5.4	1878
29	West Bengal	5.3	983
	All States	**5.2**	**1218**
	Genl. States	**5.0**	**1148**
	NE & HS	**6.5**	**2256**

Annex-FI.18: Indicative Debt Path of State Governments as % of GSDP

State	*2020–21*	*2021–22*	*2022–23*	*2023–24*	*2024–25*	*2025–26*
Andhra Pradesh	35.0	34.1	34.0	33.4	32.7	32.1
Arunachal Pradesh	40.0	38.4	38.0	36.9	35.8	34.8
Assam	27.1	27.7	29.1	29.7	30.2	30.4
Bihar	41.2	40.2	40.8	40.4	39.9	39.3
Chhattisgarh	28.1	28.8	30.2	30.8	31.3	31.6
Goa	33.3	32.5	32.5	31.9	31.2	30.6
Gujarat	30.6	30.0	30.9	30.6	30.3	29.8
Haryana	31.9	31.2	31.4	30.9	30.4	29.9
Himachal Pradesh	39.8	38.3	37.8	36.8	35.7	34.7
Jharkhand	37.2	36.7	37.5	37.4	37.1	36.8
Karnataka	26.1	26.1	27.1	27.2	27.2	27.1
Kerala	35.9	34.7	34.5	33.7	32.8	32.0
Madhya Pradesh	31.3	31.7	32.9	33.3	33.6	33.7
Maharashtra	25.7	26.0	27.5	28.1	28.5	28.5
Manipur	42.8	41.5	41.8	41.2	40.4	39.6
Meghalaya	40.5	39.9	40.3	39.8	39.1	38.4
Mizoram	37.0	35.8	35.6	34.8	34.0	33.2
Nagaland	45.2	43.0	42.1	40.6	39.1	37.7
Odisha	29.4	30.0	31.3	31.8	32.2	32.5
Punjab	46.3	45.2	45.4	44.9	44.2	43.4
Rajasthan	41.1	39.9	40.2	39.6	38.9	38.2
Sikkim	27.4	27.5	28.1	28.1	28.0	27.9
Tamil Nadu	28.9	28.7	29.3	29.1	28.9	28.7
Telangana	29.5	29.3	29.7	29.5	29.3	29.0
Tripura	36.3	34.9	35.1	34.5	33.7	32.8
Uttar Pradesh	40.9	40.0	40.5	40.2	39.7	39.1
Uttarakhand	33.2	33.1	33.9	34.0	33.9	33.7
West Bengal	42.9	42.1	42.6	42.2	41.7	41.2
All States	**33.1**	**32.6**	**33.3**	**33.1**	**32.8**	**32.5**

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