



The NCAER State Investment Potential Index

Study supported by
The Foreign and Commonwealth Office,
British High Commission, India



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N-SIPI 2016

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The Foreign and Commonwealth Office,
British High Commission, India

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Revised

National Council of Applied Economic Research
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Foreword

Emerging market economies have been the bulwark of global growth over the last decade. With the recent slowdown in the major emerging markets, including China, Russia, Brazil, and South Africa, India stands out as the one major economy in the world with the highest potential to grow rapidly. In 2016, India is poised to grow at around 7.5 percent and is emerging out of the shadow of its BRICS competitors. In terms of market size, the World Economic Forum's 2015-16 Global Competitiveness Index ranks India third in the world after China and the United States.

These global trends and the focus of the NDA Government on creating a more investment friendly climate are expanding the opportunities for doing business in India. These opportunities all lie in India's states, influenced not just by policies emanating from New Delhi but very much conditioned by what is happening in each state. In 2015, NCAER launched a research initiative to measure each state's investment climate and to track it over time to see how it was changing. This NCAER Report presents the first output of this initiative, the NCAER State Investment Potential Index 2016 (N-SIPI 2016), which uniquely provides a single composite investment rating of how the 29 Indian states and the Union Territory of Delhi are positioned to encourage and attract investment. N-SIPI seeks to bridge the many information gaps surrounding questions of what, how much and where to invest. It provides an entry point in thinking about new investment for domestic and overseas firms and encouraging a more competitive ethos among India's states. N-SIPI is also a response to the policy initiatives of the Union Government on its Make in India and Start-up India campaigns.

That there is need to systematize such information is more than evident from the distance India still needs to cover in improving its investment climate. While it represents a huge market globally, the 2015-16 Global Competitiveness Index also ranks India 55th overall, 80th on basic requirements such as institutions and infrastructure, and 58th on efficiency enhancers such as goods and labor market efficiency and financial market development.

N-SIPI is an evidence-based index that combines published secondary data on key relevant parameters with an extensive industry survey conducted by NCAER across twenty states and the Union Territory of Delhi. N-SIPI uniquely incorporates a perception-based index that uses qualitative responses to questions covering the current business climate, the availability of land, labor and infrastructure, and other hurdles faced by firms in their state. The survey builds on one of NCAER's core strengths of conducting large, national surveys that are rigorously designed and scientifically carried out. The results from the industry survey shed interesting light on the pace of business reforms and government policy at the state level, something that we hope will be of immense value to the leadership of India's states as they move towards improving their investment climate.

This first N-SIPI report also investigates in greater detail three key sectors—automobiles, pharmaceuticals, and retail—that are important drivers of growth and investment at the state level. N-SIPI ranks states on their investment and growth potential in these sectors. Future editions of N-SIPI will focus on different sectors and will aim to provide credible sectoral information to both policy makers and industry.

N-SIPI complements the Government of India's initiative through its Department of Industrial Policy and Promotion (DIPP) to improve India's ranking on the Ease of Doing Business Index of the World Bank. This index is much more procedure- and transactions-driven, while N-SIPI focuses on the policy and structural backdrop that determines the business environment in any state. N-SIPI should therefore complement the work of DIPP with the states on their 98-point action plan for business reforms to improve state performance. We are grateful to DIPP Secretary Mr Amitabh Kant for his leadership in our consultations with his Department officers during the course of this work. We also greatly welcome the enthusiasm shown by Mr Kant's successor, Mr Ramesh Abhishek, in the work at NCAER for N-SIPI, and for Mr Kant's continuing interest in N-SIPI as the new CEO of the NITI Aayog.

I would like to thank the Foreign Commonwealth Office of the British High Commission, New Delhi, for their generous support for this work. I am also grateful to the entire N-SIPI research team at NCAER led by Dr Indira Iyer and comprising Mythili Bhusnurmath, Dr Poonam Munjal, Dr Pallavi Chaudhuri, Asrar Alam, Amit Sharma, Deepshika, Ishita Gambhir, Kanika Bhatnagar, K S Urs, Nishit Mittal and Shashi Singh. Their excitement in doing this work will, I am sure, be matched by the success of N-SIPI in becoming the first of its kind, go-to state investment index that is transparent, realistic and reliable for investors and policymakers. We hope to roll out the N-SIPI every year in the month of March and we look forward to working hard in the coming year to improve the value of N-SIPI 2017 by next March.

N-SIPI 2016 represents a significant new initiative that NCAER is undertaking as part of its 60th Anniversary Year celebrations. It is aimed at helping fulfil the vision of India's founding fathers and their dream of building a Union composed of competitive, inclusive, enlightened and opportunity-creating Indian states.

New Delhi
March 2016

Shekhar Shah
Director-General
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This study was carried out under the guidance of our Research Advisory Committee which comprised of Prof Biswanath Goldar, Institute of Economic Growth; Shri Ashok Jha, former Finance Secretary, Ministry of Finance; Shri Partha Pratim Mitra, Principal Adviser, Ministry of Labour and Employment; Dr K P Krishnan, Additional Secretary, Department of Land Resources, Ministry of Rural Development; and Shri Shailendra Singh, Joint Secretary, Department of Industrial Policy and Promotion. We, at NCAER, wish to extend our sincere gratitude to each of them for their valuable insights and support. Despite their busy schedules, they spared the time to discuss key aspects of the report with the project team and we deeply appreciate their interest and involvement.

This research has also been enriched by the constructive suggestions received from the participants at the Round Table Conference on N-SIPI held on September 15, 2015 at NCAER, New Delhi. We are immensely grateful to all the participants from the central and state governments, the private sector, and academicians for their suggestions at these discussions.

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Abbreviations

2W	Two-wheelers	JNPC	Jawaharlal Nehru Pharma City
3W	Three-wheelers	KwH	Kilo Watt Hour
ASDC	Automotive Skills Development Council	LFPR	Labour Force Participation Rate
ASI	Annual Survey of Industries	LWE	Left-wing Extremism
BDMA	Bulk Drug Manufacturers Association	MHA	Ministry of Home Affairs
BPR&D	Bureau of Policy Research and Development	Min-Max	Minimum-Maximum
CAGR	Compounded Annual Growth Rate	MOSPI	Ministry of Statistics and Programme Implementation
CES	Consumer Expenditure Survey	MPCE	Monthly Per Capita Expenditure
CGHS	Central Government Health Scheme	MPCM	Monthly Per Capita Medical Expenditure
CMIE	Centre for Monitoring Indian Economy	MSME	Micro Small and Medium Enterprises
CNG	Compressed Natural Gas	NATRiP	National Automotive Testing and R&D Infrastructure Project
CSO	Central Statistical Office	NCAER	National Council of Applied Economic Research
CST	Central Sales Tax	NCR	National Capital Region
CV	Commercial Vehicles	NCRB	National Crime Records Bureau
DDA	Delhi Development Authority	NEIIPP	North-East Industrial and Investment Promotion Policy
DFID	The Department for International Development	NIC	National Industrial Classification
DIPP	Department of Investment Promotion and Policy	NIMZ	National Investment Manufacturing Zone
EME	Emerging Market Economy	NSDC	National Skill Development Corporation
ESIS	Employees' State Insurance Scheme	NSE	National Stock Exchange of India Ltd.
ESMA	Essential Services Maintenance Act	N-SIPI	NCAER State Investment Potential Index
EU	Employment and Unemployment	NSS	National Sample Survey
FAME	Faster Adaptation and Manufacturing of Hybrid and Electric Vehicles	NSSO	National Sample Survey Office
FCO	Foreign and Commonwealth Office	PM	Particulate Matter
FDI	Foreign Direct Investment	PPP	Purchasing Power Parity
FICCI	Federation of Indian Chambers of Commerce and Industry	PPP	Public Private Partnership
FPI	Foreign Portfolio Investment	PV	Passenger Vehicles
FY	Fiscal year	R&D	research and Development
GCI	Global Competitiveness Index	RBI	Reserve Bank of India
GDP	Gross Domestic Product	ROA	Return on Assets
GMP	Good Manufacturing Practices	Rs	Rupees
GOI	Government of India	RSBY	Rashtriya Swasthya Bima Yojna
GRDI	Global Retail Development Index	SEZ	Special Economic Zone
GSDP	Gross State Domestic Product	SIAM	Society of Indian Automobile Manufactures
GST	Goods and Services Tax	SLL	Special and Local Laws
GVA	Gross Value Added	TI	Transparency International
Hc	Hectare	TPP	Trans-Pacific Partnership
HDI	Human Development Index	TRIPS	Trade-Related Aspects of Intellectual Property Rights
HH	Household	UK	United Kingdom
HS	Higher Secondary	US\$	United States Dollar
ICT	Information and Communications Technology	USA	United States of America
IMF	International Monetary Fund	USD	United States Dollar
IPC	Indian Penal Code	UT	Union Territory
IPM	Indian Pharmaceutical Market	VAT	Value Added Tax
IPR	Intellectual Property Rights	WGI	Worldwide Governance Indicator
ITES	Information Technology Enabled Services	WHO	World Health Organization
ITI	Industrial Training Institute	WTO	World Trade Organization
J&K	Jammu & Kashmir	Y-O-Y	Year over Year

Executive Summary

To say that India lives in her states is a truism in more ways than one. However, over the years that truism has remained largely on paper. In recent years though, there has been a distinct effort to shift gear from the more centralised approach of the past to a decentralised one that recognises states as equal partners.

This change in tack, symbolized, among others, by the makeover of the Planning Commission to the Niti Aayog and the much higher devolution of taxable resources to the States, following the recommendations of the Fourteenth Finance Commission, combined with the government's ambitious Make in India and Start-up India initiatives has effectively shifted the scene of action to the states.

States are now vying with one other in their effort to make it easier to do business and attract investment. While India is growing as a land of investment opportunities, informational asymmetries quite often drive a wedge between investment decisions and spatial location.

The NCAER's State Investment Potential Index (N-SIPI) is uniquely poised to address these informational asymmetries by providing a single composite investment score that gives a comprehensive measure of how the 29 states and one Union Territory in this Index are positioned to encourage and attract investment. While N-SIPI does not measure streamlining of regulatory procedures and business reforms, it perfectly complements the recent World Bank/Department of Investment Promotion and Policy (DIPP) ranking of states' on how well they performed on a 98-point action plan for business reforms. Both these indices are in response to the present government's focus on increasing investment opportunities at the state level.

N-SIPI is an evidence-based index that is built around five main pillars and 51 sub-indicators identified after several rounds of brain-storming sessions and discussions with industry, academics, central and state government functionaries. The five pillars of N-SIPI include Labour, Infrastructure, Economic Climate,

Political Stability and Governance, and Perceptions of a good business climate.

A unique component of N-SIPI is the exhaustive Industry Survey conducted across 20 states and 1 union territory (Delhi) on which the fifth pillar based on perception is built. As the industry survey covered only 21 states, this study reports two types of rankings. The first is N-SIPI 21 which is the comprehensive ranking based on all five pillars. It is the Main Index, and hence the Index of choice reported for the 21 states covered by the industry surveys. For the remaining 9 states not covered by industry surveys, this report presents ranking under N-SIPI 30. These are rankings based on only the four fundamental pillars driving investment choices.

In 2016, the N-SIPI 21 ranks Gujarat, Delhi and Tamil Nadu as the top three states for medium-term investment decisions. States that have a significant amount of catching up to do include Bihar, Uttar Pradesh and Jharkhand.

At a more disaggregated level, there is significant variation across states. In N-SIPI 21, Kerala, Tamil Nadu and Karnataka top the list under the Labour Pillar. In the Infrastructure Pillar, Delhi tops followed by Punjab and Gujarat. In the Economic Climate Pillar, while Delhi comes out top again, it is closely followed by Andhra Pradesh and Maharashtra. Gujarat is the top state under the two pillars of Political Stability and Governance as well as Perceptions of a good business climate. Following Gujarat in the Political Stability and Governance Pillar are Tamil Nadu and Madhya Pradesh, while in the Perceptions Pillar it is Rajasthan and Chhattisgarh.

The rankings change in N-SIPI 30 which covers all 29 states and 1 Union Territory but does not include the fifth pillar based on industry perceptions. Gujarat now comes second in the modified Index without perceptions and Delhi moves to the top. States like Kerala, West Bengal, Punjab, Tripura and Sikkim feature more prominently in the game, while Jharkhand, Jammu and Kashmir and Arunachal Pradesh have significant catching up to do.

In addition to N-SIPI, which is a broad overall state level Index, NCAER has taken up three sectors for a more detailed study to better capture state-level nuances that could be crucial when it comes to attracting sector-specific investment. To eliminate any subjective bias in the choice of sectors, the automobile sector and the pharmaceutical sector have been selected in this report on the basis of their contribution to the registered manufacturing GVA (Gross Value Added). The retail sector has also been included in view of recent relaxations allowed in foreign direct investment (FDI) in multi-brand retail, its large employment potential, and the freedom of states to frame their own policies and vie with each other to attract investment.

In terms of profitability in the pharmaceutical industry, Maharashtra, Andhra Pradesh (including Telangana), and Gujarat appear to be the top players followed by Karnataka and Uttarakhand. In terms of the market demand for pharmaceutical products, Kerala, Punjab and Karnataka top the list followed by Jammu and Kashmir and Tamil Nadu.

The dominant states in the automobile sector, on the other hand, are Tamil Nadu, Maharashtra, Haryana, Karnataka and Delhi. In the retail sector, Delhi, Goa, and Kerala come out as the top three states with the highest potential for growth, followed closely by Maharashtra and Karnataka.

As the focus of policy reforms slowly but surely shifts to the States of India, NCAER's evidence-based State Index will be useful to both governments for planning and policy choices and to domestic and foreign investors in their investment decisions. NCAER intends to make this an annual exercise and NCAER's N-SIPI, along with the World Bank/DIPP's index on ease of doing business, would provide potential investors, both Indian and foreign, with a go-to Index to guide their investment decisions.

Section 1

Introduction, Methodology and Main Findings

1.1 INTRODUCTION

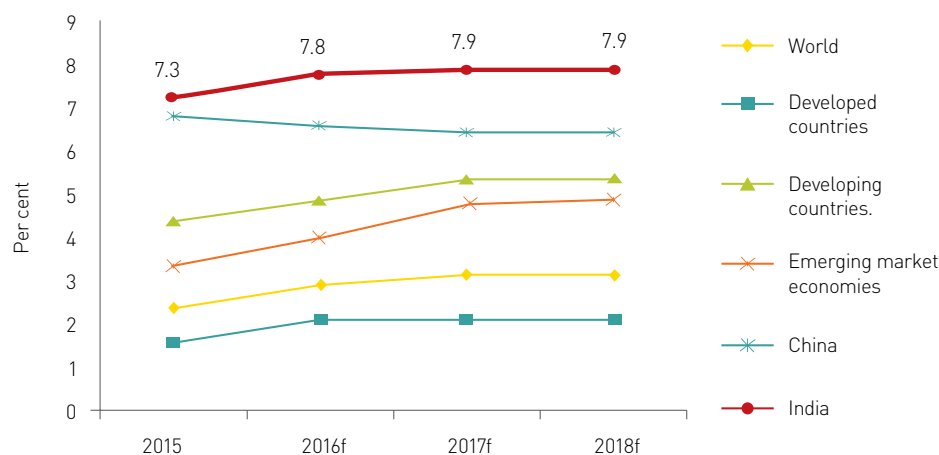
India is poised to grow at an average of 7.8 percent in 2016, faster than all the other emerging market economies, and far ahead of most countries in the developed world which are forecast to grow at around 2 percent (Figure 1.1)¹. India is also becoming more competitive globally. The World Economic Forum's Global Competitiveness Index (GCI)² which ranks 144 countries, had India jumping 16 spots overall from 71st place in 2014 to 55th place in 2015, though in terms of market size³ (one of GCI's twelve pillars) India comes out amongst the top, being the third largest in the world.

Drivers of growth and investment

The Doing Business in India climate cannot get a more opportune moment. While India is growing as a land of investment opportunities, informational asymmetries quite often drive a wedge between investment decisions and spatial location.

The NCAER's State Investment Potential Index (N-SIPI) is uniquely poised to address these informational asymmetries by providing a single composite investment score that gives a comprehensive

Figure 1.1 Global Real GDP Growth



Source: World Bank. Global Economic Prospects. January 2016

India is also at the crossroads of reaping an extremely favorable demographic dividend with the average age of its population being 29 years by 2020⁴. The IMF estimates that, if properly harnessed, the demographic dividend in India could add another 2 percent to real rates of growth in GDP in India. With the present focus on creating an environment for growth and policies to promote Make in India, the opportunities for investment in India are presently among the brightest in the world.

1 The World Bank. January 2016. Global Economic Prospects; The Economist. Dec 30, 2015. "2016's Global Wealth Forecast". The World Bank classifies emerging market economies to include Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Rep., Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Qatar, Russian Federation, Saudi Arabia, South Africa, Thailand, Turkey, and United Arab Emirates.

2 World Economic Forum. 2015. Global Competitiveness Index

3 "Market size" is measured in terms of GDP in PPP terms. China ranks first followed by the United States.

4 Planning Commission. 2013. "Employment and Skill Development: Twelfth Five Year Plan". India is projected to have the youngest working age population in 2020. In comparison, the average age of working population in China is projected at 37 years and that of the United States at 45 years. China's demographic dividend is expected to taper off by 2015, while India will benefit from a younger population till 2040.

measure of how the 29 states and the Union Territory of Delhi in this Index are positioned to encourage and attract investment. N-SIPI assesses the factors creating investment opportunities and driving investment decisions as measured by certain specific parameters. These parameters include a state's factors of production, its efficiency in the use of these factors of production, the growth prospects in this state and industries' perception of investment opportunities in that state. N-SIPI is envisaged to be a go-to Index for policy-makers and investors, and is planned to be rolled out every year in the month of March.

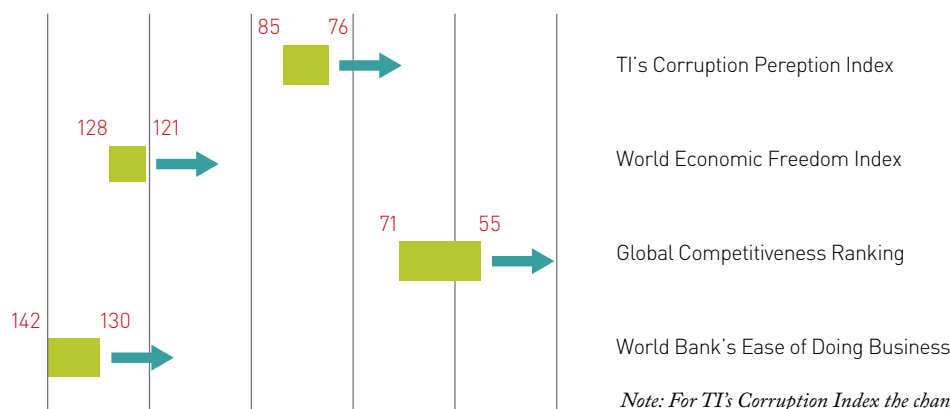
A unique component of N-SIPI is that it merges a perception based index (constructed using surveys) with fundamentals driving investment decisions. The data on perceptions has been used in the construction of N-SIPI as perceptions matter in an agency's choice of location. Using an extensive survey spanning 21 states, existing firms and companies were asked to rate the difficulties they had faced with respect to obtaining land, labor and access to infrastructure in addition to their perceptions of future business opportunities in their state – all of which are critical apriori information for making investment decisions.

How India stacks up

Most of the well-known indices are largely available at the macro level in comparison to other countries. For instance, the World Bank's Doing Business (2016) ranks India as being 130th out of 189 countries in the world, the World Economic Forum's Global Competitiveness Index (2015) ranks India 55th among 144 countries, the Heritage Foundation Economic Freedom Index ranks India 121st out of 178 countries, and Transparency International's (TI) Corruption Perception Index (2015) ranks India 76th out of 168 countries⁵. Of significance is that India has been slowly but steadily climbing up the rankings in all major global indices which makes India more attractive as a place to grow and invest in the coming years (Figure 1.2).

In response to Prime Minister Modi's thrust on Make in India and the need to increase competition at the state level to improve business climate and investment opportunities, two complementary indices have been developed over the last year. The first Index by the Department of Investment Promotion and Policy (DIPP), Government of India, which was made public in September 2015, ranked states on how well they performed on a 98-point action plan for business reforms. Gujarat was the number one state based on this metric, followed by Andhra Pradesh, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan and Odisha⁶.

Figure 1.2 Change in India's Global Rankings between 2014 and 2015¹



⁵ The World Bank's Governance Indicators ranks India much lower at 128th place in 2014 (the latest year for which data is available) in the Control of Corruption Index.

⁶ DIPP (2015). "Assessment of State Implementation of Business Reforms". The top seven states are called the "Aspiring Leaders"

The second Index, NCAER's SIPI, does not measure regulatory procedures and business reforms, but rather it assesses States' potential for investment, business, and job creation in industry and services in general, as measured by their policy intent and frameworks, availability of land and labour, in addition to the ground-level realities of infrastructure, rule of law, and economic and political climate.

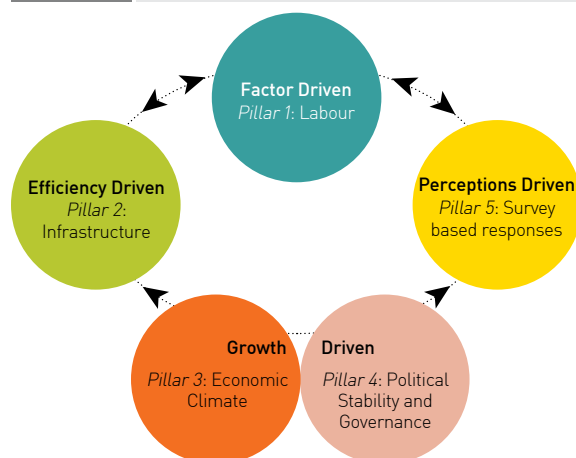
Like the DIPP Index, Gujarat tops the list followed by Delhi and Tamil Nadu. This is no surprise. However, if the N-SIPI pillar based on perceptions is dropped from the Index, the rankings change with some states like Kerala, West Bengal and Punjab moving up the rankings and others like Andhra Pradesh, Chhattisgarh and Madhya Pradesh moving down the rankings. By providing a highly credible, evidence-based yardstick to address information gaps, N-SIPI complements the present focus of the government on business reforms and policies to promote the Make in India and Start-up India campaigns. N-SIPI can be especially helpful in balancing risks and rewards in making locational choice for domestic and FDI investments.

1.2 METHODOLOGY

The Five Pillars

The NCAER's State Investment Potential Index (N-SIPI) is constructed under five broad pillars that can be classified under four broad categories as being factor driven (labour)*, efficiency driven (infrastructure), growth driven (economic climate; and political stability and governance), and perceptions driven (responses to the surveys) (Figure 1.3).

Figure 1.3 The Five Pillars of N-SIPI



* Land has not been added as a factor as comparable good quality data was not available across all the 30 states.

Under each of the five pillars there are a number of sub-indicators. Each sub-indicator has been normalized to make it unit-free. As such, 100 would now represent the best state and zero the worst state under each sub-indicator. The sub-indicators under each pillar have been aggregated using a weighted arithmetic mean. Each of the five pillars has been given equal weight and the geometric mean has been used to give a single composite investment score. Details of the aggregation method, and the pillars with the sub-indicators under each pillar are described in the Methodology section in Appendix A. The main findings are discussed below.

The Two Rankings

The industry survey was conducted in only 21 states. Among the seven North-Eastern states, due to the constraints of time and weather, only Assam was covered. Other states not covered by the survey include Goa, Jammu and Kashmir and Sikkim. Hence, this study reports two types of rankings:

- I. N-SIPI 21: This is the main Index in this study. N-SIPI 21⁷ ranks 21 states based on all five pillars and 51 sub-indicators.
- II. N-SIPI 30: This Index ranks 30 states based on four pillars (labour, infrastructure, economic climate, and political and governance indicators) and 44 sub-indicators. N-SIPI 30 does not include the fifth pillar based on the surveys.

It is to be noted that N-SIPI 21 is the comprehensive ranking based on all five pillars. It is the Main Index, and hence the Index of choice reported for the 21 states covered by the industry surveys. Hence, the State Profiles chapter reports only N-SIPI 21.

For the remaining 9 states not covered by industry surveys, this report presents ranking under N-SIPI 30. These are just indicative rankings based on the four fundamental pillars driving investment choices. As seen in the following section on Findings, there is no one-to-one correspondence between N-SIPI 21 and N-SIPI 30 since adding more states to the basket changes both the minimum and the distance to the frontier for each indicator. Appendix B gives the details of the States' ranking under both N-SIPI 21 and N-SIPI 30.

7 N-SIPI 21 does not include the six North-Eastern states of Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura; as well as Sikkim, Goa, and Jammu and Kashmir.

1.3 FINDINGS

Gujarat leads N-SIPI 21; Delhi leads N-SIPI 30

Gujarat, Delhi, Tamil Nadu, Andhra Pradesh, Maharashtra, and Karnataka are the top six states for business investment potential under N-SIPI 21 which ranks states based on all five pillars. Gujarat tops the rankings under two of the five pillars: the fourth pillar on governance and political stability and the fifth pillar on the perception of a favorable industrial climate in the state. Delhi is a close second and also tops the ranking in two pillars: the second pillar on infrastructure and the third pillar on the economic climate. In N-SIPI 30, which does not include the fifth pillar on perceptions, Delhi now tops the rankings, followed by Gujarat, and Tamil Nadu maintains its third place in both the rankings.

In N-SIPI 21, Uttar Pradesh and Jharkhand are ranked as the least favourable states for investment among the 21 states. Both these states maintain their low ranking in N-SIPI 30 too, though they move up a few ranks. Perceptions change rankings for other states too. Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Rajasthan and Assam move up the rankings if the pillar on perceptions of a favorable business climate are included, while Kerala, West Bengal and Punjab move down the rankings. Table 1.1 and Table 1.2 give the rankings of all the states under N-SIPI 21 and N-SIPI 30.

Table 1.1 Rankings under N-SIPI 21 (All Five Pillars)

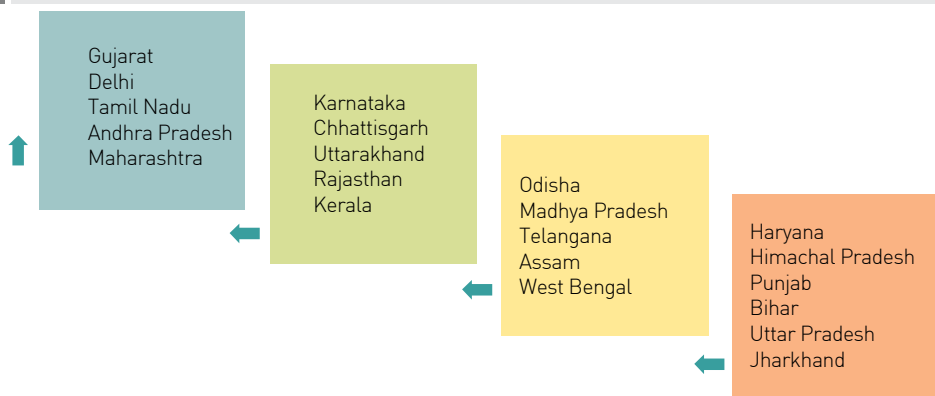
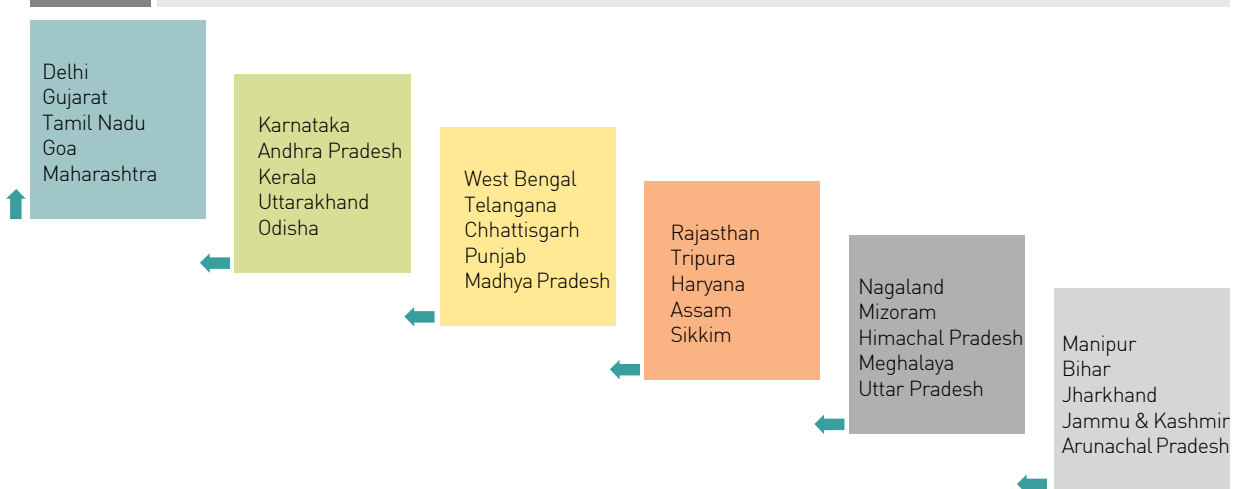


Table 1.2 Rankings under N-SIPI 30 (Four pillars: Excludes fifth pillar on Perceptions)



1.4 THE FIVE PILLARS OF N-SIPI

PILLAR 1: Labour

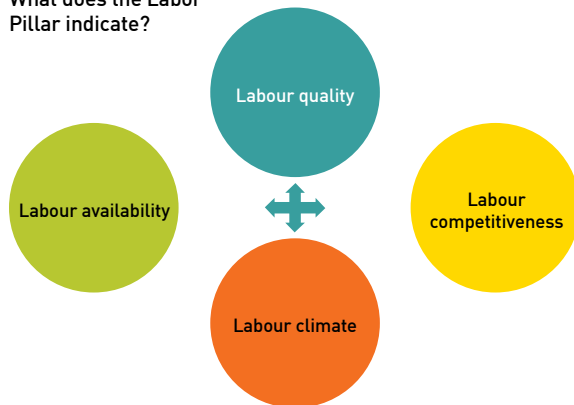
For industry, the availability of an educated and skilled workforce at competitive wages in a favorable labour environment is a significant factor affecting locational choice. While some of the labour sub-indicators are unambiguously unidirectional, others can be interpreted in two ways. For instance, higher minimum wages in a state are better from a social point of view, but from an industry point of view, it makes the state less competitive. On the other hand, the low capacity of ITIs makes both industry and the labour force worse off making these indicators unidirectional from both the society and industry points of view.

Key takeaways

Not surprisingly, states with a larger percentage of educated work force and those that had a larger share of vocationally trained workforce have a higher per capita GSDP (Figures 1.5 and 1.6). This suggests that the present government's initiatives in skilling India at a faster rate would most probably have a very significant effect on per capita GSDP and growth rates in states. As expected, in states where labour laws are perceived as being more stringent, labour mobility (as measured by the difference in labour accession and separation rates) is low which suggests that greater labour market mobility, which may make a state more attractive for investment, can be achieved with reforms in labour laws (Figure 1.7).

Figure 1.4 The First Pillar: Labour

What does the Labor Pillar indicate?



	N-SIPI 21	N-SIPI 30
Top 6 states	Kerala Tamil Nadu Karnataka Gujarat Odisha Uttar Pradesh	Kerala Tamil Nadu Karnataka Gujarat Uttar Pradesh Odisha

Figure 1.5 Education and per capita GSDP (using N-SIPI-30)

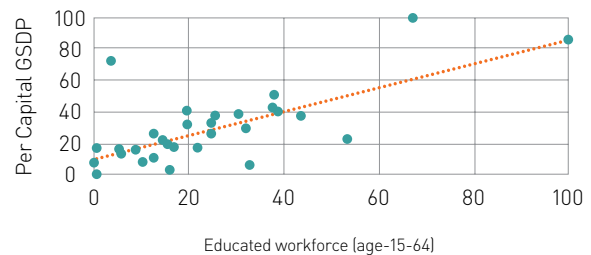


Figure 1.6 Vocational Education and per capita GSDP (using N-SIPI-30)

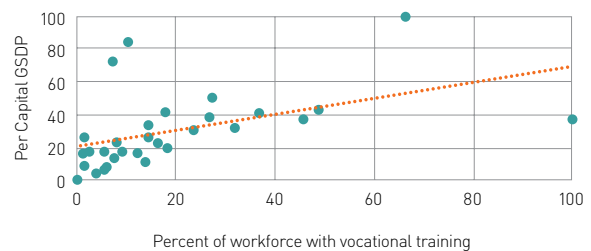
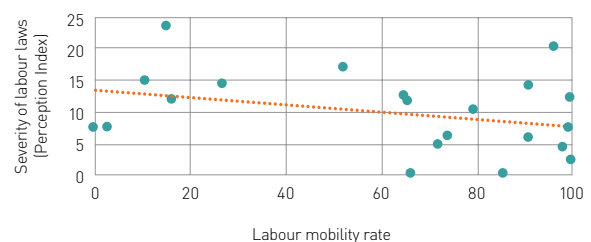


Figure 1.7 Labour mobility and labour laws (using N-SIPI-21)

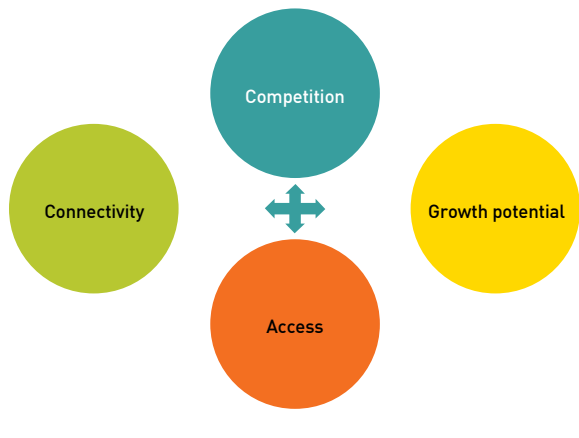


PILLAR 2: Infrastructure

Infrastructure is a key driver of investment decisions and an important factor in locational choice and profitability of investment. The infrastructure pillars captures how states stack up in terms of the various facets necessary for continuous growth and capacity utilization including the availability of power, roads, and credit. Not only is the existing infrastructure important, but the scope for new investment in infrastructure is tremendous in the coming years. The Economic Survey (2015)⁹ notes that increased infrastructure investment is an instrument for “transformational” growth in the manufacturing and services industry and the private sector is envisaged as being key to rapid delivery of high quality infrastructure.

Figure 1.8 The Second Pillar: Infrastructure

What does the Infrastructure Pillar indicate?



	N-SIPI 21	N-SIPI 30
Top 6 states	Delhi Punjab Gujarat Uttarakhand Kerala West Bengal	Delhi Goa West Bengal Gujarat Punjab Maharashtra

Key takeaways

The availability and reliability of power (as measured by fewer power outages) is strongly correlated with industrial growth as measured by industrial GSDP as a percent of total GSDP (Figure 1.9). It is also seen that states with strong ICT systems seem to support service sector growth (Figure 1.10). While access to credit (measured by the number of bank branches per lakh population) is an important factor for small and medium industries, it does appear that access does not easily translate to ease of getting credit as measured by survey responses (Figure 1.11).

Figure 1.9 Reliability of power and industrial GSDP (using N-SIPI-30)

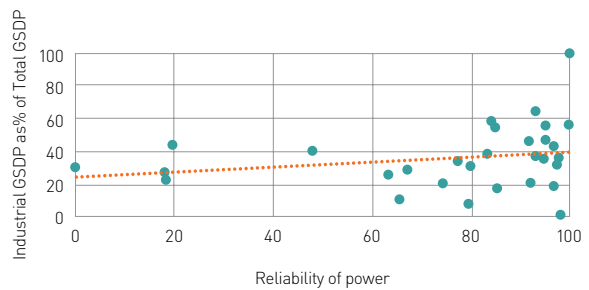


Figure 1.10 ICT Readiness and services GSDP (using N-SIPI-30)

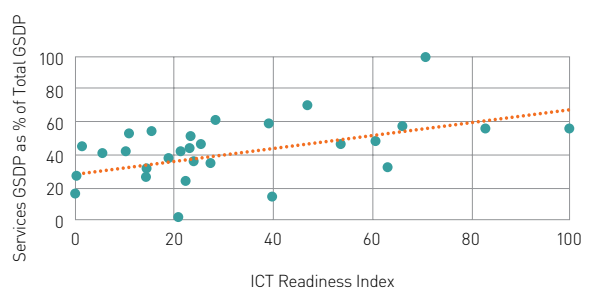
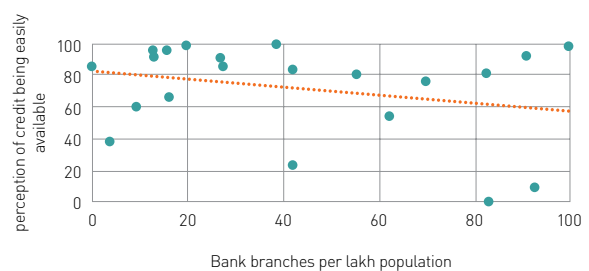


Figure 1.11 Access to credit and ease of getting credit (using N-SIPI-21)



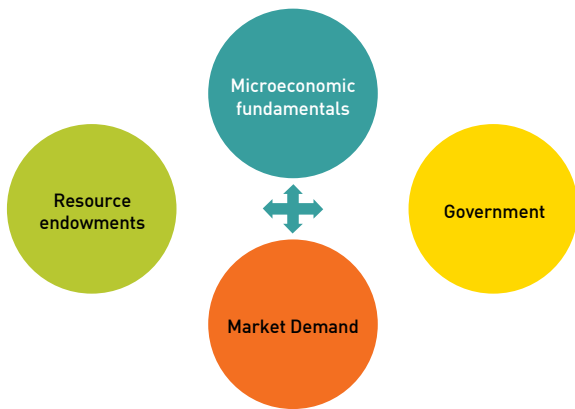
9 Government of India. 2015. Economic Survey. P32

PILLAR 3: Economic

N-SIPI’s economic pillar draws upon a broad spectrum of parameters, encompassing macroeconomic fundamentals, government policies, market demand and resource endowments. States with greater growth and per capita incomes are naturally more attractive for investors. However, the economic pillar also tries to capture the negative externalities associated with greater concentration of industry and population by using a “congestion” index, which acts as a proxy for increased rental values and market saturation.

Figure 1.12 The Third Pillar: Economic Conditions

What does the Economic Pillar indicate?



	N-SIPI 21	N-SIPI 30
Top 6 states	Delhi Andhra Pradesh Maharashtra Gujarat Telangana Tamil Nadu	Delhi Goa Andhra Pradesh Maharashtra Gujarat Telangana

10 World Development Report, World bank. 2009. Reshaping Economic Geography.

11 World Bank and Department of Industrial Policy and Promotion. September 2015. “Assessment of State Implementation of Business Reforms”.

Key takeaways

Urban agglomeration is an important aspect of growth and development¹⁰. It is seen that states with high per capita GSDP also had a greater proportion of their population living in million plus cities (Figure 1.13). It is also seen that VAT productivity is very strongly correlated with the recent World Bank/DIPP’s Ease of Doing Business (Figure 1.14). As per DIPP’s state-wide assessment of business reforms, the three topmost areas where states have made the most progress are “general” tax reforms, VAT and CST¹¹. Survey responses indicate a strong correlation between good government investment policies and government spending on development which indicates that a development oriented government is seen to be conducive to business (Figure 1.15). It is further observed that own revenues from VAT are an important factor funding state development expenditure.

Figure 1.13 Urban Bias and per capita GSDP (using N-SIPI-30)

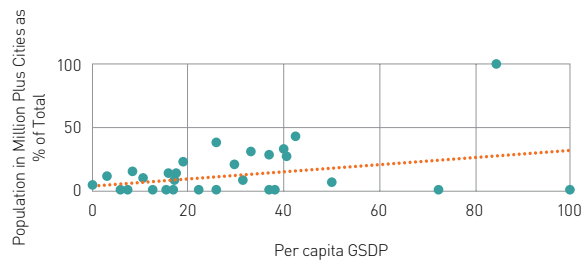


Figure 1.14 VAT Productivity and Ease of Doing Business (using N-SIPI-30)

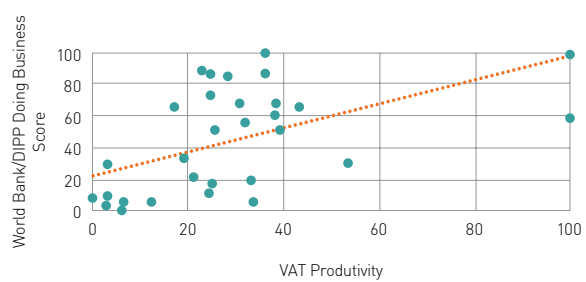
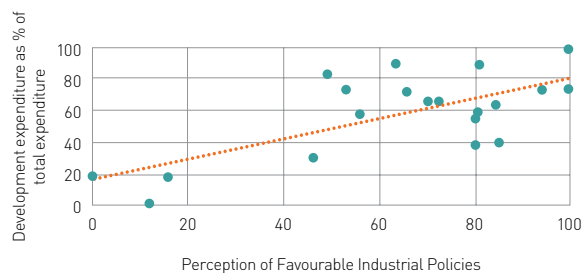


Figure 1.15 Favourable Industrial Policies and Development Expenditure (using N-SIPI-21)

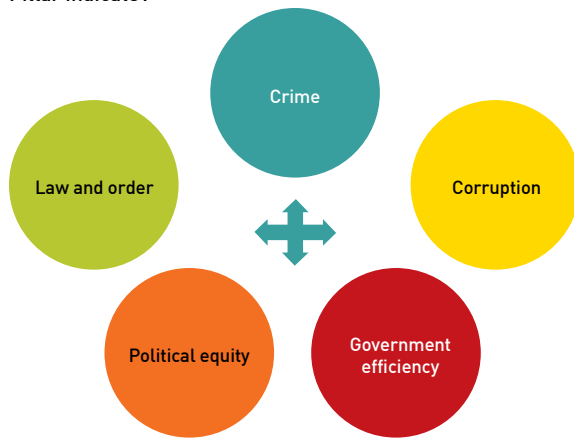


PILLAR 4: Governance and Political Stability

The pillar on governance and political stability captures broad dimensions related to law and order, crime, corruption, government efficiency and political equity as measured by the political strength of the ruling party and politicians with a clean criminal record in the legislative assembly. The Worldwide Governance Indicator (WGI) of the World Bank¹², which is exclusively a perceptions based measure of governance, is the major cross-country comparison index for governance and political stability. In the WGI 2014, India falls in the fourteenth percentile in political stability and absence of violence, in the thirty-seventh percentile for controlling corruption, and ranks fairly high in the sixty-first percentile for voice and accountability of its citizens.

Figure 1.16 The Fourth Pillar: Governance and Political Stability

What does the Governance and Political Stability Pillar indicate?



	N-SIPI 21	N-SIPI 30
Top 6 states	Gujarat Tamil Nadu Madhya Pradesh Chhattisgarh Haryana Karnataka	Tripura Mizoram Nagaland Tamil Nadu Gujarat Madhya Pradesh

Key takeaways

Overall, per capita GSDP across states is seen to be highly correlated with e-governance capabilities of a state, suggesting that good governance translates to better standards of living (Figure 1.17). There is also a strong correlation between stalled projects in a state due to land related issues and the perception of ease of getting land (Figure 1.18). Not unsurprisingly, just having a robust police force does not necessarily translate to a perception of good law and order in the state. (Figure 1.19)

Figure 1.17 Per capita GSDP and e-Governance (using N-SIPI-30)

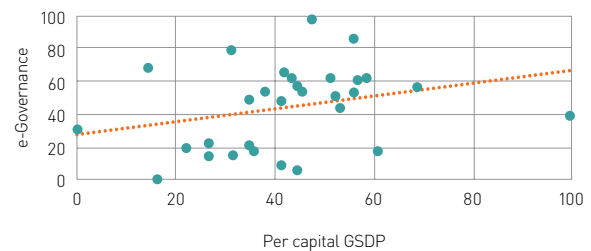


Figure 1.18 Stalled Projects and perception of Ease of Getting Land (using N-SIPI-21)

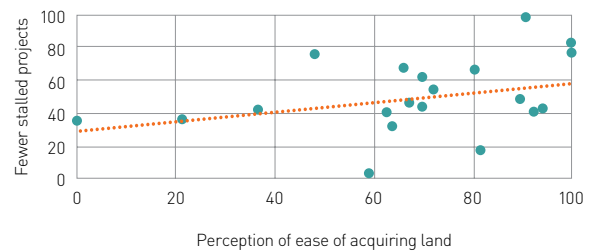
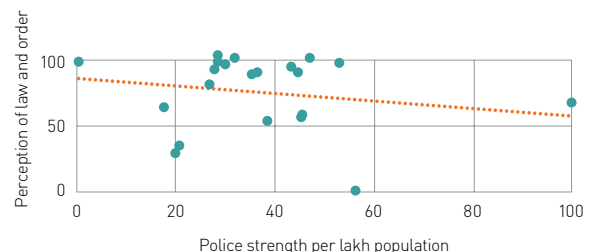


Figure 1.19 Police Strength and Perception of Law and Order (using N-SIPI-21)

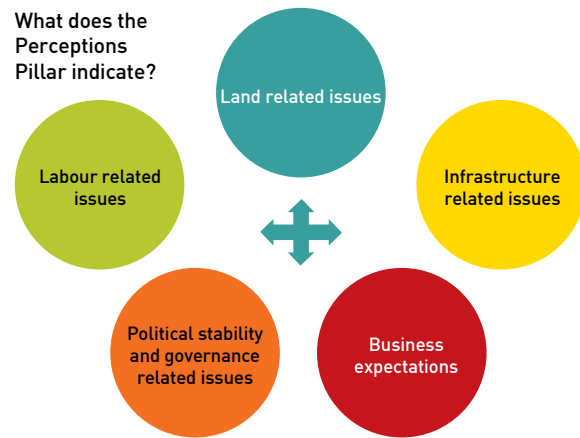


¹² World Bank, Worldwide Governance Indicators. 2015. www.govindicators.org.

PILLAR 5: Perceptions

The nationwide N-SIPI's survey was conducted between August and September 2015 and covers 1011 industrial units in 40 districts across twenty major states and the union territory of Delhi. The aim of the survey was to have a better understanding of the constraints to business at the ground level. The survey seeks responses to a number of questions ranging from the current business climate to availability of land, labour and infrastructure, to various other issues faced by the businesses in their respective states.

Figure 1.20 The Fifth Pillar: Perceptions



N-SIPI 21

- Top 6 states**
- Gujarat
 - Rajasthan
 - Chhattisgarh
 - Uttarakhand
 - Andhra Pradesh
 - Madhya Pradesh

Key takeaways

Figure 1.21 Constraints faced by businesses

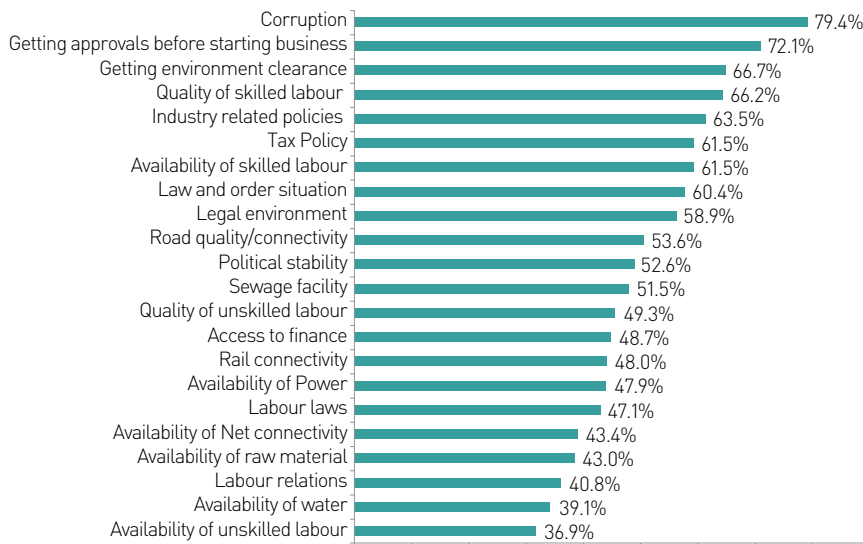


Figure 1.21 shows the results of N-SIPI survey and presents the percentage of respondents who perceive a set of 22 constraints as either severe or moderate hurdles for their business operations. The results indicate that corruption emerged as the biggest problem. Business enterprises consistently rank this as being a major obstacle for growth, with the World Bank's Enterprise Survey 2014 also ranking corruption as the topmost difficulty facing business enterprises.

Other major issues of concern found by the SIPI survey were getting approvals for starting a business and the

availability as well as quality of skilled labour. Both these issues are also the focus areas of the present government. The recent DIPP's/ World Bank's assessment of the state governments' progress in implementing business reforms will certainly streamline the process of getting approvals, while the National Skill Development Mission launched in July 2015 will aim to address the skills gap in industry. Interestingly, labour laws, labour relations, and the availability of power are among least problematic areas for the firms in the sample.

1.5 SECTOR STUDIES

The main aim of the NCAER's SIPI is to assess States' potential for investment and business as measured by the importance of certain specific parameters driving investment decisions.

These parameters - labour, infrastructure, macroeconomic fundamentals, policy orientation, governance, political stability, and perceptions – though undeniably important, give a broad picture of overall capabilities and potential of a state but may be unable to capture state-level nuances that could be crucial when it comes to attracting investment in specific sectors.

To fully understand not only the drivers of investment but also what works and what doesn't and why, the NCAER Project Team has taken up a few specific sectors for a more detailed study. The purpose of the study is to identify what is the current position in the identified sectors and to examine the potential of these sectors.

Auto, Pharma and Retail on top

In order to eliminate any subjective bias in the choice of sectors, the sectors have been selected on the basis of their contribution to the country's registered manufacturing GVA (Gross Value Added). Data sourced from the 2011 Annual Survey of Industries show that (at the three-digit level) the auto industry¹³ is the second largest contributor to India's GVA, contributing almost

7 percent to India's GVA and accounting for 8 percent of total profits. Pharmaceuticals are the third largest contributor, contributing 6 percent of the GVA and an even higher percentage of total profits (8 percent). Hence both these industries have been taken up for study at greater depth¹⁴. In fact, for both these sectors, not only is the domestic market large and growing, but the scope for exports is tremendous. A recent Economist article predicts that the global healthcare spending and automobile purchases in 2016 will be the fastest growing in the world with consumer spending in these two sectors in Asia and Australia alone growing at close to 8 percent per annum¹⁵.

Apart from these two sectors, the retail sector has also been singled out for more detailed study in view of the recent relaxations allowed in foreign direct investment (FDI) in multi-brand retail. Also, this is a sector where states have been given considerable freedom to frame their own policies. Given the huge employment potential of organized retail, we believe this is a sector where states will vie keenly with each other to attract investment.

States vary in their potential for specific investments

Based on a comprehensive analysis of these sectors, the following states emerge as the top guns (Table 1.3). Details of these studies and the methodology in given in Section 4 of this report.

Table 1.3: Top ten states in the pharmaceutical, automobile and retail sectors

Pharmaceutical Sector	Automobile Sector	Retail Sector
Supply Side Index	Overall Index	Overall Index
1. Maharashtra	1. Tamil Nadu	1. Delhi
2. Andhra Pradesh (including Telangana)*	2. Maharashtra	2. Goa
3. Gujarat	3. Haryana	3. Kerala
4. Karnataka	4. Karnataka	4. Maharashtra
5. Uttarakhand	5. Delhi	5. Karnataka
6. Goa	6. Andhra Pradesh	6. Mizoram
7. Himachal Pradesh	7. Gujarat	7. Haryana
8. Tamil Nadu	8. Uttarakhand	8. Andhra Pradesh
9. Chhattisgarh	9. Rajasthan	9. Tamil Nadu
10. Rajasthan	10. Odisha	10. Uttarakhand

¹³ The auto industry includes the manufacture of motor vehicles (291), manufacture of motor vehicle bodies (292) and manufacture of motor parts and accessories (293).

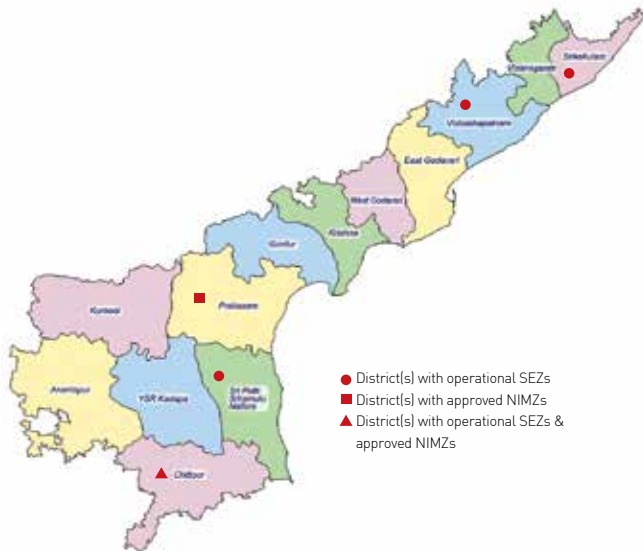
¹⁴ The largest contributor to GVA, refined petrol products (192), which accounts for 11.70 percent of GVA and 25 percent of profits, has not been selected for in-depth study given the lumpiness of investments in this sector and keeping in mind the underlying rationale of constructing such an index of state readiness for investment and growth).

¹⁵ The Economist. Dec 29, 2015. "How will the global industry fare in 2016?". <http://www.economist.com/blogs/graphicdetail/2015/12/daily-chart-3>

* AP and Telangana are clubbed together as the sector reports were prepared using the latest ASI (Annual Survey of Industries) data for the year 2012-13 when Telangana was not a separate state.

Section 2
STATE PROFILES
2.1 N-SIPI 21

Andhra Pradesh



ANDHRA PRADESH STATS

Capital	Hyderabad
Area (sq. km)	1,60,205
Location	Southern India
Per capita income (Rs.)	91,843
Literacy Rate (%)	67.02

STATE FOCUS SECTORS

1. Agro & Food Processing
2. Life sciences (including pharmaceutical, biotechnology & medical equipment)
3. Textile & Apparel
4. Electronics & Information Technology
5. Aerospace & Defence
6. Automobiles & Auto Components
7. Petroleum, Chemicals, (including Fertilizers) and Petrochemicals
8. Energy
9. Mineral based industry
10. Leather

Source: Industrial Development Policy (2015-2020)

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

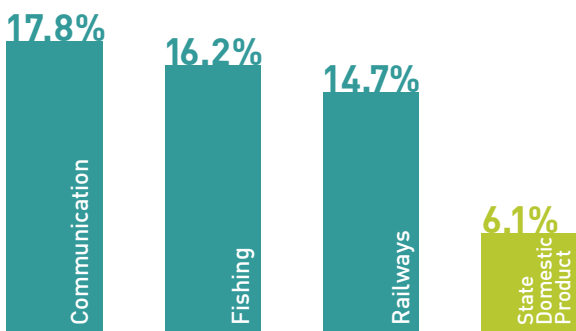
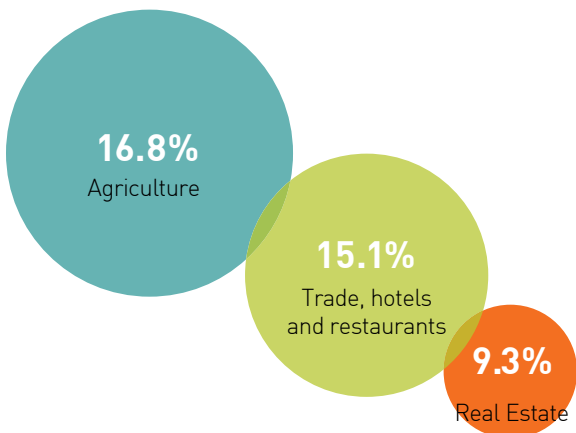


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



% share of sector in state's GSDP (2013-2014)

INCENTIVES

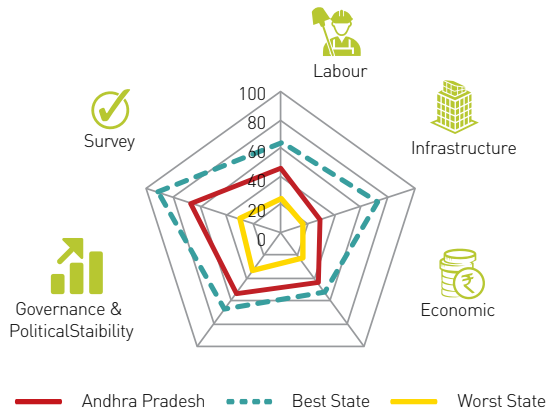
- Subsidy on cost of plant & machinery for sustainable green production measures for MSME.
- Fixed power cost @ Rs.1.00 per unit for various industries.
- 300 industrial parks and tailor-made benefits for mega projects.

Source: State Industrial Development Policy (2015-2020)

Andhra Pradesh N-SIPI 21 Rank **4**

Andhra Pradesh is one of the top five states in terms of two broad pillars: economic climate and N-SIPI Industry Survey.

State's Performance on the Five Broad Pillars



Strengths

Andhra Pradesh ranks high in availability of labour. The state also fares extremely well on VAT productivity, DIPP score, and industries' perception on ease of acquiring land. Andhra Pradesh also has a high ratio of cargo handled per port, indicating ease of handling commercial activities via such routes.

Weaknesses

State ranks low in terms of power shortage. Industry has a poor perception regarding the business climate and the state suffers from low share of industrial sector in total GSDP.

LABOUR

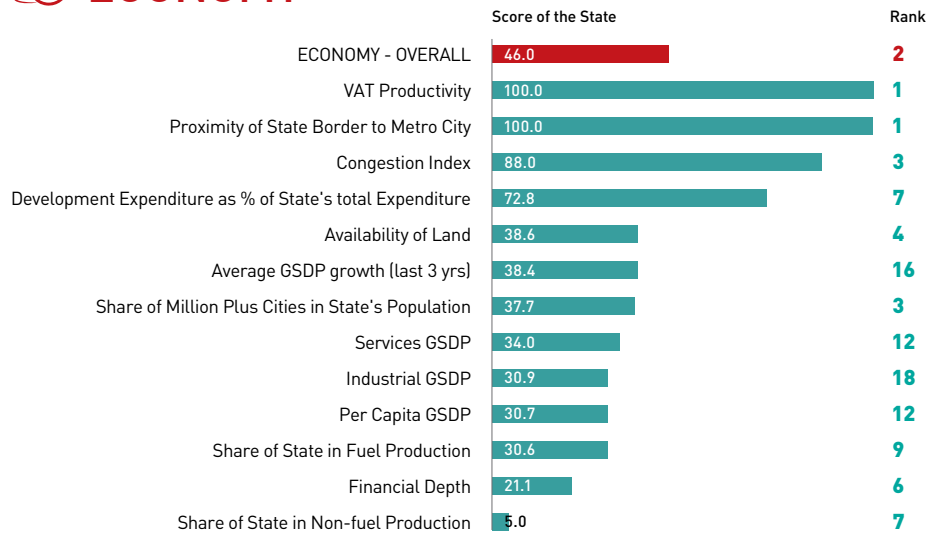
	Score of the State	Rank
LABOUR - OVERALL	47.5	7
Average Labour Turnover	91.0	6
Average Wages of Educated and Vocationally Trained Labour	83.2	4
Labour Force Participation Rate	78.1	3
Average Wages in the Manufacturing Sector	69.7	11
Seating Capacity of ITIs	35.0	9
Share of Workforce in the Manufacturing Sector	33.2	12
Percent of Young (age 25-35 years) Seeking/ Available for Work	25.3	7
Above Secondary Level Population as % of Total (15-64 years)	24.8	9
Number of ITIs	19.9	10
Vocationally Trained Persons as % of Total (15-64 years)	14.4	11

INFRASTRUCTURE

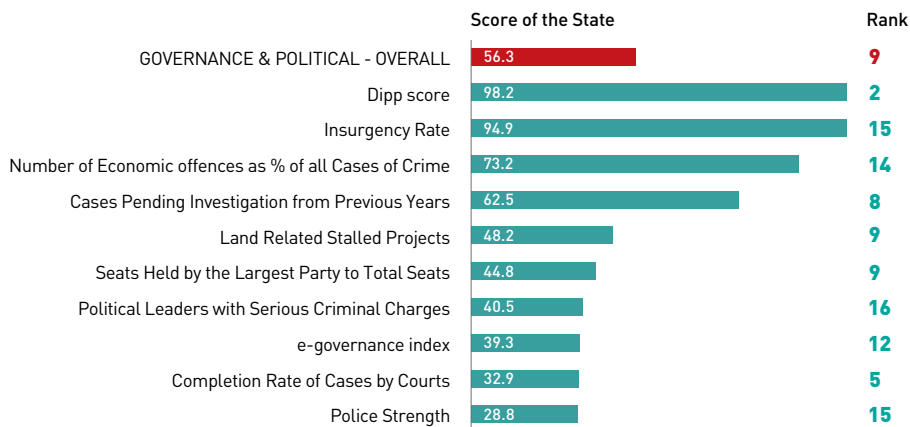
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	30.0	14
Power Shortage as % of Total Demand	68.6	18
Average Electricity Tariff for Industry	65.8	5
Number of Airports	50.0	10
Cargo Handled Per port	47.0	2
Bank Branches Per Lakh Population	42.1	9
ICT - Readiness Index	28.0	14
Net annual ground water availability	15.0	17
Number of Sea-ports	13.0	7
Statutory Towns in Smart Cities as % of total in State	11.3	2
Rail Density	11.0	12
Road Density	3.0	14
Cargo Handled per Day per Airport	1.4	7



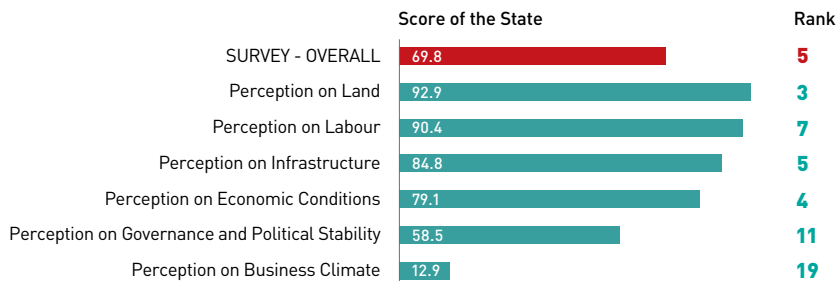
ECONOMY



GOVERNANCE & POLITICAL

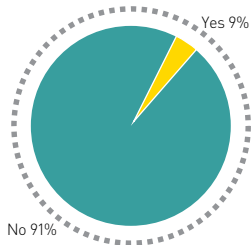


SURVEY

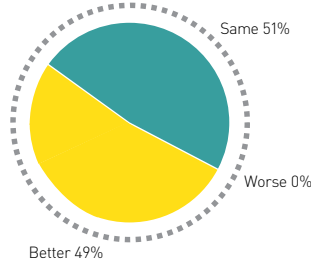


SURVEY RESULTS

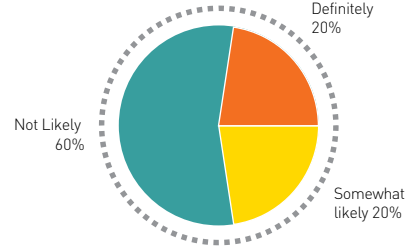
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

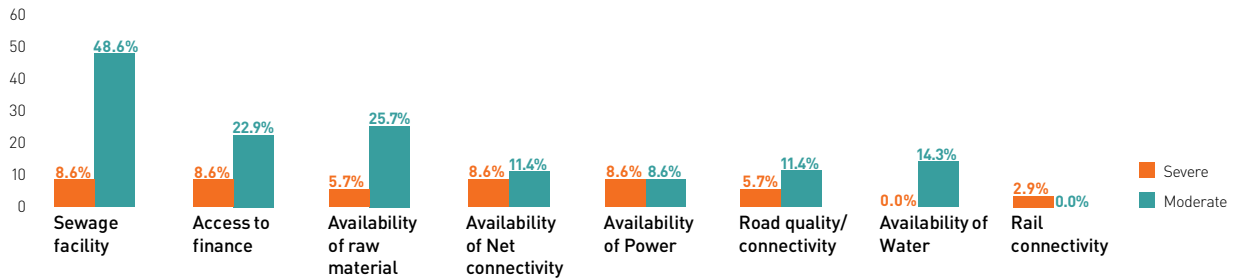


Percentage respondents planning business expansion in next five years



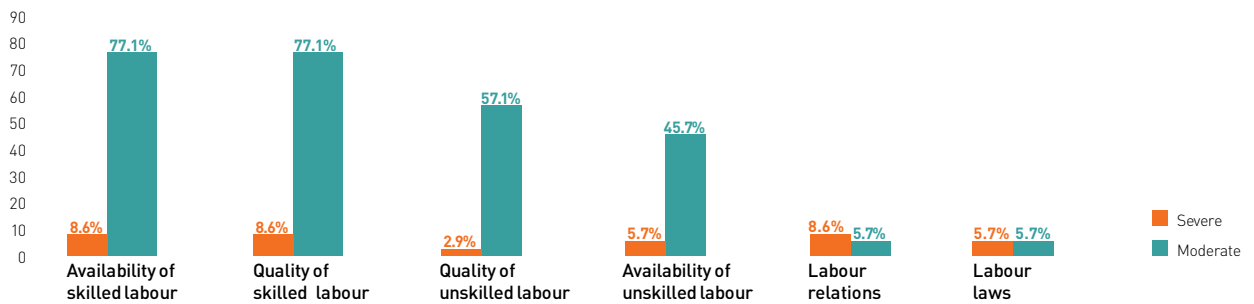
Infrastructure related issues

(% respondents labelling these as severe or moderate)



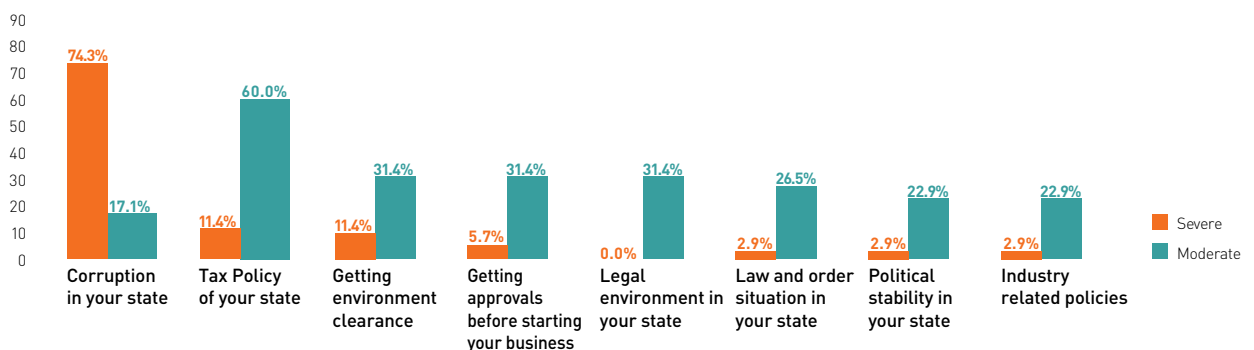
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Assam



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

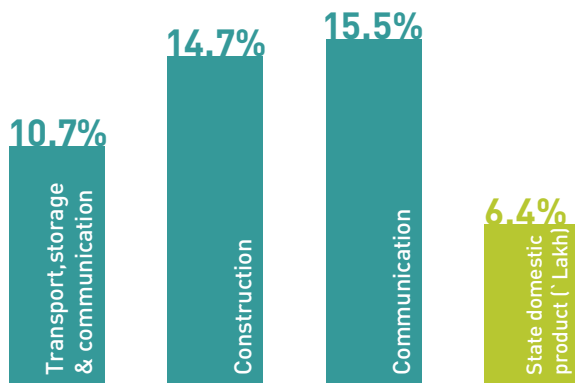
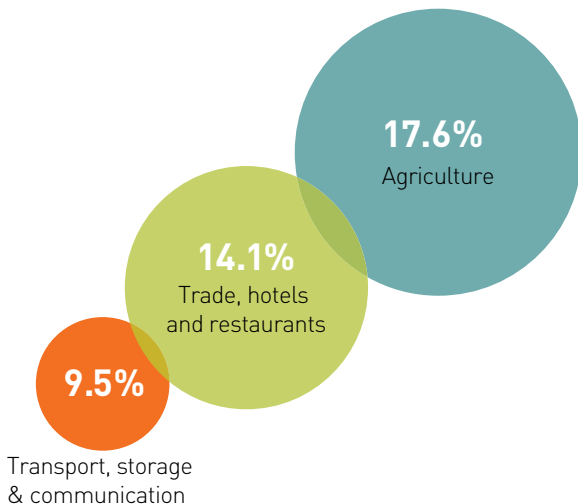


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



ASSAM STATS

Capital	Dispur
Area (sq. km)	78,438
Location	North-eastern India
Per capita income (Rs.)	50,558

STATE FOCUS SECTORS

1. Food processing
2. Extraction and Value Addition of Herbal Medicinal and Aromatic Plants
3. Mineral based
4. Power
5. Bamboo based
6. Horticulture
7. Information Technology related activities
8. Hospitality industry and Tourism
9. Bio-Technology sector.

Source: Assam Industrial Development Corporation Limited

INCENTIVES

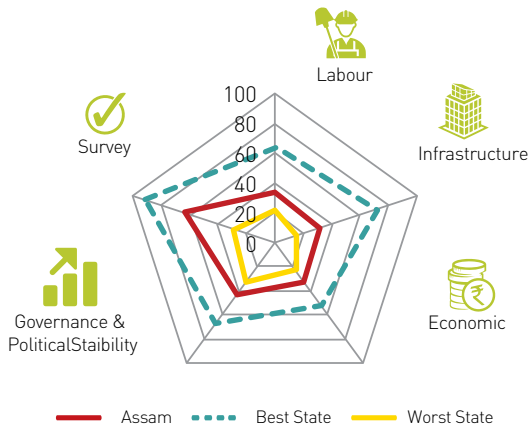
- State Capital Investment subsidy for new micro units
- Tax exemptions for various industries.
- State Capital Subsidy for Educational and Research Institutions, Hospitals, and public utility facilities.

Source: Industrial Policy Statement of Assam (2014).

Assam

N-SIPI 21 Rank 14

State's Performance on the Five Broad Pillars



The state fared among the top ten states in terms of N-SIPI perception survey, but lags behind on other pillars.

Strengths

The state ranks the highest in terms of having the least number of stalled projects based on land related disputes and land acquisition by enterprises not older than 5 years. The state also scores high on number of airports, road density. Further, Assam has a ready pool of people available for work in the age group 20-35 years.

Weaknesses

The state ranks low in terms of proportion of ITIs in the state and financial depth (in terms of branches per population and credit disbursement by the banking industry).

LABOUR

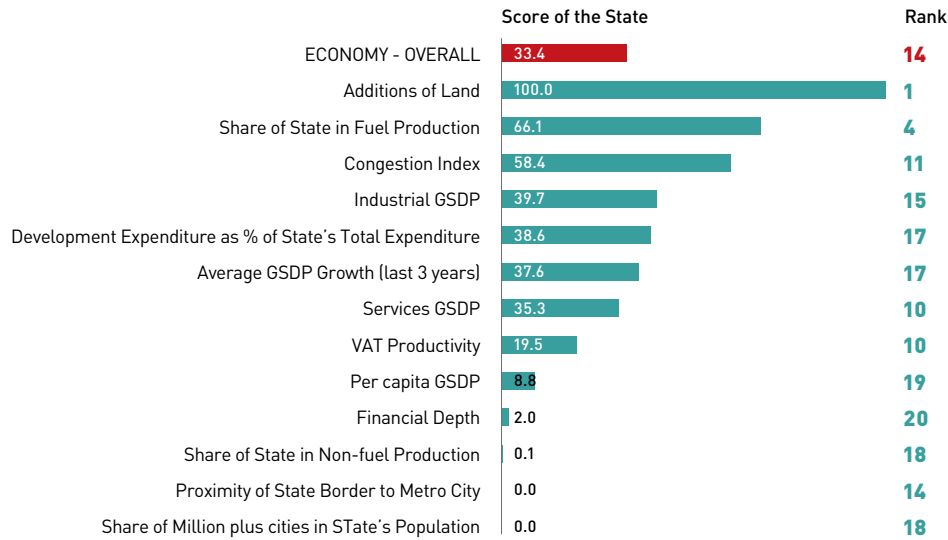
	Score of the State	Rank
LABOUR - OVERALL	33.6	16
Average Labour Turnover	99.3	3
Average Wages in the Manufacturing Sector	97.7	2
Average Wages of Educated and Vocationally Trained Labour	53.2	15
Percent of young (age 25-35 years) Seeking/ Available for Work	43.7	2
Labour Force Participation Rate	27.5	18
Share of Workforce in the Manufacturing Sector	8.0	19
Vocationally Trained Persons as % of total (15-64 years)	6.0	17
Number of ITIs	0.0	21
Seating Capacity of ITIs	0.0	21
Above Secondary Level Population as % of Total (15-65 years)	0.0	21

INFRASTRUCTURE

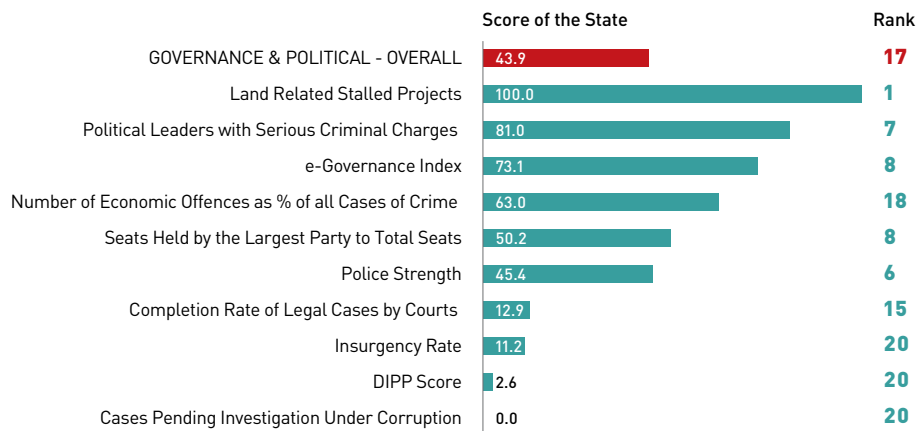
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	31.5	12
Net Annual Ground Water Availability	81.0	2
Number of Airports	80.0	2
Average Electricity Tariff for Industry	65.5	7
Power Shortage as % of Total Demand	55.1	20
ICT - Readiness Index	30.9	12
Rail Density	18.3	7
Road Density	16.2	3
Bank Branches per Lakh Population	4.0	20
Statutory Towns in Smart Cities as % of Total in State	3.4	11
Cargo Handled per Day per Airport	0.2	14
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10



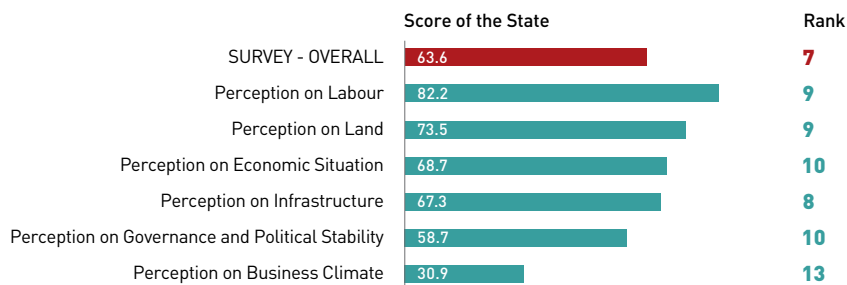
ECONOMY




GOVERNANCE & POLITICAL

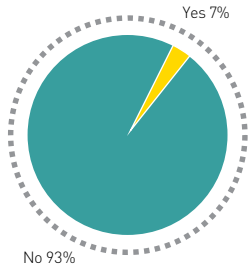



SURVEY

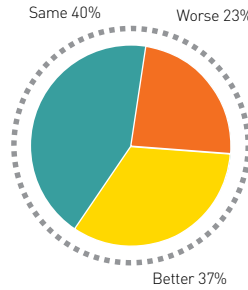


SURVEY RESULTS

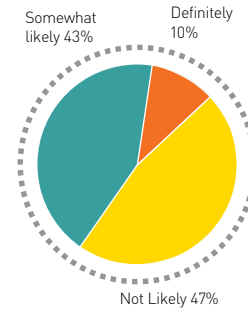
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

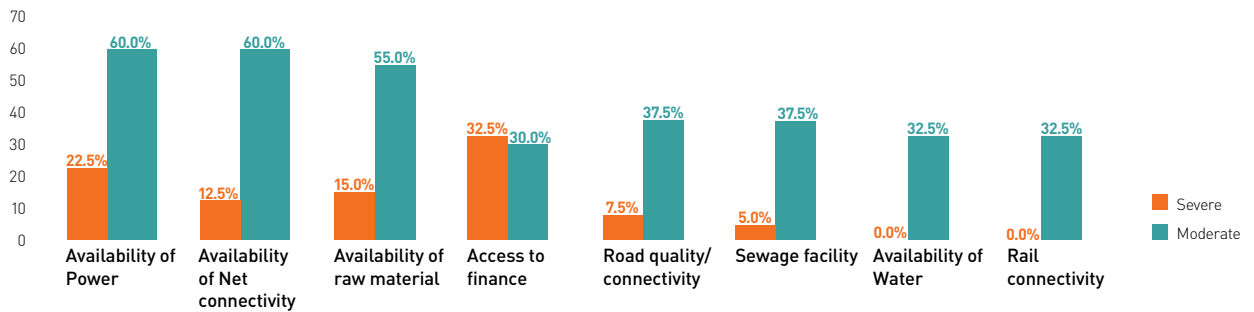


Percentage respondents planning business expansion in next five years



Infrastructure related issues

(% respondents labelling these as severe or moderate)



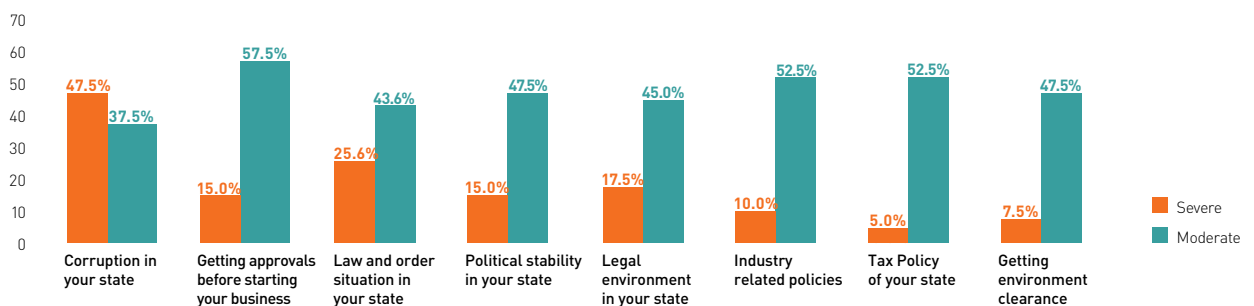
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Bihar



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

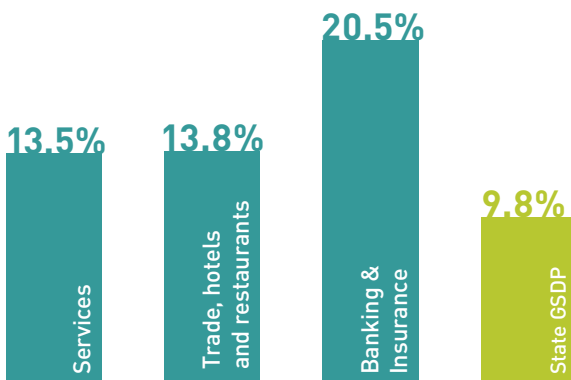
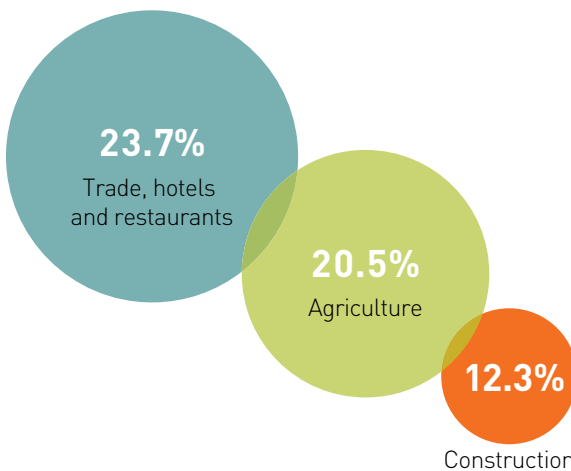


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



BIHAR STATS

Capital	Patna
Area (sq. km)	94,163
Location	Northern Central India
Per capita income (Rs.)	34,014
Literacy Rate (%)	61.8

STATE FOCUS SECTORS

1. Food processing
2. Sugar Industry
3. Power Sector
4. IT and Communication
5. Leather Industry
6. Mines and Minerals
7. Energy and Infrastructure
8. Textiles
9. Tourism
10. Higher / Technical Educational Institution.

Source: Udyog Mitra Bihar

INCENTIVES

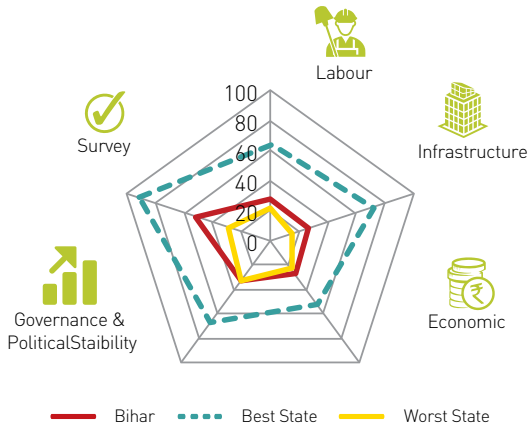
- Exemption from Transaction Fees on lease/ sale/ transfer of industrial land.
- Full re-imbursement of electricity duty for new industrial units.
- Capital Subsidy for industrial units and subsidy on non-conventional sources of energy production.

Source: Industrial Policy Statement (2011)

Bihar

N-SIPI 21 Rank 19

State's Performance on the Five Broad Pillars



Bihar needs to work towards improving and governance ease of doing business, in addition to industry perception of business climate within the state.

Strengths

The state boasts of high average growth rate of GSDP. Bihar also has relatively high share of ITIs in the state for developing skilled workforce. Further, Bihar also high rail density, providing a big boost to industry.

Weaknesses

The state ranks low in terms of labour force participation rate, ICT readiness, and business climate.

LABOUR

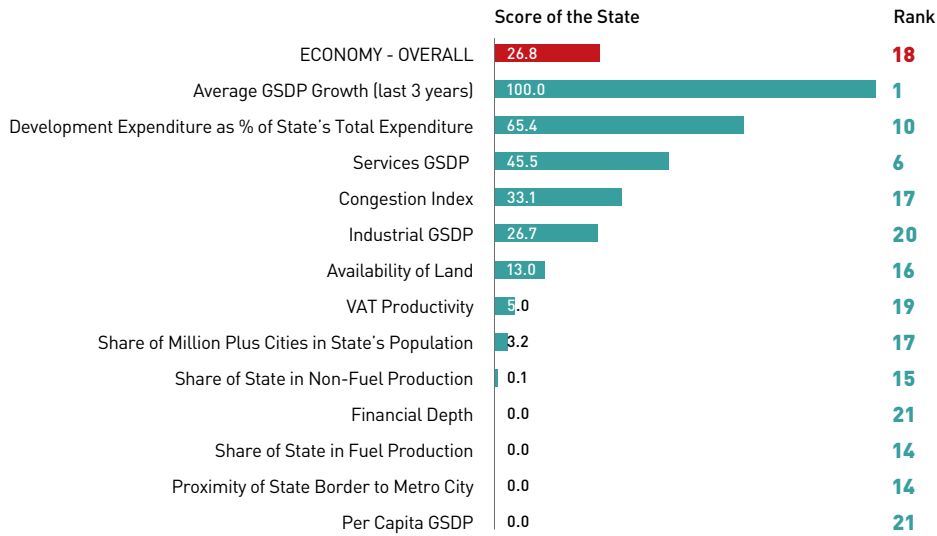
	Score of the State	Rank
LABOUR -OVERALL	27.8	20
Average Wages in the Manufacturing Sector	100.0	1
Average Wages of Educated and Vocationally Trained Labour	80.9	9
Seating Capacity of ITIs	44.9	6
Number of ITIs	33.8	7
Percent of young (age 20-35 years) Seeking/Available for Work	12.9	17
Share of workforce in the Manufacturing Sector	5.3	20
Above Secondary Level Population as % of Total (15-65 years)	0.5	20
Average Labour Turnover	0.0	21
Vocationally Trained Persons as % of total (15-64 years)	0.0	21
Labour Force Participation Rate	0.0	21

INFRASTRUCTURE

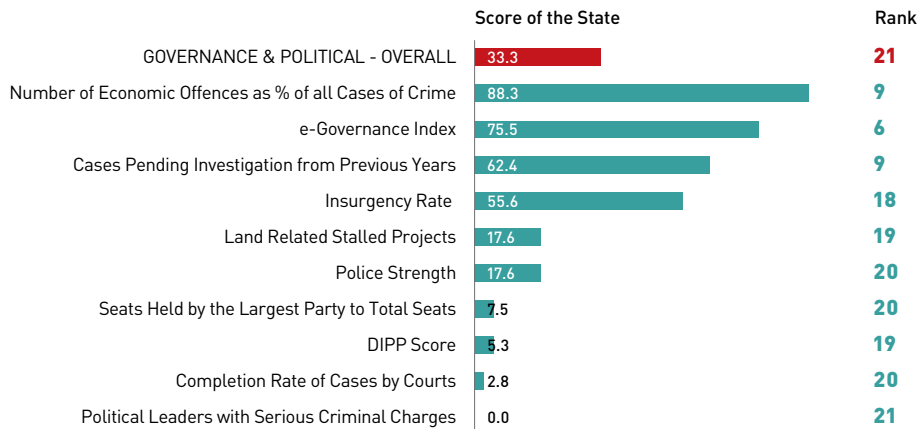
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	26.0	17
Power Shortage as % of Total Demand	82.1	13
Net Annual Ground Water Availability	70.0	5
Number of Airports	60.0	8
Average Electricity Tariff for Industry	28.1	18
Rail Density	22.6	5
ICT - Readiness Index	18.6	17
Road Density	5.6	10
Statutory Towns in Smart Cities as % of Total in State	3.0	13
Cargo Handled per day per Airport	0.1	18
Bank Branches per Lakh Population	0.0	21
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10



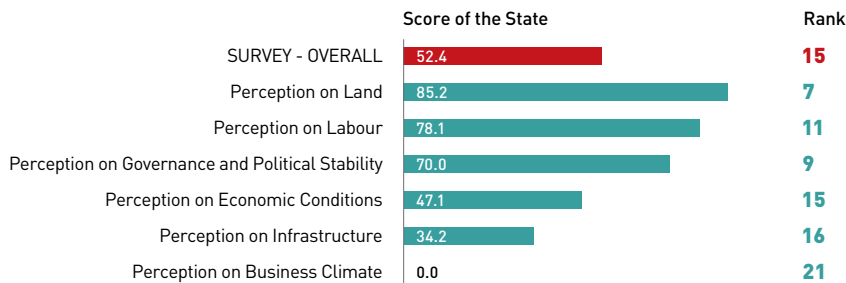
ECONOMY



GOVERNANCE & POLITICAL

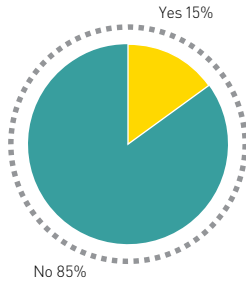


SURVEY

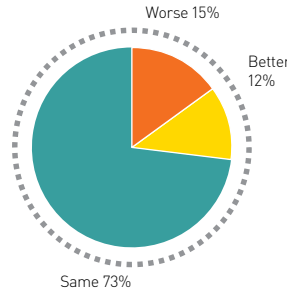


SURVEY RESULTS

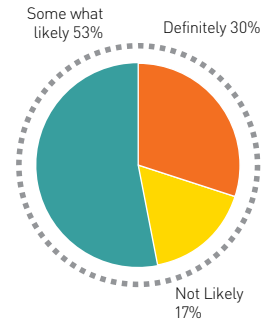
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

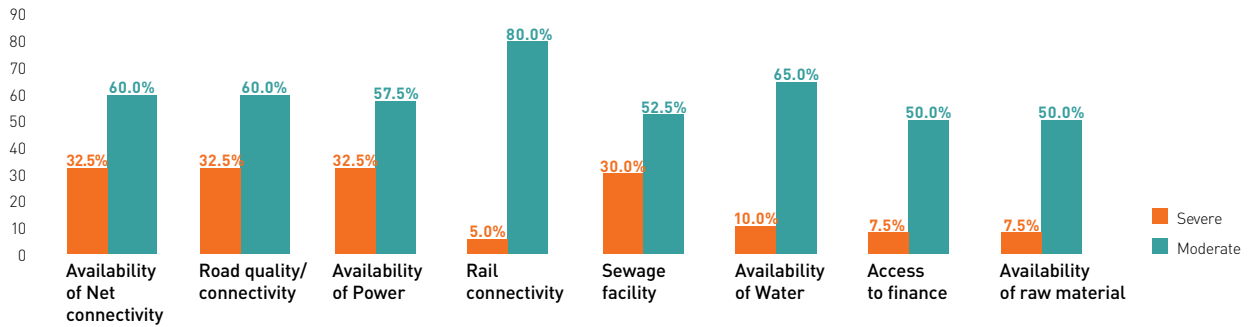


Percentage respondents planning business expansion in next five years



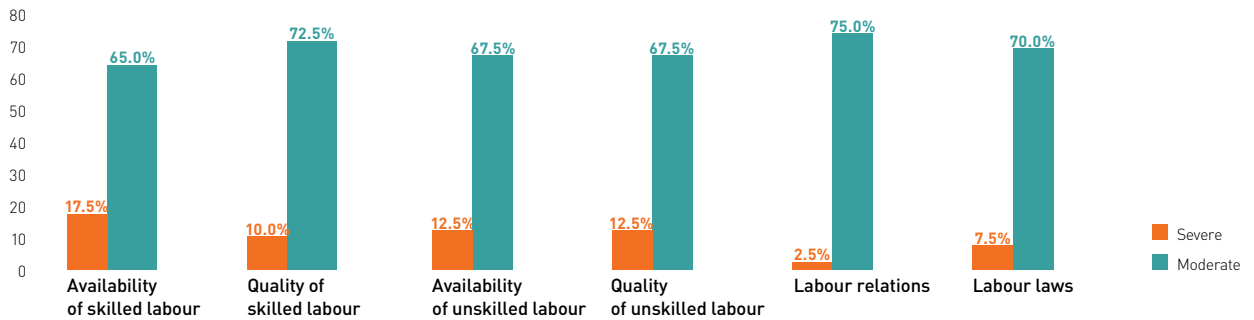
Infrastructure related issues

(% respondents labelling these as severe or moderate)



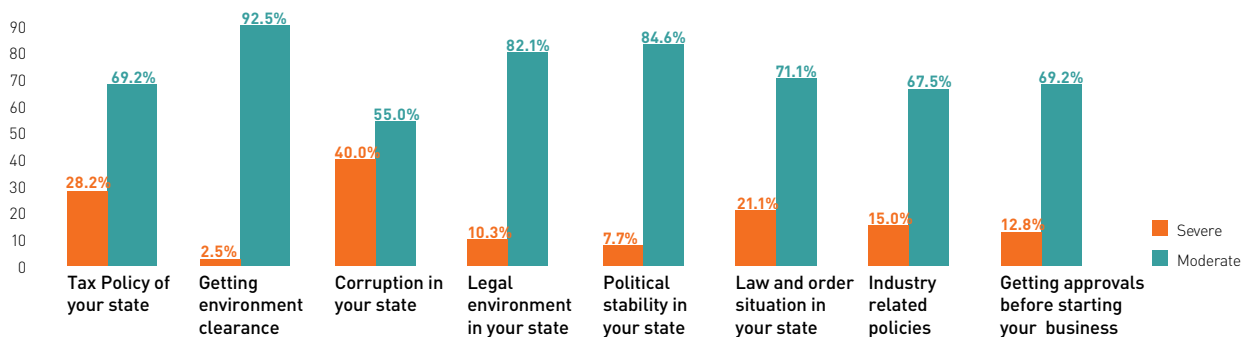
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Chhattisgarh



CHHATTISGARH STATS

Capital	Raipur
Area (sq. km)	1,35,192
Location	Central India
Per capita income (Rs.)	70,069
Literacy Rate (%)	70.3

STATE FOCUS SECTORS

1. Forest Products (herbs, spices, medicines)
2. Automobile, Auto Components
3. Mineral based
4. Plant, machineries, engineering products and its spares)
5. Agro & Food Processing
6. Pharmaceutical industry
7. White goods, electronic and electrical consumer goods
8. IT & ITES industry
9. Biotechnology & Nanotechnology
10. Textile Industry
11. Power generation, transmission & distribution among others

Source: State Industrial Policy 2014-19

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

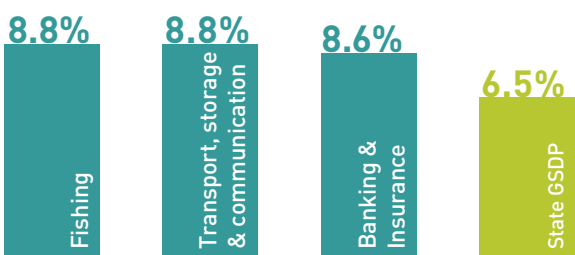
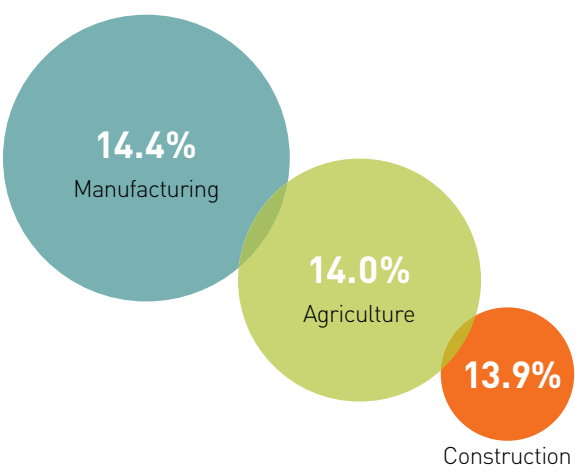


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



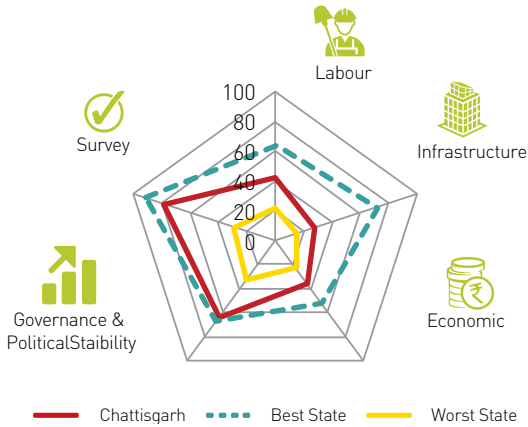
INCENTIVES

- Subsidy on interest payment, fixed capital investment, technical patent, and technology purchase.
- Concession in electricity, land premium on allotment of land in industrial areas.
- Single window system for ease of doing business and export promotion initiatives.

Source: State Industrial policy (2014-19)

Chhattisgarh N-SIPI 21 Rank **7**

State's Performance on the Five Broad Pillars



Chhattisgarh is one of the top five states in terms of two broad pillars: governance and political stability and survey, but lags behind on the rest.

Strengths

Chhattisgarh has one of the highest share of industrial sector to total GSDP across states, in addition to ranking on the top for the ratio of development expenditure to total expenditure. The state also performs extremely well in terms of industry's perception on economic climate and governance and political climate. The state has very high labour force participation ratio.

Weaknesses

The state lacks adequate road and rail network, and also suffers from poor business expectations as per N-SIPI Survey.

LABOUR

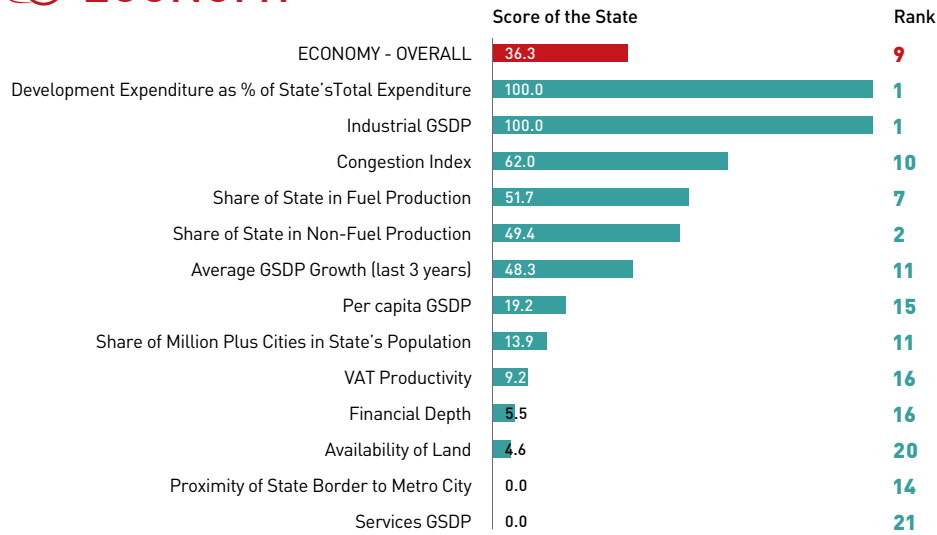
	Score of the State	Rank
LABOUR - OVERALL	42.0	12
Average Wages of Educated and Vocationally Trained Labour	100.0	1
Labour Force Participation Rate	96.7	2
Average Wages in the Manufacturing Sector	90.5	3
Average Labour Turnover	85.8	8
Percent of young (age 20-35 years) seeking/available for Work	18.7	13
Vocationally Trained Persons as % of Total (15-64 years)	12.3	14
Number of ITIs	6.5	17
Seating Capacity of ITIs	5.8	18
Above Secondary Level Educated Population as % of Total (15-64 years)	5.3	19
Share Workforce in the Manufacturing Sector	0.0	21

INFRASTRUCTURE

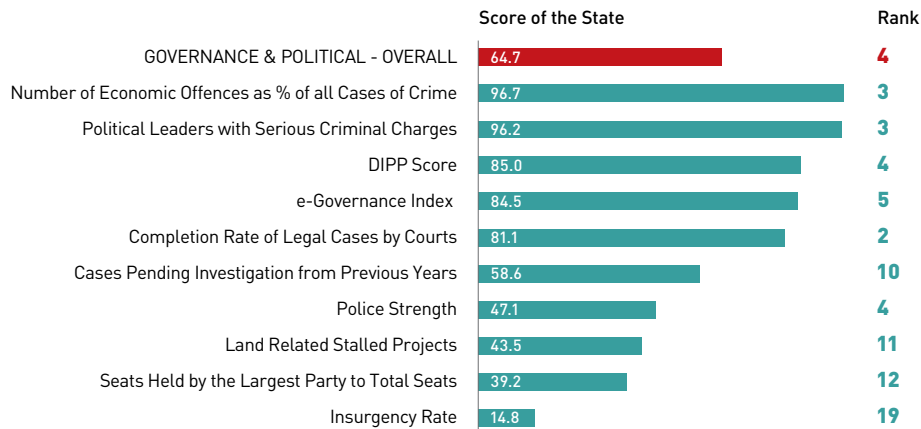
	Score of the State	Rank
INFRASTRUCTURE -OVERALL	27.2	16
Power shortage as % of Total Demand	91.7	9
Average Electricity Tariff for Industry	81.2	3
ICT - Readiness Index	47.9	8
Number of Airports	20.0	16
Net Annual Ground Water Availability	19.4	14
Bank Branches per Lakh Population	15.7	16
Rail Density	4.9	19
Road Density	1.1	20
Cargo Handled per day per Airport	0.3	12
Number of Statutory Towns in Smart Cities as % of Total in State	0.0	21
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10



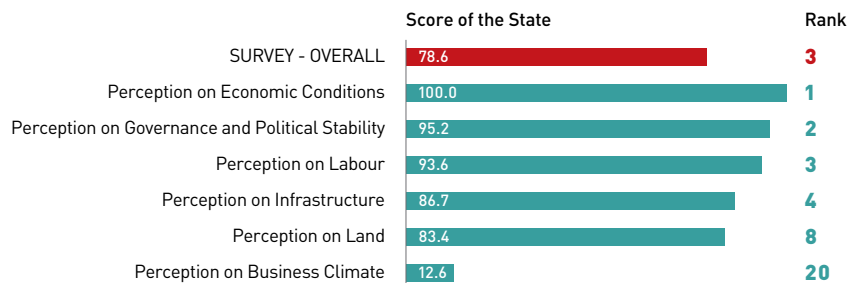
ECONOMY



GOVERNANCE & POLITICAL

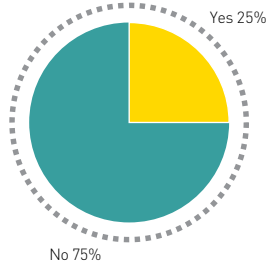


SURVEY

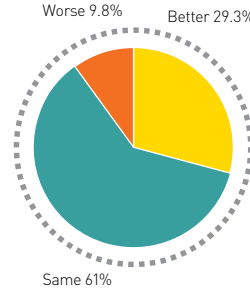


SURVEY RESULTS

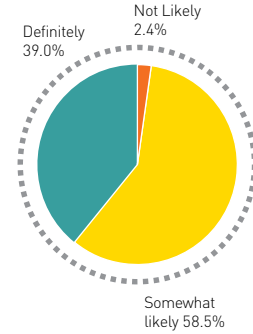
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

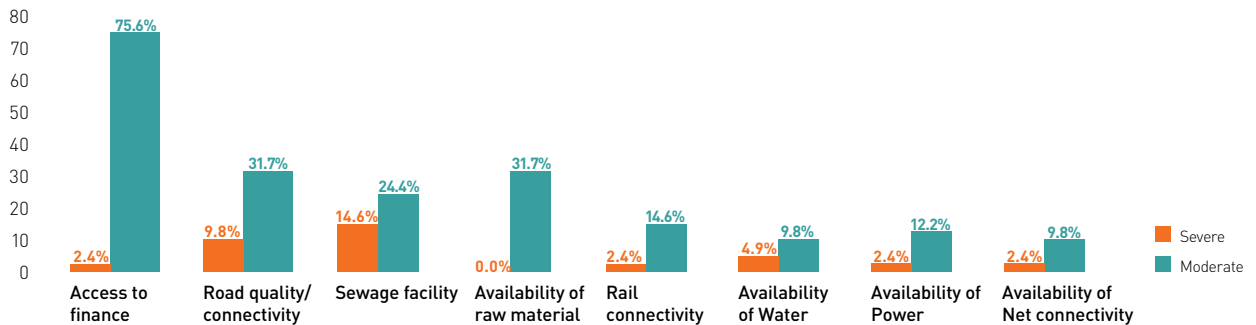


Percentage respondents planning business expansion in next five years



Infrastructure related issues

(% respondents labelling these as severe or moderate)



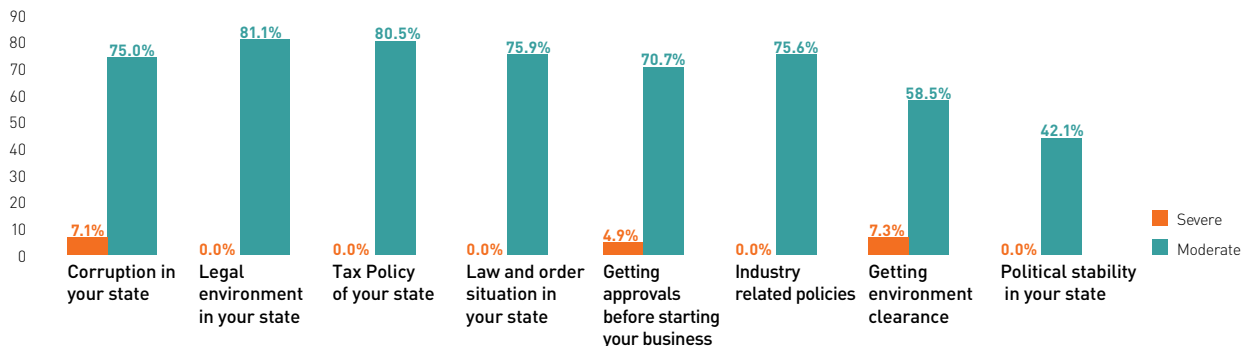
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Delhi



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

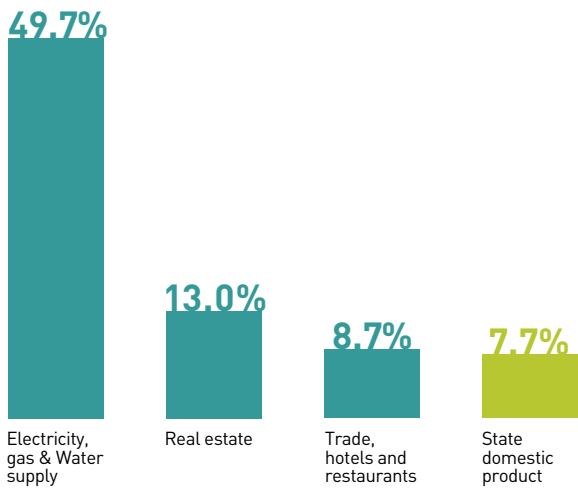
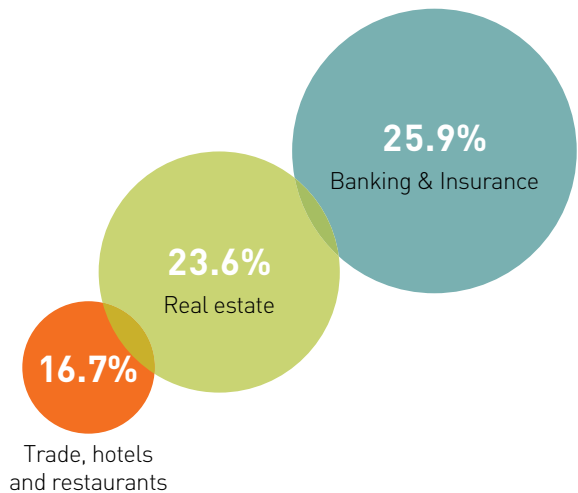


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



DELHI STATS

Capital	Delhi
Area (sq. km)	1,483
Location	Northern India
Per capita income (Rs.)	2,22,268
Literacy Rate (%)	80.8

STATE FOCUS SECTORS

1. IT and IT enabled services
2. Educational services
3. Business and financial services
4. Media
5. R&D
6. Design
7. Biotechnology

INCENTIVES

- Promote industry academia linkages, innovation, and entrepreneurship.
- Set up Industrial Development and O&M (Operations and Maintenance) Fund.
- Create land bank, follow cluster approach for formation of industrial estates.

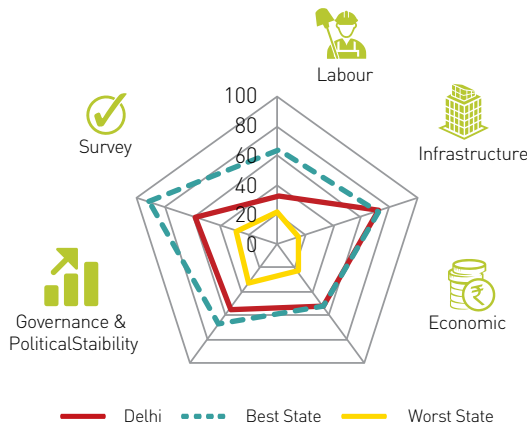
Source: Industrial Policy for Delhi, 2010-2021.

Delhi

N-SIPI 21 Rank 2

Delhi tops the chart in terms of two broad pillars: Infrastructure and Economic Climate, but lags behind on Labour.

State's Performance on the Five Broad Pillars



Strengths

Delhi tops in terms of share of service sector in state GSDP and favourable labour climate, ranking high also for financial depth in terms of ratio of bank branches per population and credit-GSDP ratio. The national capital also boasts of excellent road and rail density, and internet connectivity.

Weaknesses

Delhi lags behind on vocational training and share of ITIs. Also, troubling is the high congestion factor.

LABOUR

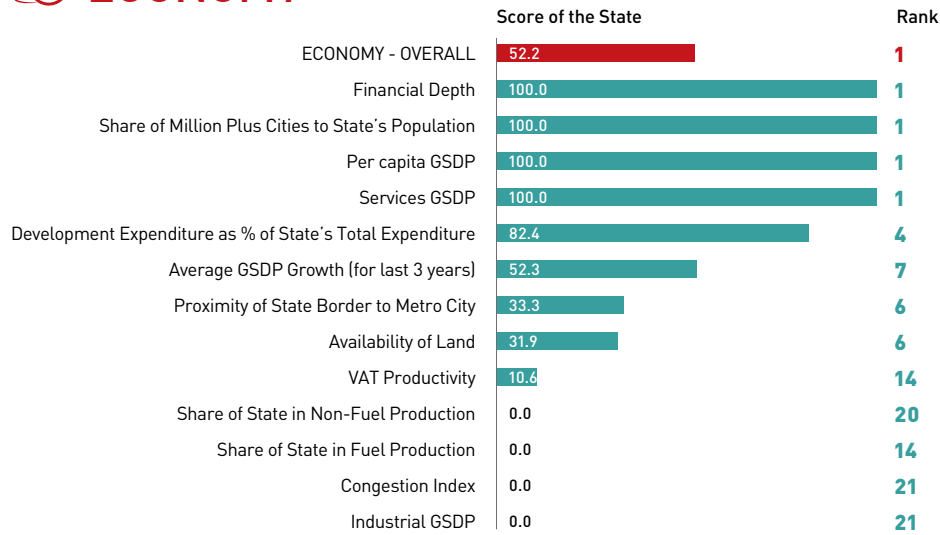
	Score of the State	Rank
LABOUR -OVERALL	31.9	19
Above Secondary Level Population as % of Total (15-64 years)	100.0	1
Share of Workforce in the Manufacturing Sector	99.1	2
Average Wages in Manufacturing Sector	35.7	19
Percent of young (age 20-35 years) Seeking /Available for Work	32.4	4
Labour Force Participation Rate	17.1	20
Average Labour Turnover	14.8	18
Vocationally Trained persons as % of total (15-64 years)	10.5	15
Seating Capacity of ITIs	5.2	19
Number of ITIs	2.7	20
Average Wages of Educated and Vocationally Trained Labour	1.9	20

INFRASTRUCTURE

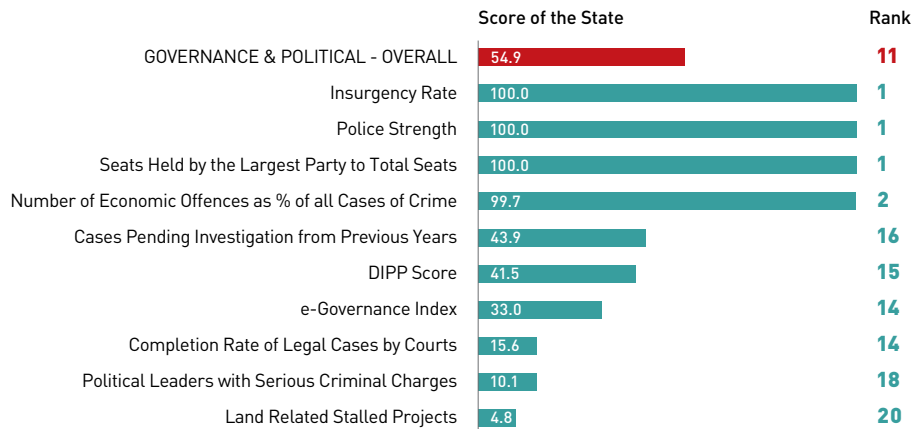
	Score of the State	Rank
INFRASTRUCTURE -OVERALL	71.1	1
Statutory Towns in Smart Cities as % of Total in State	100.0	1
Cargo Handled Per Day Per Airport	100.0	1
Road Density	100.0	1
Power Shortage to Total Demand	97.4	2
Bank Branches Per lakh Population	90.9	3
ICT - Readiness Index	85.7	2
Rail Density	75.0	2
Average Electricity Tariff for Industry	55.5	9
Net Annual Ground Water Availability	46.8	7
Number of Airports	20.0	16
Cargo Handled Per port	0.0	10
Number of Sea-ports	0.0	10



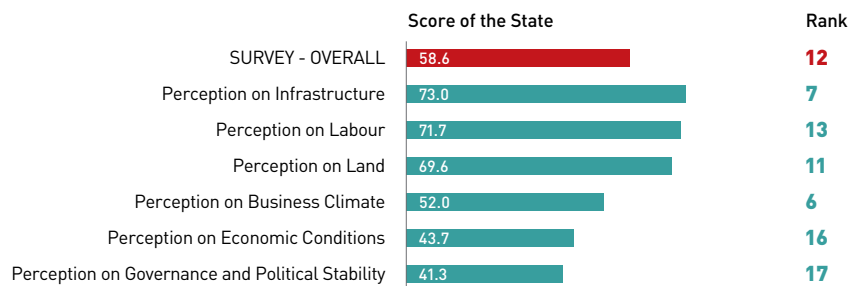
ECONOMY



GOVERNANCE & POLITICAL

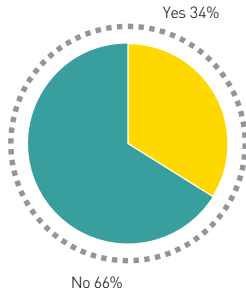


SURVEY

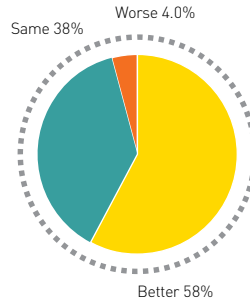


SURVEY RESULTS

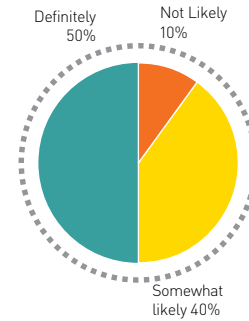
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

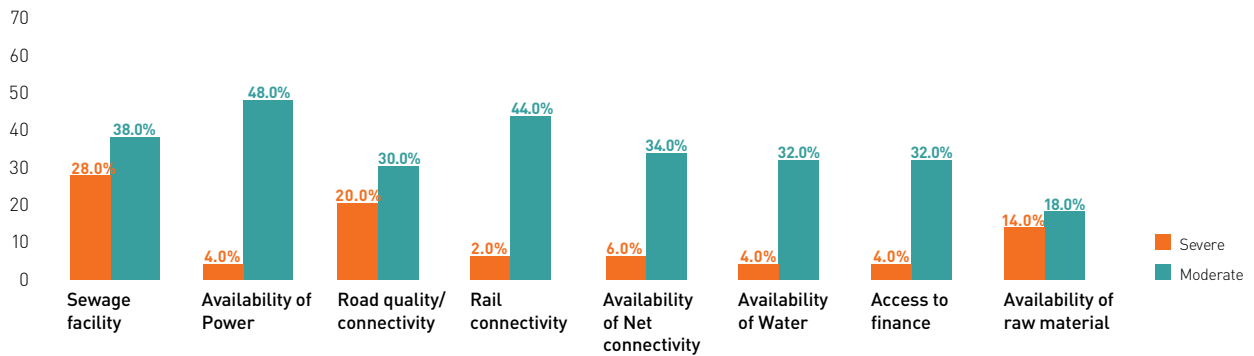


Percentage respondents planning business expansion in next five years



Infrastructure related issues

(% respondents labelling these as severe or moderate)



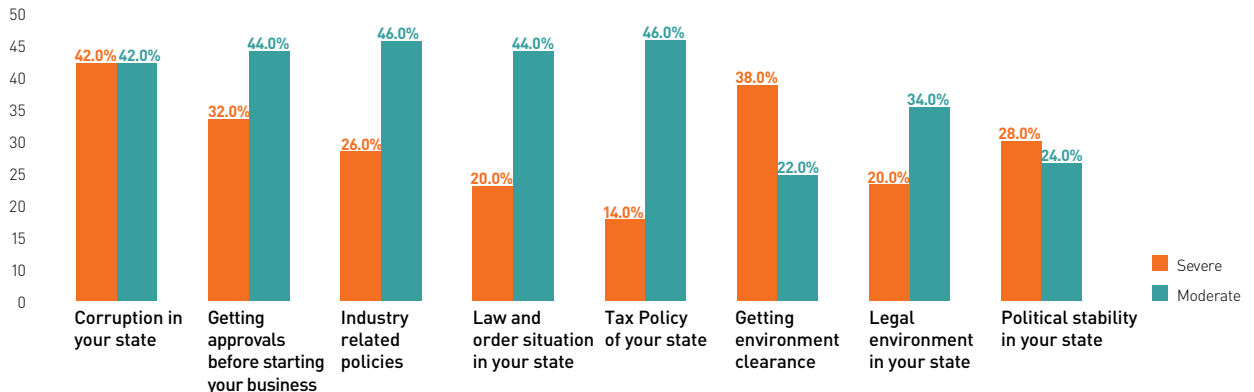
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Gujarat

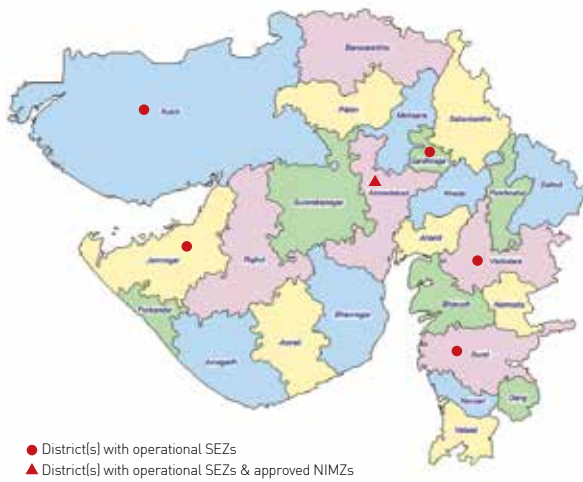


Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

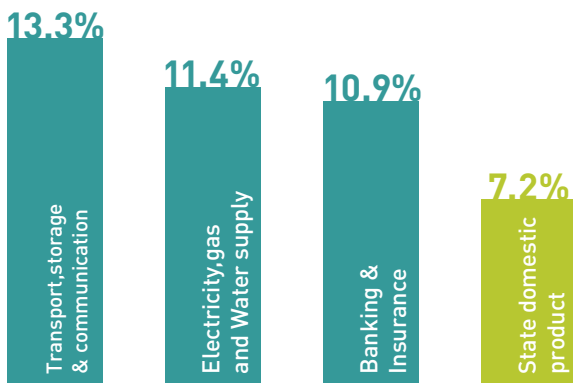
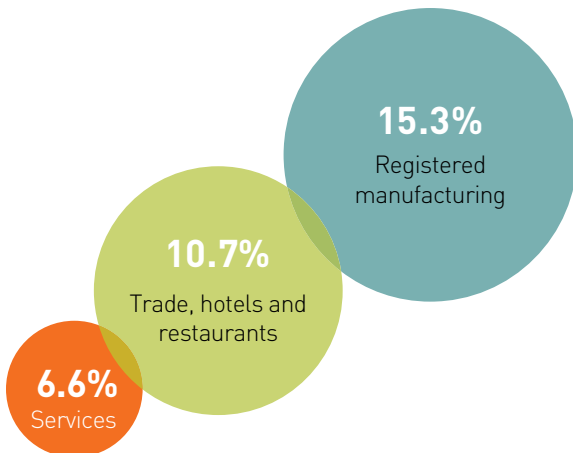


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



GUJARAT STATS

Capital	Gandhinagar
Area (sq. km)	1,96,244
Location	Western India
Per capita income (Rs.)	1,25,467
Literacy Rate (%)	78.0

STATE FOCUS SECTORS

1. Healthcare Industry
2. Transport
3. Ports & Ship Building Industry
4. Agri & Food Business
5. Manufacturing
6. Innovation and R&D
7. Renewable Energy
8. Micro, Small and Medium Enterprises
9. Biotechnology and Nano – Technology
10. Mega Projects

Source: State Industrial and Investment Policy, 2015

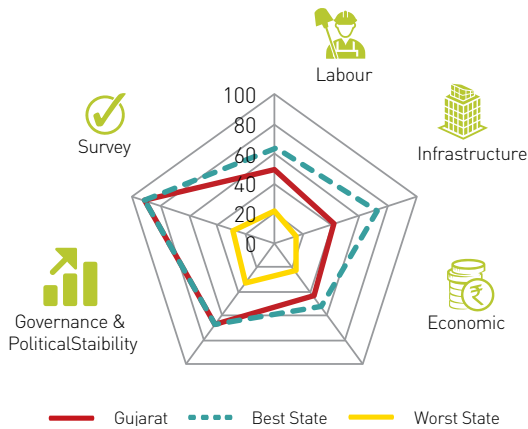
INCENTIVES

- Incentives and assistance for mega IT/ITES projects, development of Technology Park under the new IT Policy.
- Incentives for clusters and anchor units, employment generation grant on EPF and single window clearance system under Electronics Policy (2014-19)
- Facilitation of Agro and Food Processing activities like hi-tech agriculture, organic farming and Agri-infrastructure projects.

Gujarat N-SIPI 21 Rank **1**

Gujarat is the top performing state ranking among the top five states on all broad pillars.

State's Performance on the Five Broad Pillars



Strengths

Gujarat boasts of the lowest power shortage, ranking at the top also on DIPP Ease of Doing Business. In addition, Gujarat is one of the top two states on survey parameters such as labour climate, infrastructure, economic climate, and business expectations in the state.

Weaknesses

The state ranks low on stalled projects because of land related issues and road density.

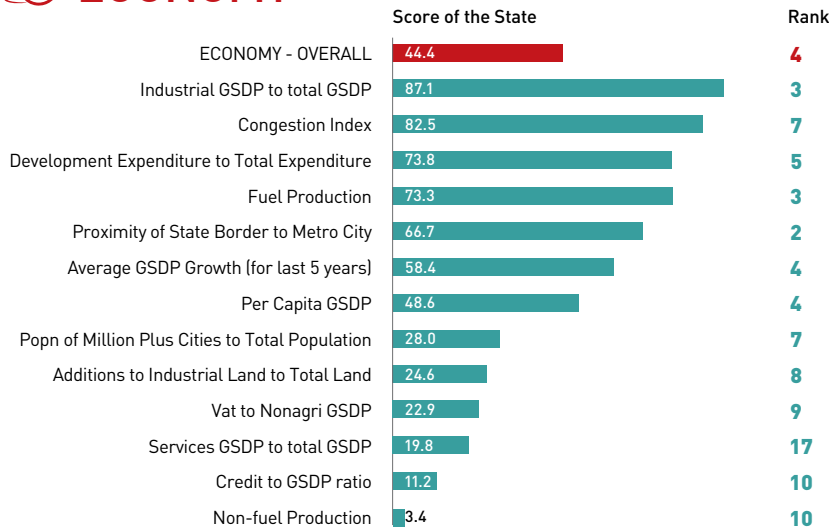
LABOUR

	Score of the State	Rank
LABOUR -OVERALL	49.3	4
Share of Workforce in the Manufacturing Sector	97.0	3
Average Wages of Educated and Vocationally Trained Labour	86.7	3
Average Labour Turnover	73.8	10
Average Wages in the Manufacturing Sector	69.2	13
Labour Force Participation Rate	58.4	9
Seating Capacity of ITIs	39.4	8
Number of ITIs	31.0	8
Above Secondary Level Population as % of Total (15-64 years)	19.4	12
Vocationally Trained Persons as % of Total (15-64 years)	17.6	10
Percent of Young (age 25-35 years) Seeking/ Available for Work	0.0	21

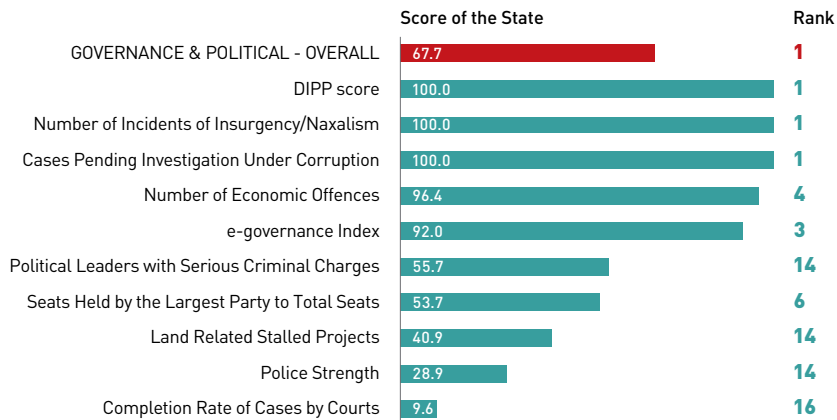
INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE -OVERALL	41.9	3
Power Shortage to Total Demand	100.0	1
Number of Airports	100.0	1
Number of Sea-ports	84.0	2
Ict-Readiness Index	76.0	4
Average Electricity Tariff for Industry	45.7	14
Cargo Handled Per Port	44.1	4
Bank Branches Per Lakh Population	38.4	11
Net Annual Ground Water Availability	20.4	13
Rail Density	15.9	9
Statutory Towns in Smart Cities as % of Total in State	5.9	6
Road Density	2.5	17
Cargo Handled Per Day at Airport	0.6	9

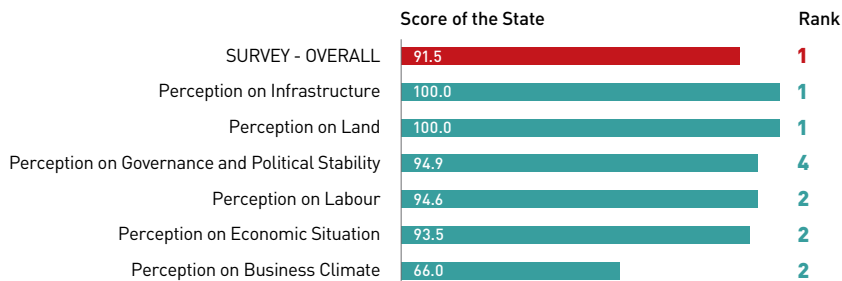
ECONOMY



GOVERNANCE & POLITICAL

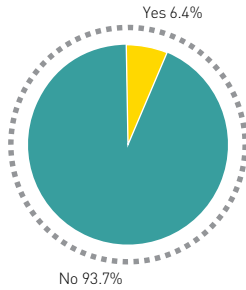


SURVEY

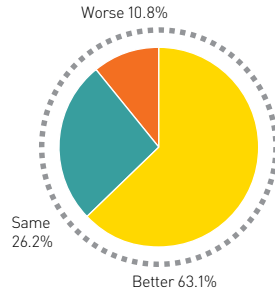


SURVEY RESULTS

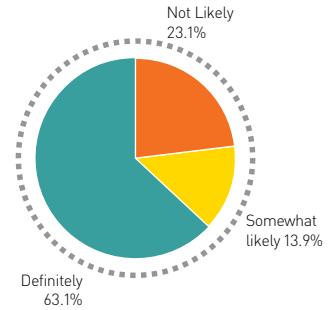
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

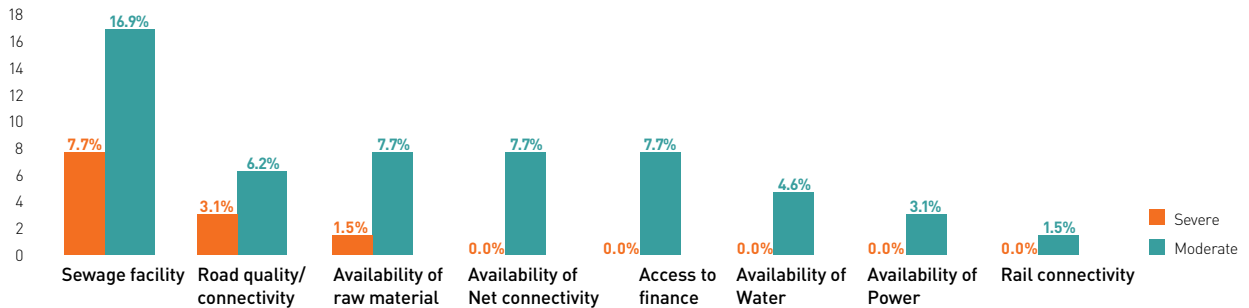


Percentage respondents planning business expansion in next five years



Infrastructure related issues

(% respondents labelling these as severe or moderate)



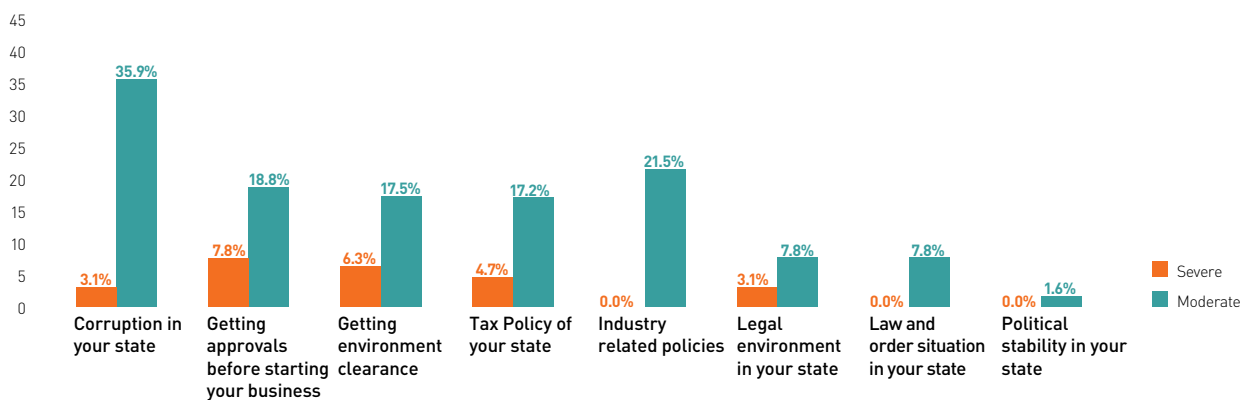
Labour related issues

(% respondents labelling these as severe or moderate)

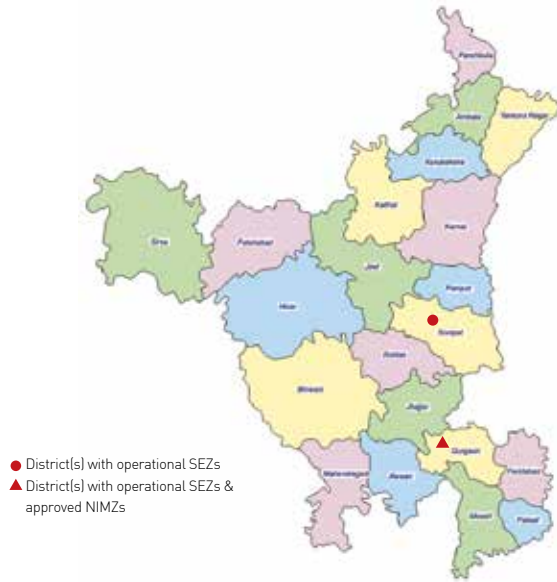


Governance related issues

(% respondents labelling these as severe or moderate)



Haryana



HARYANA STATS

Capital	Chandigarh
Area (sq. km)	44,212
Location	Northern India
Per capita income (Rs.)	1,46,706
Literacy Rate (%)	75.6

STATE FOCUS SECTORS

1. Auto, Auto Components and Light Engineering
2. Agro-based, food processing & allied industry
3. Textiles / Apparel / Knitting / Embroidery
4. Footwear & Accessories
5. Electronics & IT / ITES
6. Defence & Aerospace Manufacturing
7. Renewable Energy & Solar Parks
8. Pharmaceutical & Chemical Industry

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

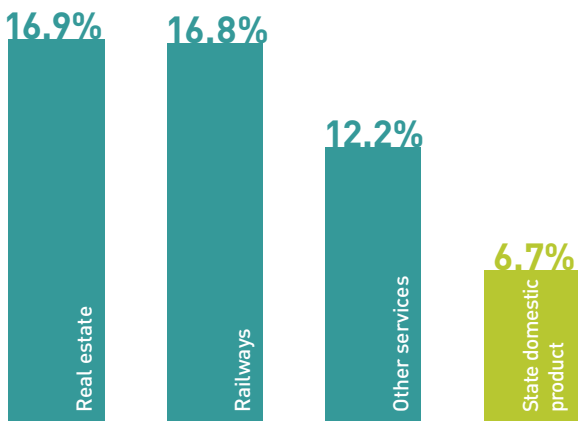


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



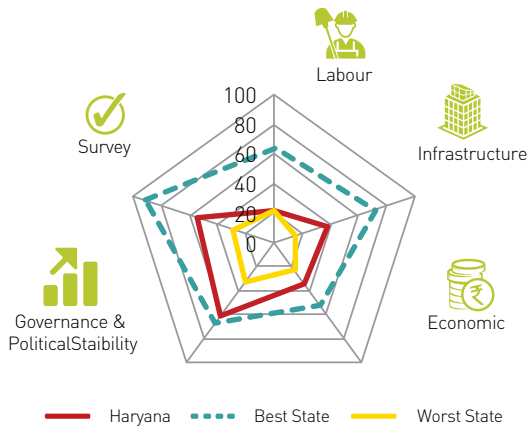
INCENTIVES

- Allotment of land in the industrial estates developed by HSIID.
- Investment Subsidy, freight subsidy to Export-oriented units; Investment in services sector.
- Ease of doing business – single window, online clearance and approvals; third party verifications or self-certifications.

Source: Enterprises Promotion Policy, 2015.

Haryana N-SIPI 21 Rank **16**

State's Performance on the Five Broad Pillars



Haryana is close to the top performing states in terms of governance and political stability with, but lags behind on the other pillars.

Strengths

Haryana's strength lies in having high per capita GSDP, extremely low power shortage, and relatively positive perception of the industry about the state business and economic climate. The state also has one of the lowest shares of MPs and MLAs with serious criminal record, in addition to very low incidence of insurgency rate.

Weaknesses

The state lags behind on the number of ITIs and share of state in total seating capacity of ITIs in India, including low labour force participation rate. The state also suffers from high congestion factor.

LABOUR

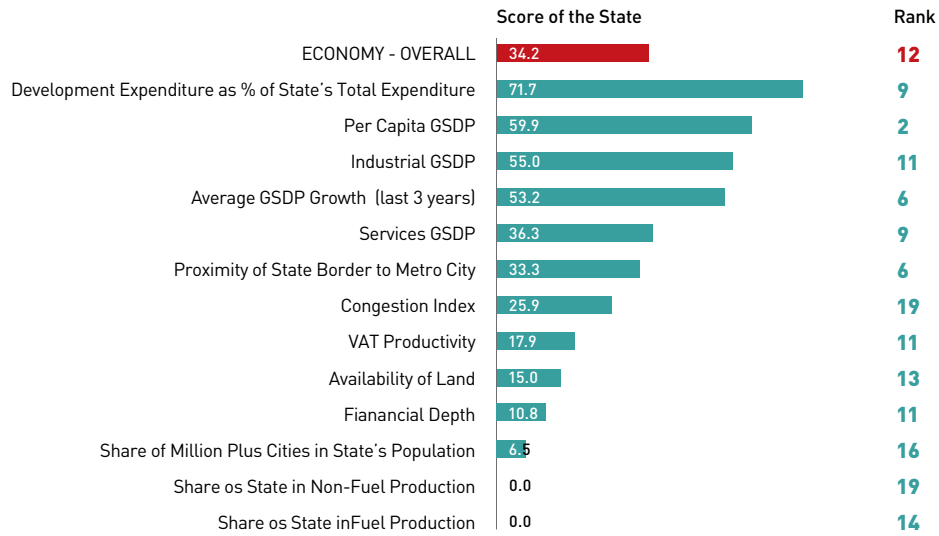
	Score of the State	Rank
LABOUR -OVERALL	22.1	21
Share of Workforce in the Manufacturing Sector	61.8	6
Above Secondary Level Population as % of total (15-64 years)	38.3	4
Vocationally Trained Persons as % of Total (15-64 years)	27.3	6
Labour Force Participation Rate	22.7	19
Percent of Young (age 25-35 years) seeking/ available for work	22.6	11
Seating Capacity of ITIs	15.3	15
Average Wages in Manufacturing Sector	12.8	20
Average Labour Turnover	10.5	19
Number of ITIs	9.7	15
Average Wages of Educated and Vocationally Trained Labour	0.0	21

INFRASTRUCTURE

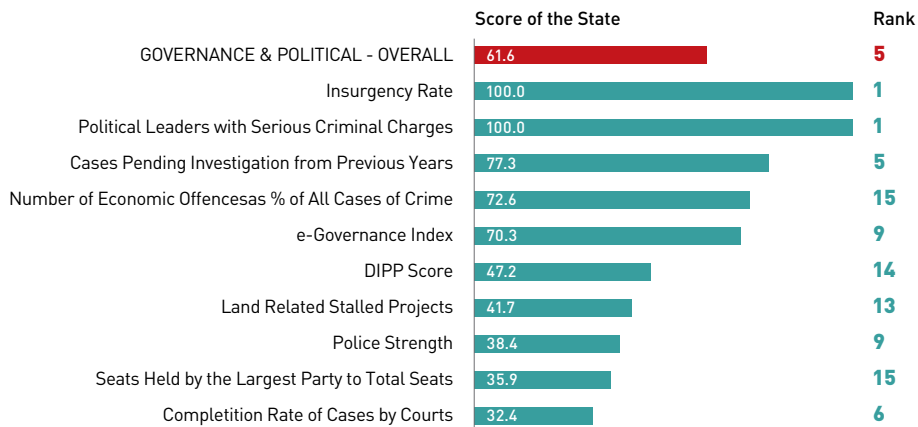
	Score of the State	Rank
INFRASTRUCTURE -OVERALL	36.9	8
Power Shortage as % of Total Demand	97.4	2
Bank Branches Per Lakh Population	69.9	6
ICT-Readiness Index	64.5	6
Average Electricity Tariff for Industry	55.5	9
Net Annual Ground Water Availability	53.8	6
Rail Density	20.7	6
Statutory Towns in Smart Cities as % of Total in State	4.1	9
Road Density	3.1	13
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10
Cargo Handled per Day at Airport	0.0	19
Number of Airports	0.0	21



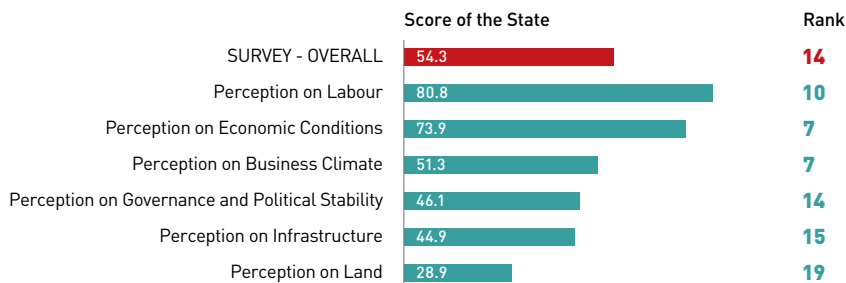
ECONOMY



GOVERNANCE & POLITICAL

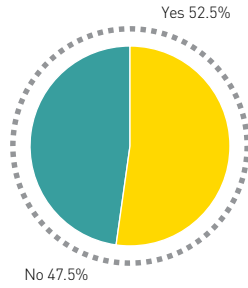


SURVEY

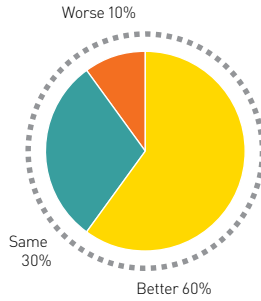


SURVEY RESULTS

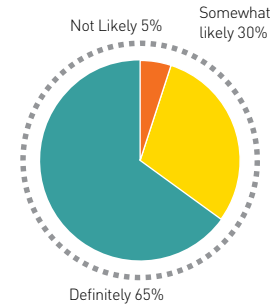
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

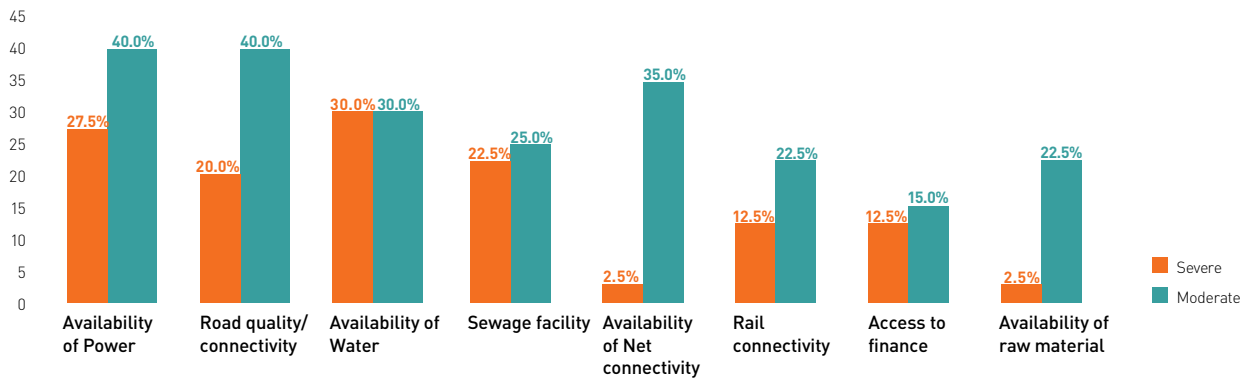


Percentage respondents planning business expansion in next five years



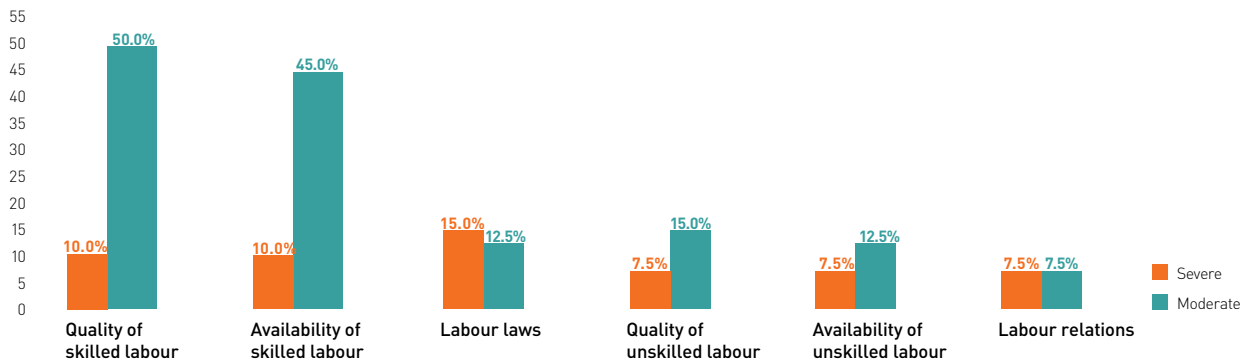
Infrastructure related issues

(% respondents labelling these as severe or moderate)



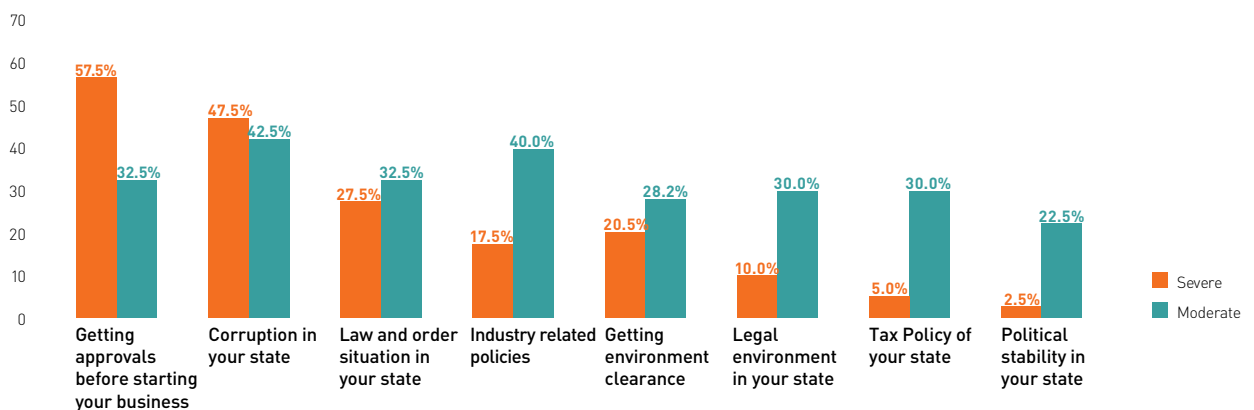
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Himachal Pradesh



HIMACHAL PRDADESH STATS

Capital	Shimla
Area (sq. km)	55,673
Location	Northern India
Per capita income (Rs.)	1,17,275
Literacy Rate (%)	82.8

STATE FOCUS SECTORS

1. Handlooms
2. Handicrafts
3. Sericulture industry
4. Agro/ Horticulture/ Animal Husbandry & Aqua-Produce Based Industry
5. MSME
6. Khadi, Textiles and garments industries
7. Mineral based industry

Source: Industrial Policy, 2013, Government of Himachal Pradesh

INCENTIVES

- Special incentives for setting up environment friendly industries, thrust industries and Khadi and Village Industries.
- Incentives for improving productivity through technological and process improvements.
- Incentives for patenting innovation.

Source: State's Industrial Policy (2013)

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

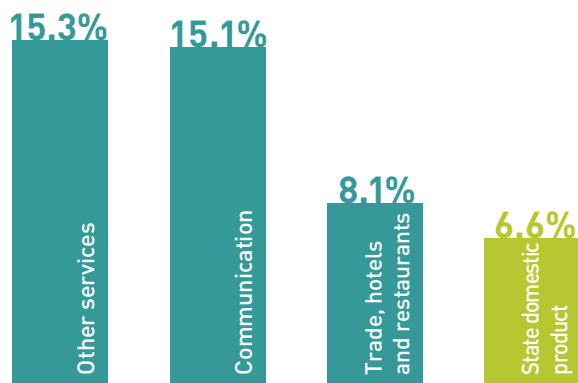
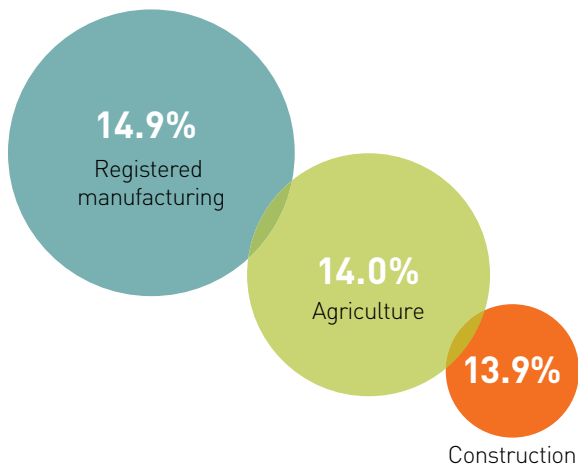
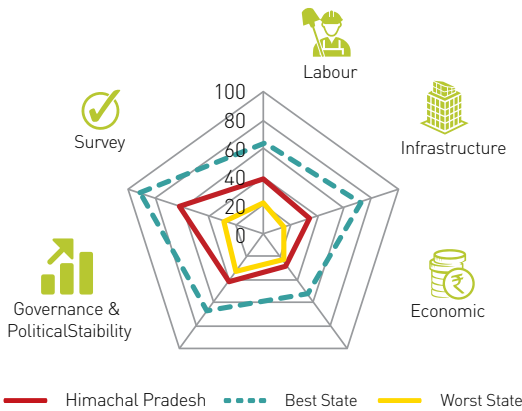


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



Himachal Pradesh N-SIPI 21 Rank **17**

State's Performance on the Five Broad Pillars



Himachal Pradesh is one of the top ten states in terms of two broad pillars: infrastructure and N-SIPI Survey, but lags behind in terms of the other pillars.

Strengths

The state gets the highest ranking in governance and political stability in N-SIPI Survey. Himachal also has very high labour force participation, along with low rate of insurgency. The state has one of the highest bank branches per lakh population, providing wider physical access to the banking network.

Weaknesses

The state lags behind in infrastructure, especially in terms of road and rail density. The state also falls behind in terms of the share of development expenditure in total state expenditure.

LABOUR

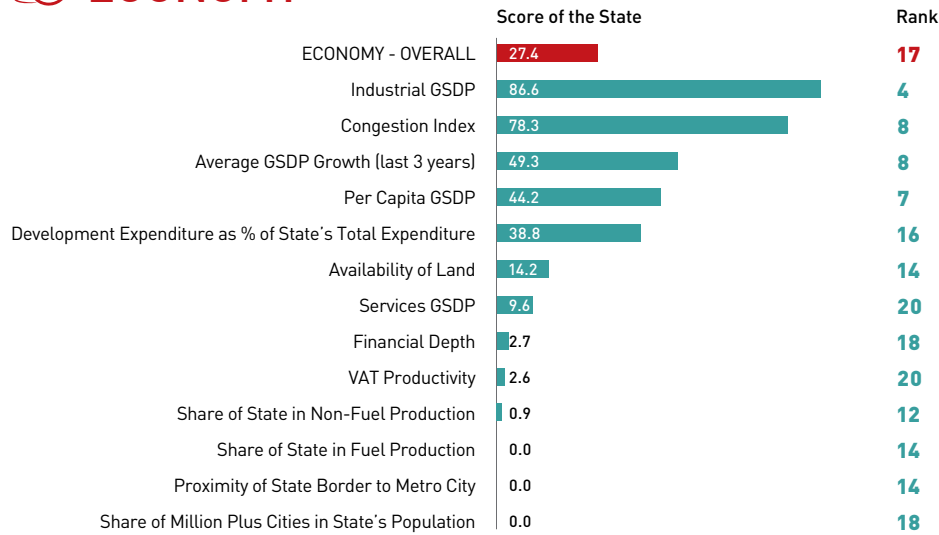
	Score of the State	Rank
LABOUR -OVERALL	38.0	14
Labour Force Participation Rate	100.0	1
Average Wages in the Manufacturing Sector	77.7	8
Average wages of educated and Vocationally Trained Labour	71.7	12
Vocationally Trained Persons as % of total (15-64 years)	45.8	3
Above Secondary Level Population as % of total (15-64 years)	25.6	8
Percent of young (age 20-35 years) Seeking /Available for Work	24.5	9
Share of Workforce in the manufacturing Sector	14.0	18
Number of ITIs	9.8	14
Seating Capacity of ITIs	8.9	16
Average Labour Turnover	2.3	20

INFRASTRUCTURE

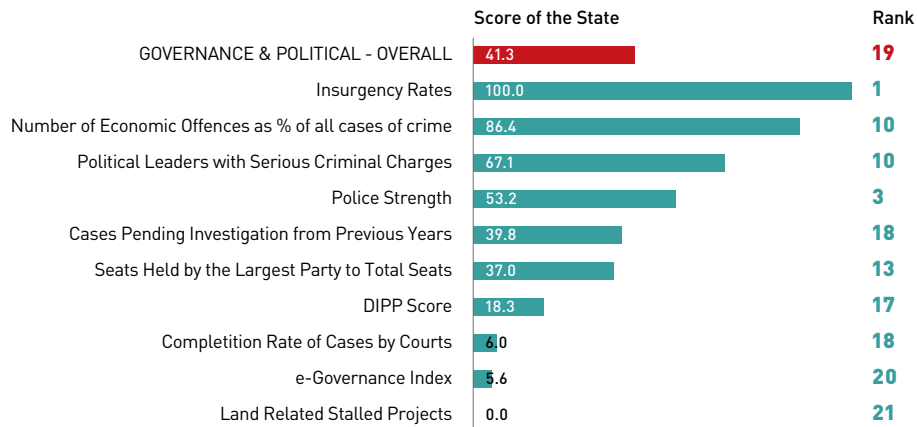
	Score of the State	Rank
INFRASTRUCTURE -OVERALL	34.3	10
Bank Branches per Lakh Population	100.0	1
Average Electricity Tariff for Industry	95.2	2
Power Shortage as % of Total Demand	94.2	7
Number of Airports	40.0	13
ICT-Readiness Index	26.9	16
Road Density	2.8	16
Rail Density	2.4	20
Statutory Towns in Smart Cities as % of Total in State	1.9	17
Net Annual Ground Water Availability	0.0	21
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10
Cargo Handled Per Day at Airport	0.0	19



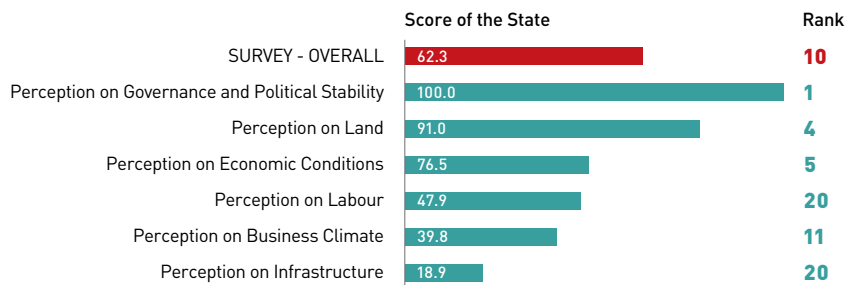
ECONOMY



GOVERNANCE & POLITICAL

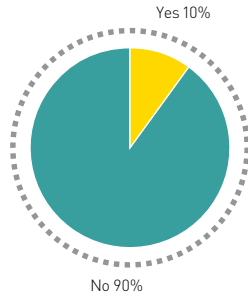


SURVEY

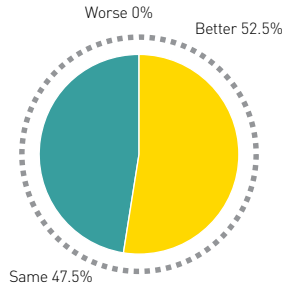


SURVEY RESULTS

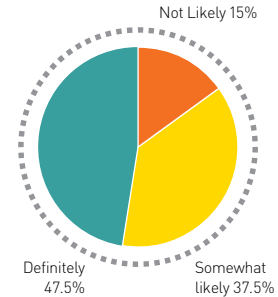
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

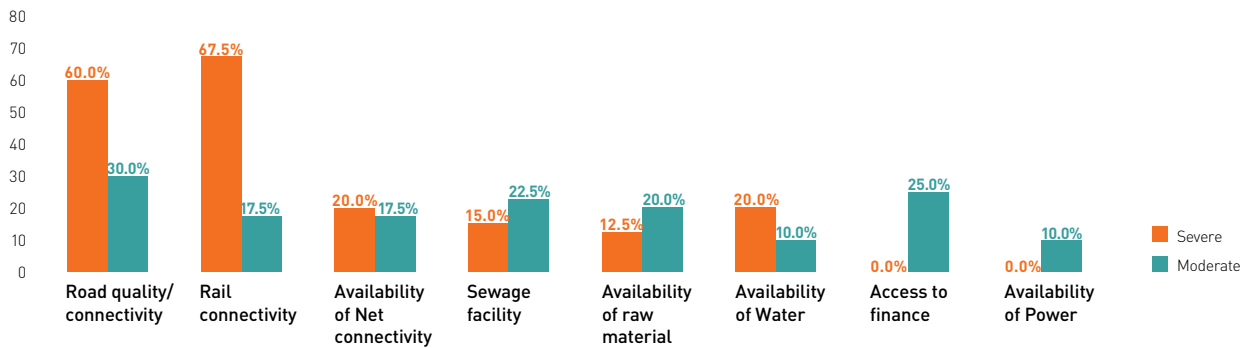


Percentage respondents planning business expansion in next five years



Infrastructure related issues

(% respondents labelling these as severe or moderate)



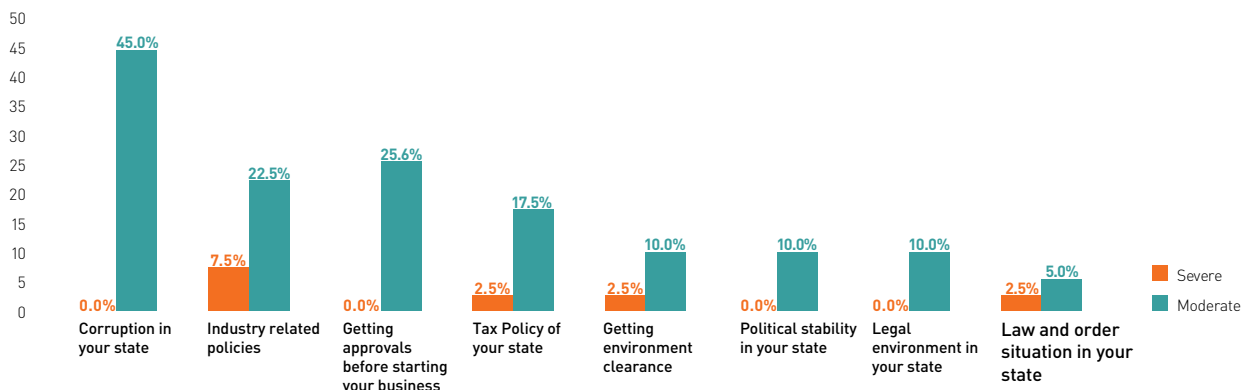
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Jharkhand



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

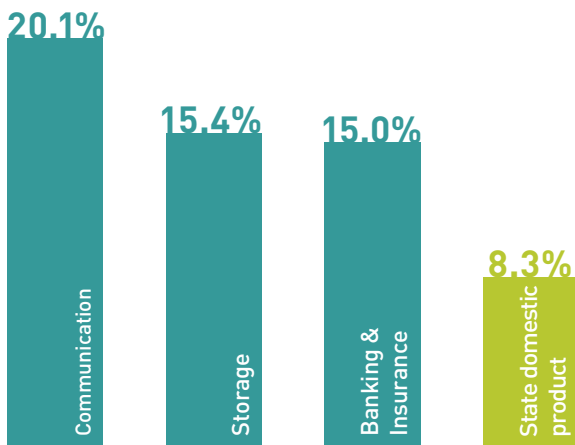
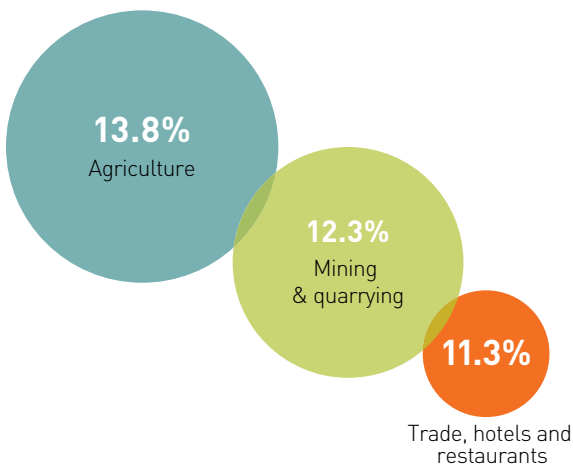


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



JHARKHAND STATS

Capital	Ranchi
Area (sq. km)	79,716
Location	Central India
Per capita income (Rs.)	53,017
Literacy Rate (%)	66.4

STATE FOCUS SECTORS

1. Power generation and distribution
2. Infrastructure development
3. Automobile industry
4. Mines and mineral based industries
5. White goods segment

Source: Department of Industry Jharkhand

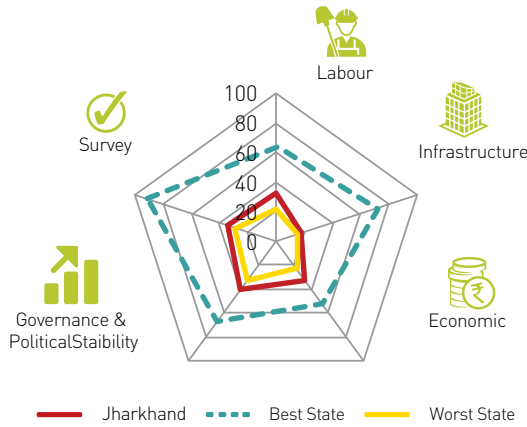
INCENTIVES

- Reimbursement of expenditure incurred on patent registration.
- Incentives under Comprehensive Project Investment Subsidy (CPIS); incentives on total fixed capital investment for MSMEs.
- Special incentives for industrial parks, textiles, agro-food processing cluster, power plant, IT / ITES and Tourism.

Source: Jharkhand Industrial Policy 2012

Jharkhand N-SIPI 21 Rank **21**

State's Performance on the Five Broad Pillars



Jharkhand needs to work on improving both infrastructure and governance and political stability to attract investments in the state.

Strengths

Jharkhand is one of the top three states in terms of average growth rate of GSDP and DIPP score of Ease of Doing Business. The state also has very high share of industrial sector in total GSDP across different states. Further, Jharkhand also has very high average labour turnover.

Weaknesses

The state suffers from high rate of insurgency and has relatively high rate of stalled projects due to land related issues.

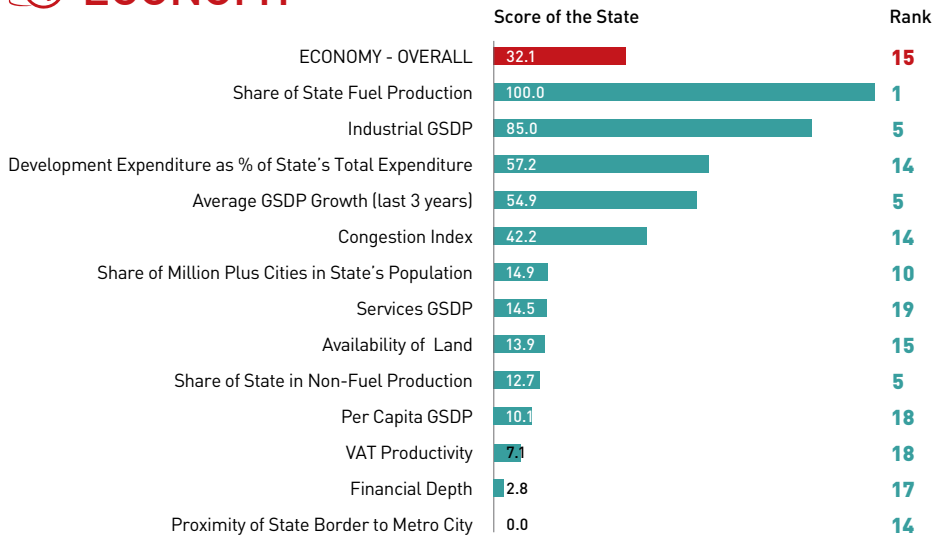
LABOUR

	Score of the State	Rank
LABOUR -OVERALL	32.5	18
Average Labour Turnover	99.9	2
Average Wages in the Manufacturing Sector	55.6	16
Average Wages of Educated and Vocationally Trained Labour	50.6	16
Labour Force Participation Rate	39.4	16
Percent of young (age 20-35 years) Seeking /Available for Work	22.6	12
Share of Workforce in the Manufacturing Sector	19.0	16
Seating Capacity of ITIs	17.5	14
Above Secondary Level Population as % of Total (15-64 years)	10.2	17
Number of ITIs	8.6	16
Vocationally Trained Persons as % of Total (15-64 years)	1.7	20

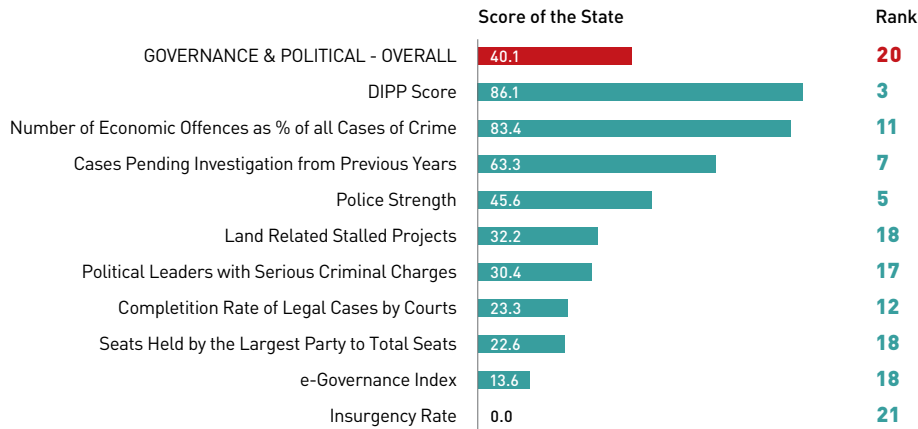
INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE -OVERALL	17.7	20
Power Shortage as % of Total Demand	82.1	13
Average Electricity Tariff for Industry	38.9	16
Bank Branches per Lakh Population	16.0	15
Net Annual Ground Water Availability	15.9	16
Rail Density	15.2	11
Number of Airports	10.0	20
Statutory Towns in Smart Cities as % of Total in State	4.1	9
Cargo Handled per Day at Airport	0.3	11
ICT-readiness Index	0.0	21
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10
Road Density	0.0	21

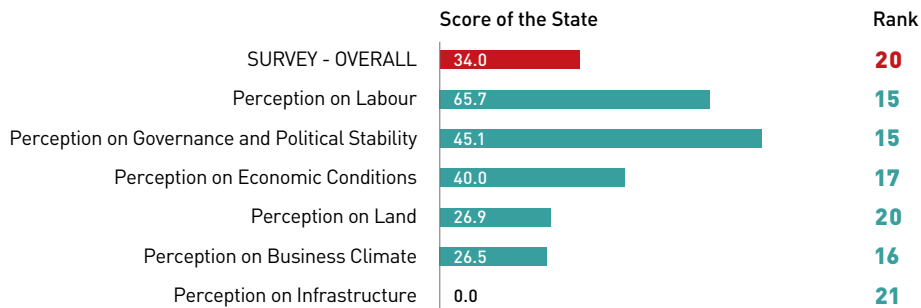
ECONOMY



GOVERNANCE & POLITICAL

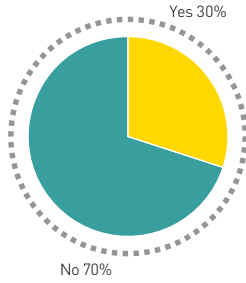


SURVEY

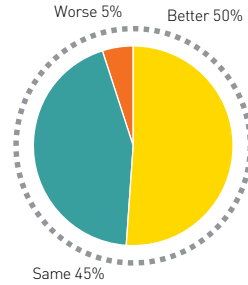


SURVEY RESULTS

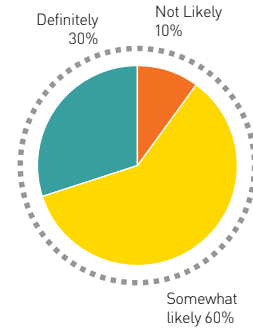
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

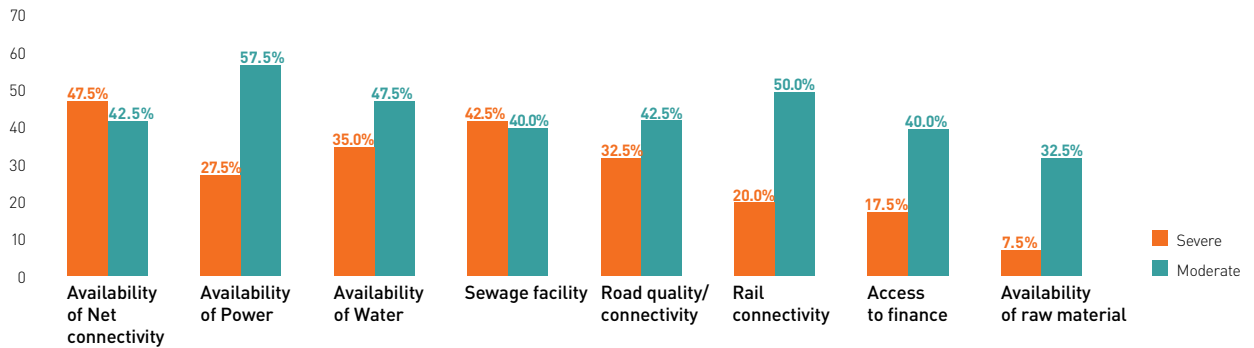


Percentage respondents planning business expansion in next five years



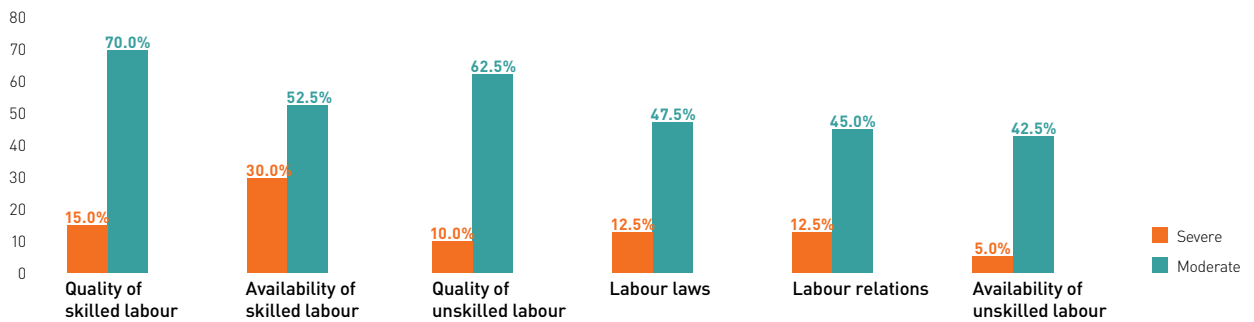
Infrastructure related issues

(% respondents labelling these as severe or moderate)



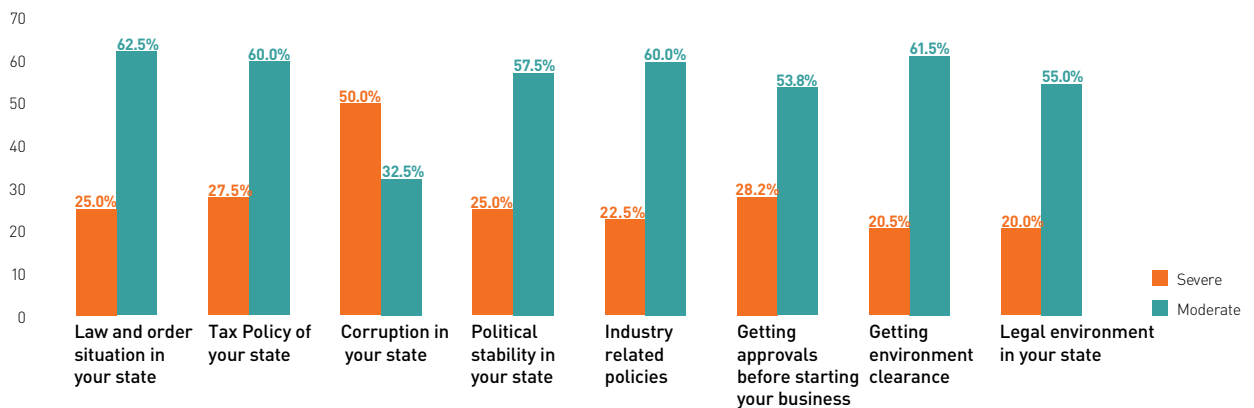
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Karnataka



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

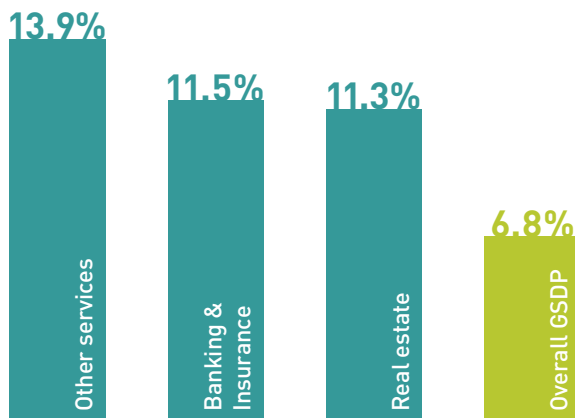
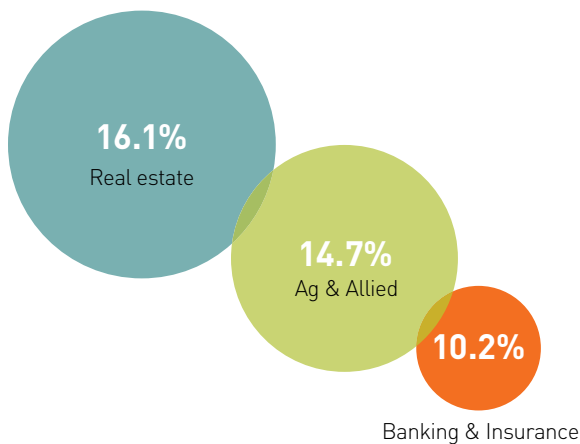


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



KARNATAKA STATS

Capital	Bengaluru
Area (sq. km)	1,91,791
Location	Southern India
Per capita income (Rs.)	1,00,797
Literacy Rate (%)	75.4

STATE FOCUS SECTORS

1. IT and IT enabled Services
2. Agro and food processing (floriculture)
3. Biotechnology
4. Aerospace
5. Engineering
6. Animation
7. Electronics and telecom
8. Electronic hardware
9. Automotive
10. Tourism
11. Textiles and apparel
12. Renewable energy

Source: Directorate of Industries and Commerce

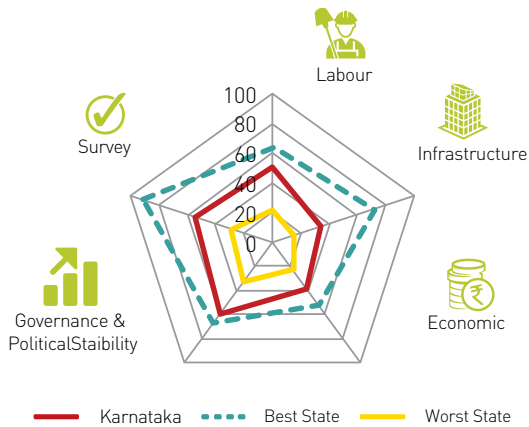
INCENTIVES

- Exemption from entry tax, electricity tariff (for focused ultra-mega and super mega enterprises)
- Interest free loan and investment subsidies
- Set up State Industrial Corridors to benefit backward areas.

Source: Karnataka Industrial Policy 2014-19

Karnataka N-SIPI 21 Rank **6**

State's Performance on the Five Broad Pillars



Karnataka is one of the top states in terms of labour, but needs to catch up in terms of the other pillars.

Strengths

Karnataka is one of the top performing states in terms of e-governance facilities. The state government spends higher proportion of its expenditure on development category. The state also has higher share of ITIs for developing skilled workforce and very low rate of insurgency.

Weaknesses

The state lags behind in terms of low rail density. Karnataka also suffers from relatively higher power shortage.

LABOUR

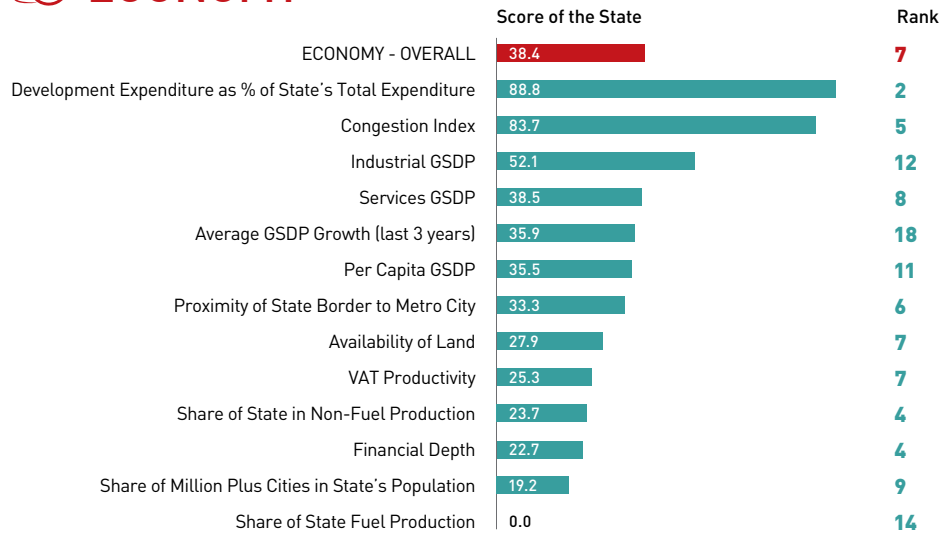
	Score of the State	Rank
LABOUR - OVERALL	50.8	3
Number of ITIs	86.2	2
Average Wages of Educated and Vocationally Trained Labour	72.8	11
Seating Capacity of ITIs	66.1	3
Average Wages in the Manufacturing Sector	58.3	15
Labour Force Participation Rate	53.5	10
Average Labour Turnover	52.0	15
Share of Workforce in the Manufacturing Sector	46.9	10
Above Secondary Level Population as % of Total (15-64 years)	32.0	6
Vocationally Trained Persons as % of Total (15-64 years)	23.4	8
Percent of young (age 20-35 years) Seeking /Available for Work	16.4	14

INFRASTRUCTURE

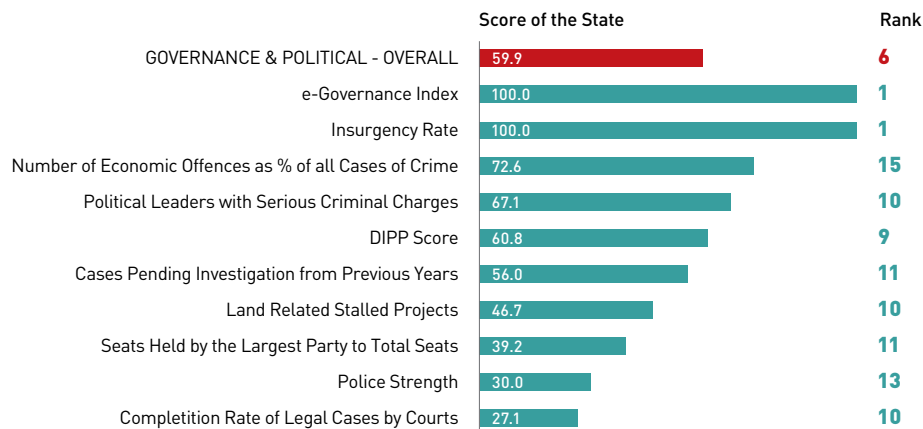
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	33.8	11
ICT-readiness Index	73.5	5
Power Shortage as % of Total Demand	72.4	17
Bank Branches per Lakh Population	62.5	7
Number of Airports	50.0	10
Average Electricity Tariff for Industry	45.1	15
Number of Sea-ports	24.0	6
Net Annual Ground Water Availability	17.2	15
Cargo Handled per Port	13.4	7
Rail Density	9.1	16
Cargo Handled per Day at Airport	7.9	4
Road Density	6.1	9
Statutory Towns in Smart Cities as % of Total in State	4.8	8



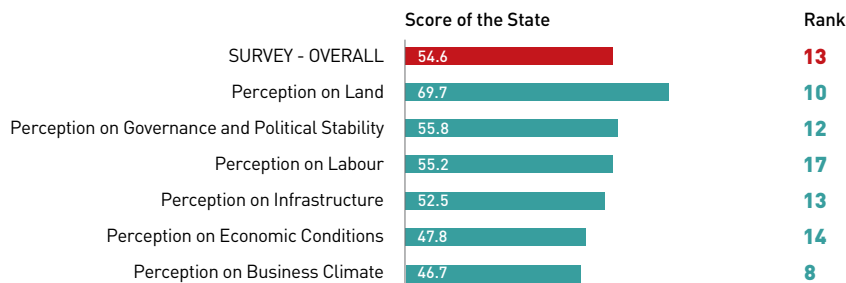
ECONOMY



GOVERNANCE & POLITICAL

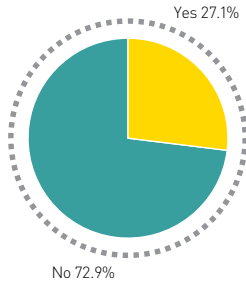


SURVEY

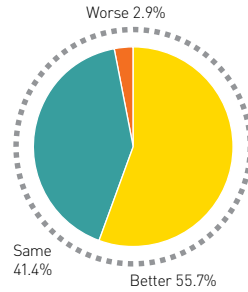


SURVEY RESULTS

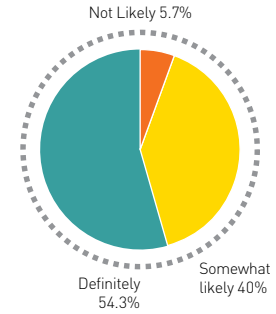
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

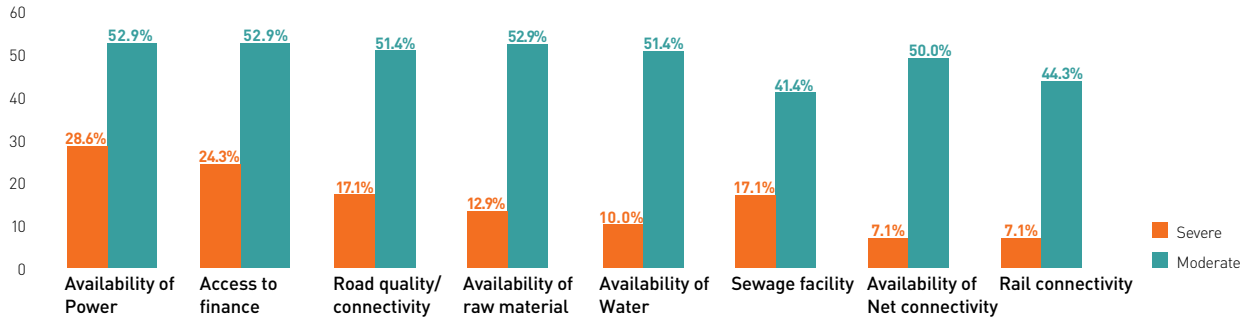


Percentage respondents planning business expansion in next five years



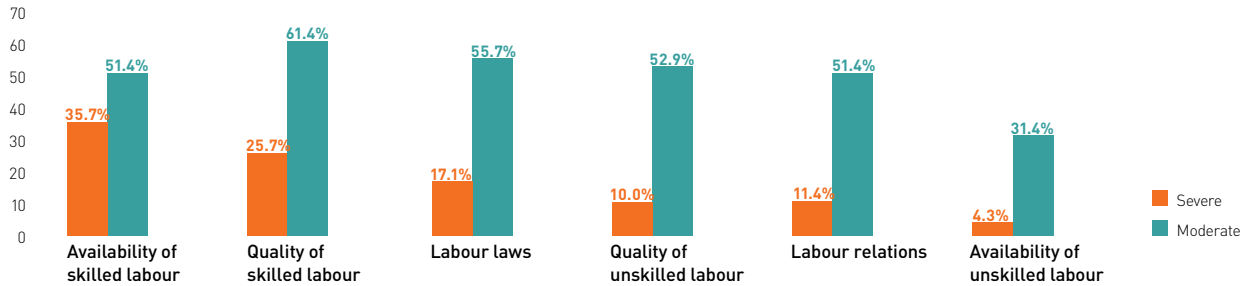
Infrastructure related issues

(% respondents labelling these as severe or moderate)



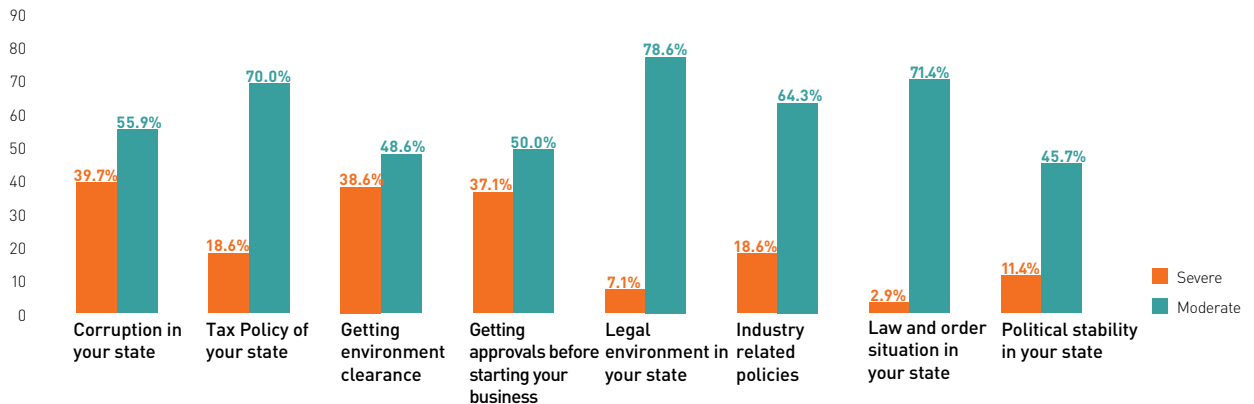
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Kerala



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

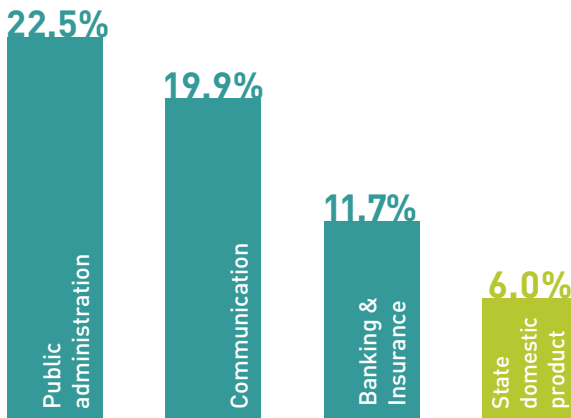
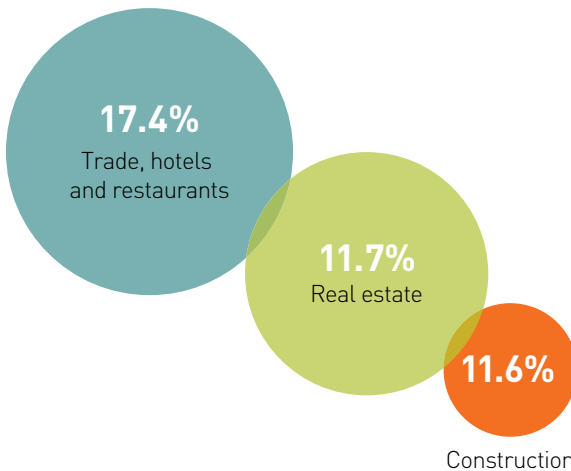


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



KERALA STATS

Capital	Thiruvananthapuram
Area (sq. km)	38,852
Location	Southern India
Per capita income (Rs.)	1,17,132
Literacy Rate (%)	94.0

STATE FOCUS SECTORS

1. Food Processing
2. Biotechnology and Nanotechnology
3. Furniture sector
4. Garments
5. Rubber based Industries
6. Ayurvedic medicines
7. Marine products
8. Light Engineering
9. 100% Export Oriented Units

Source: Kerala Industrial & Commercial Policy Amended – 2015

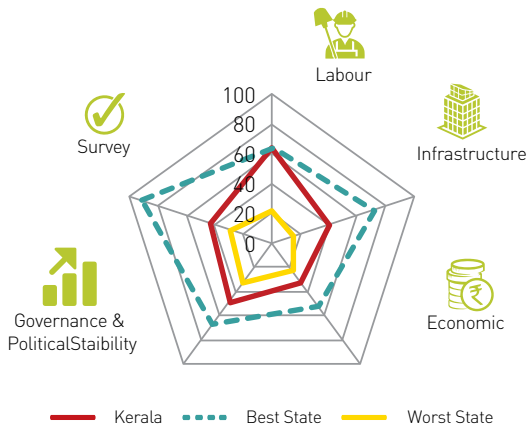
INCENTIVES

- Capital investment in Effluent Treatment Plants
- Proposed ‘Green Financing scheme’ to attract investments in green industries.
- Capital subsidy for new manufacturing units for investments in Electronic System Design & Manufacturing (ESDM) sector.

Source: Kerala Industrial & Commercial Policy Amended – 2015.

Kerala N-SIPI 21 Rank **10**

State's Performance on the Five Broad Pillars



Kerala is one of the top five states for two main pillars: labour and infrastructure, but struggles on other counts.

Strengths

Kerala ranks highest in terms of having a workforce with at least secondary level education, including those who are vocationally trained. The state has high road density and one of the lowest congestion factors across all other states. Kerala is one of the top two states in terms of share of service sector in total GSDP.

Weaknesses

The state lags behind in terms of development expenditure. Further, the state also suffers from poor industry perception of the labour climate and economic climate as per N-SIPI survey findings.

LABOUR*

	Score of the State	Rank
LABOUR -OVERALL	63.9	1
Vocationally Trained Persons as % of Total (15-64 years)	100.0	1
Percent of young (age 20-35 years) Seeking /Available for Work	100.0	1
Average Labour Turnover	96.6	5
Average Wages of Educated and Vocationally Trained Labour	82.1	7
Share of Workforce in the Manufacturing Sector	55.9	7
Average Wages in the Manufacturing Sector	54.3	17
Above Secondary Level Population as % of Total (15-64 years)	44.0	2
Labour Force Participation Rate	43.1	14
Seating Capacity of ITIs	33.6	11
Number of ITIs	29.9	9

INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE -OVERALL	40.6	5
Power Shortage as % of Total Demand	90.4	11
Bank Branches per Lakh Population	82.9	4
Average Electricity Tariff for Industry	56.9	8
ICT-Readiness Index	56.5	7
Net Annual Ground Water Availability	37.2	8
Number of Sea-ports	36.0	3
Number of Airports	30.0	14
Road Density	25.6	2
Rail Density	15.9	9
Cargo Handled per Day at Airport	6.8	5
Cargo Handled per Port	5.2	9
Statutory Towns in Smart Cities as % of Total in State	1.6	18

* Kerala ranks very high in labour. However, some indicators like mandays lost and strikes have not been taken into account due to lack of complete data across all states.



ECONOMY

	Score of the State	Rank
ECONOMY - OVERALL	32.0	16
Congestion Index	100.0	1
Services GSDP	63.7	2
Per Capita GSDP	44.2	8
VAT Productivity	43.9	3
Average GSDP Growth (last 3 years)	41.3	14
Industrial GSDP	31.9	17
Share of State Fuel Production	28.2	6
Availability of Land	18.7	11
Development Expenditure as % of State's Total Expenditure	16.8	20
Financial Depth	16.6	8
Share of State in Non-Fuel Production	0.4	13
Share of Million Plus Cities in State's Population	0.0	14
Proximity of State Border to Metro City	0.0	14



GOVERNANCE & POLITICAL

	Score of the State	Rank
GOVERNANCE & POLITICAL - OVERALL	48.8	16
Insurgency Rate	100.0	1
Political Leaders with Serious Criminal Charges	94.9	4
e-Governance Index	59.0	11
Number of Economic Offences as % of all Cases of Crime	53.9	19
Cases Pending Investigation from Previous Years	53.8	8
Land Related Stalled Projects	42.3	17
Police Strength	36.4	10
Completion Rate of Legal Cases by Courts	31.4	8
DIPP Score	16.5	18
Seats Held by the Largest Party to Total Seats	0.0	21

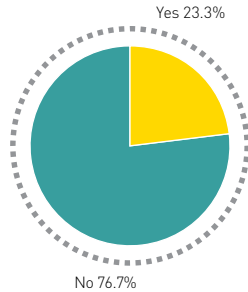


SURVEY

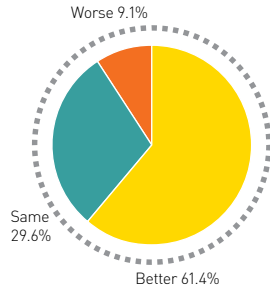
	Score of the State	Rank
SURVEY - OVERALL	43.7	17
Perception on Land	65.7	15
Perception on Business Climate	55.9	5
Perception on Governance and Political Stability	49.9	13
Perception on Labour	48.7	19
Perception on Infrastructure	32.1	17
Perception on Economic Condition	10.0	20

SURVEY RESULTS

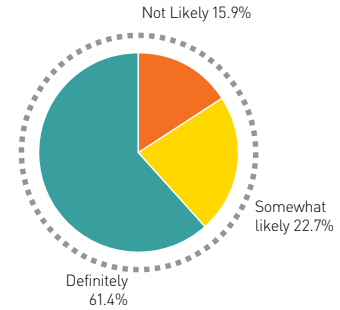
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

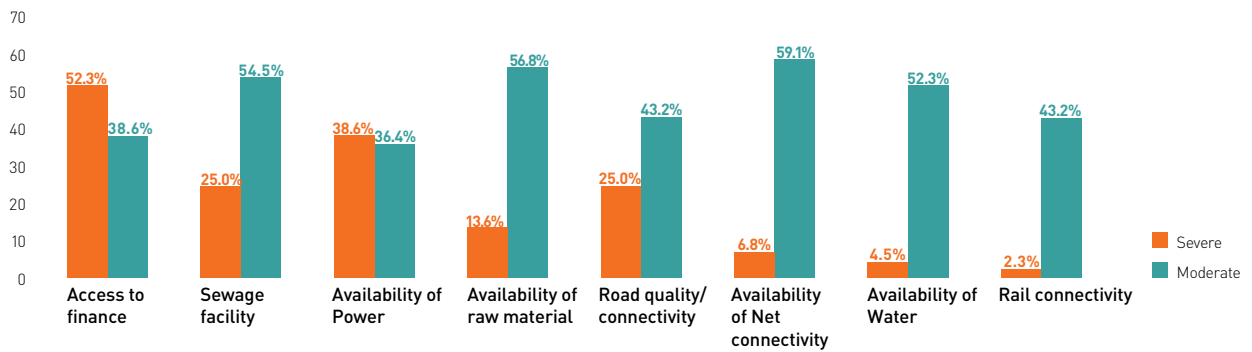


Percentage respondents planning business expansion in next five years



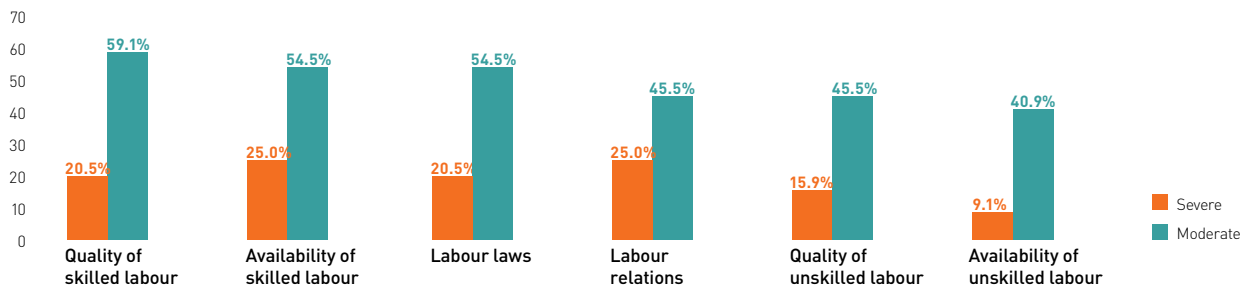
Infrastructure related issues

(% respondents labelling these as severe or moderate)



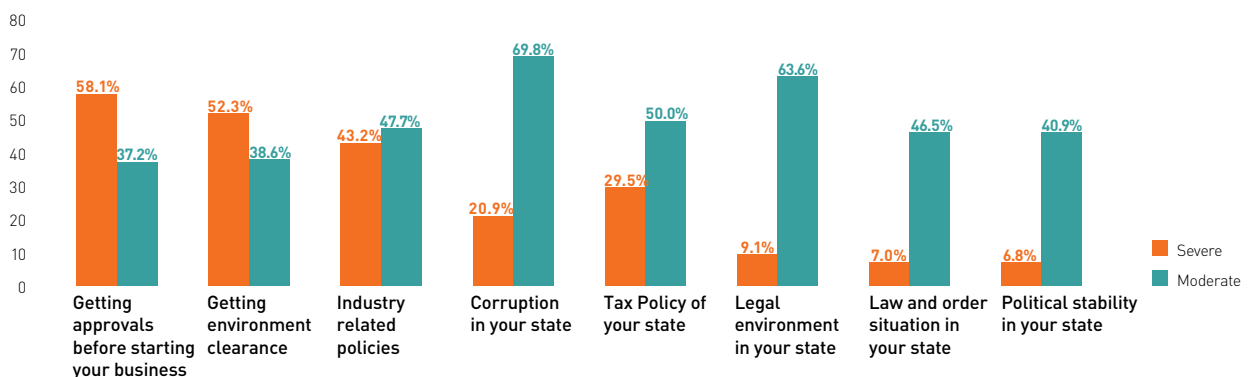
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Madhya Pradesh

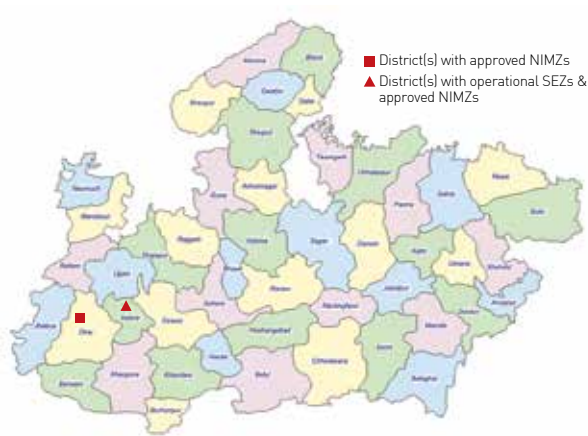


Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

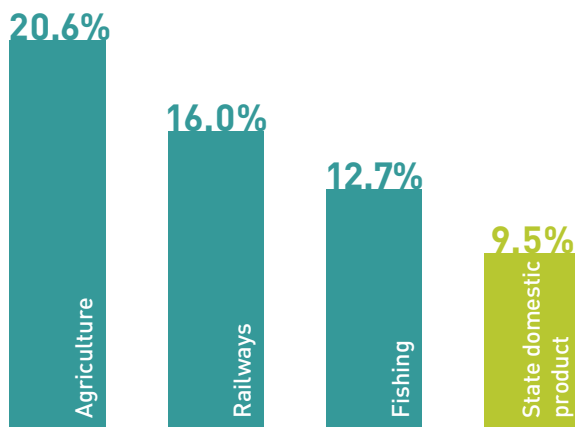
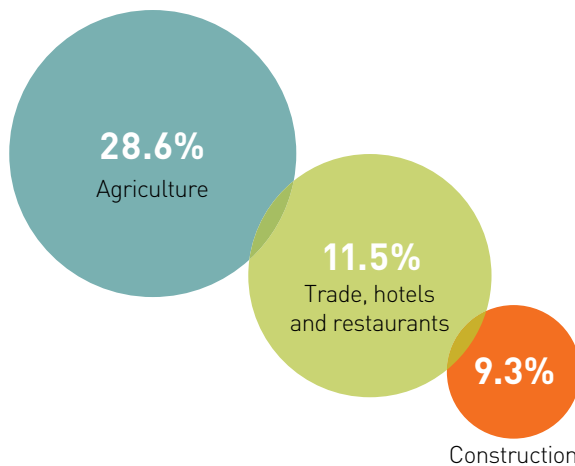


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



MADHYA PRADESH STATS

Capital	Bhopal
Area (sq. km)	3,08,252
Location	Central India
Per capita income (Rs.)	57,846
Literacy Rate (%)	69.3

STATE FOCUS SECTORS

1. Auto and auto components
2. Textiles
3. Tourism
4. IT/ITEs
5. Healthcare
6. Skill development
7. Pharmaceutical
8. Renewable energy
9. Biotechnology
10. Logistics & warehousing

Source: Industrial Promotion Policy 2014 and Action Plan, Madhya Pradesh

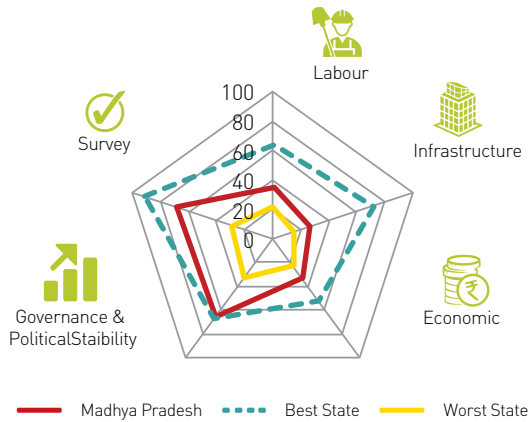
INCENTIVES

- Capital subsidy, entry tax exemption
- Incentives for micro and small enterprises (MSME) along with marketing assistance.
- Incentive packages for MSMEs for green industrialization.

Source: Industrial Promotion Policy 2014

Madhya Pradesh N-SIPI 21 Rank **12**

State's Performance on the Five Broad Pillars



Madhya Pradesh is one of the top five states in terms of governance and political stability, in addition to being close to the top in terms of N-SIPI Survey.

Strengths

The state ranks very highly in terms of average GSDP growth and ratio of development expenditure in state expenditure. The state also has the lowest number of economic offences. Madhya Pradesh fares extremely well on power availability and number of airports.

Weaknesses

The state has poor road and railway infrastructure, and also lags behind on police strength. The state also has relatively lower bank branches per lakh of population.

LABOUR

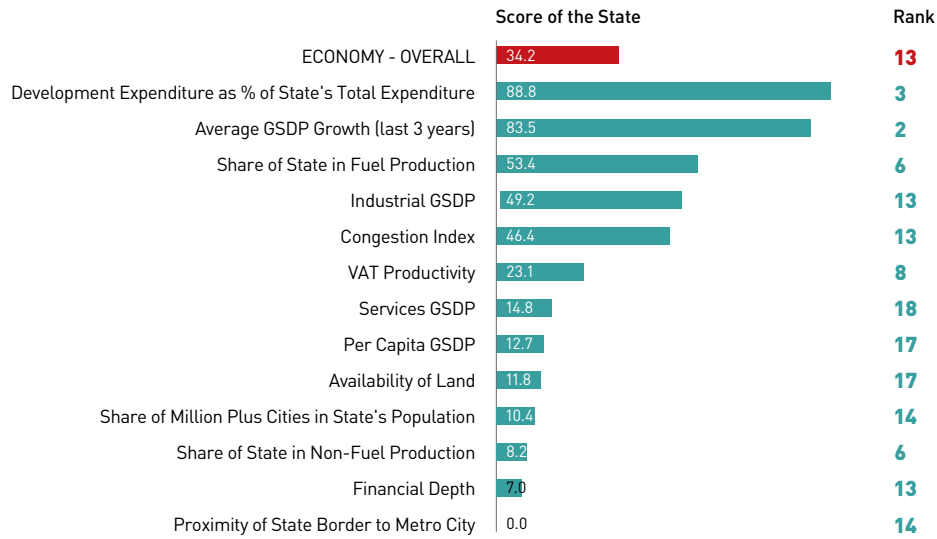
	Score of the State	Rank
LABOUR - OVERALL	34.9	15
Average Wages of Educated and Vocationally Trained Labour	80.9	10
Average Labour Turnover	71.9	11
Average wages in the Manufacturing Sector	58.3	14
Labour Force Participation Rate	50.2	11
Seating Capacity of ITIs	21.2	13
Number of ITIs	18.8	12
Share of Workforce in the Manufacturing Sector	15.4	17
Vocationally Trained Persons as % of Total (15-64 years)	13.7	13
Above Secondary Level Population as % of Total (15-64 years)	12.7	16
Percent of Young (age 25-35 years) Seeking/ Available for Work	5.6	20

INFRASTRUCTURE

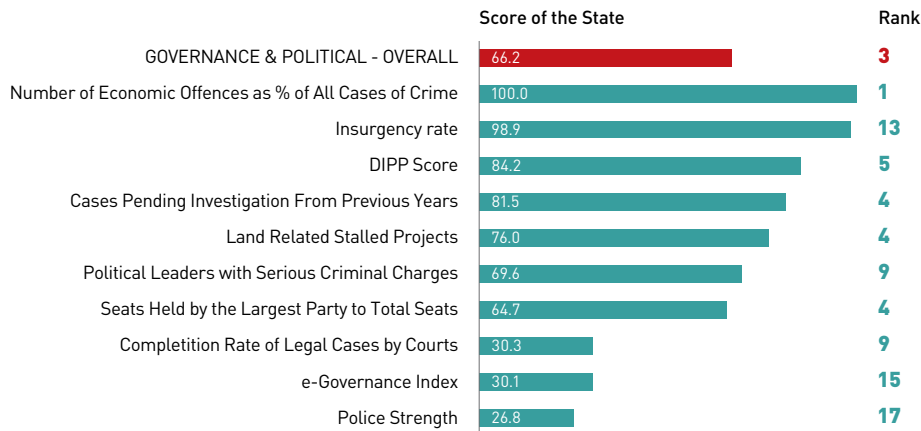
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	25.8	18
Power Shortage to Total Demand	96.8	4
Number of Airports	80.0	2
Average Electricity Tariff for Industry	53.4	11
Net Annual Ground Water Availability	25.0	10
ICT-Readiness Index	16.9	19
Bank Branches per Lakh Population	12.8	18
Rail Density	9.1	16
Number of Statutory Towns in Smart Cities	2.3	15
Road Density	1.6	19
Cargo Handled per Day at Airport	0.1	16
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10



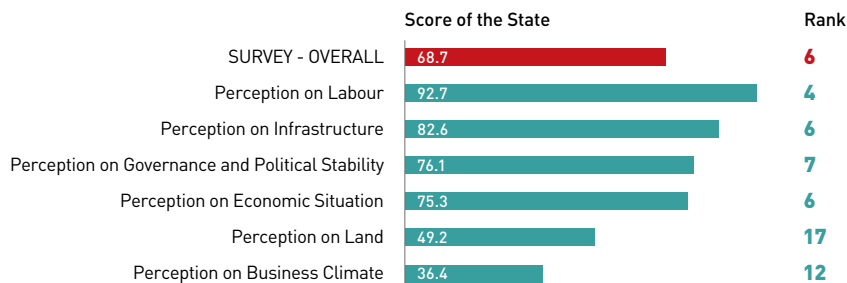
ECONOMY



GOVERNANCE & POLITICAL

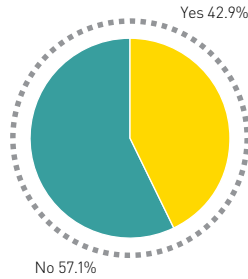


SURVEY

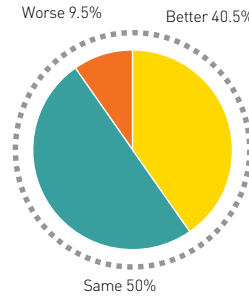


SURVEY RESULTS

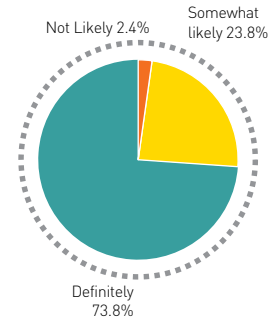
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

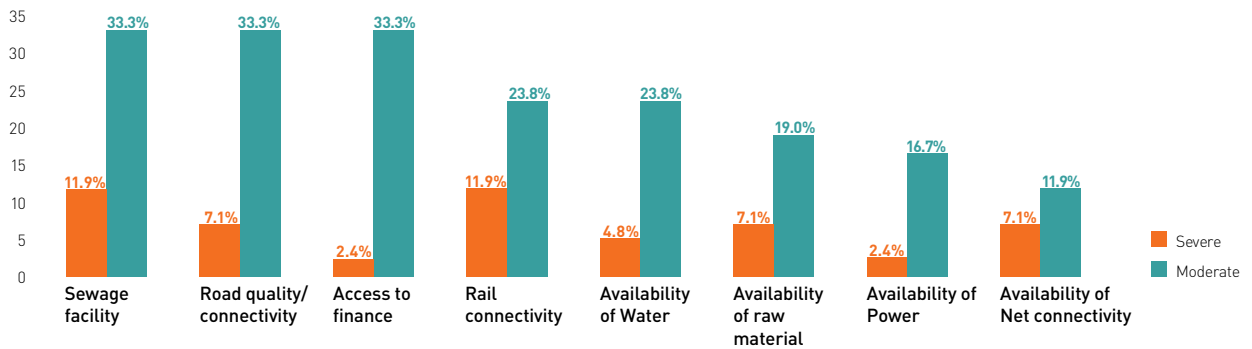


Percentage respondents planning business expansion in next five years



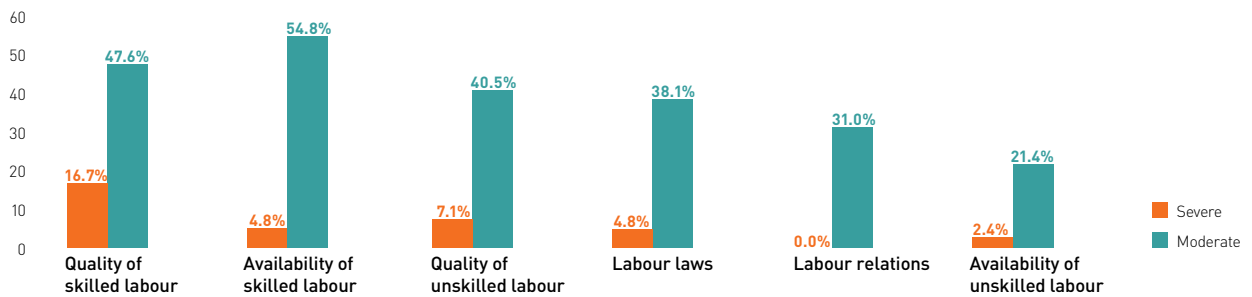
Infrastructure related issues

(% respondents labelling these as severe or moderate)



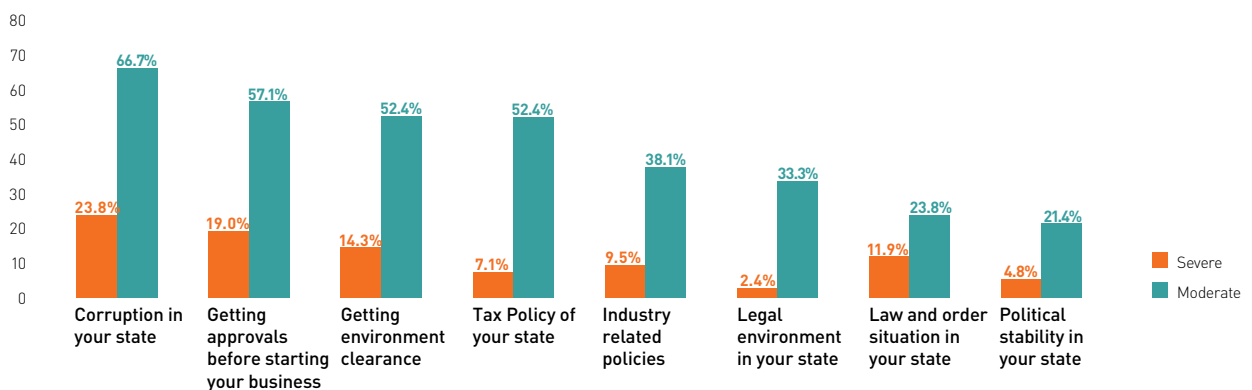
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Maharashtra

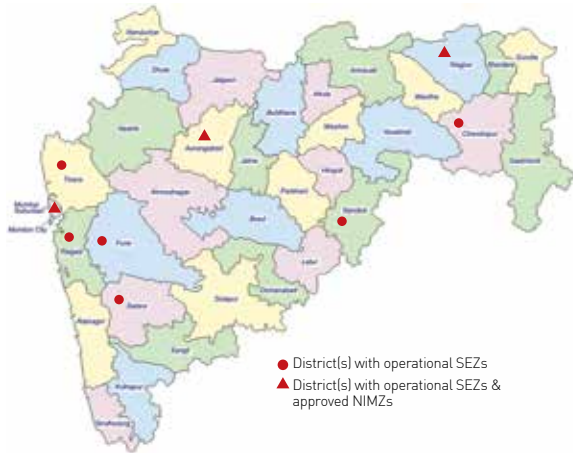


Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

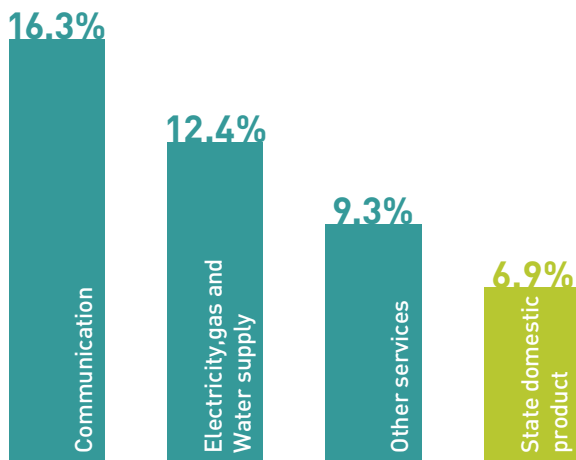
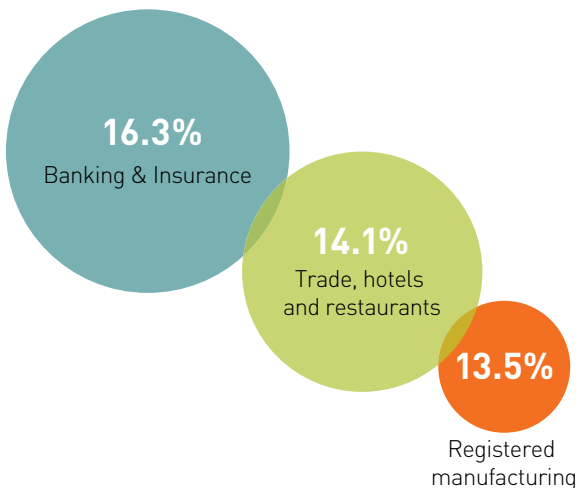


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



MAHARASHTRA STATS

Capital	Mumbai (Summer), Nagpur (Winter)
Area (sq. km)	3,07,713
Location	Western India
Per capita income (Rs.)	1,29,526
Literacy Rate (%)	82.3

STATE FOCUS SECTORS

1. Auto Industry
2. Biotechnology
3. Bioinformatics
4. Infrastructure Support Institutions
5. Floriculture
6. Food Processing Industry
7. Information Technology (IT) and ITeS
8. Infrastructure
9. Leather Industry

Source: India in Business web portal of Ministry of External Affairs, GoI

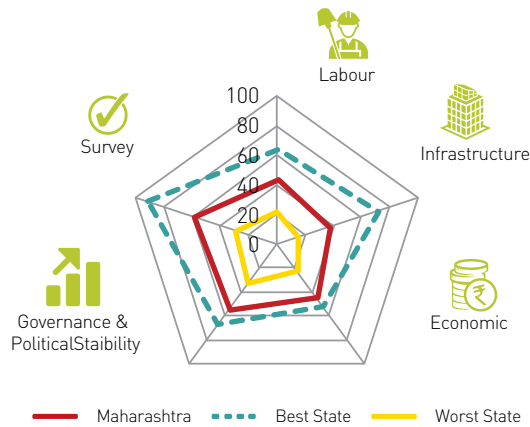
INCENTIVES

- Reimbursement of cost for water and energy audit
- Electricity duty exemption for large IT and BT units in IT and BT parks.
- Power tariff subsidy, interest subsidy for various industries.

Source: Industrial Policy of Maharashtra 2013.

Maharashtra N-SIPI 21 Rank **5**

State's Performance on the Five Broad Pillars



Maharashtra ranks third in terms of the economic pillar, but has room for improvement as far as the other four pillars are concerned.

Strengths

The state has one of the highest proportions of vocationally trained persons, along with a very ratio of ITIs compared to other states. Maharashtra also has excellent ICT infrastructure and along with an excellent network of sea ports and airports. The state also has greater financial depth in terms of higher bank credit to GSDP ratio, and is one of the top three states in terms of per capita GSDP.

Weaknesses

Maharashtra has lower average of completion of cases under IPC and SLL. The state also needs to work towards improving industry perception of ease of acquiring land.

LABOUR

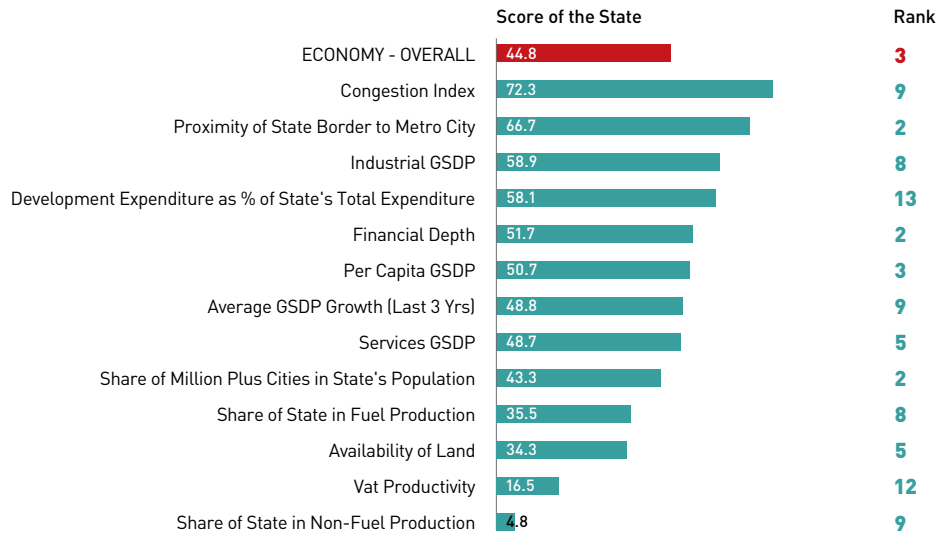
	Score of the State	Rank
LABOUR - OVERALL	43.3	11
Seating Capacity of ITIs	78.2	2
Average Labour Turnover	65.6	13
Labour Force Participation Rate	62.1	6
Vocationally Trained Persons as % of Total (15-64 years)	49.0	2
Share of Workforce in the Manufacturing Sector	48.4	9
Number of ITIs	44.8	4
Above Secondary Level Population as % of Total (15-64 Years)	37.9	5
Average Wages of Educated and Vocationally Trained Labour	34.4	19
Percent of Young (Age 25-35 Years) Seeking/ Available for Work	12.9	18
Average Wages in the Manufacturing Sector	0.0	21

INFRASTRUCTURE

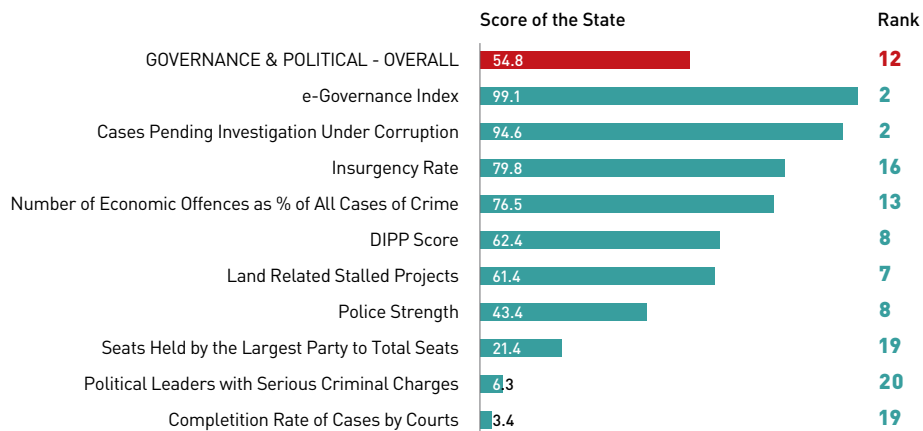
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	37.1	7
ICT - Readiness Index	100.0	1
Number of Sea-Ports	100.0	1
Power Shortage as % of Total Demand	91.7	9
Number of Airports	80.0	2
Bank Branches Per Lakh Population	27.5	12
Net Annual Ground Water Availability	24.1	12
Cargo Handled Per Day Per Airport	15.1	2
Cargo Handled Per Port	13.2	8
Rail Density	10.4	14
Statutory Towns in Smart Cities as % of Total in State	8.4	4
Road Density	4.7	11
Average Electricity Tariff for Industry	0.0	21



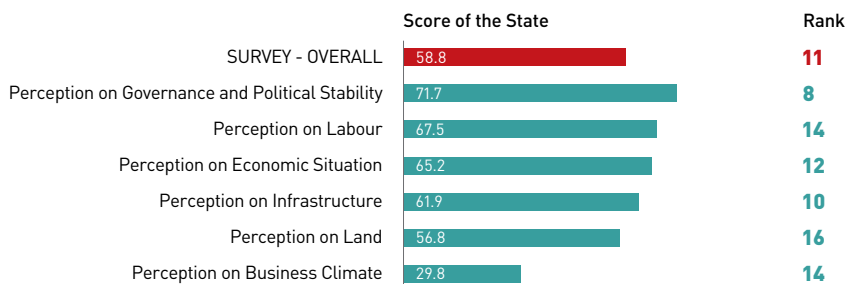
ECONOMY



GOVERNANCE & POLITICAL

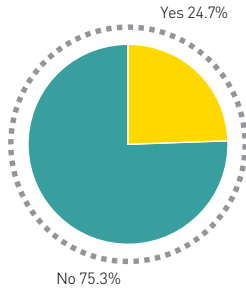


SURVEY

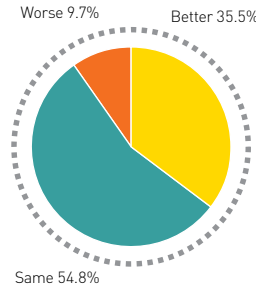


SURVEY RESULTS

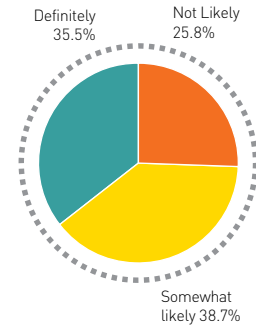
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

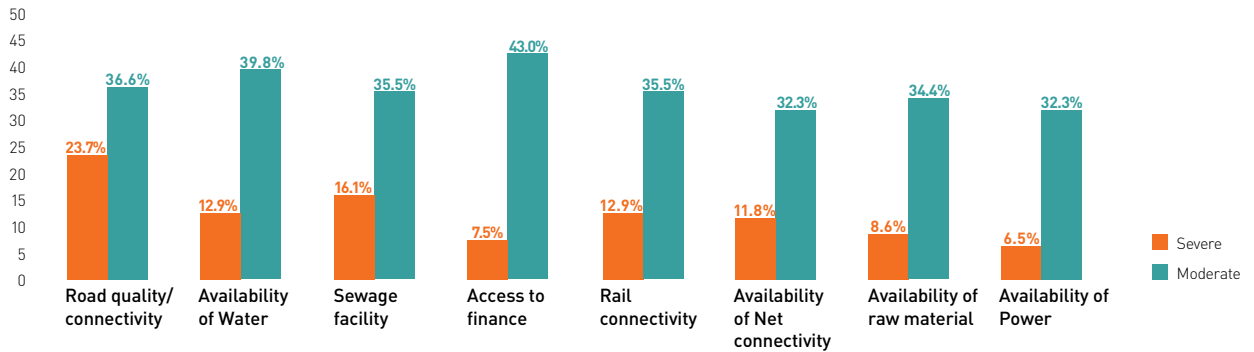


Percentage respondents planning business expansion in next five years



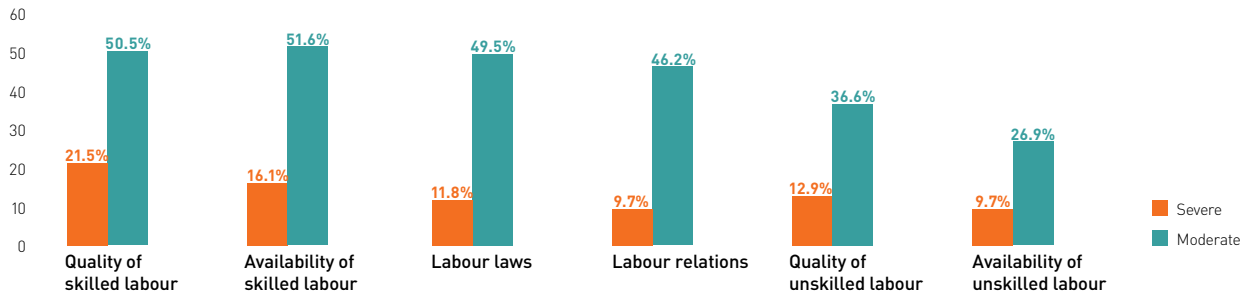
Infrastructure related issues

(% respondents labelling these as severe or moderate)



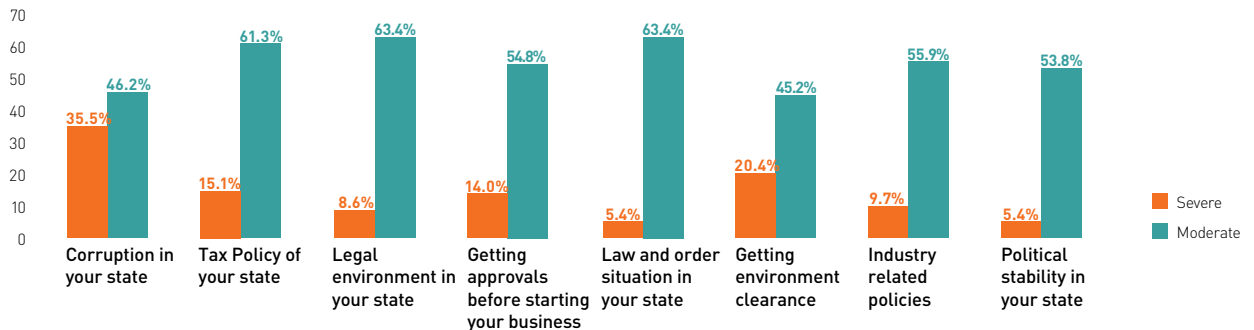
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Odisha



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

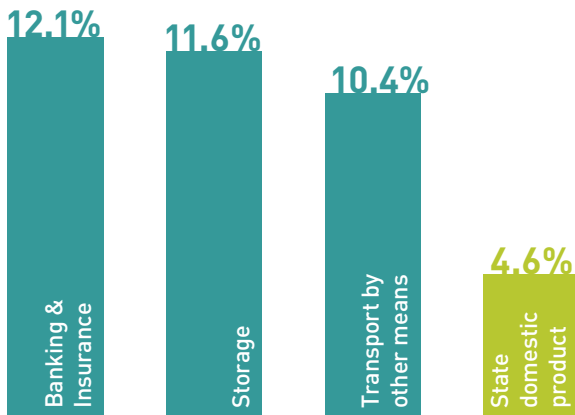
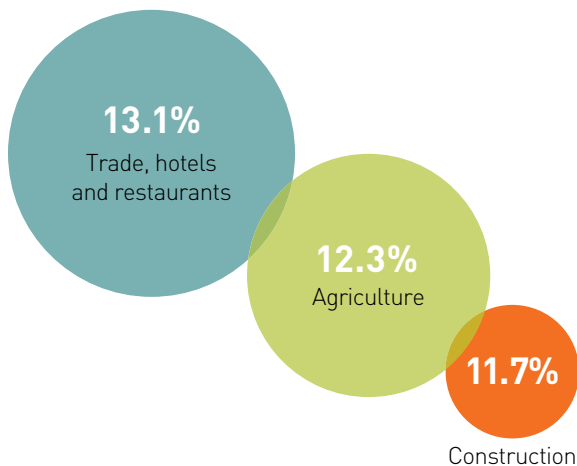


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



ODISHA STATS

Capital	Bhubaneswar
Area (sq. km)	1,55,707
Location	Central India
Per capita income (Rs.)	62,962
Literacy Rate (%)	72.9

STATE FOCUS SECTORS

1. Auto and Auto Components
2. Downstream and Ancillary Industries
3. Agro and Food Processing
4. IT and Electronics
5. Tourism
6. Civil Aviation
7. Pharmaceutical
8. Handcrafts and Textile
9. Petroleum and Petro-Chemicals

Source: Odisha Industrial Policy 2014

INCENTIVES

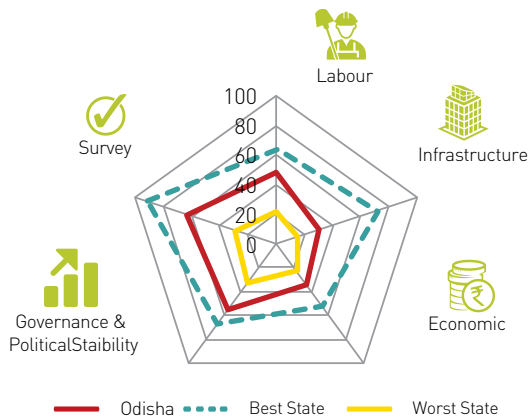
- Subsidies on interest rates;
- Exempted from electricity duty; reimbursement of entry tax for new micro & small and priority sector industrial units.
- Reimbursement of CST on sales of finished products by the new industrial units in Priority Sector for a period of 10 years.

Source: Odisha Industrial Policy – 2014

Odisha N-SIPI 21 Rank **11**

Odisha is one of the top five states in terms of labour, but lags behind in terms of the other pillars.

State's Performance on the Five Broad Pillars



Strengths

Odisha tops in terms of average labour turnover. The state also has one of the highest rates of land acquisition by establishments not older than five years. Further Odisha ranks very high in terms of production of non-fuel commodities.

Weaknesses

The state lacks adequate vocationally trained persons. The state also has poor rail density.

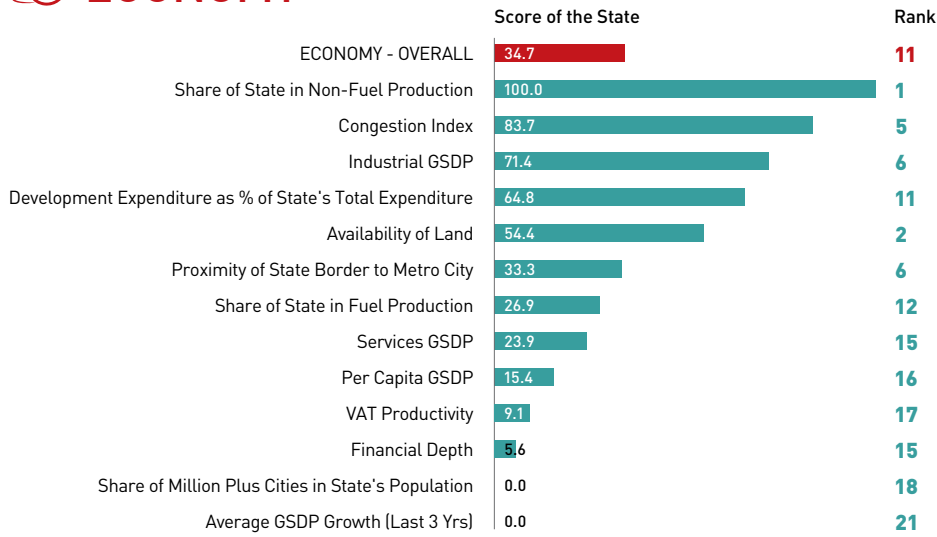
LABOUR

	Score of the State	Rank
LABOUR - OVERALL	48.2	5
Average Labour Turnover	100.0	1
Average Wages of Educated and Vocationally Trained Labour	87.5	2
Average Wages in the Manufacturing Sector	82.1	6
Labour Force Participation Rate	60.2	8
Seating Capacity of ITIs	54.6	4
Number of ITIs	35.1	6
Share of Workforce in the Manufacturing Sector	26.6	15
Percent of Young (age 25-35 years) Seeking/ Available for Work	22.6	10
Vocationally Trained Persons as % of Total (15-64 Years)	7.6	16
Above Secondary Level Population as % of Total (15-64 Years)	5.7	18

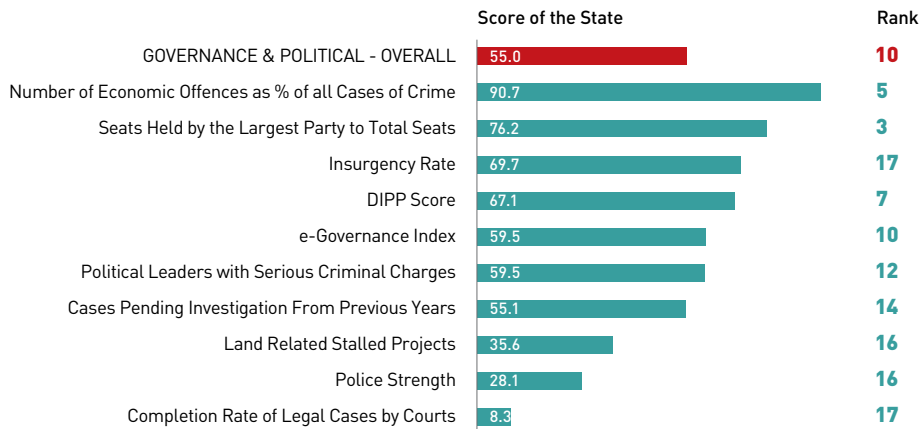
INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	30.1	13
Power Shortage as % of Total Demand	89.7	12
Average Electricity Tariff for Industry	68.2	4
ICT - Readiness Index	33.2	10
Number of Sea-ports	28.0	5
Bank Branches per Lakh Population	26.9	13
Cargo Handled per Port	26.7	6
Net Annual Ground Water Availability	24.8	11
Number of Airports	20.0	16
Rail Density	9.1	16
Road Density	6.4	8
Statutory Towns in Smart Cities as % of Total in State	5.0	7
Cargo Handled per Day per Airport	0.2	14

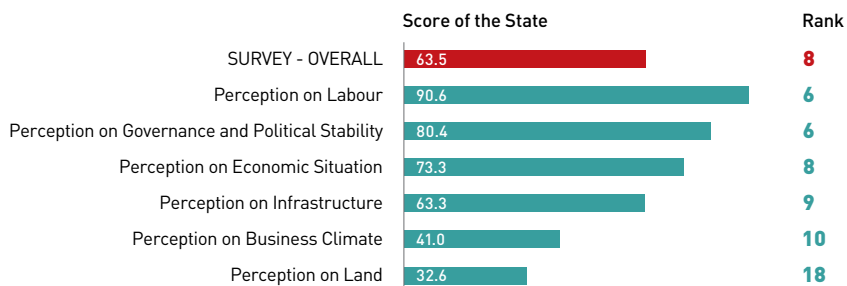
ECONOMY



GOVERNANCE & POLITICAL

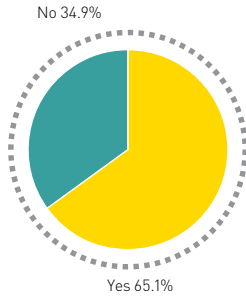


SURVEY

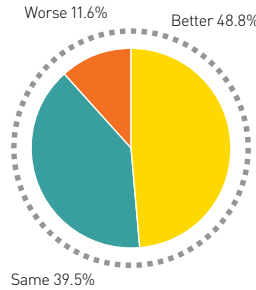


SURVEY RESULTS

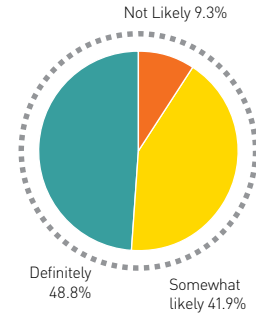
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

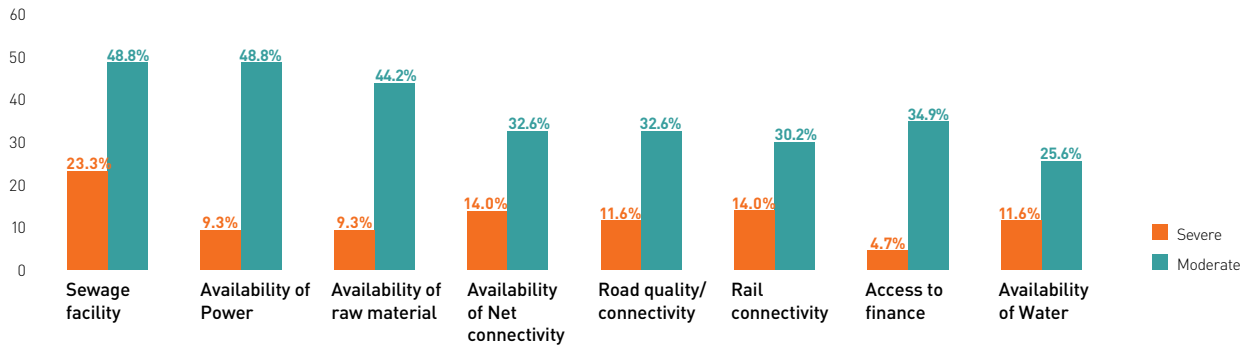


Percentage respondents planning business expansion in next five years



Infrastructure related issues

(% respondents labelling these as severe or moderate)



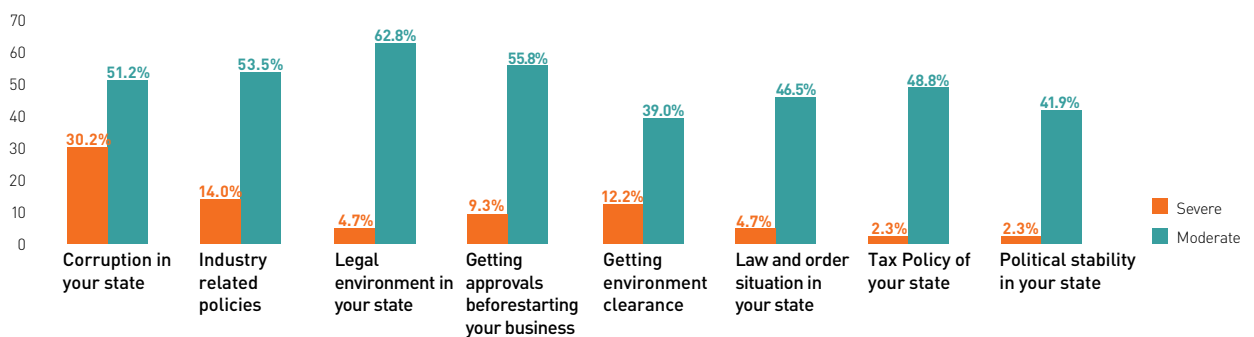
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Punjab



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

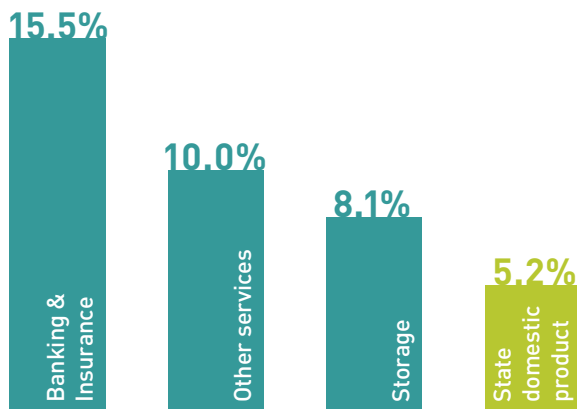
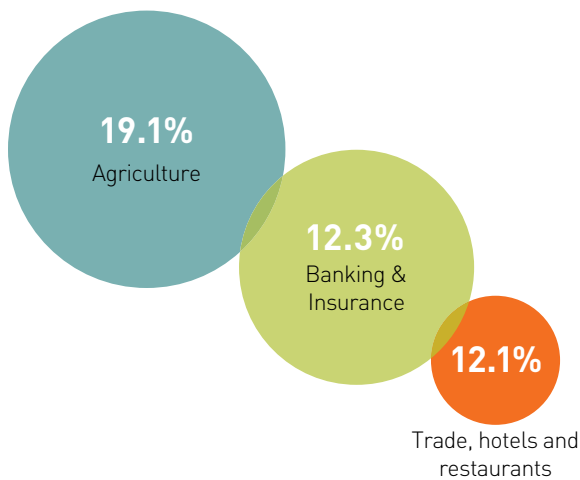


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



PUNJAB STATS

Capital	Chandigarh
Area (sq. km)	50,362
Location	Northern India
Per capita income (Rs.)	1,04,642
Literacy Rate (%)	75.8

STATE FOCUS SECTORS

1. Food Processing
2. Auto parts
3. Light Engineering
4. Biotechnology
5. Manufacturing
6. Textiles
7. Electronic Hardware & IT sector
8. Agro Industries
9. Tourism
10. Health Services

Source: Fiscal Incentives for Industrial Promotion 2013

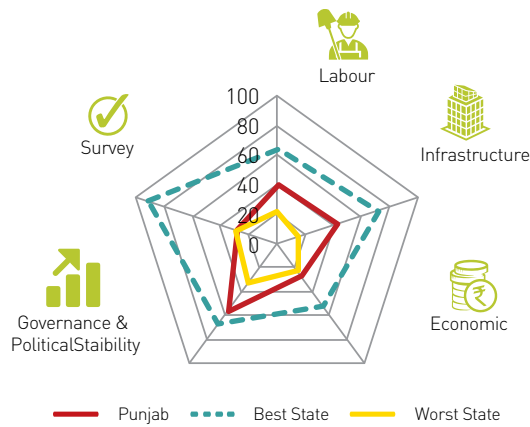
INCENTIVES

- Concessions provided on electricity duty
- Property tax incentive
- Recovery of fixed capital investment.

Source: Fiscal Incentives for Industrial Promotion 2013, Government of Punjab

Punjab N-SIPI 21 Rank **18**

State's Performance on the Five Broad Pillars



Punjab ranks second in terms of the infrastructure pillar, but needs to work significantly towards improving the state economic climate and industry perception.

Strengths

Punjab has seen high rate of land acquisition by establishments not older than five years. Further, the state has very high ratio of bank branches per lakh population, providing greater physical access to the banking network. The state also has fairly high road and rail density.

Weaknesses

The state ranks low in terms of ratio of development expenditure and congestion index.

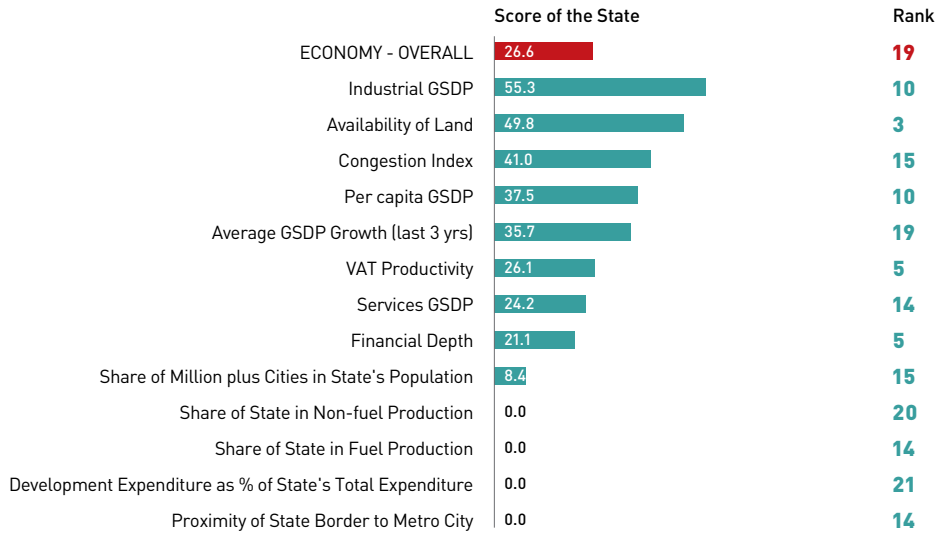
LABOUR

	Score of the State	Rank
LABOUR - OVERALL	39.3	13
Share of Workforce in the Manufacturing Sector	83.6	5
Average Wages in the Manufacturing Sector	78.7	7
Average Wages of Educated and Vocationally Trained Labour	62.5	13
Labour Force Participation Rate	41.6	15
Vocationally Trained Persons as % of Total (15-64 years)	31.8	5
Seating Capacity of ITIs	24.9	12
Above Secondary Level Population as % of Total (15-64 years)	19.9	11
Number of ITIs	18.8	13
Average Labour Turnover	16.1	17
Percent of Young (age 25-35 years) Seeking/Available for Work	15.4	15

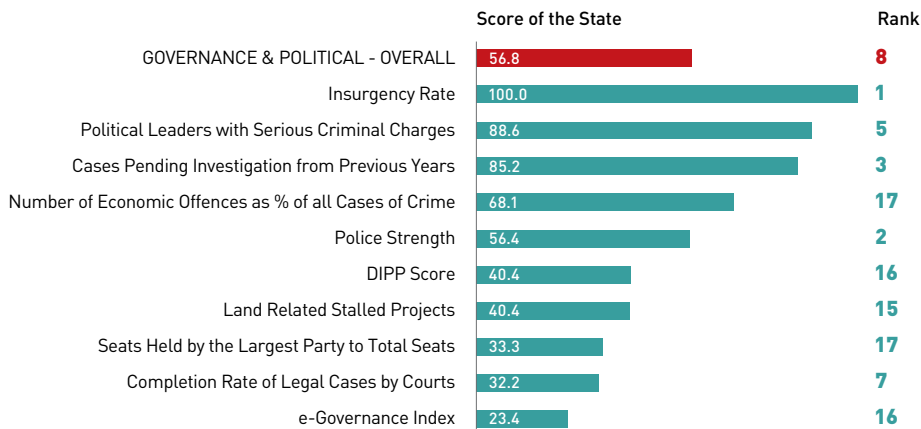
INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	42.2	2
Net Annual Ground Water Availability	100.0	1
Power Shortage as % of Total Demand	93.6	8
Bank Branches per Lakh Population	92.6	2
Average Electricity Tariff for Industry	51.7	13
ICT - Readiness Index	32.8	11
Number of Airports	30.0	14
Rail Density	25.6	4
Road Density	7.5	5
Statutory Towns in Smart Cities as % of Total in State	2.8	14
Cargo Handled per Day per Airport	0.4	10
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10

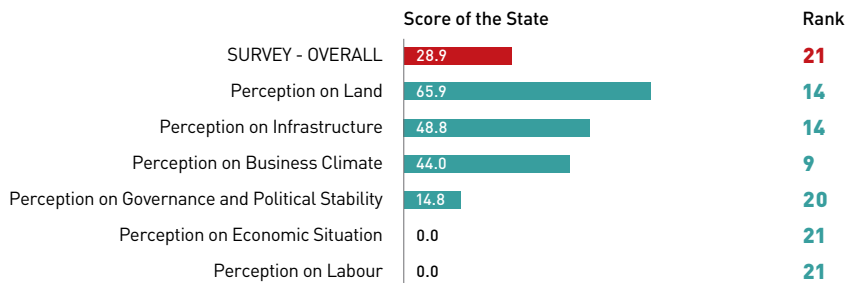
ECONOMY



GOVERNANCE & POLITICAL

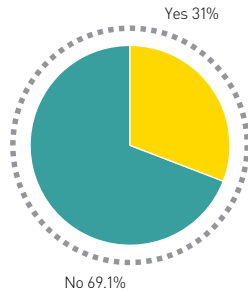


SURVEY

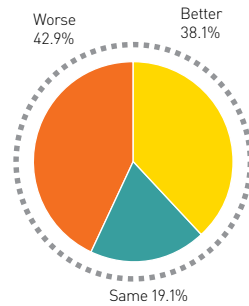


SURVEY RESULTS

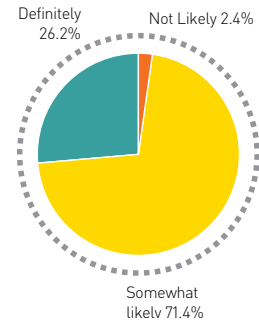
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

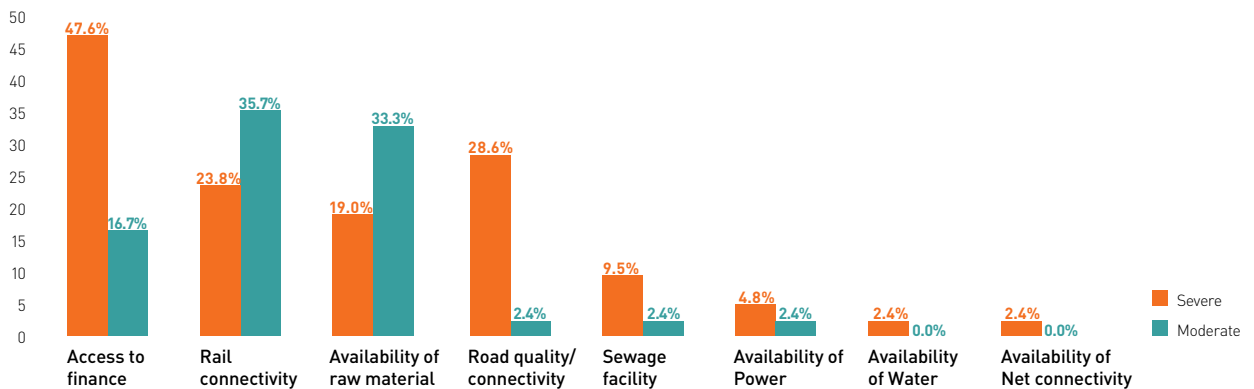


Percentage respondents planning business expansion in next five years



Infrastructure related issues

(% respondents labelling these as severe or moderate)



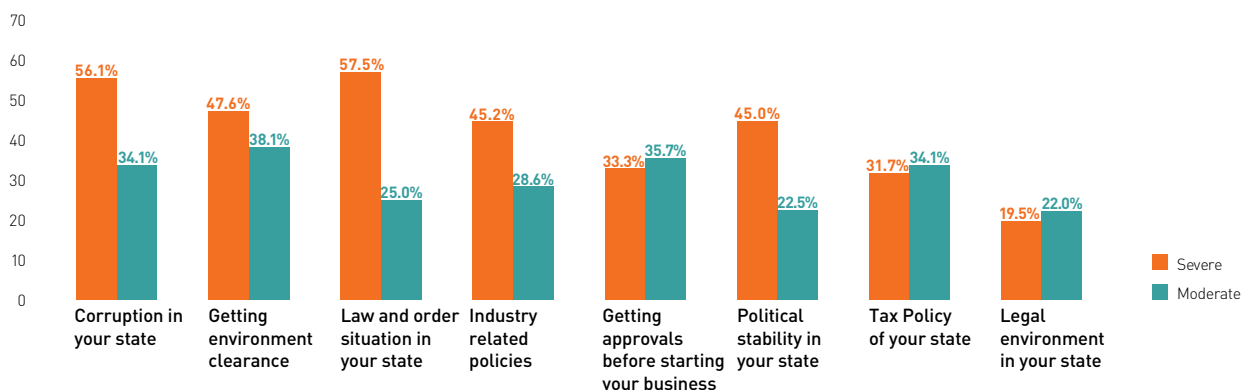
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Rajasthan



RAJASTHAN STATS

Capital	Jaipur
Area (sq. km)	3,42,239
Location	Central India
Per capita income (Rs.)	73,359
Literacy Rate (%)	66.1

STATE FOCUS SECTORS

1. IT & ITES
2. Auto & Engineering
3. Renewable Energy
4. Tourism
5. Healthcare
6. Agro & food processing
7. Mineral & ceramics
8. Textile
9. Defence manufacturing
10. Electronic System Design & Manufacturing
11. MSME
12. Infrastructure

Source: Resurgent Rajasthan Partnership Summit 2015, Government of Rajasthan

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

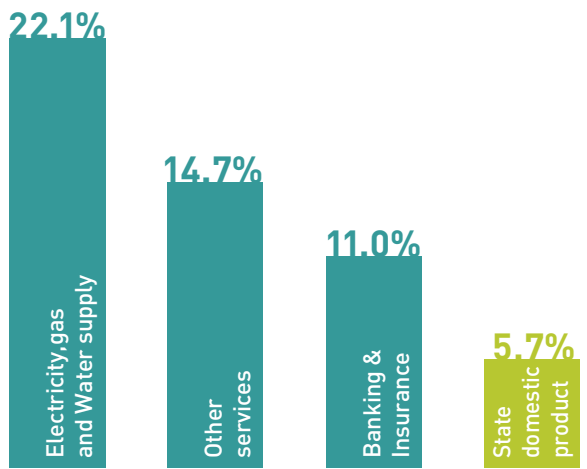
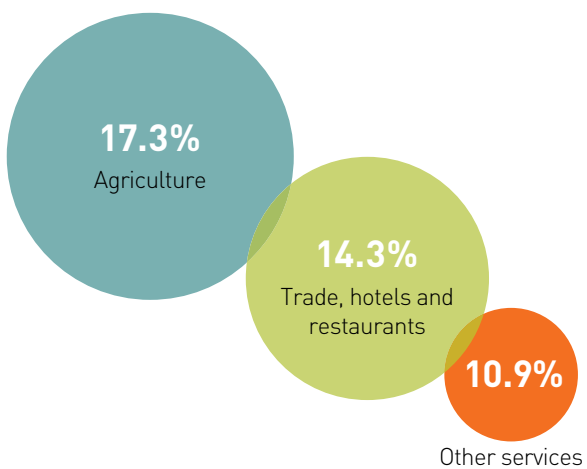


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



INCENTIVES

- Employment generation subsidy to manufacturing enterprises.
- Exemption from electricity duty, land tax.
- Exemption from Entry Tax, for investment more than Rs. 750 crores on capital goods

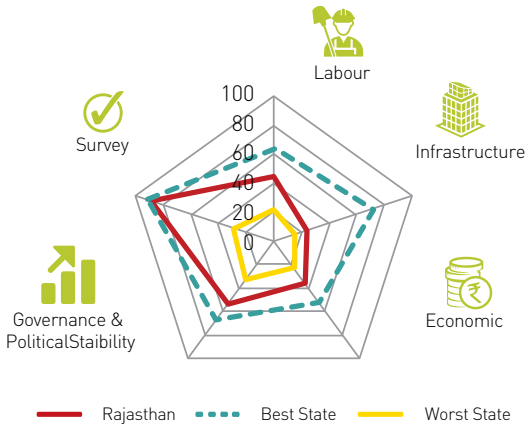
Source: Rajasthan Investment Promotion Scheme, 2014

Rajasthan

N-SIPI 21 Rank 9

Rajasthan ranks second in terms of N-SIPI perception survey, but falls behind in terms of other pillars.

State's Performance on the Five Broad Pillars



Strengths

Rajasthan has very high share of ITIs and higher ratio of development expenditure. The state also has extremely positive perception regarding labour, infrastructure, economic and political climate as observed from the N-SIPI 21 survey. Rajasthan also ranks very high in terms of production of both fuel and non-fuel commodities.

Weaknesses

The state falls behind in terms of ratio of economic offenses and cases pending investigation from previous year.

LABOUR

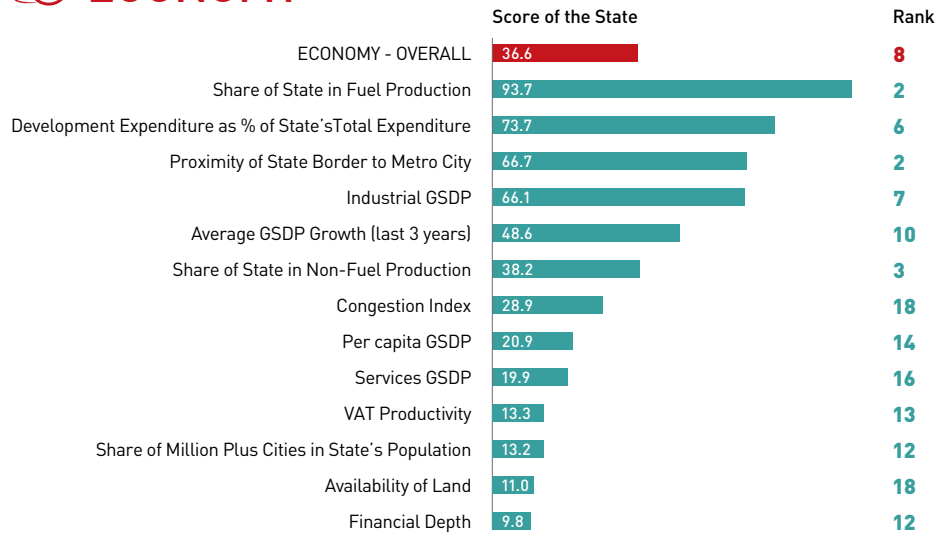
	Score of the State	Rank
LABOUR - OVERALL	44.2	10
Average Wages of Educated and Vocationally Trained Labour	81.7	8
Average Wages in the Manufacturing Sector	70.2	10
Average Labour Turnover	66.0	12
Labour Force Participation Rate	61.3	7
Seating Capacity of ITIs	51.7	5
Number of ITIs	48.6	3
Share of Workforce in the Manufacturing Sector	29.8	14
Above Secondary Level Population as % of Total (15-64 years)	16.8	13
Percent of Young (age 25-35 years) Seeking/Available for work	10.0	19
Vocationally Trained Persons as % of Total (15-64 years)	5.6	18

INFRASTRUCTURE

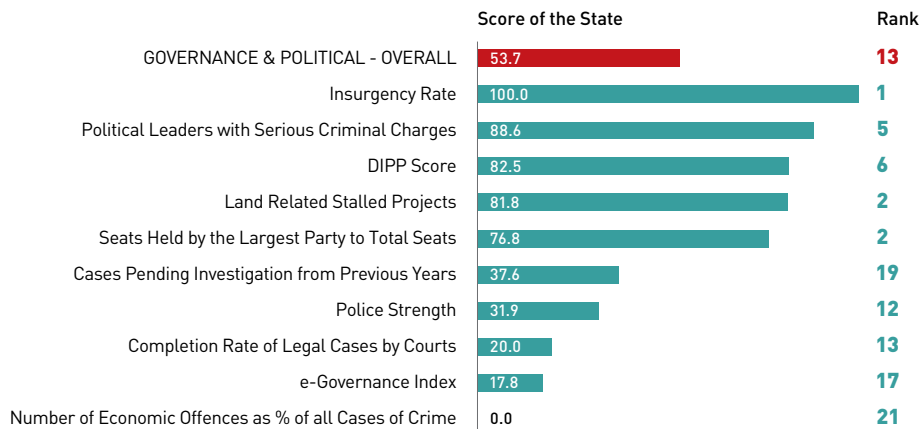
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	23.7	19
Power Shortage to Total Demand	96.2	5
Number of Airports	60.0	8
Average Tariff for Industry	52.9	12
Bank Branches per Lakh Population	19.8	14
ICT-Readiness Index	17.6	18
Rail Density	9.8	15
Net Annual Ground Water Availability	5.6	20
Statutory Towns in Smart Cities as % of Total in State	3.0	12
Road Density	1.9	18
Cargo Handled per Day at Sirport	0.2	13
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10



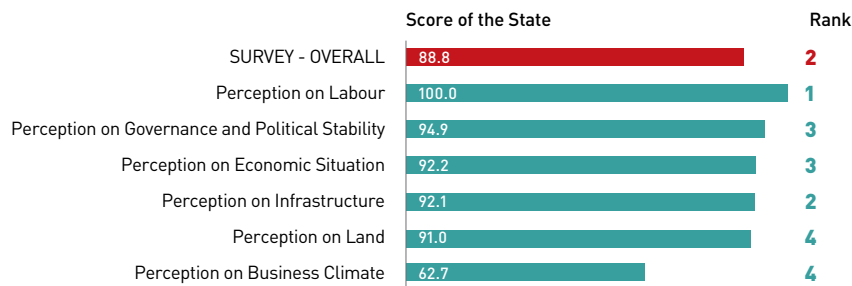
ECONOMY



GOVERNANCE & POLITICAL

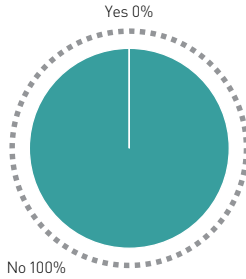


SURVEY

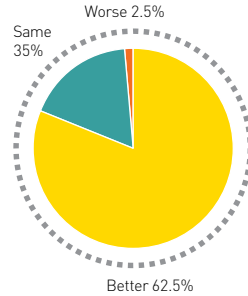


SURVEY RESULTS

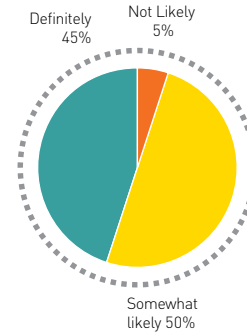
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

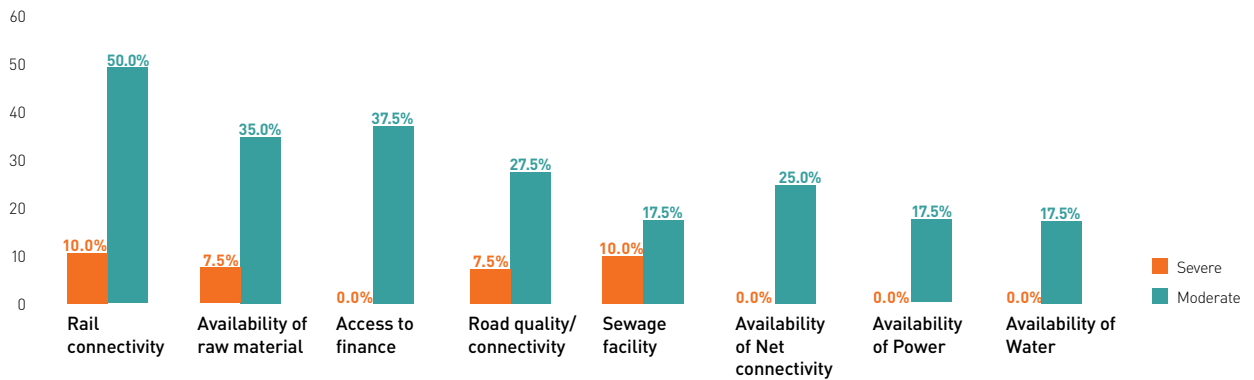


Percentage respondents planning business expansion in next five years



Infrastructure related issues

(% respondents labelling these as severe or moderate)



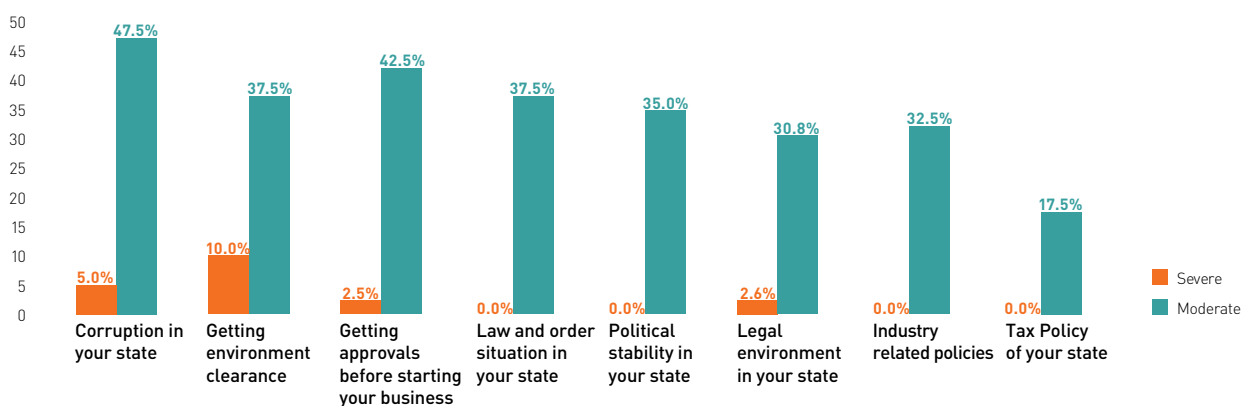
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Tamil Nadu



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

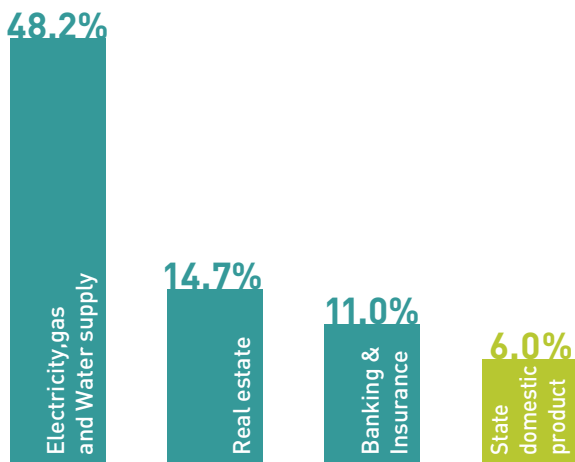


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



TAMIL NADU STATS

Capital	Chennai
Area (sq. km)	1,30,060
Location	Southern India
Per capita income (Rs.)	1,24,704
Literacy Rate (%)	80.1

STATE FOCUS SECTORS

1. Aerospace Sector
2. Automobile Sector
3. Electronic Hardware Sector
4. Heavy Engineering Sector
5. Infrastructure Sector
6. Pharmaceuticals & Biotechnology Sector
7. Renewable Energy Sector
8. Skill Development Sector
9. Textiles & Apparels Sector
10. Agro and Food Processing
11. IT ITES Sector

Source: Tamil Nadu Industrial Guidance & Export Promotion Bureau, Industries Department, Government of Tamil Nadu

INCENTIVES

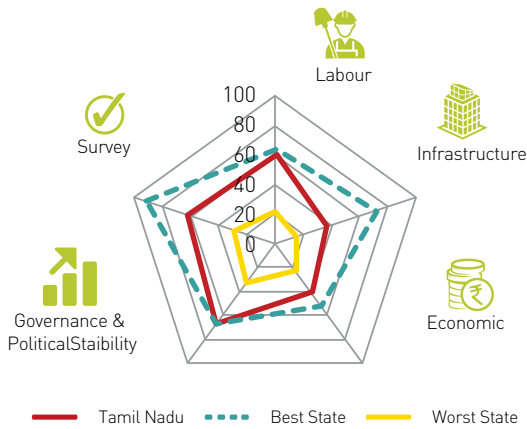
- Capital subsidy, environmental protection infrastructure subsidy
- Exemption from electricity tax.
- Incentives for additional employment generation and SEZ-Developer/Units

Source: Tamil Nadu Industrial Policy, 2014

Tamil Nadu N-SIPI 21 Rank **3**

Tamil Nadu is one of the top two states in terms of governance and political stability, followed closely by economic climate.

State's Performance on the Five Broad Pillars



Strengths

Tamil Nadu has a very high ratio of workforce with at least secondary level education, along with having the highest share of workforce in the manufacturing sector. The state also gets a boost because of the extremely favourable perception of business climate among different industries. The state rates high on low congestion index, in spite of having higher ratio of metro cities in the state/close to the state border. The state also has very high number sea ports.

Weaknesses

The state suffers from power shortage and relatively lower development expenditure.

LABOUR

	Score of the State	Rank
LABOUR - OVERALL	59.7	2
Share of Workforce in the Manufacturing Sector	100.0	1
Average Wages of Educated and Vocationally Trained Labour	83.1	6
Average Labour turnover	79.3	9
Average Wages in the Manufacturing Sector	77.3	9
Labour Force Participation Rate	65.4	5
Seating Capacity of ITIs	44.4	7
Number of ITIs	41.0	5
Above Secondary Level Population as % of Total (15-64 years)	38.8	3
Vocationally Trained Persons as % of Total (15-64 years)	36.7	4
Percent of Young (age 25-35 years) Seeking/ Available for Work	30.8	5

INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	35.9	9
Power Shortage to Total Demand	80.1	16
ICT-readiness Index	79.8	3
Number of Airports	70.0	6
Bank Branches per Lakh Population	55.4	8
Number of Sea-ports	36.0	3
Net Annual Ground Water Availability	35.4	9
Cargo Handled per Port	27.9	5
Rail Density	17.7	8
Average Electricity Tariff for Industry	10.1	19
Cargo Handled per Day at Airport	9.2	3
Road Density	7.1	6
Statutory Towns in Smart Cities as % of Total in State	1.5	19



ECONOMY

	Score of the State	Rank
ECONOMY - OVERALL	41.1	6
Congestion Index	91.6	2
Proximity of State Border to Metro City	66.7	2
Development expenditure as % of State's total expenditure	62.5	12
Industrial GSDP	58.8	9
Services GSDP	49.5	4
Per Capita GSDP	48.2	5
Average GSDP Growth (last 3 yrs)	41.5	13
Share of Million Plus Cities in State's Population	31.3	5
Share of State in Fuel Production	29.4	11
Financial Depth	28.6	3
VAT Productivity	25.4	6
Availability of Land	17.3	12
Share of State in Non-Fuel Production	3.3	11



GOVERNANCE & POLITICAL

	Score of the State	Rank
GOVERNANCE & POLITICAL - OVERALL	67.6	2
Insurgency Rate	100.0	1
Number of Economic Offences as % of all Cases of Crime	88.6	8
Political Leaders with Serious Criminal Charges	74.7	8
e-Governance Index	73.6	7
Completion Rate of Legal Cases by Courts	72.4	3
Land Related Stalled Projects	67.2	5
Cases Pending Investigation from Previous Years	55.8	13
Seats Held by the Largest Party to Total Seats	54.0	5
DIPP Score	54.0	12
Police Strength	35.4	11

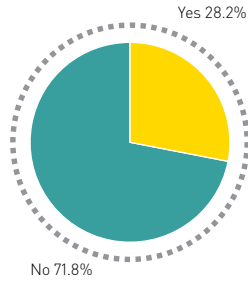


SURVEY

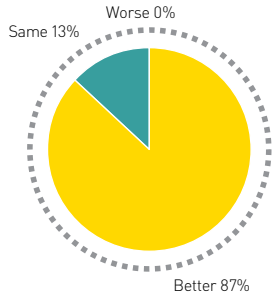
	Score of the State	Rank
SURVEY - OVERALL	62.5	9
Perception on Business Climate	100.0	1
Perception on Labour	84.1	8
Perception on Economic Situation	67.9	11
Perception on Land	66.7	13
Perception on Governance and Political Stability	37.1	18
Perception on Infrastructure	19.1	19

SURVEY RESULTS

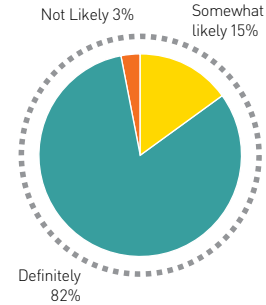
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

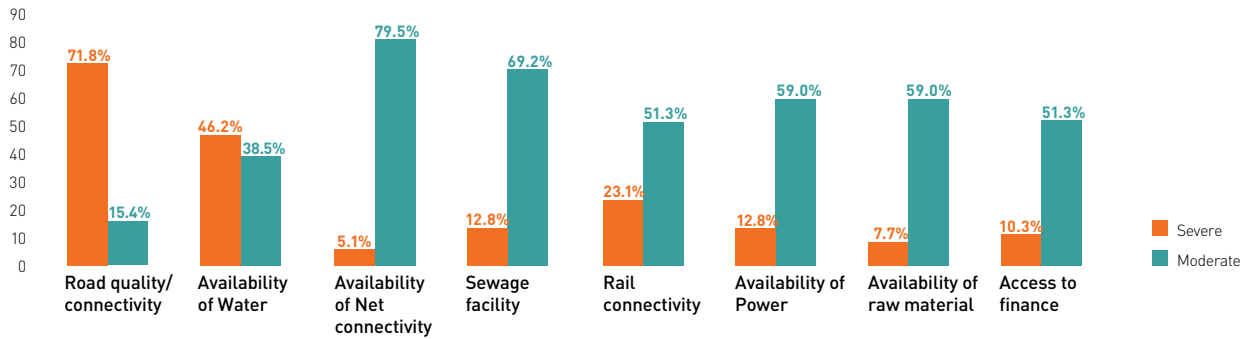


Percentage respondents planning business expansion in next five years



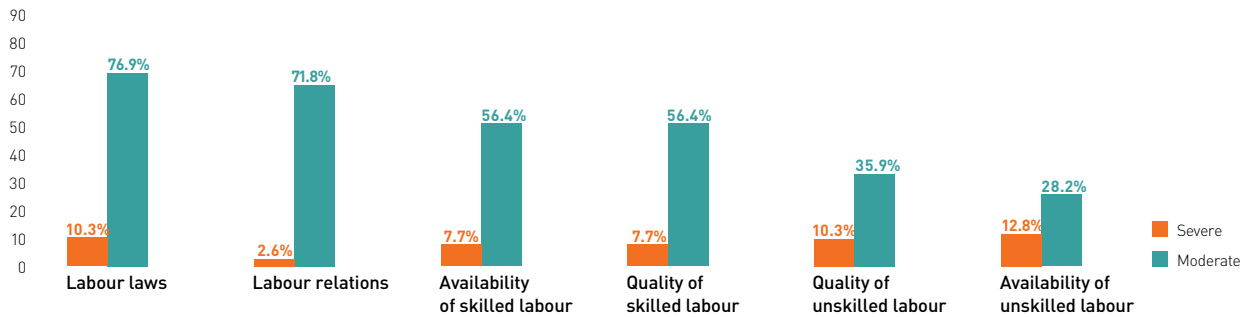
Infrastructure related issues

(% respondents labelling these as severe or moderate)



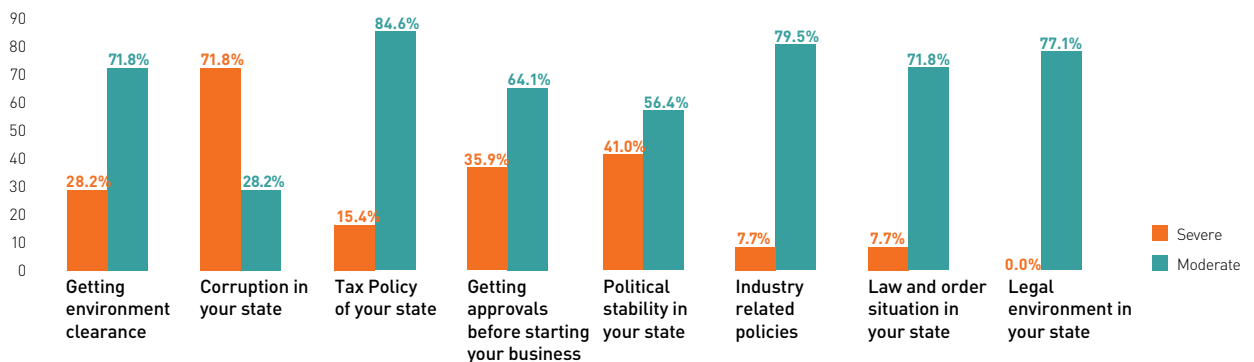
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Telangana



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

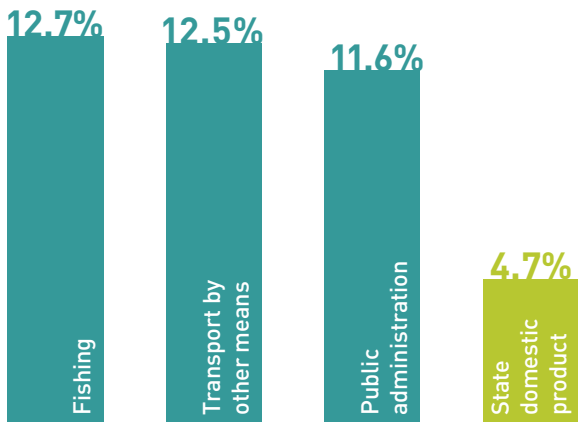
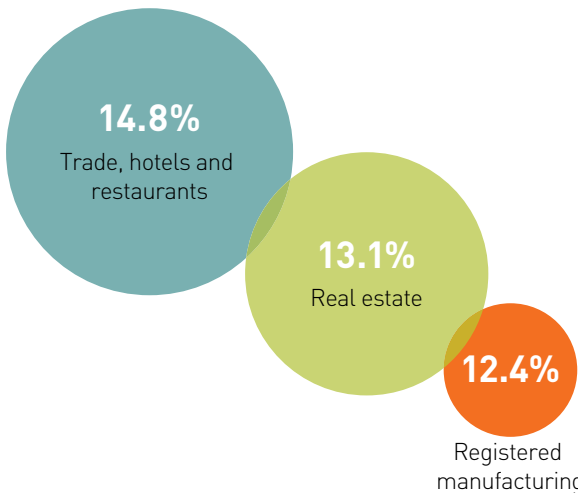


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



TELANGANA STATS

Capital	Hyderabad
Area (sq. km)	1,14,840
Location	Southern India
Per capita income (Rs.)	1,07,965
Literacy Rate (%)	66.5

STATE FOCUS SECTORS

1. Pharma / Biotech R&D
2. Food Processing
3. Gems & Jewellery
4. Electrical power generation equipment

Source: Resident Commissioner, Government of Telangana

INCENTIVES

- Reimbursement of power cost, infrastructure development costs, training & skill development cost.
- Investment subsidy, interest subsidy; land cost rebate.
- Seed capital for first generation entrepreneur.

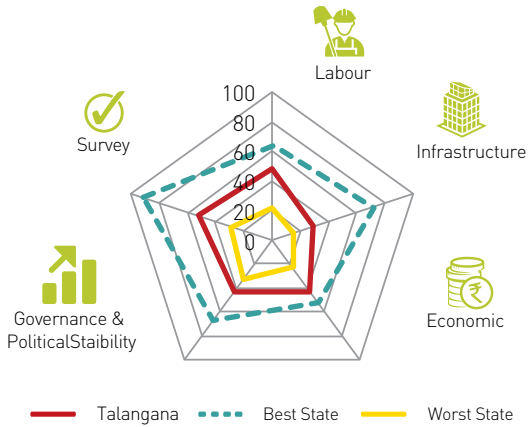
Source: Industrial Policy Framework for the State of Telangana 2014

Telangana

N-SIPI 21 Rank 13

Telangana is among the top five states in terms of labour and economic climate.

State's Performance on the Five Broad Pillars



Strengths

Land acquisition is less of a constraint in the state as per both N-SIPI perception survey and lower ratio of stalled projects because of land related issues. The state of Telangana also has one of the highest VAT productivity ratio across India. The state also has very high labour force participation rate.

Weaknesses

The state suffers from acute power shortage and higher number of economic offenses.

LABOUR

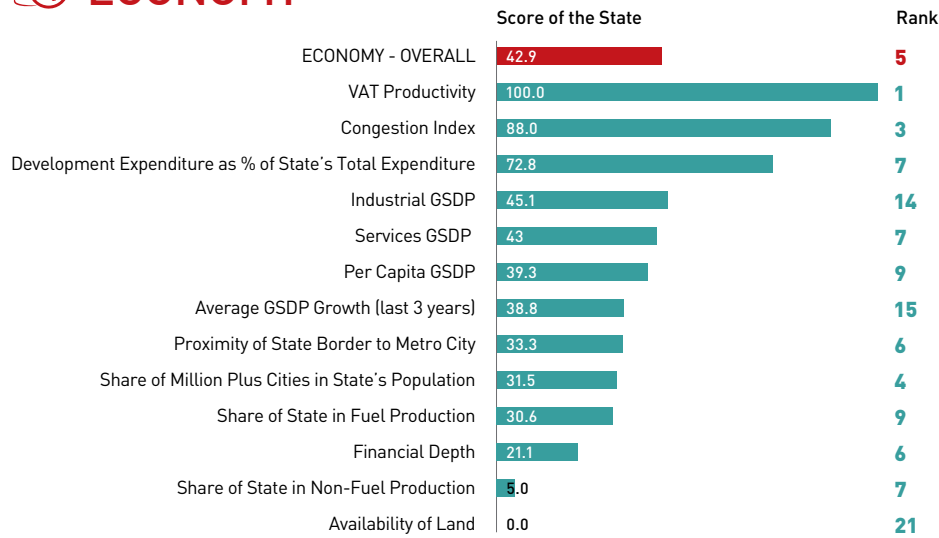
	Score of the State	Rank
LABOUR - OVERALL	47.5	7
Average Labour Turnover	91.0	6
Average Wages of Educated and Vocationally Trained Labour	83.2	4
Labour Force Participation Rate	78.1	3
Average Wages in the Manufacturing Sector	69.7	11
Seating Capacity of ITIs	35.0	9
Share of workforce in the Manufacturing Sector	33.2	12
Percent of young (age 20-35 years) Seeking/Available for Work	25.3	7
Above Secondary Level Population as % of Total (15-65 years)	24.8	9
Number of ITIs	19.9	10
Vocationally Trained Persons as % of total (15-64 years)	14.4	11

INFRASTRUCTURE

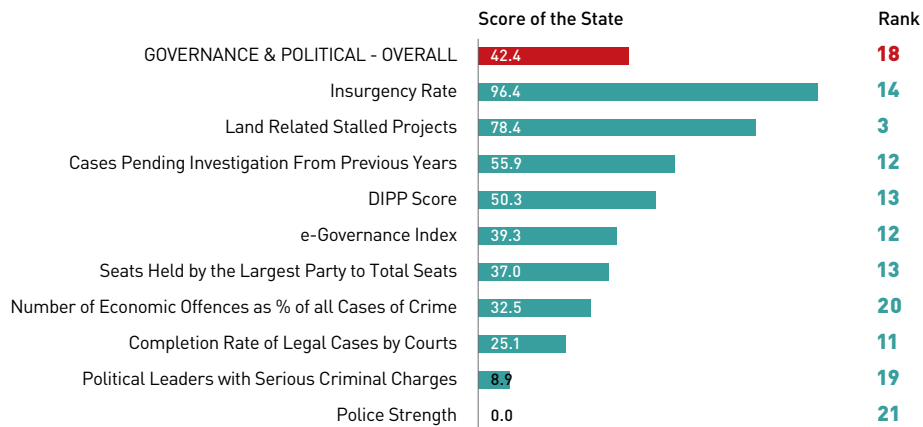
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	29.2	15
Average Electricity Tariff for Industry	65.8	5
Power Shortage as % of Total Demand	60.3	19
Number of Airports	50.0	10
Cargo Handled per day per Airport	47.0	2
Bank Branches per Lakh Population	42.1	9
ICT - Readiness Index	28.0	14
Net Annual Ground Water Availability	15.0	17
Number of Sea-ports	13.0	7
Statutory Towns in Smart Cities as % of Total in State	11.1	3
Rail Density	11.1	12
Road Density	3.0	14
Cargo Handled per Port	1.4	7



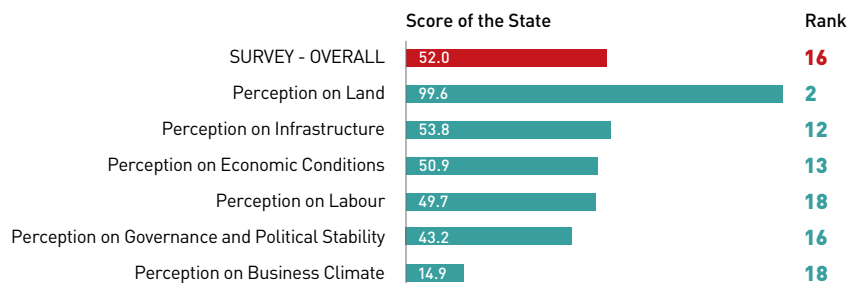
ECONOMY




GOVERNANCE & POLITICAL

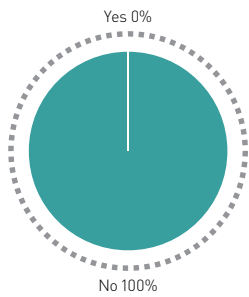



SURVEY

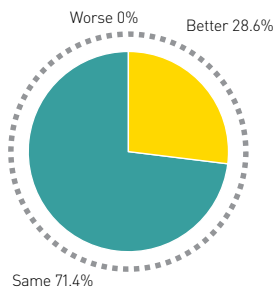


SURVEY RESULTS

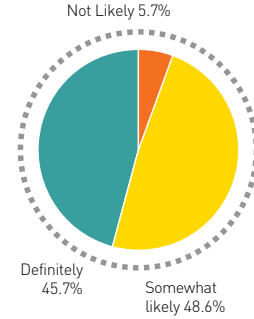
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

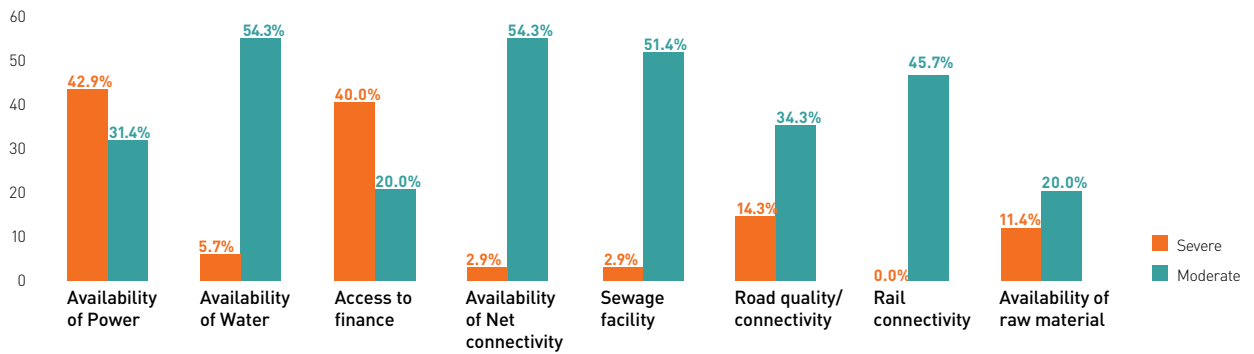


Percentage respondents planning business expansion in next five years



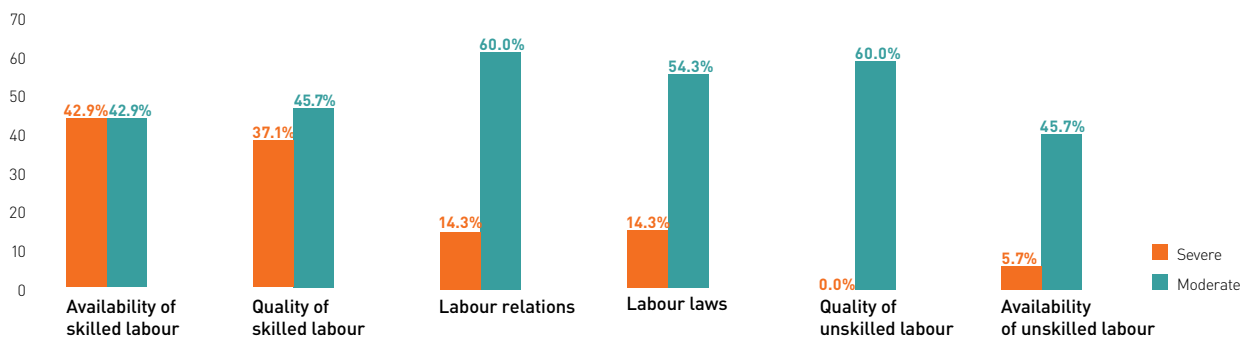
Infrastructure related issues

(% respondents labelling these as severe or moderate)



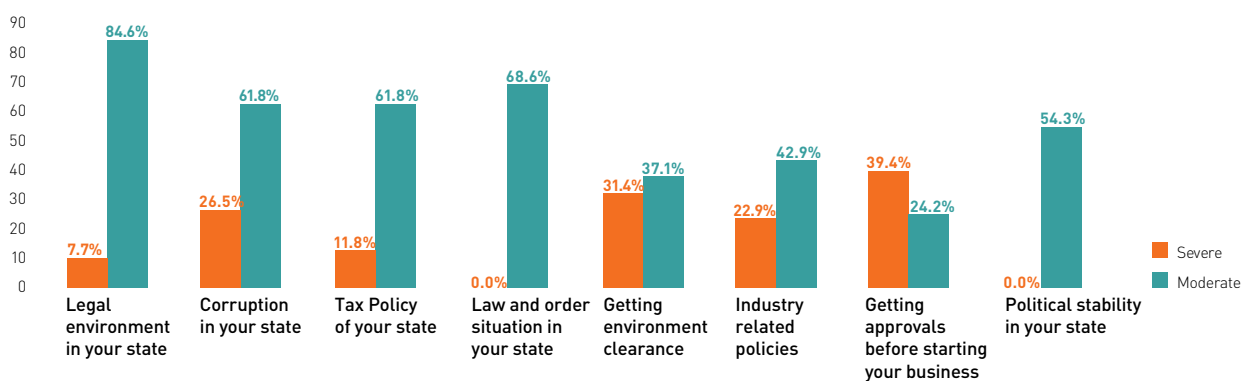
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Uttar Pradesh



UTTAR PRADESH STATS

Capital	Lucknow
Area (sq. km)	2,40,928
Location	Northern Central India
Per capita income (Rs.)	41,122
Literacy Rate (%)	67.7

STATE FOCUS SECTORS

1. Handloom Industry
2. Khadi & Gramodyog Industry
3. Information Technology Industry
4. Bio-technology industry
5. Food Processing Industry
6. Tourism Industry
7. Sugar Industry

Source: Infrastructure and Industrial Investment Policy UP, 2012

INCENTIVES

- Electricity produced by captive power plant for self-use exempted from Electricity Duty.
- Interest free loan for new eligible industrial units.
- Reimbursement of interest for new eligible industrial units.

Source: Infrastructure and Industrial Investment Policy, 2012, Uttar Pradesh

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

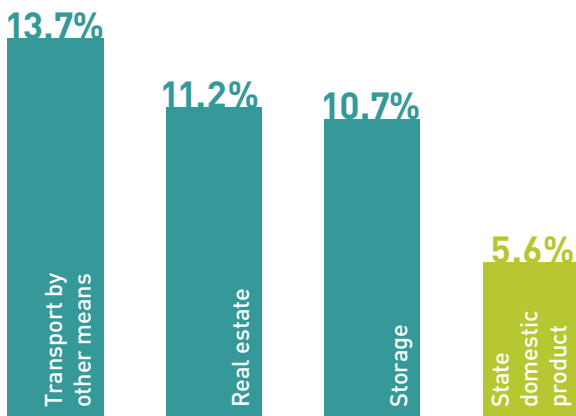
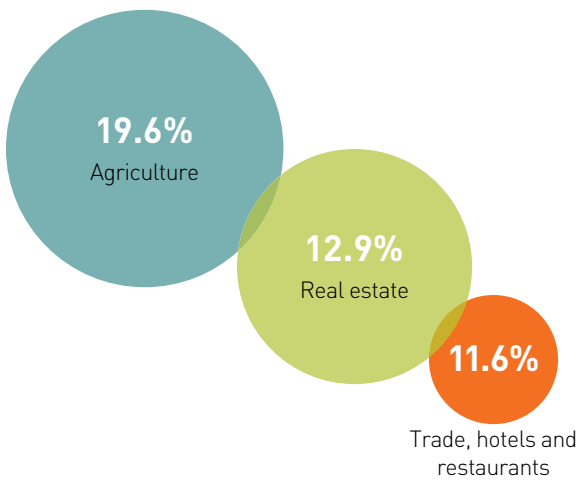
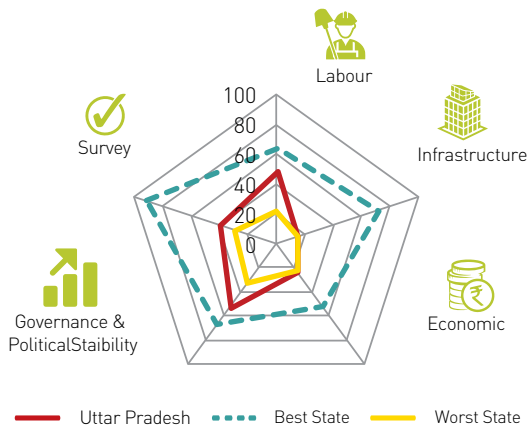


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



Uttar Pradesh N-SIPI 21 Rank **20**

State's Performance on the Five Broad Pillars



Uttar Pradesh comes close to the top performing states in terms of labour, but lags way behind on others.

Strengths

The state has the highest number of ITIs. The state also has relatively higher number of airports compared to other states, providing good air connectivity. Uttar Pradesh has lower number of stalled projects due to land related issues.

Weaknesses

Uttar Pradesh lags behind in terms of ratio of vocationally trained persons and shortage of power.

LABOUR

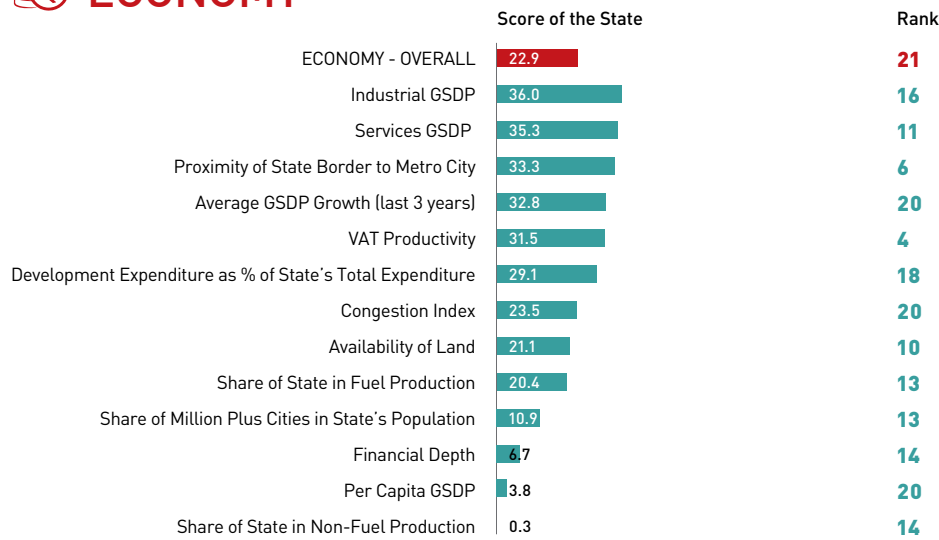
	Score of the State	Rank
LABOUR -OVERALL	47.8	6
Number of ITIs	100.0	1
Seating Capacity of ITIs	100.0	1
Average Wages in the Manufacturing Sector	82.2	5
Share of workforce in the Manufacturing Sector	53.3	8
Average Wages of Educated and Vocationally Trained Labour	50.0	17
Labour Force Participation Rate	31.6	17
Average Labour Turnover	26.6	16
Above Secondary Level Population as % of Total (15-65 years)	16.1	14
Percent of young (age 20-35 years) Seeking/Available for Work	14.4	16
Vocationally Trained Persons as % of total (15-64 years)	3.9	19

INFRASTRUCTURE

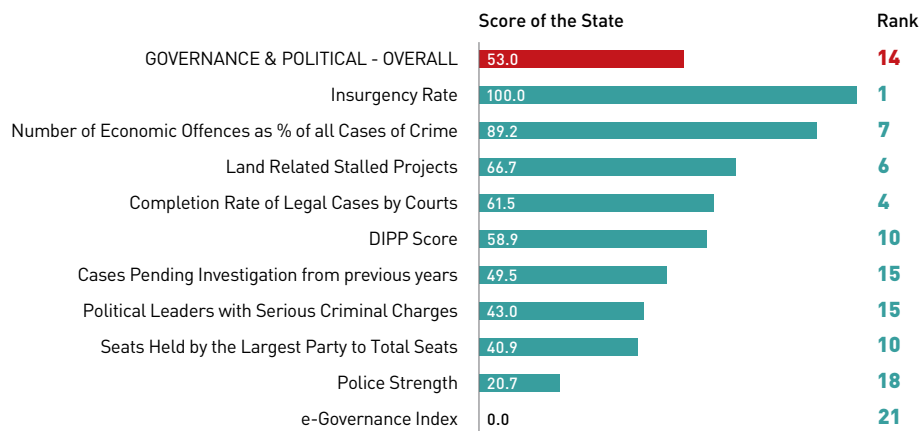
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	14.3	21
Number of Airports	80.0	2
Net Annual Ground Water Availability	73.1	4
Average Electricity Tariff for Industry	9.9	20
Bank Branches per Lakh Population	9.5	19
Road Density	6.6	7
Statutory Towns in Smart Cities as % of Total in State	2.1	16
ICT - Readiness Index	1.8	20
Cargo Handled per day per Airport	0.1	17
Power Shortage as % of Total Demand	0.0	21
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10
Rail Density	0.0	21



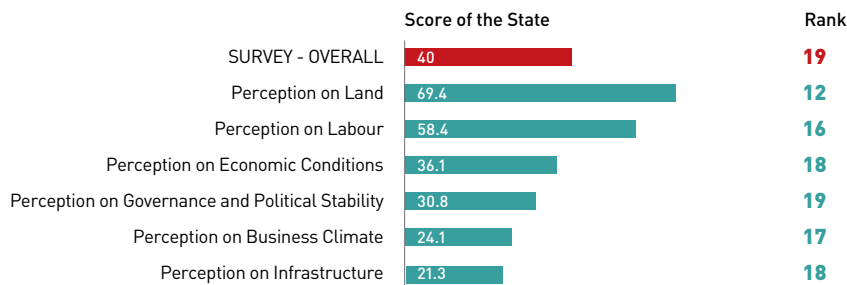
ECONOMY



GOVERNANCE & POLITICAL

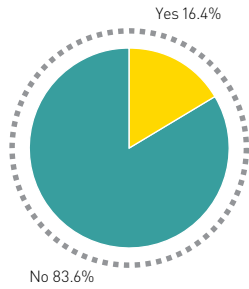


SURVEY

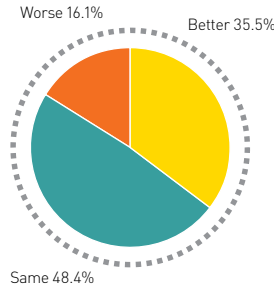


SURVEY RESULTS

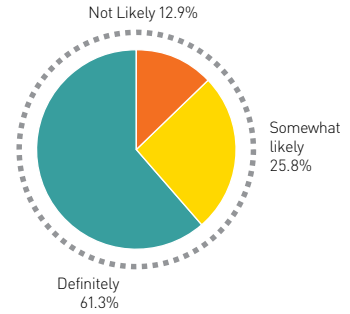
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

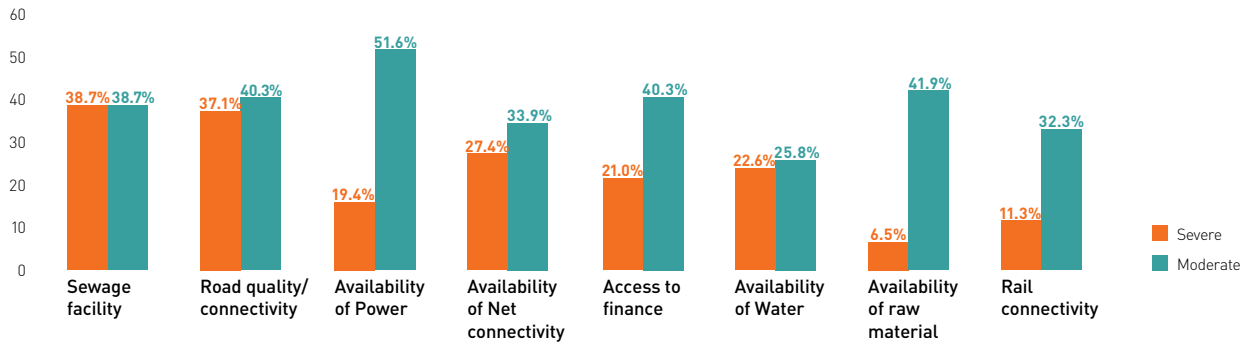


Percentage respondents planning business expansion in next five years



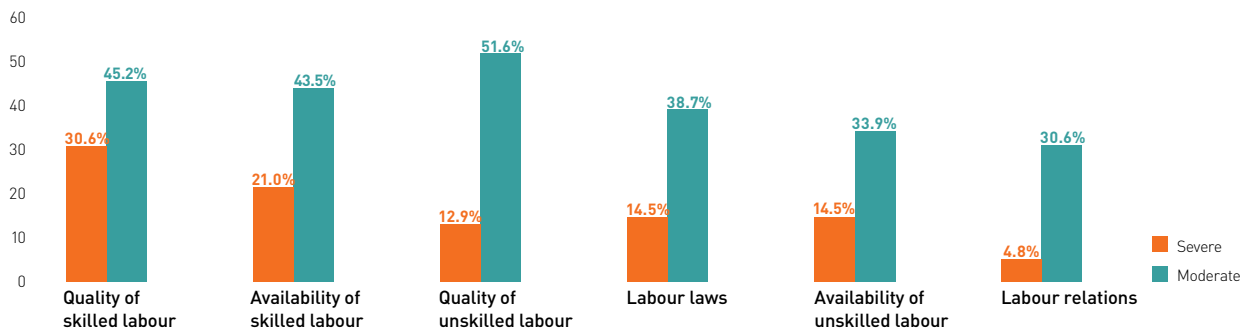
Infrastructure related issues

(% respondents labelling these as severe or moderate)



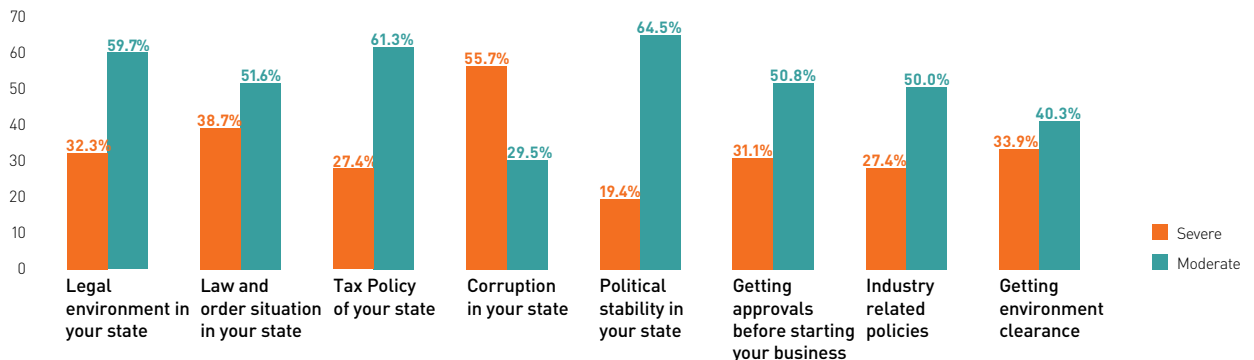
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Uttarakhand



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

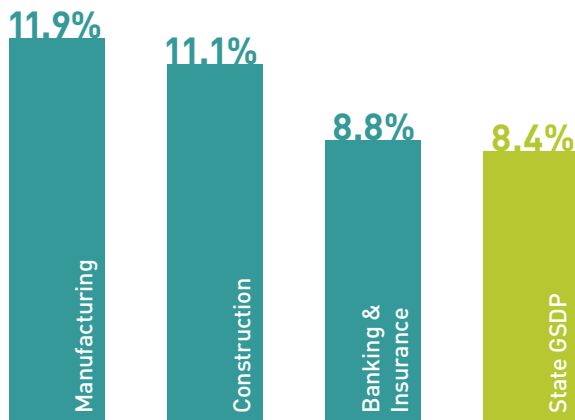
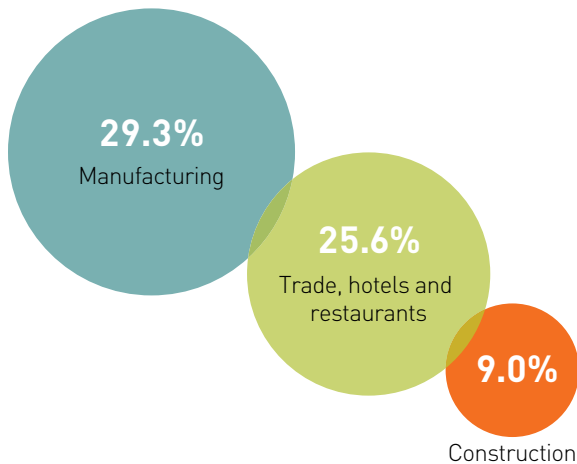


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



UTTARAKHAND STATS

Capital	Dehradun
Area (sq. km)	53,483
Location	Northern India
Per capita income (Rs.)	1,19,248
Literacy Rate (%)	78.8

STATE FOCUS SECTORS

1. Floriculture & horticulture
2. Agro & food processing
3. Biotechnology
4. Information & Communication Technology
5. Forest Products (herbs, spices, medicines)
6. Tourism
7. Handlooms & Handicrafts
8. Tea
9. Wool
10. Bottling plants, wineries, breweries & mineral water

Source: State Industrial Policy 2003

INCENTIVES

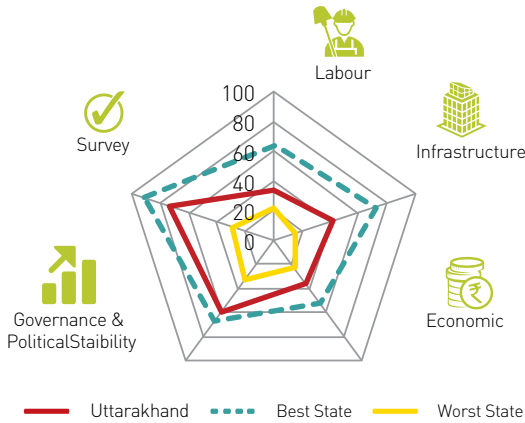
- Subsidy on capital investment, freight subsidy, special state transport subsidy.
- Infrastructure development grant, electricity bill reimbursement on manufacturing enterprises
- Reimbursement of the expense for installing pollution control equipment, registering patents.

Source: Industrial Policy, 2003, Uttarakhand

Uttarakhand N-SIPI 21 Rank **8**

Uttarakhand is one of the top five states in terms of two broad pillars: N-SIPI perception Survey and infrastructure.

State's Performance on the Five Broad Pillars



Strengths

Uttarakhand performs very well in terms of business climate as per N-SIPI survey findings, and has one of the highest share of Industrial sector in total GSDP across states. The state also has one of the highest average growth rate of GSDP.

Weaknesses

Uttarakhand lags behind on share of ITIs in the state. The state also fares poorly on DIPP score of Ease of Doing Business.

LABOUR

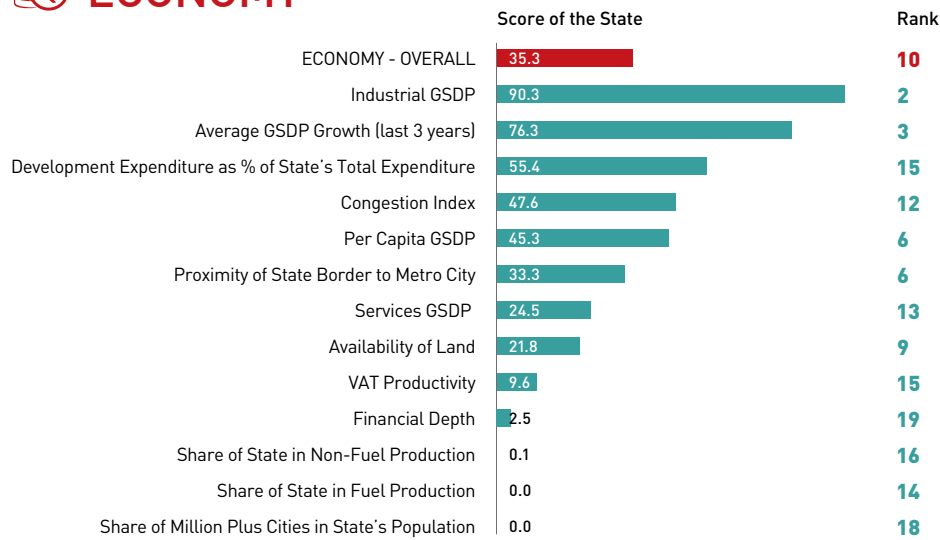
	Score of the State	Rank
LABOUR -OVERALL	33.2	17
Average Labour Turnover	64.9	14
Labour Force Participation Rate	46.5	12
Percent of young (age 20-35 years) Seeking/Available for Work	43.6	3
Average Wages in the Manufacturing Sector	41.9	18
Average Wages of Educated and Vocationally Trained Labour	36.3	18
Share of workforce in the Manufacturing Sector	34.6	11
Above Secondary Level Population as % of Total (15-65 years)	30.3	7
Vocationally Trained Persons as % of total (15-64 years)	26.8	7
Number of ITIs	4.5	18
Seating Capacity of ITIs	3.2	20

INFRASTRUCTURE

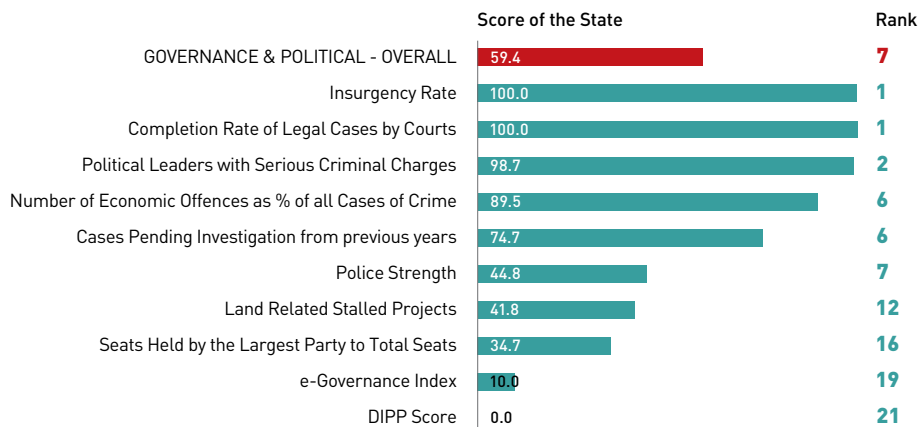
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	41.3	4
Average Electricity Tariff for Industry	100.0	1
Rail Density	100.0	1
Bank Branches per Lakh Population	82.7	5
Power Shortage as % of Total Demand	80.8	15
ICT - Readiness Index	29.0	13
Number of Airports	20.0	16
Net Annual Ground Water Availability	7.0	19
Road Density	3.2	12
Statutory Towns in Smart Cities as % of Total in State	0.5	20
Cargo Handled per Port	0.0	10
Number of Sea-ports	0.0	10
Cargo Handled per day per Airport	0.0	19



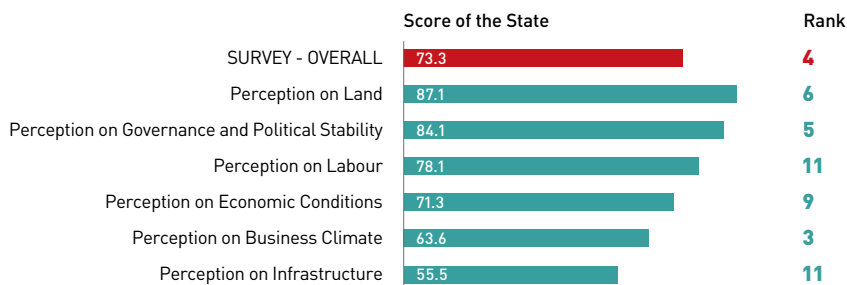
ECONOMY



GOVERNANCE & POLITICAL

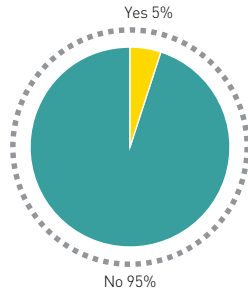


SURVEY

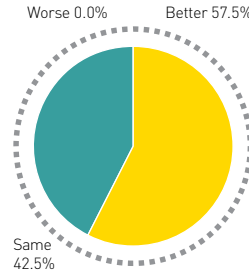


SURVEY RESULTS

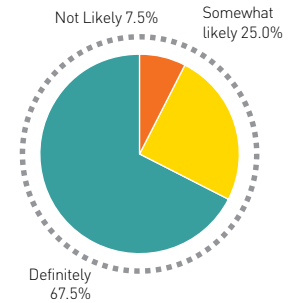
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

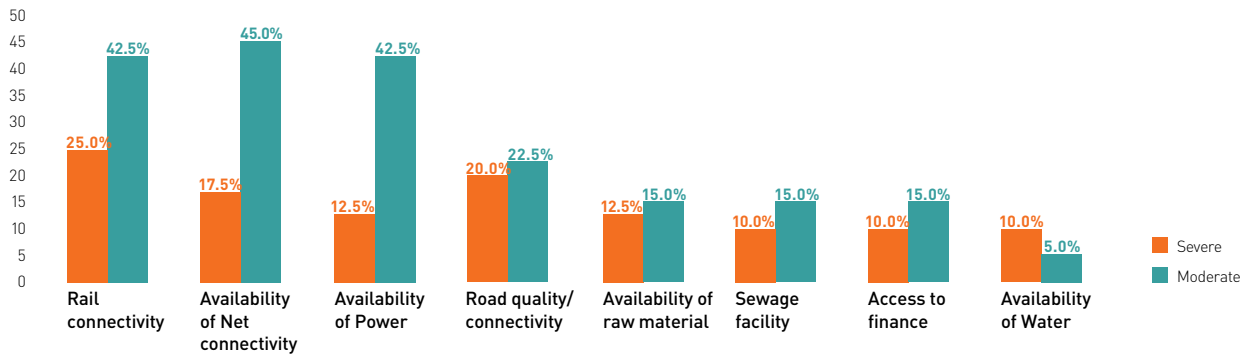


Percentage respondents planning business expansion in next five years



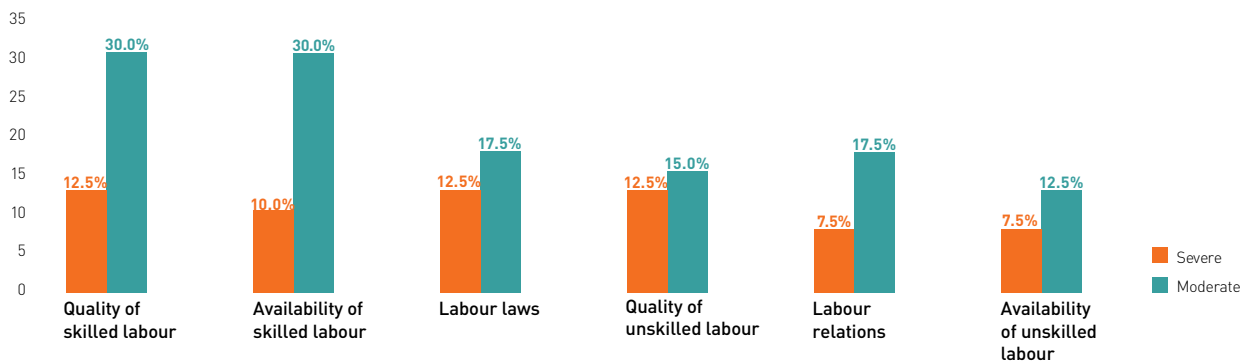
Infrastructure related issues

(% respondents labelling these as severe or moderate)



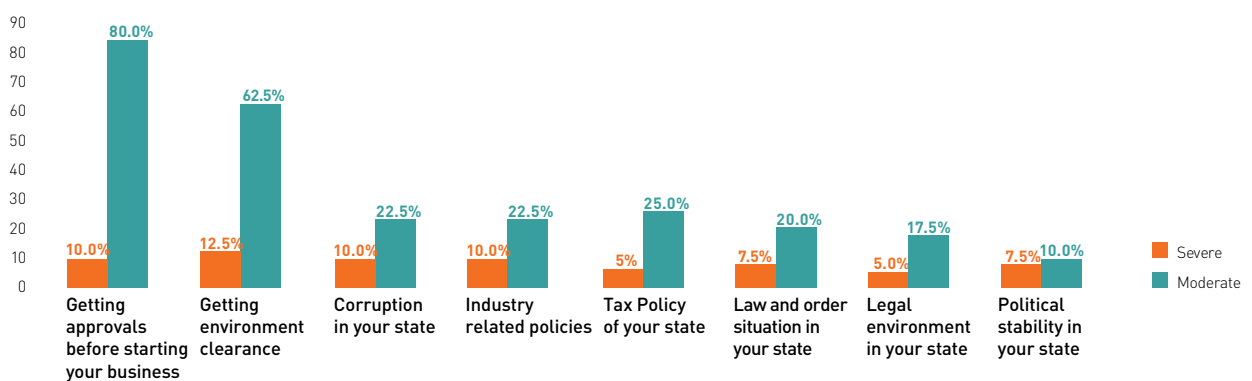
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



West Bengal

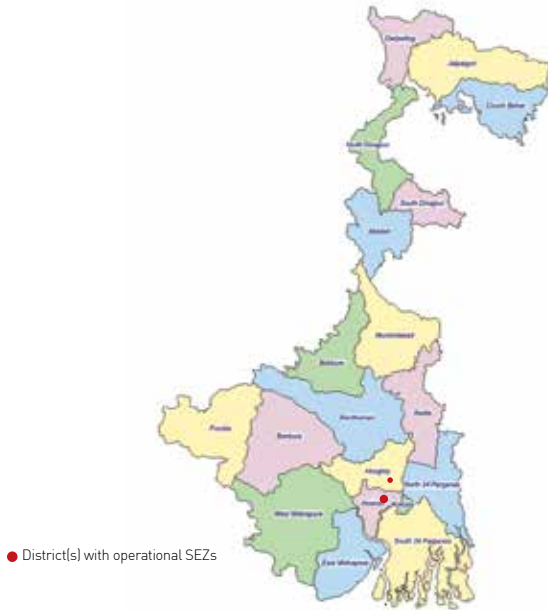


Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

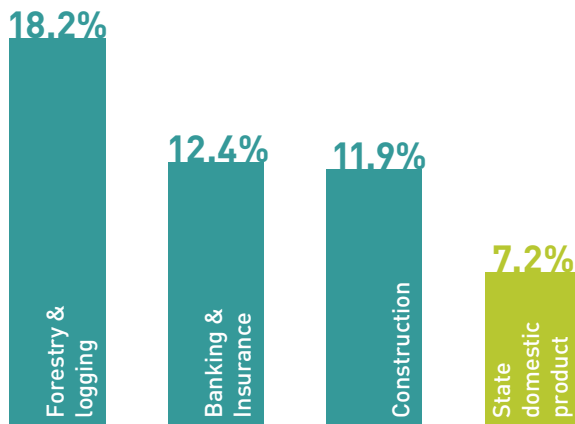
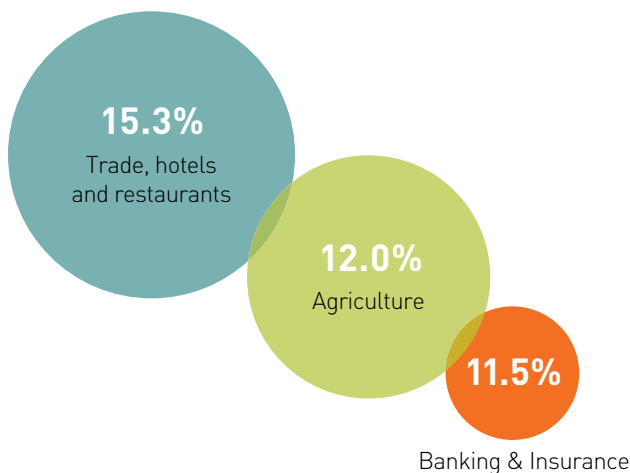


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



WEST BENGAL STATS

Capital	Kolkata
Area (sq. km)	88,752
Location	Northern Central India
Per capita income (Rs.)	77,141
Literacy Rate (%)	76.3

STATE FOCUS SECTORS

1. Urban Infrastructure and Housing
2. Transport
3. Food processing, horticulture & floriculture
4. MSME and Textiles
5. IT Software and Hardware
6. Manufacturing
7. Healthcare
8. Education and Skills
9. Energy and Infrastructure
10. Hospitality & Tourism and Entertainment
11. Financial Services

Source: State Industrial and Investment Policy, 2013

INCENTIVES

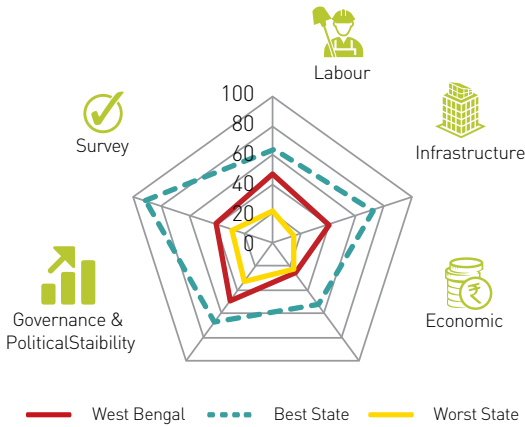
- Fiscal incentives package for large-scale units to be set up in the state
- State capital investment subsidy, interest subsidy on term loan, power subsidy for MSME.
- Incentives to private player for establishing industrial park under Scheme of Approved Industrial Park (SAIP).

Source: West Bengal Incentive Scheme 2013 for MSME and WBIDC website on incentive schemes for WBSISS.

West Bengal

N-SIPI 21 Rank 15

State's Performance on the Five Broad Pillars



West Bengal is close to the top five states in terms of infrastructure, but lags behind in terms of the other pillars.

Strengths

West Bengal state has high rail and road density and is the top state in terms of cargo handled per port. The state also has one of the highest share of service sector in total GSDP.

Weaknesses

West Bengal needs to establish higher number of ITIs in the state. The state also lags behind in terms of the share of development expenditure in total state expenditure.

LABOUR

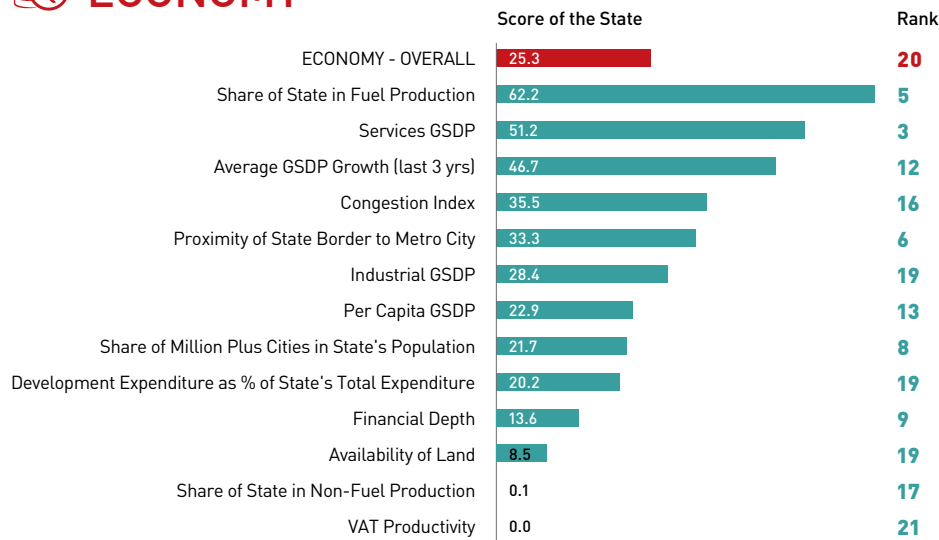
	Score of the State	Rank
LABOUR -OVERALL	46.6	9
Average labour turnover	98.0	4
Share of workforce in the manufacturing sector	96.3	4
Average wages in the manufacturing sector	89.2	4
Average wages of educated and vocationally trained labour	62.2	14
Labour force participation rate	46.5	12
Percent of young (age 25-35 years) seeking/ available for work	29.2	6
Vocationally trained persons as % of total (15-64 years)	18.3	9
Above secondary level population as % of total (15-64 years)	15.8	15
Seating Capacity of ITIs	6.8	17
Number of ITIs	4.2	19

INFRASTRUCTURE

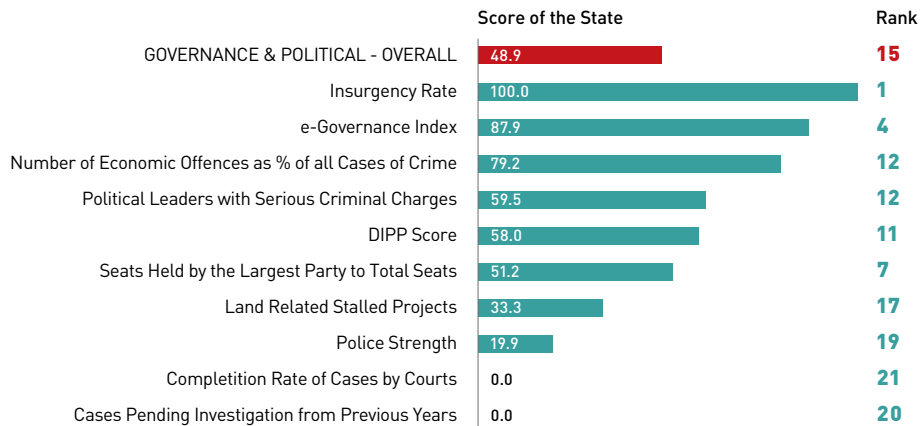
	Score of the State	Rank
INFRASTRUCTURE -OVERALL	40.0	6
Cargo Handled per Port	100.0	1
Power Shortage to Total Demand	96.2	5
Net Annual Ground Water Availability	73.6	3
Number of Airports	70.0	6
ICT-readiness Index	46.7	9
Average Tariff for Industry	33.9	17
Rail Density	26.8	3
Road Density	15.8	4
Bank Branches per Lakh Population	12.9	17
Number of Statutory Towns in Smart Cities	5.9	5
Number of Sea-ports	4.0	9
Cargo Handled per Day at Airport	3.2	6



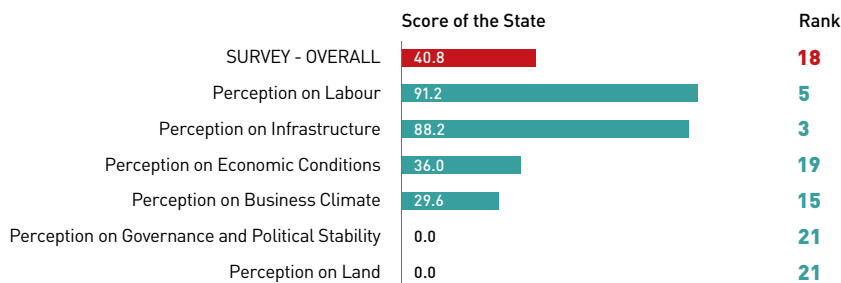
ECONOMY



GOVERNANCE & POLITICAL

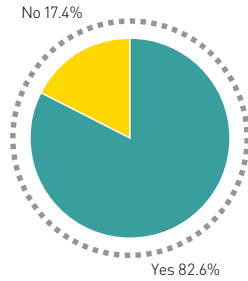


SURVEY

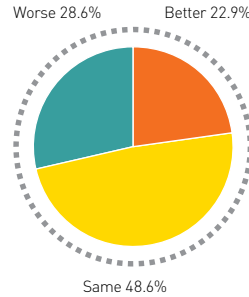


SURVEY RESULTS

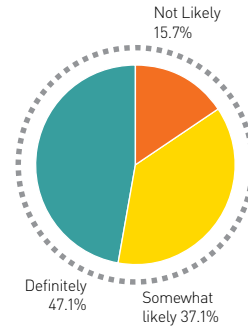
Percentage respondents who faced problem in acquiring land



Percentage respondents perceiving business condition in next six months to be

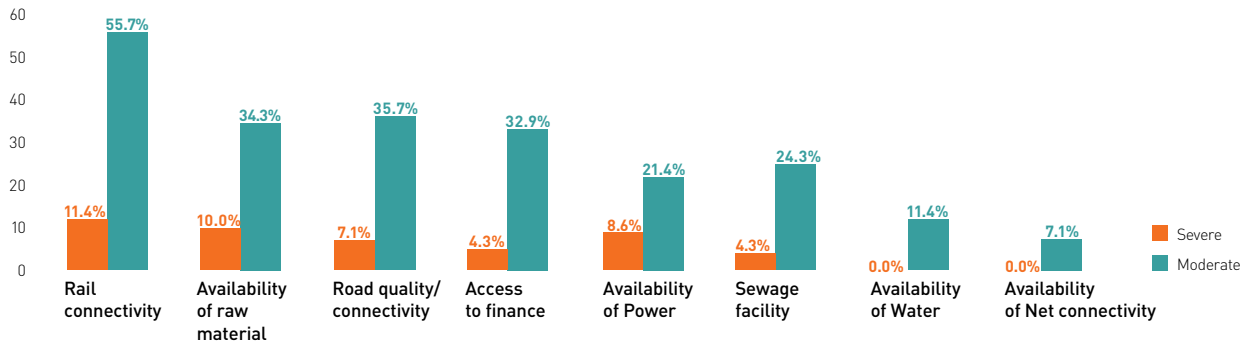


Percentage respondents planning business expansion in next five years



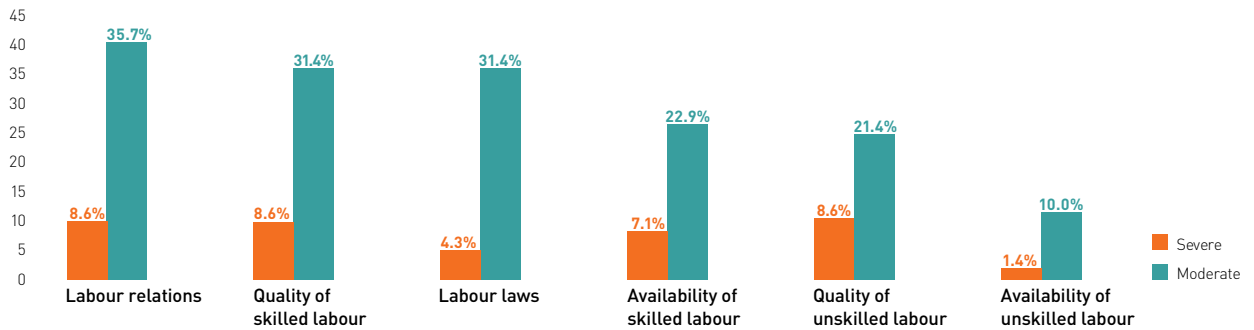
Infrastructure related issues

(% respondents labelling these as severe or moderate)



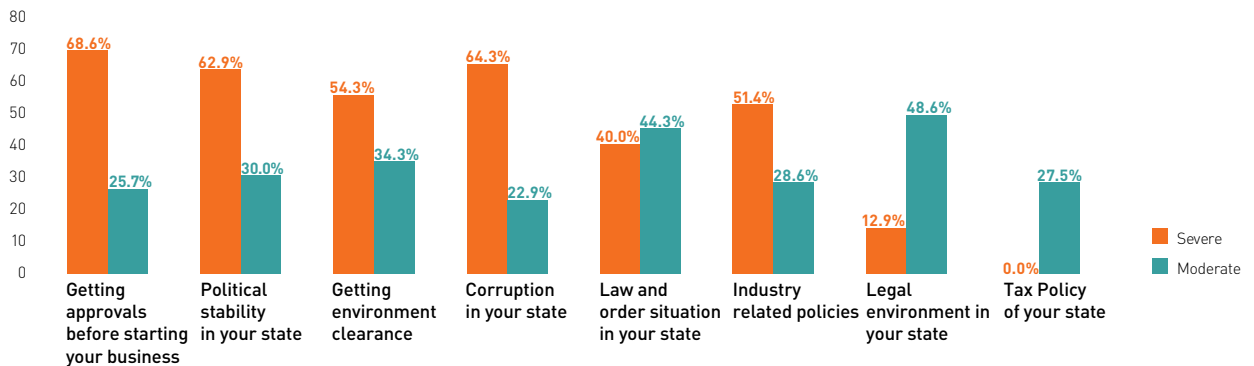
Labour related issues

(% respondents labelling these as severe or moderate)



Governance related issues

(% respondents labelling these as severe or moderate)



Section 2
STATE PROFILES
2.2 N-SIPI 30

Arunachal Pradesh



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

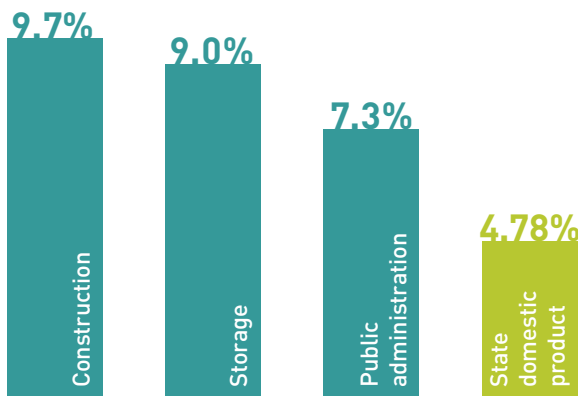
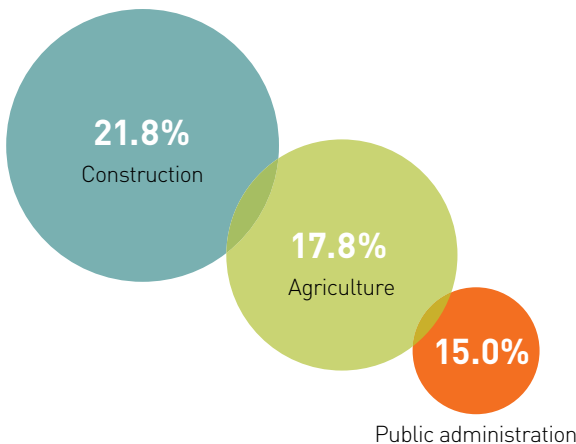


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



ARUNACHAL PRADESH STATS

Capital	Itanagar
Area (sq. km)	83,743
Location	North-eastern India
Per capita income (Rs.)	92,199
Literacy Rate (%)	65.4

STATE FOCUS SECTORS

1. Industries based on agricultural, horticultural and plantation produce and non-timber forest produce.
2. Industries based on locally available raw materials except timber.
3. Textiles, Handicrafts and Sericulture.
4. Electronics and IT based Enterprises.
5. Mineral Based Industries
6. Facilitation and Development of Industrial Infrastructure including Power, Communications etc. under (PPP).
7. Food Processing Industries.
8. Engineering and Allied Industries.
9. Tourism

Source: Arunachal Pradesh State Industrial Policy 2008

INCENTIVES

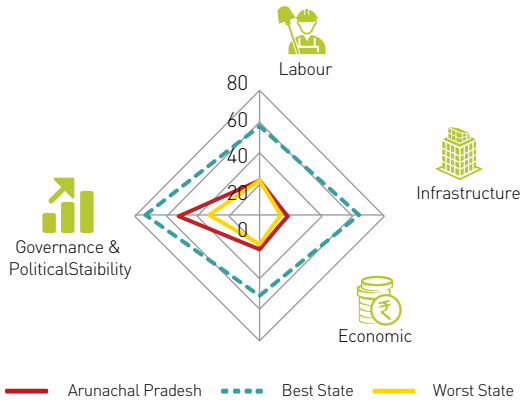
- Preferential price to product manufactured by MSME
- Special Incentives for Food Processing Industries.
- Priority clearance for setting up of large/heavy enterprises.

Source: Arunachal Pradesh State Industrial Policy 2008

Arunachal Pradesh N-SIPI 30 Rank **30**

Arunachal Pradesh has significant room for improvement on all broad pillars.

State's Performance on the Five Broad Pillars



Strengths

Arunachal has the lowest number of stalled projects due to land related issues. The state also ranks fairly high on development expenditure and low congestion index.

Weaknesses

The state needs to focus on building a vocationally trained workforce and improve road density and power availability.

LABOUR

	Score of the State	Rank
LABOUR - OVERALL	22.6	28
Average Labour Turnover	84.0	9
Average Wages in the Manufacturing Sector	66.1	21
Labour Force Participation Rate	39.3	22
Average Wages of Educated and Vocationally Trained Labour	17.0	28
Above Secondary Level Population as % of Total (15-64 years)	12.6	22
Percent of Young (age 25-35 years) Seeking/ Available for Work	5.0	20
Vocationally Trained Persons as % of Total (15-64 years)	1.5	28
Number of ITIs	0.3	28
Seating Capacity of ITIs	0.2	27
Share of Workforce in the Manufacturing Sector	0.0	30

INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	18.1	26
Average Electricity Tariff for Industry	84.6	2
Power Shortage as % of Total Demand	48.2	26
Number of Airports	20.0	18
Bank Branches Per Lakh Population	15.0	20
Net Annual Ground Water Availability	11.7	21
Statutory Towns in Smart Cities as % of Total in State	11.5	11
Road Density	0.1	29
ICT - Readiness Index	0.0	30
Cargo Handled Per Port	0.0	11
Number of Sea-ports	0.0	11
Cargo Handled Per Day Per Airport	0.0	23
Rail Density	0.0	26



ECONOMY

	Score of the State	Rank
ECONOMY - OVERALL	21.5	27
Congestion Index	85.5	6
Development Expenditure as % of State's Total Expenditure	81.8	5
Industrial GSDP	39.8	11
Per Capita GSDP	26.0	14
Services GSDP	16.2	28
Average GSDP Growth (last 3 yrs)	14.6	28
VAT Productivity	4.3	26
Share of State in Fuel Production	1.7	16
Financial Depth	0.6	27
Availability of Land	0.0	26
Share of State in Non-Fuel Production	0.0	23
Proximity of State Border to Metro City	0.0	14
Share of Million Plus Cities in State's Population	0.0	19



GOVERNANCE & POLITICAL

	Score of the State	Rank
GOVERNANCE & POLITICAL - OVERALL	51.4	18
Land Related Stalled Projects	100.0	1
Insurgency Rate	88.1	21
Police Strength	82.8	4
Political Leaders with Serious Criminal Charges	81.2	14
Number of Economic Offences as % of all Cases of Crime	75.6	21
Seats Held by the Largest Party to Total Seats	62.2	8
Cases Pending Investigation from Previous Years	24.4	25
DIPP Score	0.0	30
e-Governance Index	0.0	30
Completion Rate of Legal Cases by Courts	0.0	30

Goa



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

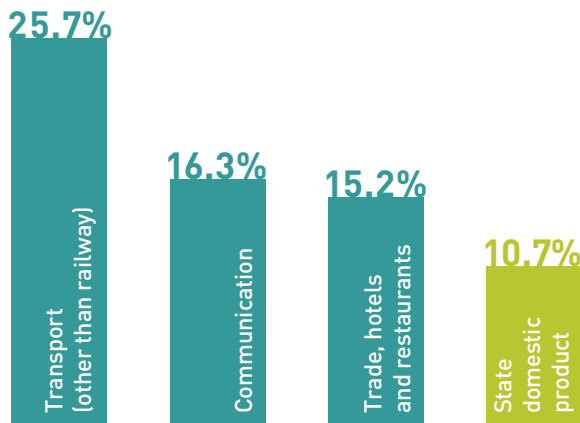
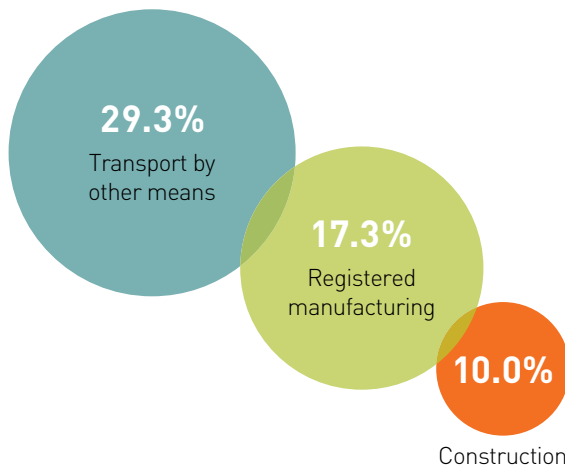


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



GOA STATS

Capital	Panaji
Area (sq. km)	3,702
Location	Western India
Per capita income (Rs.)	2,57,490
Literacy Rate (%)	88.7

STATE FOCUS SECTORS

1. Pharmaceuticals, Drugs and Biotech industries
2. Food processing and agro based industries
3. IT and IT – enabled services
4. Eco, Heritage, Adventure, Event and Medical Tourism
5. Entertainment Industry.

Source: Department of Industries, Trade & Commerce

INCENTIVES

- Financial assistance in the form of interest free loan to export-oriented industries.
- Special incentives for bio-technology units under Goa State Investment Subsidy Scheme for Bio Technology Units (2009).
- Capital Contribution Scheme to support local entrepreneurs.

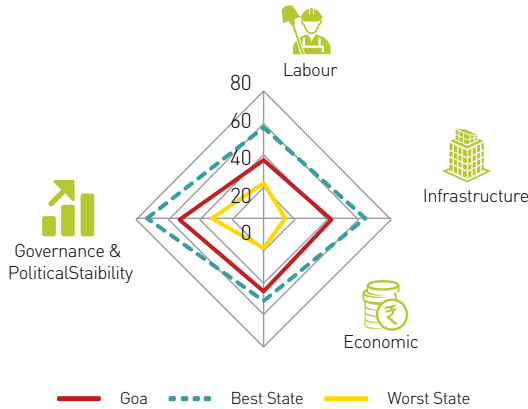
Source: Goa Industrial Policy (2003)

Goa

N-SIPI 30 Rank 4

Goa is one of the top states in two broad pillars: labour, infrastructure, and economic climate.

State's Performance on the Five Broad Pillars



Strengths

Goa ranks among the top two states in terms of vocationally trained workers, and average growth rate of GSDP between 2009-10 to 2013-14. The state also has the highest per capita GSDP across all states. The state also has the highest ratio of bank branches per lakh population, providing wider physical access to the banking network.

Weaknesses

Goa ranks very high on number of economic offenses and has low VAT productivity.

LABOUR

	Score of the State	Rank
LABOUR - OVERALL	36.9	12
Average Wages of Educated and Vocationally Trained Labour	91.6	2
Share of Workforce in the Manufacturing Sector	67.7	7
Above Secondary Level Population as % of Total (15-64 years)	67.4	2
Vocationally Trained Persons as % of Total (15-64 years)	66.5	2
Labour Force Participation Rate	29.3	25
Average Labour Turnover	27.1	24
Percent of Young (age 25-35 years) Seeking/ Available for Work	17.2	4
Seating Capacity of ITIs	1.7	23
Number of ITIs	0.8	23
Average Wages in the Manufacturing Sector	0.0	30

INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	42.4	2
Bank Branches Per Lakh Population	100.0	1
ICT - Readiness Index	100.0	1
Power Shortage as % of Total Demand	95.3	8
Average Electricity Tariff for Industry	55.0	10
Statutory Towns in Smart Cities as % of Total in State	21.4	6
Road Density	13.8	5
Number of Sea-Ports	12.0	9
Rail Density	11.5	12
Cargo Handled Per Port	11.2	9
Number of Airports	10.0	23
Net Annual Ground Water Availability	9.4	22
Cargo Handled Per Day Per Airport	1.1	9



ECONOMY

	Score of the State	Rank
ECONOMY - OVERALL	45.2	2
Average GSDP growth (last 3 yrs)	100.0	1
Per Capita GSDP	100.0	1
Congestion Index	97.1	2
Development Expenditure as % of State's Total Expenditure	68.5	12
Services GSDP	56.0	7
Industrial GSDP	45.9	7
Availability of Land	33.4	6
Share of State in Non-Fuel Production	11.3	6
Financial Depth	7.3	18
VAT Productivity	3.2	28
Share of State in Fuel Production	0.0	18
Proximity of State Border to Metro City	0.0	14
Share of Million Plus Cities in State's Population	0.0	19



GOVERNANCE & POLITICAL

	Score of the State	Rank
GOVERNANCE & POLITICAL - OVERALL	52.7	14
Insurgency Rate	100.0	1
Political Leaders with Serious Criminal Charges	81.2	14
e-Governance Index	78.2	6
Number of Economic Offences as % of all Cases of Crime	53.6	28
Cases Pending Investigation from Previous Years	47.8	9
Land Related Stalled Projects	42.9	19
Seats Held by the Largest Party to Total Seats	36.3	21
Completion Rate of Legal Cases by Courts	30.0	14
DIPP Score	29.3	19
Police Strength	27.2	10

Jammu & Kashmir



JAMMU & KASHMIR STATS

Capital	Srinagar (Summer), Jammu (Winter)
Area (sq. km)	2,22,236
Location	Northern India
Per capita income (Rs.)	72,396
Literacy Rate (%)	67.2

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

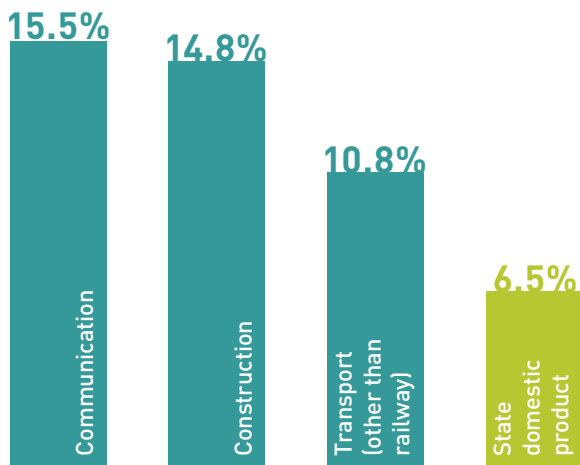
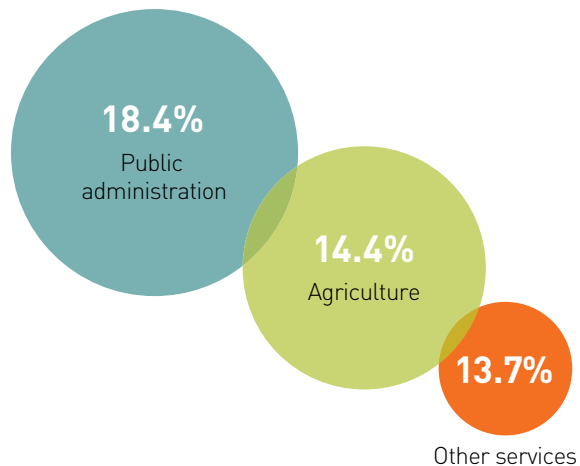


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



STATE FOCUS SECTORS

1. Food Processing & Agro based industries
2. Leather Processing & Leather goods
3. Tissue culture
4. Silk Yarn, Woven fabric of silk
5. Wool & woven fabrics of wool
6. Woven fabrics of cotton
7. Floriculture
8. Medicinal herbs-processing
9. Green houses
10. Computer hardware/Electronics
11. Sports goods and equipment for physical exercise
12. Auto Ancillaries
13. Eco-tourism
14. Hotels, Houseboats, Resorts, Adventure & leisure sports, amusement parks, cable car.
15. Handicrafts
16. Precision engineering
17. Exploration of minerals

Source: J&K SIDCO

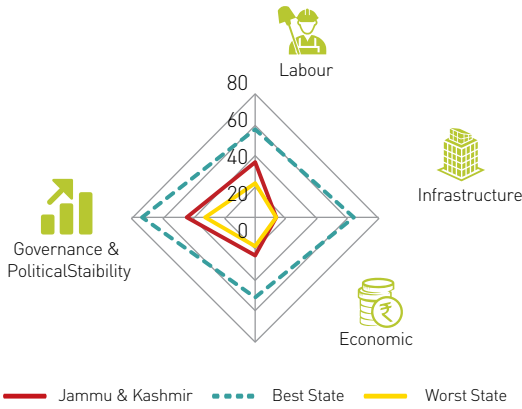
INCENTIVES

- Industrial incentives extended in 2002 by DIPP for a period of ten years.
- Capital Investment Subsidy for investment of plant & machinery, interest subsidy on the average of daily working capital loan.
- State's new industrial policy is expected to unveil soon, aimed to revive the sector.

Jammu & Kashmir N-SIPI 30 Rank **29**

Jammu and Kashmir lags behind on all broad N-SIPI pillars.

State's Performance on the Five Broad Pillars



Strengths

Jammu and Kashmir has lower number of economic offenses compared to the rest of the states, along with lower proportion of state legislative candidates with serious criminal records. The state also has relatively higher proportion of youth, in the age group 25-30 years, seeking work.

Weaknesses

Jammu Kashmir needs to improve its rail and road density. The state also has the lowest number of ITIs.

LABOUR

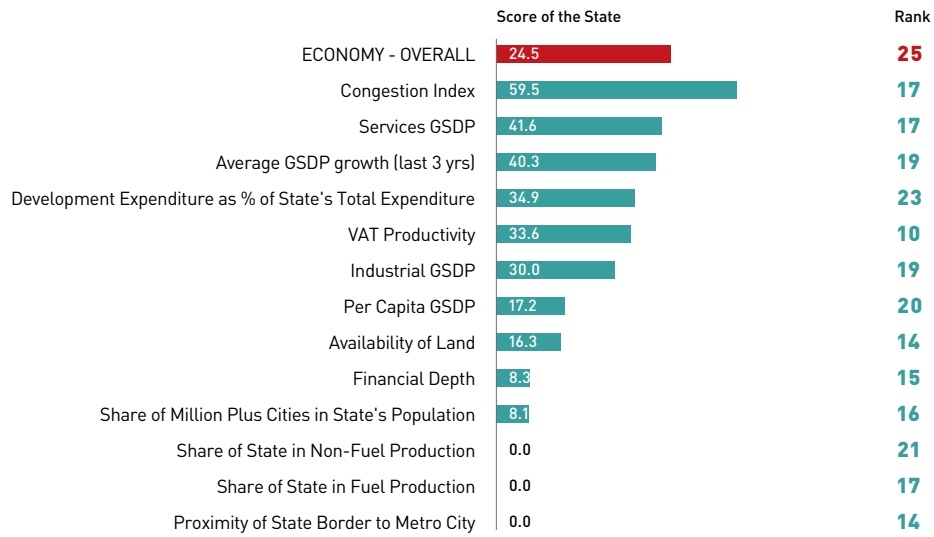
	Score of the State	Rank
LABOUR -OVERALL	35.9	20
Average Wages in Manufacturing Sector	85.8	7
Average Labour Turnover	66.6	17
Average Wages of Educated and Vocationally Trained Labour	62.8	16
Share of Workforce in the Manufacturing Sector	55.4	12
Labour Force Participation Rate	40.7	20
Above Secondary Level Population as % of total (15-64 years)	21.8	14
Percent of Young (age 25-35 years) Seeking/ Available for Work	12.8	7
Vocationally Trained Persons as % of Total (15-64 years)	9.2	18
Number of ITIs	2.2	21
Seating Capacity of ITIs	2.0	22

INFRASTRUCTURE

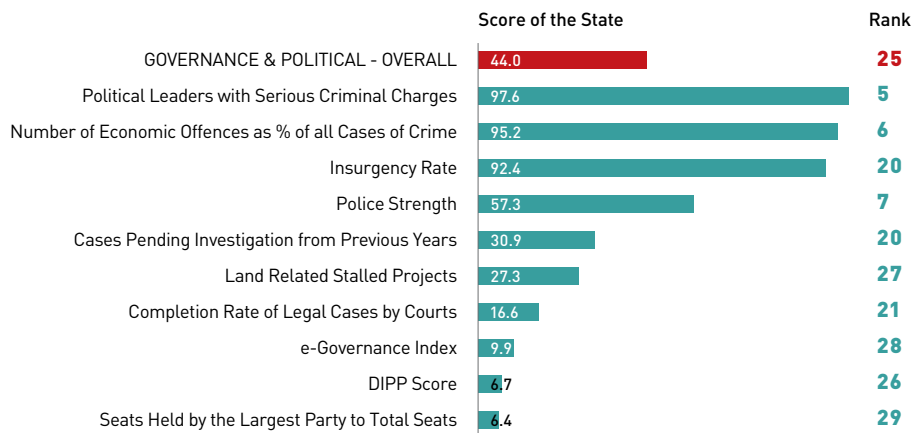
	Score of the State	Rank
INFRASTRUCTURE - OVERALL	13.8	30
Average Electricity Tariff for Industry	83.7	3
Number of Airports	30.0	15
Bank Branches Per Lakh Population	28.8	11
ICT - Readiness Index	5.4	27
Net Annual Ground Water Availability	4.0	27
Rail Density	0.6	23
Cargo Handled Per Day Per Airport	0.3	15
Statutory Towns in Smart Cities as % of Total in State	0.0	30
Power Shortage as % of Total Demand	0.0	30
Cargo Handled Per Port	0.0	11
Number of Sea-Ports	0.0	11
Road Density	0.0	30



ECONOMY




GOVERNANCE & POLITICAL



Manipur



MANIPUR STATS

Capital	Imphal
Area (sq. km)	22,327
Location	North-eastern India
Per capita income (Rs.)	47,414
Literacy Rate (%)	76.9

STATE FOCUS SECTORS

1. Agro based industry
2. Bio-Technology industries
3. Floriculture
4. Handloom and Handicraft
5. Silk and Sericulture
6. Medicinal Plants
7. Distillation of oils from aromatic plants
8. Rubber processing
9. Bamboo processing
10. Dairy and allied products
11. Meat processing unit
12. Mineral based industries
13. Information Technology
14. Manufacturing of construction material
15. Trade and Commerce under Export Import mechanisms

Source: Industrial and Investment Policy of Manipur, 2013

INCENTIVES

- Capital investment subsidy on the capital invested on plants and machineries
- Subsidies for financially weak traditional industrial units.
- Single window to be set up for clearance to facilitate the industries.

Source: Industrial and Investment Policy of Manipur, 2013

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

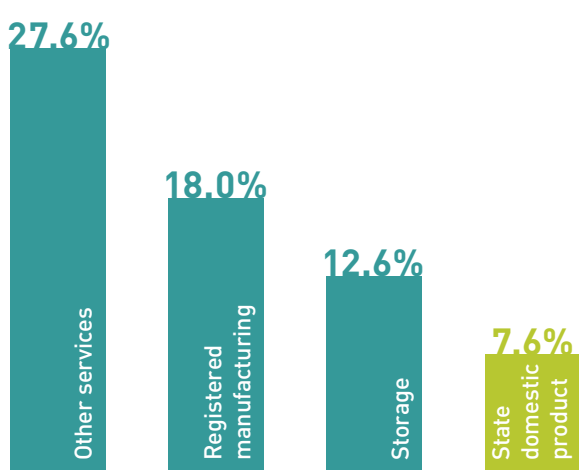
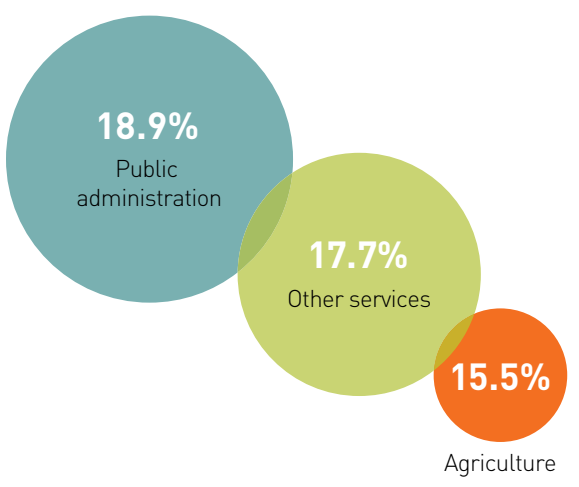


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)

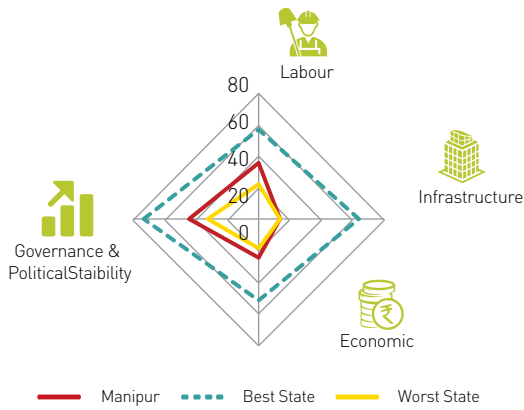


Manipur

N-SIPI 30 Rank 25

Manipur needs to catch up with the other states on all broad N-SIPI pillars.

State's Performance on the Five Broad Pillars



Strengths

Manipur has one of the least number of stalled projects caused by land related issues. The state also high labour turnover ratio, and a high proportion of youth, in the age group 25-30 years, available for work.

Weaknesses

The state lacks adequate ITIs, which is also reflected in the lower proportion of vocationally trained people. The state also needs to boost the road network.

LABOUR

	Score of the State	Rank
LABOUR - OVERALL	39.2	15
Average Labour Turnover	96.7	3
Average Wages in the Manufacturing Sector	91.0	4
Average Wages of Educated and Vocationally Trained Labour	58.6	19
Share of Workforce in the Manufacturing Sector	48.1	13
Labour Force Participation Rate	42.4	19
Above Secondary Level Population as % of Total (15-64 Years)	32.9	8
Percent of Young (Age 25-35 Years) Seeking/ Available for Work	16.2	5
Vocationally Trained Persons as % of Total (15-64 years)	5.6	23
Number of ITIs	0.4	26
Seating Capacity of ITIs	0.1	29

INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	21.4	25
Average Electricity Tariff for Industry	100.0	1
Power Shortage as % of Total Demand	80.1	19
Statutory Towns in Smart Cities as % of Total in State	10.7	12
ICT - Readiness Index	10.3	26
Number of Airports	10.0	23
Net Annual Ground Water Availability	4.1	26
Road Density	3.4	20
Cargo Handled Per Day Per Airport	0.9	10
Bank Branches Per Lakh Population	0.0	30
Cargo Handled Per Port	0.0	11
Number of Sea-Ports	0.0	11
Rail Density	0.0	26



ECONOMY

	Score of the State	Rank
ECONOMY - OVERALL	20.1	29
Congestion Index	74.0	13
Average GSDP growth (last 3 yrs)	59.4	8
Services GSDP	41.3	18
Development Expenditure as % of State's Total Expenditure	31.5	24
Industrial GSDP	31.3	18
VAT Productivity	6.6	25
Per capita GSDP	4.0	28
Financial Depth	0.1	29
Availability of Land	0.0	26
Share of State in Non-Fuel Production	0.0	23
Share of State in Fuel Production	0.0	18
Proximity of State Border to Metro City	0.0	14
Share of Million Plus Cities in State's Population	0.0	19



GOVERNANCE & POLITICAL

	Score of the State	Rank
GOVERNANCE & POLITICAL - OVERALL	51.7	16
Land Related Stalled Projects	100.0	1
Political Leaders with Serious Criminal Charges	100.0	1
Police Strength	92.8	3
Number of Economic Offences as % of all Cases of Crime	90.7	8
Seats Held by the Largest Party to Total Seats	62.1	8
e-Governance Index	52.3	15
Cases Pending Investigation from Previous Years	10.3	28
DIPP Score	4.5	27
Completion Rate of Legal Cases by Courts	4.3	28
Insurgency Rate	0.0	27

Meghalaya



MEGHALAYA STATS

Capital	Shillong
Area (sq. km)	22,429
Location	North-eastern India
Per capita income (Rs.)	69,331
Literacy Rate (%)	74.4

STATE FOCUS SECTORS

1. Agro Processing & Horticulture
2. Plantation Crops
3. Traditional Handloom & Handicraft
4. Tissue Culture and Bio-Technology
5. Spices Oleoresin and other Essential Oils
6. Animal Husbandry and Meat Processing
7. Mineral based Industries
8. Electronics & Information Technology
9. Bamboo/Reclaimed Wood based Industry
10. Hotel/Nursing Homes/Captive Power Generation

Source: State Industrial and Investment Promotion Policy, 2012

INCENTIVES

- Subsidies on interest, power and capital investment.
- Subsidies on expenses incurred on procurement of know-how from a well-established and approved R&D organization.
- Special incentives for Export Oriented Units, Food Processing Industries, Large Enterprises

Source: Meghalaya Industrial and Investment Promotion Policy, 2012

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

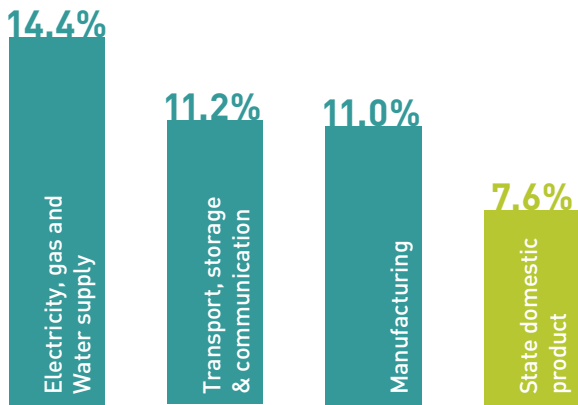
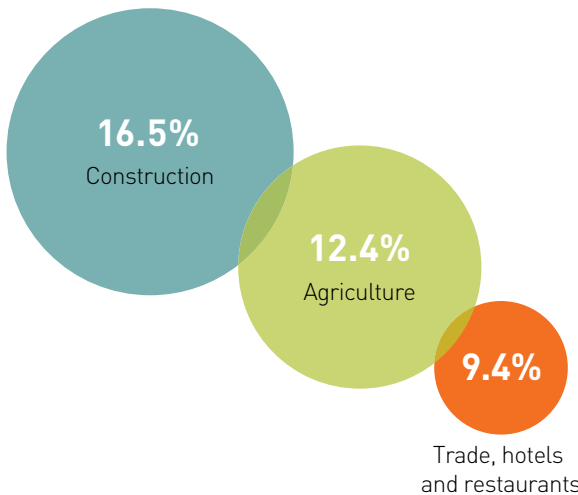
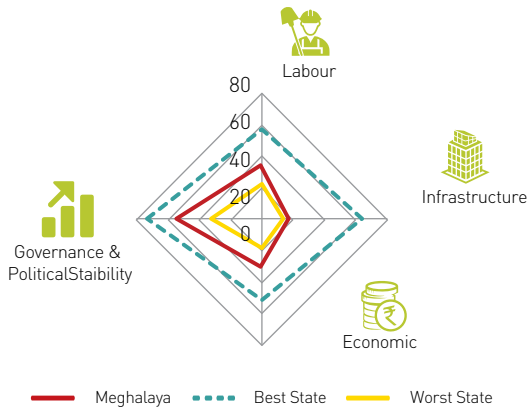


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



Meghalaya N-SIPI 30 Rank **24**

State's Performance on the Five Broad Pillars



Meghalaya is close to the top ten states in terms of political climate, but the state lags behind on other pillars significantly.

Strengths

Meghalaya has the lowest number of stalled projects based on land related issues. The state also ranks high on low congestion factor. Further, labour force participation ratio labour turnover ratio are both very high.

Weaknesses

Infrastructure is extremely poor in Meghalaya, and the state also needs to establish ITIs and other vocational training centres.

LABOUR

	Score of the State	Rank
LABOUR - OVERALL	34.3	18
Average Labour Turnover	91.9	5
Average Wages in the Manufacturing Sector	81.0	11
Average Wages of Educated and Vocationally Trained Labour	75.3	12
Labour Force Participation Rate	73.8	4
Above Secondary Level Population as % of Total (15-64 Years)	8.8	24
Share of Workforce in the Manufacturing Sector	7.5	27
Percent of Young (Age 25-35 Years) Seeking/ Available for Work	2.3	28
Vocationally Trained Persons as % of Total (15-64 years)	1.2	29
Number of ITIs	0.4	26
Seating Capacity of ITIs	0.3	26

INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	17.5	27
Average Electricity Tariff for Industry	66.5	6
Statutory Towns in Smart Cities as % of Total in State	30.0	5
Power Shortage as % of Total Demand	19.9	27
ICT - Readiness Index	18.9	21
Net Annual Ground Water Availability	17.5	18
Bank Branches Per Lakh Population	15.4	19
Number of Airports	10.0	23
Road Density	1.8	26
Cargo Handled Per Port	0.0	11
Number of Sea-Ports	0.0	11
Cargo Handled Per Day Per Airport	0.0	23
Rail Density	0.0	26



ECONOMY

	Score of the State	Rank
ECONOMY - OVERALL	30.0	19
Congestion Index	93.6	4
Average GSDP growth (last 3 yrs)	73.3	6
Development Expenditure as % of State's Total Expenditure	71.8	10
Industrial GSDP	42.8	9
Services GSDP	37.9	19
Share of State in Non-Fuel Production	21.3	13
Per capita GSDP	15.8	23
VAT Productivity	12.3	24
Financial Depth	2.7	23
Availability of Land	1.4	24
Share of State in Fuel Production	1.1	13
Proximity of State Border to Metro City	0.0	14
Share of Million Plus Cities in State's Population	0.0	19



GOVERNANCE & POLITICAL

	Score of the State	Rank
GOVERNANCE & POLITICAL - OVERALL	54.0	12
Land Related Stalled Projects	100.0	1
Political Leaders with Serious Criminal Charges	100.0	1
Cases Pending Investigation from Previous Years	100.0	1
Number of Economic Offences as % of all Cases of Crime	79.5	18
e-Governance Index	45.2	16
Police Strength	40.1	8
Insurgency Rate	35.6	26
Seats Held by the Largest Party to Total Seats	32.6	25
DIPP Score	4.5	27
Completion Rate of Legal Cases by Courts	2.4	29

Mizoram



MIZORAM STATS

Capital	Aizawl
Area (sq. km)	21,081
Location	North-eastern India
Per capita income (Rs.)	84,258
Literacy Rate (%)	91.3

STATE FOCUS SECTORS

1. Food processing Industries
2. Handloom Industries
3. Handicraft Industries
4. Plantain fibre and hill brooms
5. Tea, rubber, Coffee and plantation based Industries
6. Textile related industries
7. Animal feed and poultry feed industries
8. Entertainment/ Music industries
9. Packaging industries
10. Forest based industries

Source: Mizoram Industrial Policy 2012

INCENTIVES

- Subsidy for MSMEs on power line, power, power-generating set etc.
- Subsidies to new MSMEs and new industrial units
- Manpower development subsidy to new and existing industrial units

Source: Mizoram Industrial Policy 2012

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

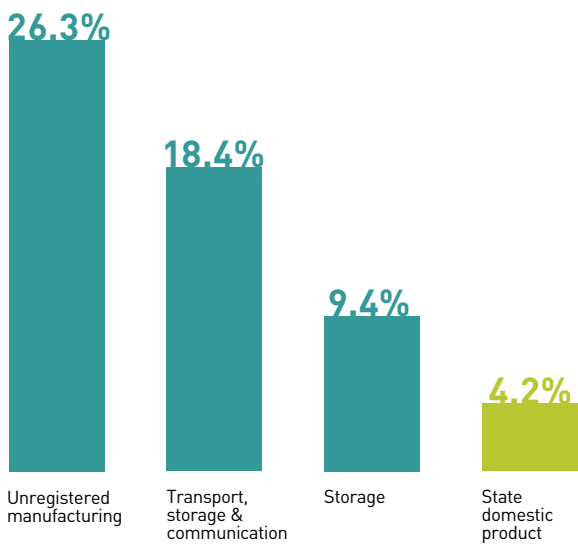
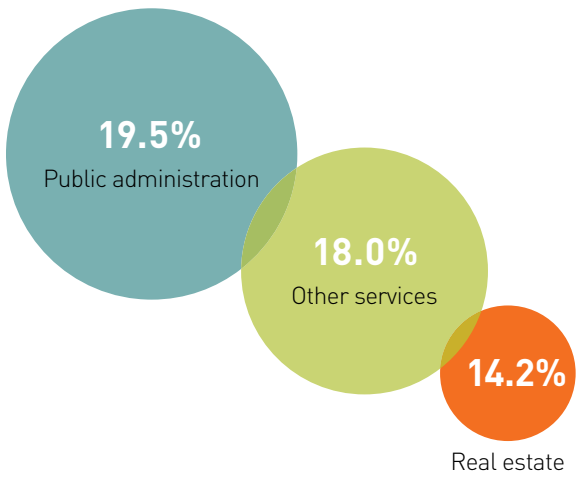


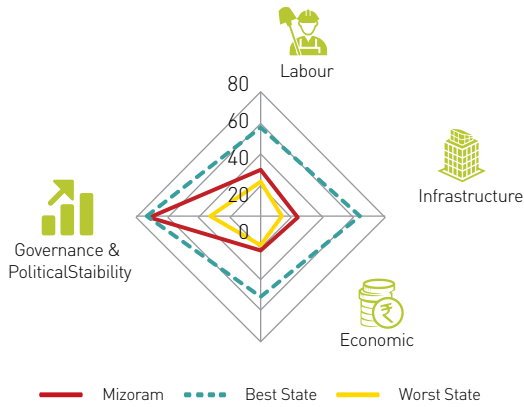
Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



Mizoram

N-SIPI 30 Rank 22

State's Performance on the Five Broad Pillars



Mizoram is one of the top states in terms of governance and political stability but falls behind on all other counts.

Strengths

Mizoram is one of the top three states in terms of share of service sector in total GSDP, ranking very high also on low congestion index. The state also ranks high in terms of proportion of statutory towns to be developed as smart cities.

Weaknesses

The state has poor rail and road density and also suffers from power shortage.

LABOUR

	Score of the State	Rank
LABOUR - OVERALL	30.1	23
Average Labour Turnover	91.9	5
Labour Force Participation Rate	73.4	5
Average Wages in the Manufacturing Sector	59.5	24
Average Wages of Educated and Vocationally Trained Labour	36.8	24
Above Secondary Level Population as % of Total (15-64 Years)	14.3	20
Percent of Young (Age 25-35 Years) Seeking/ Available for Work	13.1	6
Vocationally Trained Persons as % of Total (15-64 years)	8.0	19
Share of Workforce in the Manufacturing Sector	4.1	28
Number of ITIs	0.0	30
Seating Capacity of ITIs	0.0	30

INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	23.6	21
Power Shortage as % of Total Demand	65.4	24
Average Electricity Tariff for Industry	57.8	8
Statutory Towns in Smart Cities as % of Total in State	52.2	2
ICT - Readiness Index	28.5	11
Bank Branches Per Lakh Population	24.9	12
Number of Airports	10.0	23
Road Density	1.8	27
Net Annual Ground Water Availability	0.0	30
Cargo Handled Per Port	0.0	11
Number of Sea-ports	0.0	11
Cargo Handled Per Day Per Airport	0.0	23
Rail Density	0.0	26



ECONOMY

	Score of the State	Rank
ECONOMY - OVERALL	21.2	28
Congestion Index	100.0	1
Development Expenditure as % of State's Total Expenditure	68.4	13
Services GSDP	61.0	3
Per Capita GSDP	22.5	17
Average GSDP growth (last 3 yrs)	12.8	29
Industrial GSDP	11.5	28
Financial Depth	2.4	24
VAT Productivity	0.0	30
Availability of Land	0.0	26
Share of State in Non-fuel Production	0.0	23
Share of State in Fuel Production	0.0	18
Proximity of State Border to Metro City	0.0	14
Share of Million Plus Cities in State's Population	0.0	19



GOVERNANCE & POLITICAL

	Score of the State	Rank
GOVERNANCE & POLITICAL - OVERALL	71.4	2
Land Related Stalled Projects	100.0	1
Political Leaders with Serious Criminal Charges	100.0	1
Insurgency Rate	98.9	15
Police Strength	94.4	2
Number of Economic Offences as % of all Cases of Crime	84.6	15
Seats Held by the Largest Party to Total Seats	80.5	2
Completion Rate of Legal Cases by Courts	74.0	3
Cases Pending Investigation from Previous Years	40.9	10
e-Governance Index	33.4	21
DIPP Score	7.4	25

Nagaland



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

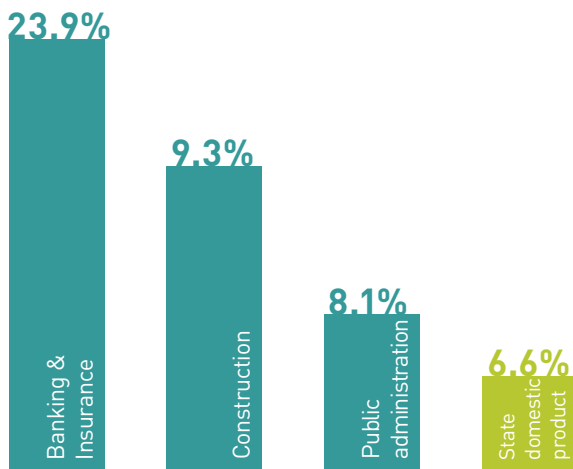
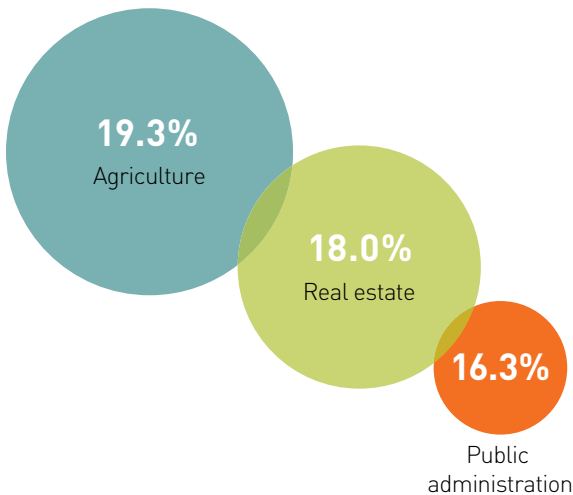


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



NAGALAND STATS

Capital	Kohima
Area (sq. km)	16,579
Location	North-eastern India
Per capita income (Rs.)	84,280
Literacy Rate (%)	79.6

STATE FOCUS SECTORS

1. Food Processing Industries
2. Tourism Industry
3. Agro-based industries
4. Mineral based industries
5. Handloom and Handicrafts
6. Sericulture
7. Floriculture
8. Electronics and IT
9. Pharmaceuticals
10. Petrochemicals
11. Bio-tech Industries
12. Cane & Bamboo Processing/manufacturing Industries
13. Distillations of oils from Medicinal & Aromatic Plants
14. Indigenous Herbs & Natural Dyes and Small Scale Service & Business Enterprises.

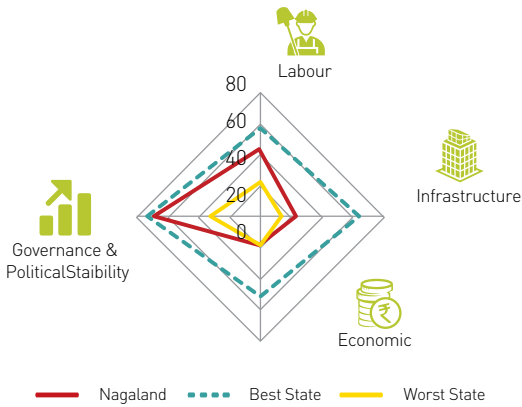
INCENTIVES

- Subsidies on power, power line, fees for procurement of NRDC technology.
- Special incentives for export oriented unit
- Price Preference and exemption of Earnest Money on all tenders of the Govt. Store Purchase Programme

Source: Incentive Scheme 2000 of Government of Nagaland

Nagaland N-SIPI 30 Rank **18**

State's Performance on the Five Broad Pillars



Nagaland is one of the top states in terms of two pillars: labour and governance and political stability.

Strengths

The state has one of the lowest ratio stalled projects due to land acquisition issues. Nagaland also has one of the highest average labour turnover and proportion of workforce with at least secondary level education.

Weaknesses

The state lacks adequate ITIs, banks per lakh population, and has low rail density.

LABOUR

	Score of the State	Rank
LABOUR - OVERALL	43.7	3
Average Labour Turnover	100.0	1
Percent of Young (age 25-35 years) Seeking/ Available for Work	100.0	1
Average Wages of Educated and Vocationally Trained Labour	57.9	20
Average Wages in the Manufacturing Sector	55.0	26
Above Secondary Level Population as % of Total (15-64 Years)	53.1	3
Labour Force Participation Rate	50.7	14
Vocationally Trained Persons as % of Total (15-64 Years)	16.2	12
Share of Workforce in the Manufacturing Sector	2.9	29
Number of ITIs	0.4	24
Seating Capacity of ITIs	0.3	25

INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	23.5	22
Average Electricity Tariff for Industry	81.9	4
Power Shortage as % of Total Demand	79.6	20
Statutory Towns in Smart Cities as % of Total in State	31.6	4
ICT - Readiness Index	11.0	25
Number of Airports	10.0	23
Road Density	9.5	7
Net Annual Ground Water Availability	8.0	24
Bank Branches per Lakh Population	7.6	27
Rail Density	0.6	23
Cargo Handled per Port	0.0	11
Number of Sea-ports	0.0	11
Cargo Handled per Day per Airport	0.0	23



ECONOMY

	Score of the State	Rank
ECONOMY - OVERALL	18.5	30
Congestion Index	74.0	13
Services GSDP	52.2	9
Average GSDP Growth (Last 3 Yrs)	52.1	10
Development Expenditure as % of State's Total Expenditure	22.6	27
Per Capita GSDP	22.5	16
Industrial GSDP	7.3	29
VAT Productivity	3.1	29
Financial Depth	0.0	30
Availability of Land	0.0	26
Share of State in Non-Fuel Production	0.0	23
Share of State in Fuel Production	0.0	18
Proximity of State Border to Metro City	0.0	14
Share of Million Plus Cities in State's Population	0.0	19



GOVERNANCE & POLITICAL

	Score of the State	Rank
GOVERNANCE & POLITICAL - OVERALL	68.5	3
Land Related Stalled Projects	100.0	1
Police Strength	100.0	1
Political Leaders with Serious Criminal Charges	100.0	1
Number of Economic Offences as % of all Cases of Crime	99.7	2
Insurgency Rate	72.3	23
Seats Held by the Largest Party to Total Seats	71.9	6
e-Governance Index	58.1	14
Completion Rate of Legal Cases by Courts	50.0	7
Cases Pending Investigation From Previous Years	29.7	21
DIPP Score	3.1	29

Sikkim



SIKKIM STATS

Capital	Gangtok
Area (sq. km)	7,096
Location	North-eastern India
Per capita income (Rs.)	1,96,144
Literacy Rate (%)	81.4

STATE FOCUS SECTORS

1. Pharmaceuticals
2. Eco-tourism
3. Food processing
4. Breweries
5. Cosmetics
6. Security Ink
7. Mattress
8. Corrugated Boxes

Source: Commerce and Industries Department, Government of Sikkim

INCENTIVES

- Fiscal incentives for promoting industrial development under the 2007 North East Industrial and Investment Promotion Policy
- Financial assistance for modernization of existing industries.
- Entrepreneurial loans for educated unemployed youth.

Source: Sikkim Industrial Development and Investment Corporation Ltd. (web-portal)

Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

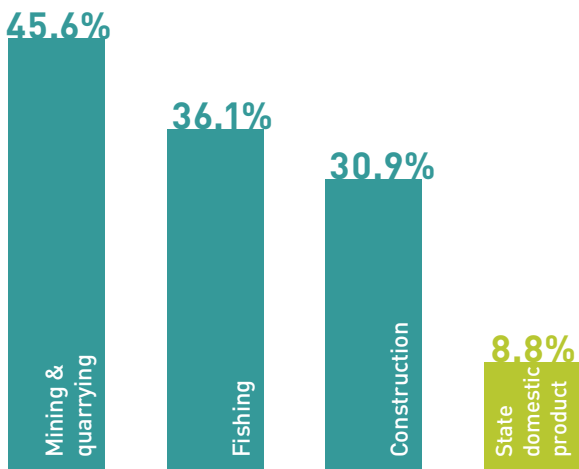
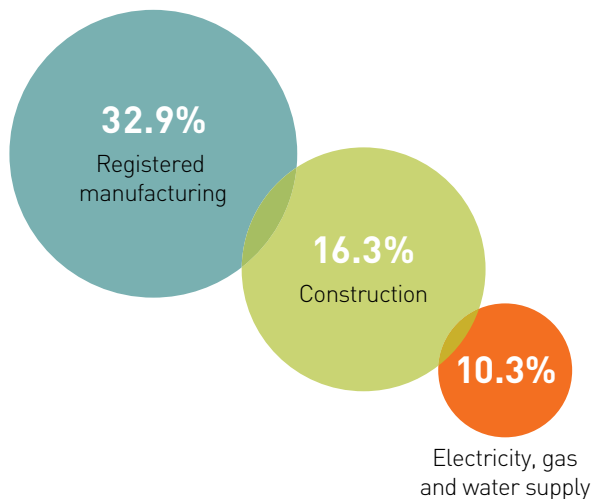
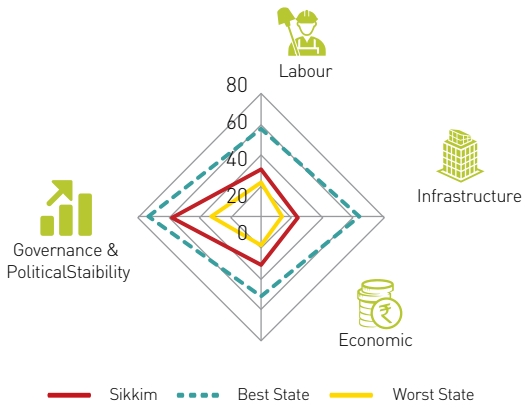


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



Sikkim N-SIPI 30 Rank **19**

State's Performance on the Five Broad Pillars



Sikkim is one of the top ten states in terms of economic climate, but lags behind on the other pillars.

Strengths

Sikkim has the highest labour force participation ratio. The state also has the highest share of industrial sector GSDP in total GSDP, in addition to being the top state in terms of power availability.

Weaknesses

The state needs more ITIs to boost the number of vocationally trained people. The state also lacks adequate road network.

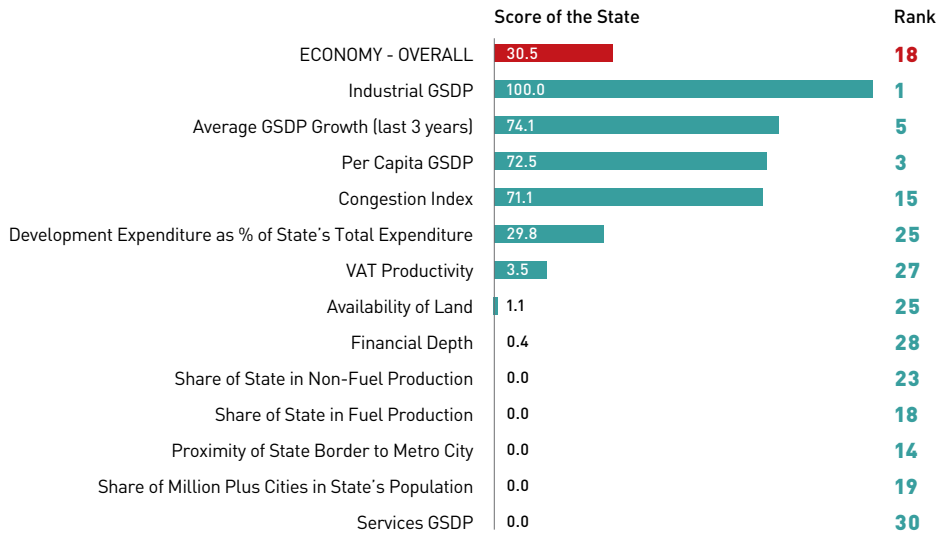
LABOUR

	Score of the State	Rank
LABOUR - OVERALL	31.3	22
Labour Force Participation Rate	100.0	1
Average Labour Turnover	92.9	4
Average Wages in the Manufacturing Sector	74.1	18
Average wages of educated and Vocationally Trained Labour	17.6	27
Share of Workforce in the Manufacturing Sector	13.1	26
Vocationally Trained Persons as % of total (15-64 years)	7.2	21
Percent of young (age 25-35 years) Seeking /Available for Work	4.5	22
Above Secondary Level Population as % of total (15-64 years)	3.8	27
Number of ITIs	0.2	29
Seating Capacity of ITIs	0.1	28

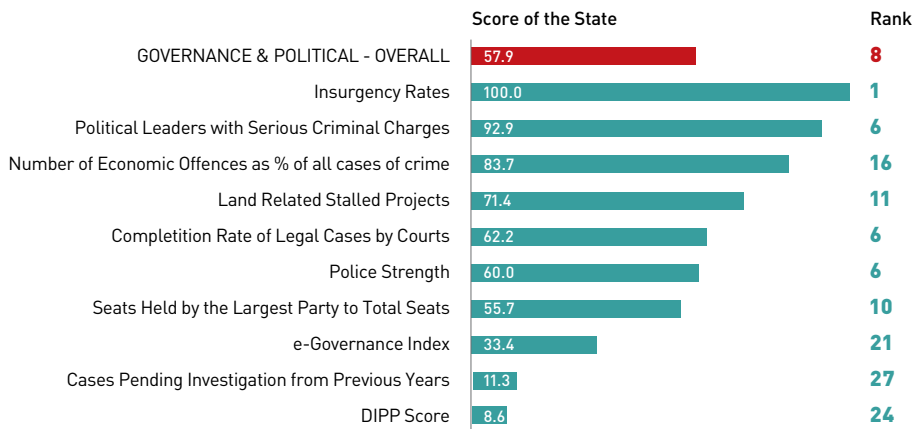
INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	23.6	20
Power Shortage as % of Total Demand	100.0	1
Bank Branches per Lakh Population	47.6	5
Statutory Towns in Smart Cities as % of Total in State	37.5	3
Average Electricity Tariff for Industry	25.6	25
ICT-readiness Index	21.4	20
Road Density	3.1	22
Net Annual Ground Water Availability	1.2	29
Cargo Handled per Port	0.0	11
Number of Sea-ports	0.0	11
Cargo Handled per Day at Airport	0.0	23
Number of Airports	0.0	29
Rail Density	0.0	26

ECONOMY



GOVERNANCE & POLITICAL



Tripura



Figure 5 Three year average y-o-y growth rate (%) between 2012-13 and 2014-15

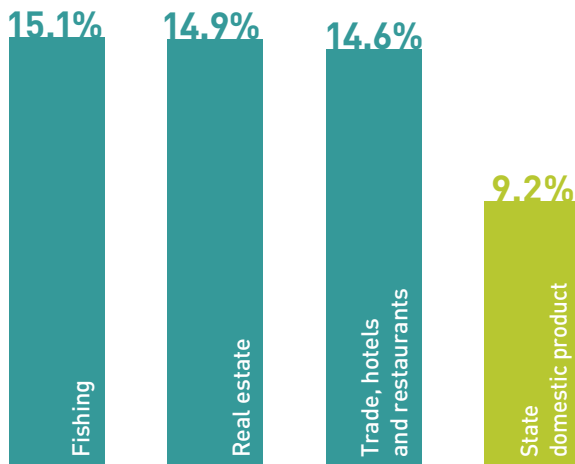
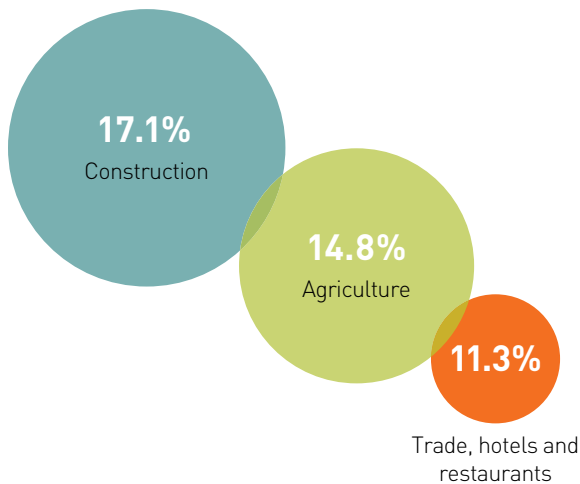


Figure 6 Contribution of sectors with highest share in GSDP (2013-14)



TRIPURA STATS

Capital	Agartala
Area (sq. km)	10,486
Location	North-eastern India
Per capita income (Rs.)	71,972
Literacy Rate (%)	87.2

STATE FOCUS SECTORS

1. Trade & Commerce
2. Rubber
3. Food Processing
4. Tea
5. IT Sector
6. Bamboo
7. Mineral Resources and Forestry Based
8. Tourism Sector

Source: Tripura Industrial Development Corporation Website

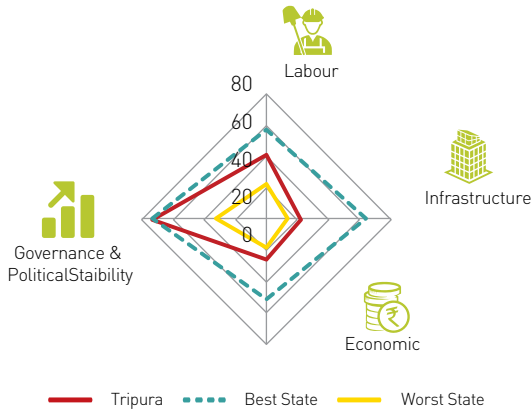
INCENTIVES

- Subsidies available on capital investment and transport expenses.
- Reimbursement of power charges, interest on term loans.
- Procurement Preference on all purchases through tenders by State Government Agencies on products manufactured in Tripura by eligible enterprises

Source: Tripura Industrial Investment Promotion Incentive Scheme-2012

Tripura N-SIPI 30 Rank **15**

State's Performance on the Five Broad Pillars



Tripura ranks the highest in terms of governance and political stability, but falls behind on account of other pillars.

Strengths

Tripura has the one of the least number of stalled projects due to land related issues and least number of cases pending investigation from previous year. The state also has good road density and has experienced relatively high average growth rate of GSDP.

Weaknesses

Tripura needs to set up more ITIs and needs to increase the development expenditure in total expenditure.

LABOUR

	Score of the State	Rank
LABOUR - OVERALL	40.9	11
Average wages in the Manufacturing Sector	100.0	1
Average Labour Turnover	97.1	2
Average Wages of Educated and Vocationally Trained Labour	72.9	13
Labour Force Participation Rate	61.4	8
Percent of Young (age 25-35 years) Seeking/ Available for Work	41.4	2
Share of Workforce in the Manufacturing Sector	32.2	20
Vocationally Trained Persons as % of Total (15-64 years)	2.7	26
Above Secondary Level Population as % of Total (15-64 years)	0.8	28
Seating Capacity of ITIs	0.4	24
Number of ITIs	0.4	24

INFRASTRUCTURE

	Score of the State	Rank
INFRASTRUCTURE - OVERALL	22.3	23
Net Annual Ground Water Availability	55.6	6
Average Electricity Tariff for Industry	49.3	11
Number of Airports	40.0	13
ICT-Readiness Index	21.6	19
Statutory Towns in Smart Cities as % of Total in State	18.8	7
Power Shortage as % of Total Demand	18.3	28
Bank Branches per Lakh Population	18.2	16
Road Density	12.8	6
Rail Density	8.5	20
Cargo Handled per Day per Airport	0.3	14
Cargo Handled per Port	0.0	11
Number of Sea-ports	0.0	11



ECONOMY

	Score of the State	Rank
ECONOMY - OVERALL	25.7	24
Average GSDP Growth (last 3 years)	80.2	3
Congestion Index	48.6	20
Services GSDP	41.8	16
Development Expenditure as % of State's Total Expenditure	40.0	20
Industrial GSDP	26.0	21
VAT Productivity	24.2	19
Per Capita GSDP	17.0	21
Availability of Land	7.4	22
Share of State in Fuel Production	3.0	15
Financial Depth	2.4	26
Share of State in Non-Fuel Production	0.0	23
Proximity of State Border to Metro City	0.0	14
Share of Million Plus Cities in State's Population	0.0	19



GOVERNANCE & POLITICAL

	Score of the State	Rank
GOVERNANCE & POLITICAL - OVERALL	72.6	1
Land Related Stalled Projects	100.0	1
Cases Pending Investigation From Previous Years	100.0	1
Insurgency rate	97.1	17
Number of Economic Offences as % of All Cases of Crime	93.4	7
Political Leaders with Serious Criminal Charges	90.6	9
Seats Held by the Largest Party to Total Seats	79.3	3
e-Governance Index	74.6	10
Police Strength	61.0	5
Completion Rate of Legal Cases by Courts	18.5	19
DIPP Score	11.5	23

Section 3
SURVEY FINDINGS
N-SIPI 21

Section 3

N-SIPI Survey Findings

3.1 INTRODUCTION

The N-SIPI Industry Survey 2015 was conducted at a nationwide level to have a better understanding of the constraints to business at the ground level. The survey sought to get feedback on a number of issues ranging from the current business climate to the availability of land, labour, infrastructure and the economic and political climate in the state. The results of this survey forms the fifth pillar of N-SIPI 21.

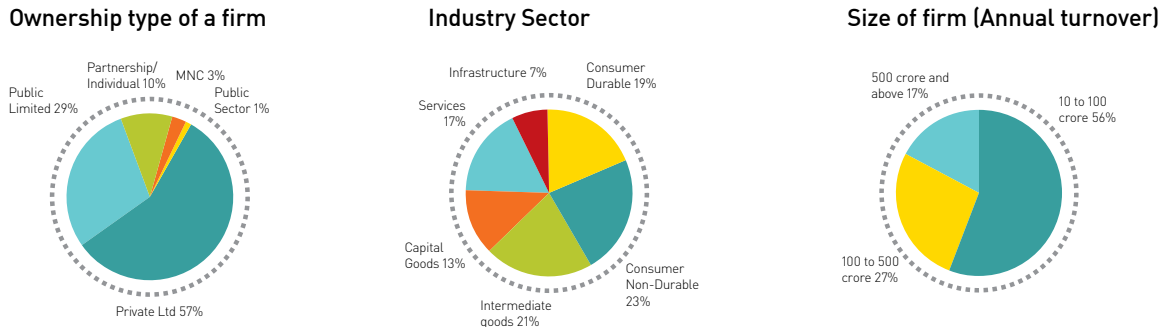
3.2 SURVEY FEATURES

This report presents the key results of the survey carried out during August and September 2015. The survey covered 1011 industrial units in twenty one states. The primary respondents in this survey were medium and

large enterprises in different industries. The respondents were usually the MDs, CEOs, HR Head, or Managers of the enterprise. The data was collected on the basis of questionnaires and face to face interviews.

In this survey, the firms were classified by ownership (private limited, public limited, partnership, multinational corporations and public sector enterprises), industry (consumer durable, consumer non-durable, intermediate, capital goods, infrastructure and services), and by firm-size (annual turnover Rs. 10 to 100 crore, Rs. 100 to 500 crore and above Rs. 500 crore). Over 50 percent of the firms were private limited companies and close to a quarter produced consumer non-durable goods. Less than a fifth of the firms surveyed had a turnover of over Rs 500 crore annually (Figure 3.1)

Figure 3.1 Survey coverage by ownership type, industry type and firm-size



3.3 KEY FINDINGS

The respondents in each state rated the constraints in business operations related to land, labour, infrastructure, economic conditions and governance as being severe, moderate, or as being not a constraint at all. The following sections report the key findings of the results which were aggregated first at the state level and then at the All-India level. Further details of the survey results are presented in the State Profiles chapters in Section 2 as well as in Appendix C of this report.

3.3.1 Land related issues

Rapid economic growth over the last two decades has raised the demand for land for industrial purposes.

One in every four firms faced problems in acquiring land for industrial purposes

However, the acquisition of land for setting up a new business or expanding an existing one is often a big impediment to business. In this regard, the survey asked a set of questions on land related issues, with particular emphasis on acquisition of land.

According to the survey findings, 27 percent of surveyed units faced problems in acquiring land for industrial use (Figure 3.2). Across states, Rajasthan faced the least problems while West Bengal comes at the bottom of the spectrum, with 83 percent of respondents facing a moderate to severe problem in acquiring land. This is followed by 66 percent in Odisha. Close to a third of the capital goods and infrastructure industries faced problems with respect to acquiring land (Figure 3.3).

Figure 3.2 Percent respondents finding acquiring land a problem

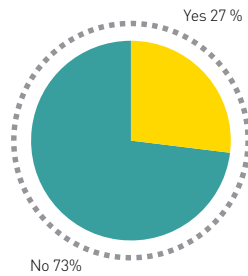
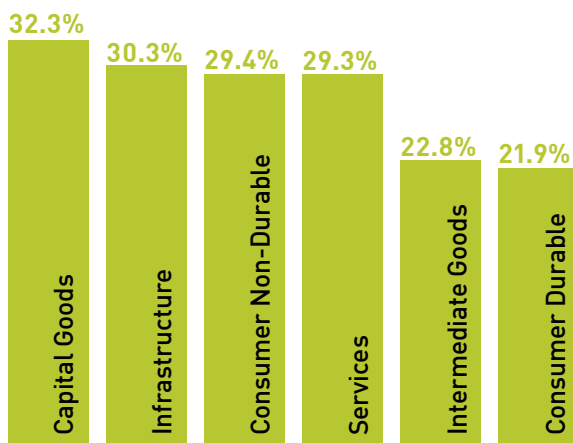
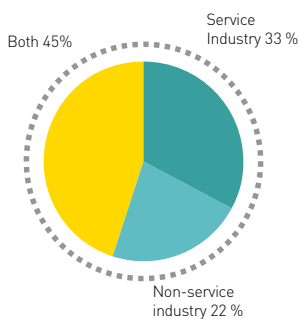


Figure 3.3 Percent respondents, by industry types, finding acquiring land a problem



On firms’ perception of whether the service or non-service based industries gets land more easily, irrespective of the firms’ own type of industry, about 45 percent of the respondents felt that acquiring land was a major issue regardless of the type of activity, while close to a third of the respondents perceived that the service industry gets land more easily (Figure 3.4).

Figure 3.4 Perception of type of industry that gets land more easily



3.3.2 Infrastructure related issues

Adequate and quality infrastructure is critical for being competitive and achieving faster growth. While the former Planning Commission of India had given a greater thrust to investment expenditure in the 12th Five Year Plan, with projected expenditure at 8.3 percent of GDP compared to 7.1 percent in the 11th Five Year Plan¹, investments have fallen short of target resulting in significant infrastructure deficits across the country. As noted by the Planning Minister (April, 2015)², this shortfall could be attributed to a number of reasons ranging from inadequate allocation of fuel, delays in environmental clearances, land acquisition issues, and funding issues particularly with regard to private investments including PPPs. This Industry Survey has a comprehensive list of questions that cover these infrastructure issues that are critical for the smooth functioning of business.

In the N-SIPI survey, the respondents were asked whether, for operating their businesses, they find a given set of infrastructure related constraints to be severe, moderate or not a constraint at all. Lack of adequate infrastructure appears to be a pressing concern as most of the issues like road, rail connectivity, sewage facility, access to finance and availability of power were each rated as severe or moderate constraints by about 50 percent of the respondents.

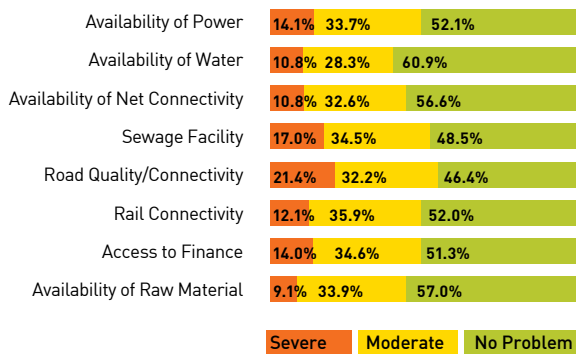
The quality of roads turns out to be the most significant constraint as close to 54 percent of the respondents rate it

Road quality and inadequate sewage facilities are seen as top concerns for business

as being a severe to moderate problem (Figure 3.5). Following closely, the availability of sewage facilities is reported as being the next biggest constraint within infrastructure.

1 Source: Planning Commission-12th Plan document
 2 http://www.business-standard.com/article/pti-stories/12th-plan-s-pvt-investment-in-infra-will-not-materialise-govt-115043000608_1.html

Figure 3.5 Perception of severity of Infrastructure related constraints (% respondents)



Among the industry types, capital goods and intermediate goods suffer the most due to both of these constraints (Figures 3.6 and 3.7). While the availability of water and raw materials were ranked at the lower end of the scale as constraints, they still were identified as being a problem by about 40 percent of the respondents. Across states, most of the sub groups of infrastructure were identified as being a major constraint for industries in Andhra Pradesh, Assam and Bihar. West Bengal, on the other hand, performs excellently in this regard and appears at the top.

West Bengal seen as being the best state in terms of infrastructure, while Andhra Pradesh, Assam and Bihar seen as being in deficit

Figure 3.6 Perception of road quality/connectivity being a constraint, by industry types (% respondents)

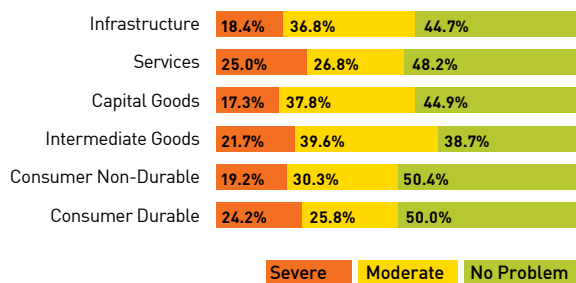
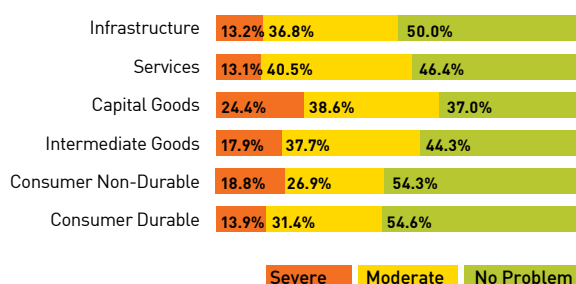


Figure 3.7 Perception, of sewage facility being a constraint, by industry types (% respondents)



3.3.3 Labour Related Issues

The newly formed Ministry of Skill Development and Entrepreneurship (MSDE) has issued a draft National Policy

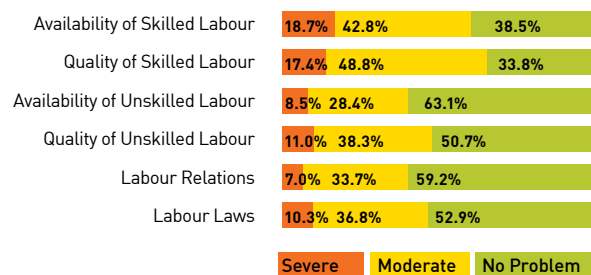
Among the labour related issues, the quality of skilled labour is the biggest constraint faced by industry

for Skill Development and Entrepreneurship 2015 (GOI, 2015). The draft Policy aptly summarizes the skilling challenge in India as being one where “the country presently faces a dual challenge of a severe paucity of highly-trained, quality labor, as well as the non-employability of large sections of the educated workforce that possess little or no job skills.”

This argument gets even more strengthened by our survey responses. Over two-thirds of the respondents viewed the quality of skilled labour as posing a severe or moderate problem. Similarly, availability of skilled labour was a severe or moderate problem for 62 percent of the respondents (Figure 3.8). The Skill India campaign launched by the present government on July 15, 2015 aims to train 40 crore people by 2022. If the training under this campaign is done in a systematic and scientific manner to match demand for skills from the industry with the households supply of skills, then this program will help in addressing the present gap in the quality and availability of skills for industry.

Meanwhile, a much lower proportion of respondents found labour relations and availability of unskilled workers as a constraint in their business operations. This is not a surprise as unskilled workers are a big pool of employable and usually uneducated people who, in order to earn a livelihood, pick up jobs which are most often informal in nature. The official statistics reveal that over 92 percent of total workers in India are informal workers.

Figure 3.8 Perception of severity of Labour related constraints (% respondents)



The respondents' views on the availability of skilled labour vary widely by states. Karnataka and Andhra Pradesh depict an extreme picture with more than 80 percent of the respondents showing concern regarding availability of skilled labour, while companies located in Rajasthan, Gujarat, and West Bengal have a more favourable view.

As far as labour laws are concerned, respondents in Tamil Nadu are most concerned about the present labour laws whereas respondents in Rajasthan do not have any problems in this regard. Of interest to note is that the state government of Rajasthan has initiated state-level amendments to three critical Central government labour legislations — the Industrial Disputes Act, Contract Labour Act and the Factories Act. The more favorable perception in Rajasthan could primarily be driven by these amendments.

Amongst the industry sectors, the availability and quality of labour is of utmost concern for consumer goods and capital goods industries, with around 70 percent of the respondents from these industries rating this as a severe or moderate problem (Figures 3.9 and 3.10).

Figure 3.9 Perception of availability of skilled labour being a constraint, by industry types (% respondents)

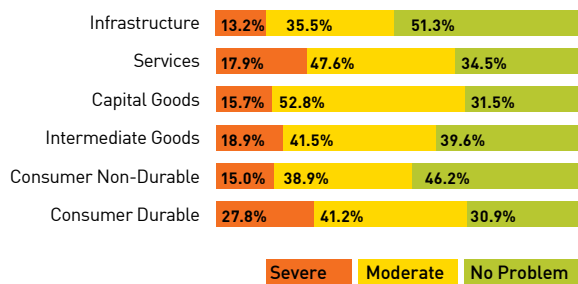
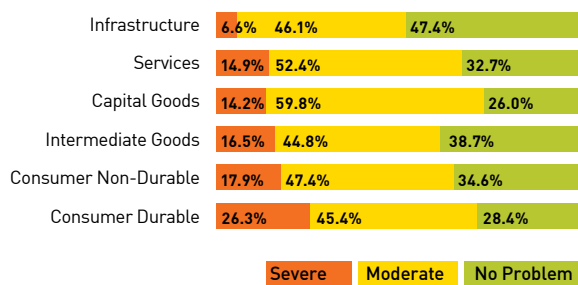


Figure 3.10 Perception of quality of skilled labour being a constraint, by industry types (% respondents)



Tamil Nadu views labour laws as being problematic whereas Rajasthan does not

3.3.4 Governance Related Issues

The extent to which government policies are transparent and the degree to which such policies are implemented in the interest of citizens and business alike is of prime importance for promoting an investor-friendly environment. However, these and many other governance related issues are not perceived as being favourable by the majority of the respondents in the N-SIPI survey.

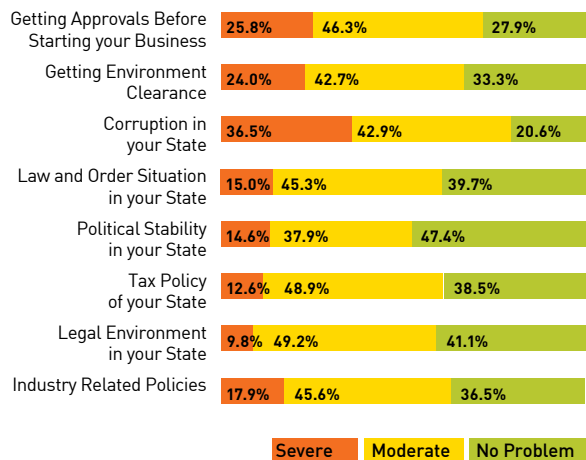
The survey results show that about 80 percent of the respondents find corruption in their state as the biggest hurdle in operating their businesses. This

Corruption is the single biggest problem faced by business followed by getting approvals to start a business

is followed by other governance related issues like getting approvals before starting a business and getting environment clearances, which were identified as severe or moderate constraints by 72 percent and 67 percent of the respondents respectively (Figure 3.11). Corruption is observed as the biggest threat in Tamil Nadu, Karnataka, Kerala, and Bihar, where over 95 percent of the respondents reported it as a serious constraint.

The political climate in a state has generally been viewed as being favourable with close to 50 percent of respondents being satisfied with political stability. Close to 40 percent of the respondents were satisfied with the legal environment in the state, the law and order situation, as well as the tax policies in the state.

Figure 3.11 Perception of severity of Governance related constraints (% respondents)



Across industry types, the capital goods and service industries appear to be the most affected with 85 percent of the respondents belonging to each of these categories reporting corruption as being a severe or moderate problem (Figure 3.12). With regard to getting approvals before starting business too, capital goods and service industries show a higher degree of vulnerability as compared to other industries, with more than 75 percent of industries from these sectors rating it as a significant problem in business.

Capital goods and service based industries face more hurdles in doing business

Figure 3.12 Perception of corruption being a constraint, by industry types (% respondents)

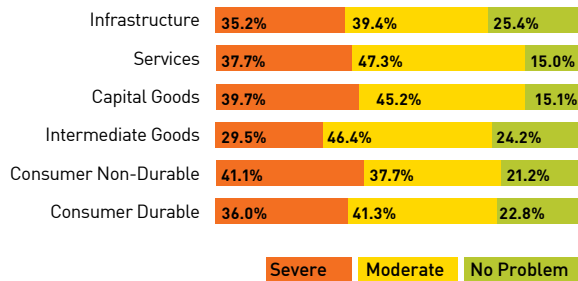
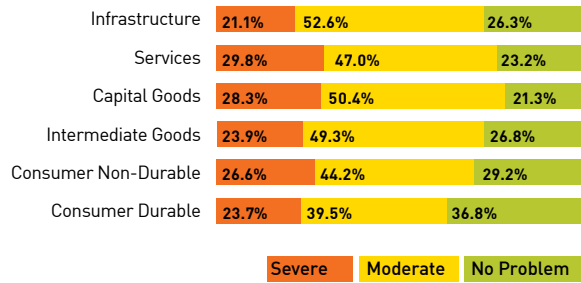


Figure 3.13 Perception of getting approvals being a constraint, by industry types (% respondents)



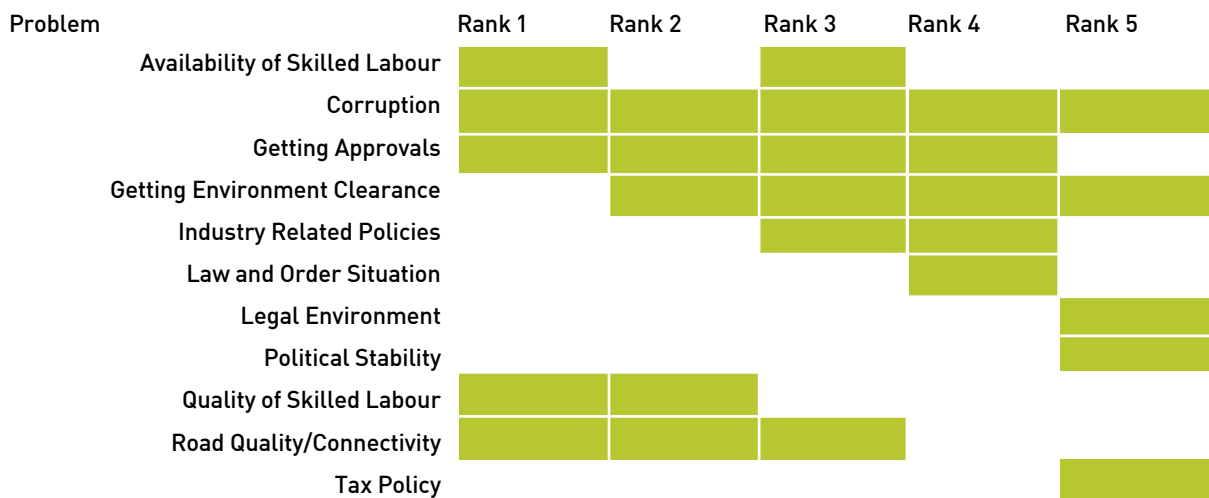
3.3.5 The five biggest constraints to business

In all, the respondents in each state were asked about their perception of the severity of a set of 22 constraints. Further, the respondents were asked to pick the five biggest constraints (of the total 22) and rank them from 1 to 5, assigning “Rank 1” to the biggest constraint, “Rank 2” to the second biggest and so on. Evidently, corruption is not just a severe constraint for majority of the respondents but is also among the top 5 for most of them (Figure 3.14).

The legal environment, political stability and tax policy were also identified among the top five constraints but most of the respondents ranked them as fifth biggest constraint.

The legal environment, political stability and tax policy have also been identified as being the top five among 22 constraints faced by industry

Figure 3.14 Constraints ranked among the top five



3.3.6 Perception Regarding Business Climate

Apart from the various challenges to business operations in terms of land, labour, infrastructure and governance, the survey also collected information on perceptions regarding current short term prospects for business climate as well as future prospects. Survey responses were mainly reported in the form of anticipated direction of change i.e. whether the condition will / has the potential to become better, remain the same, or worsen.

Figure 3.15a Perception of business conditions in the short term (next six months)

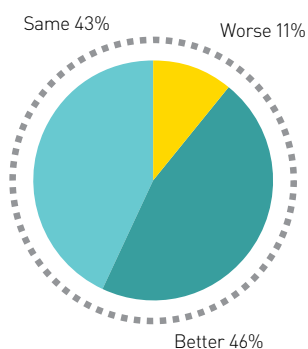


Figure 3.15b Perception of financial position in the short term (next six months)

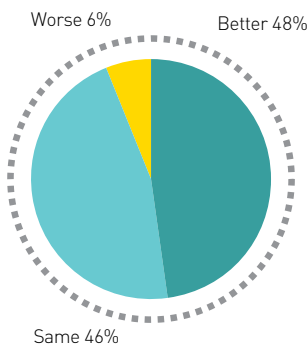
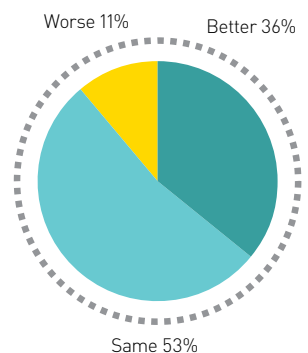


Figure 3.15c Perception of investment climate today compared to six months back



Results of the survey suggest that most firms have an optimistic view on the future business conditions. About 46 percent of the

Industries appear optimistic about the overall business climate over the next six months

respondents seem confident about future prospects (Figure 3.15a). Perception regarding positive business condition in turns implies positive expectation regarding future financial position, though it is not surprising majority (48 percent) of respondents reported an optimistic view regarding future financial position of their businesses (Figure 3.15b). In terms of investment climate, 53 percent of the respondents have indicated that things are unlikely to be any more conducive, while 11 percent of the respondents have shown a pessimistic view regarding both future business condition and investment climate, and have expressed that it will deteriorate in future (Figure 3.15c). The results are consistent with Reserve Bank of India Industrial Outlook Survey Q2:2015-16, which showed an overall optimistic business climate and financial condition across firms³. Survey results also gave a clear indication that for majority of the industries, the investment climate has improved as compared to the previous six months at the time of survey.

At the state level, Gujarat and Tamil Nadu appear at the top in respect of a positive outlook regarding business climate. Bihar, on the other hand, appears consistently at the bottom across all related questions with firms expressing pessimistic view regarding future business climate in the state.

Gujarat and Tamil Nadu appear most optimistic regarding future business climate

In terms of type of ownership, around 89 percent of the respondents from multinational companies have reported an improvement in financial condition and the majority of these companies have an optimistic view regarding the future business climate. With regard to industry sectors, 28 percent and 27 percent of firms in the business of infrastructure and intermediate goods production witness less than optimal capacity utilization, with an average of 23 percent across all industries.

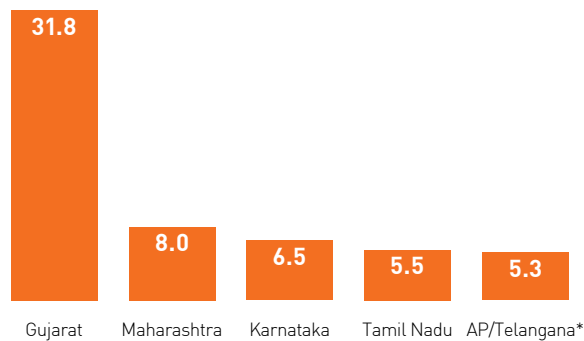
³ Reserve Bank of India, Industrial Outlook Survey - Q2-2015-16 (Round 71)

3.3.7 The top 5 preferred states for doing business

The Survey also asked its respondents whether business operation would have been easier in some other state and if 'yes', in which state. Around 27 percent of respondents reported that it would have been easier in some other state. The top five preferred states are in the Figure 3.16. According to the survey, Gujarat is at the top as being the most preferred destination for doing business in India. Maharashtra, Karnataka, Tamil Nadu and Andhra Pradesh/Telangana were other preferred states but on average, the response to this question is highly skewed towards Gujarat.

A quarter of the firms surveyed perceived business operations would have been easier in another state

Figure 3.16 The top states perceived as being easier for doing business



*AP and Telangana are together identified as the fifth most preferred states. This is because the respondents found both to be equally good and could not clearly distinguish between them as a more preferred state as Telangana, at the time of the survey, was too new a state for them to make a clear choice.

Section 4

SECTOR FOCUS REPORTS

4.1 The Indian Pharmaceutical
Industry

4.2 The Automobile Industry
in India

4.3 Retail Sector in India

Section 4

Sector Focus Reports

4.1 THE INDIAN PHARMACEUTICAL INDUSTRY

4.1.1 Introduction

Pharmaceuticals are the third largest contributor to India's registered manufacturing Gross Value Added (GVA), contributing 6% of the GVA across all sectors, and an even higher percentage of total profits (8%), based on data from Annual Survey of Industries (2011-12). This study first examines the key states that have consistently reported higher share of GVA as compared to other sectors for the last five years, in addition to identifying states that have been growing faster than others in Section 4.1.2. Section 4.1.3 then looks at the drivers for growth for the pharmaceutical industry looking at both supply and demand side factors. Section 4.1.4 ranks states based on drivers of growth identified from the supply and demand analysis in Section 4.1.3. This study has two indices ranking the states, viz the Pharmaceutical Supply Index and the Demand for Medicines Index in Section 4.1.4. The results from the study will be of particular interest for both existing firms and potential entrants as they reflect on market competition, consumer base, resource utilization, survival, and best practices in the pharmaceutical industry.

According to the estimates of Bulk Drugs Manufacturers Association (BDMA), the bulk drugs sector is expected to grow to USD 28 billion by the end of 12th plan in 2017

The Indian Pharmaceutical Market (IPM) is highly fragmented with over 10,500 manufacturing units and over 3,000 pharma companies in the market. In addition, there are about 1,400 WHO GMP (Good Manufacturing Practices) approved manufacturing units. However, the top 10 firms (Table 4.1.1) control more than 70 per cent of the market share.

According to CMIE data, pharmaceutical exports increased 14.1 per cent in FY14, year-over-year, to Rs.910

Exports have been the main driver of growth in this sector

billion. Exports have been a significant factor behind the growth of the industry, with the bulk drugs industry being the major driver for the overall growth of the pharma industry in India. USA and Russia have been the top pharma export destinations over the past five years. The Indian Pharmaceutical Market (IPM) accounts for 2.4 per cent of the global pharma industry in value terms (13th largest) and 10 per cent in volume terms (3rd largest)¹⁶. The emerging semi-regulated markets¹⁷ also offer growth opportunities for Indian firms, especially with some of these markets being dominated by branded generic drugs, along with high expenditure on healthcare. Table D.1.1 in Appendix D shows the major destinations for exports.

As far as imports are concerned, the government is attempting to cut the dependence on imports by formulating a new bulk drugs policy in an attempt to lure and forge alliances with global bulk drugs manufacturers (particularly, Italian bulk drug makers) as part of its "Make In India" initiative. This has the potential to encourage backward linkages of the domestic pharma companies, and enhance comparative advantage in terms of cost of production and quality control.

Table 4.1.1 Top 10 Pharma Companies

Company Name	Net Sales (Rs. cr)
Cipla	10,131.78
Dr. Reddys Labs	10,011.00
Lupin	9,752.47
Aurobindo Pharma	8,095.10
Sun Pharma	8,017.19
Cadila Health	5,284.40
Glenmark	5,085.60
Torrent Pharma	3,475.49
GlaxoSmithKline	3,287.58
Jubilant Life	3,176.30

Source: NSE (as on 31st December, 2015)

¹⁶ India Fitch Ratings, 2015

¹⁷ Russia, South Africa, Latin America (Brazil, Mexico), and South East Asia

4.1.2 Performance of Key States

This section examines the performance of states based on the following:

- 4.1.2.1 Production, profits and growth (firm-based approach)
- 4.1.2.2 Monthly per capita expenditure on medicine (household-based approach)

4.1.2.1 Concentration of pharma industry in key states

The top performing states as measured by the states' pharma GVA as a percent of All India pharma sector GVA were Maharashtra, Telangana, Himachal Pradesh and Gujarat (Figure 4.1.1). The pharma sector also contributed over 25% of Telangana's and Himachal Pradesh's state GVA (Figure 4.1.2). Interestingly, 2012-13 data from ASI reveals that Maharashtra is the top state in terms of labour absorption for the pharma industry, employing 19.5 per cent of all workers (within the pharma industry) across all states in India, while Gujarat employs 15.2 per cent, and Telangana 14 per cent of all Pharma workers across India.

Figure 4.1.1 Share of State in All India Pharma GVA (2012-13) %

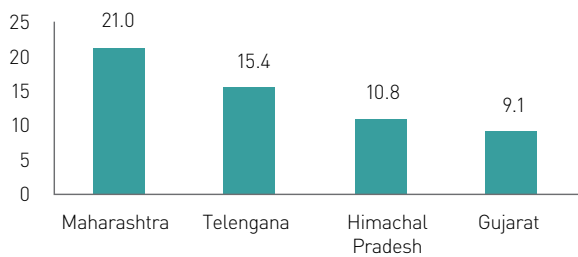
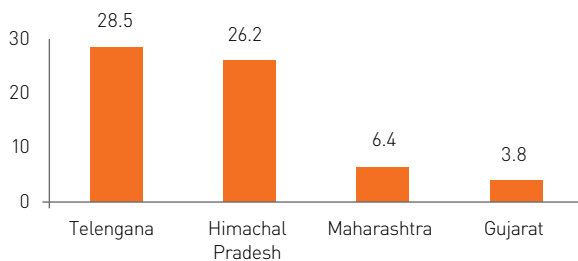
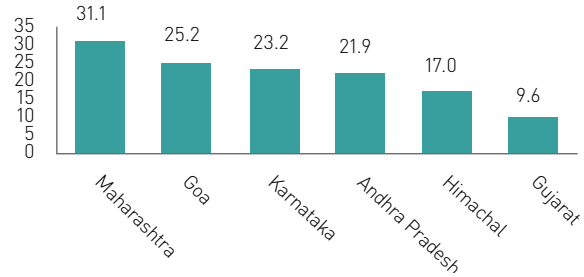


Figure 4.1.2 Share of Pharma Industry's in State's total GVA (2012-13) %



Source: Annual Survey of Industries (ASI), 2012-13

Figure 4.1.3 GVA (Average y-o-y growth rate between 2008-09 and 2012-13)



In terms of growth, however, Maharashtra grew at the fastest rate between 2008-09 and 2012-13 followed by Goa and Karnataka (Figure 4.1.3). These three states again topped in terms of growth rate of profits suggesting that the growth potential in these states is fairly significant (Figure 4.1.4). Andhra Pradesh, Gujarat and Maharashtra have the highest inventory turnover suggesting markets are buoyant in these states (Figure 4.1.5).

Figure 4.1.4 Profit (Average y-o-y growth rate between 2008-09 and 2012-13)

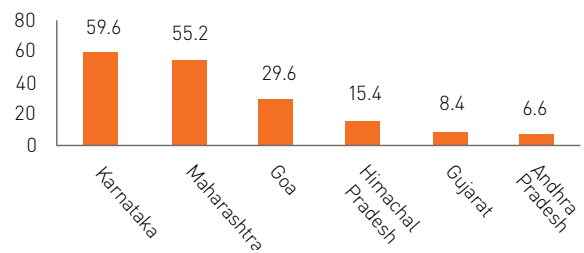
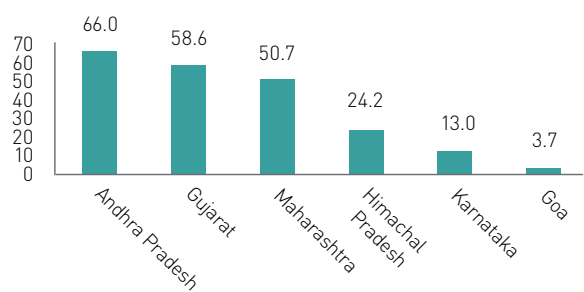


Figure 4.1.5 Inventory Turnover Ratio (in 100s)



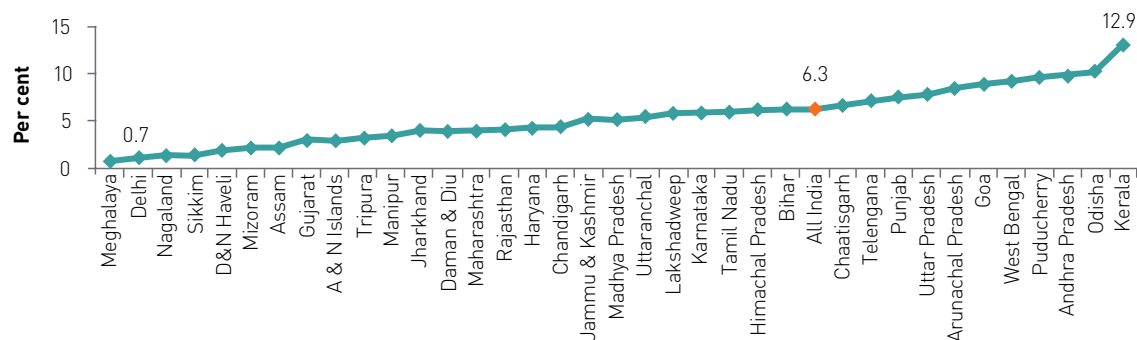
Source: Annual Survey of Industries (ASI), 2012-13; (Figures for Andhra Pradesh in figures 4.1.3, 4.1.4, and 4.1.5 include that of the Telangana region)

4.1.2.2 Household spending on pharma

An analysis of monthly per capita medicine expenditure (MPCM) is a good indicator of domestic demand side push factors for pharma sector growth. The data from 71st round of NSSO (Social Consumption: Health) survey suggests that the (MPCM is Rs. 102.5 at all India level. If we look at share of MPCM in total monthly per capita expenditures (MPCE), we find that households in Kerala spend the highest (12.9 percent) on medicines followed by Odisha (10.3 percent), Andhra Pradesh (9.8 percent), Puducherry (9.7 percent) and West Bengal (9.3 percent) (Figure 4.1.6).

On an average 6 percent of household expenditure is on medicine

Figure 4.1.6 Share of monthly per capita expenditure on medicine in MPCE (%)



Source: 71st round of NSSO (Social Consumption: Health) survey

4.1.3 Supply – demand analysis

Data from Annual Survey of Industries (ASI) show that the domestic market grew at 15 per cent (CAGR) over the period 2008-09 to 2012-13 in terms of gross value added (GVA). Total output expanded 16.9 per cent (CAGR), while the industry profit registered growth of 12.6 (CAGR) per cent during the same period.

4.1.3.1 Supply Side Factors

The supply side analysis attempts to examine the factors driving profitability and productive capacity of a firm. The results from the study will be of particular interest for both existing firms and potential entrants as they reflect on market competition, resource utilization, survival, and best practices in the pharmaceutical industry.

For the purpose of the analysis, the Annual Survey of Industries factory level data for the pharmaceutical industries for 2011-12 have been used¹⁸. The Return on Assets (ROA) and Gross Value Added (GVA) are treated as dependent variables. ROA is defined as the ratio of net income to total assets, and is a measure of

firm profitability. GVA, on the other hand, captures the value addition from the final output produced by the company. Table D.1.2 in Appendix D provides the list of explanatory variables that are expected to drive firm profitability and productive capacity and regression results for the supply side regressions.

Firm size, market shares, and average wages are significant factors that affect both ROA and GVA. Firm location in an urban area is not statistically significant for GVA and only marginally significant for ROA. The results, however, also show that credit is negatively associated with both GVA and ROA. While access to credit can potentially decrease the vulnerability of firms from volatility in their cash flow, Hall (2002)¹⁹

Firm size, market shares, and average wages are significant factors that affect both ROA and GVA

showed that credit from banks and financial institutions can also stifle growth for firms that are engaged in Research and Development (R&D) because of the time lag involved in recovering fixed R&D costs.

¹⁸ In order to identify pharmaceutical companies, industry code of 2100, based on the four-digit level 2008 NIC industry code, has been used. This includes firms involved in manufacturing pharmaceuticals, medicinal chemical and botanical products.

4.1.3.2 Demand Side Factors

The demand side analysis is aimed at identifying the socio-economic factors which impact the level of household expenditure on medicine using the latest 71st round of NSSO household survey on 'Social Consumption: Health' data for the period between January to June 2014. This survey captures the household and individual persons' profile along with episodes of hospitalization of each household member as well as out-patient medical incidences. The survey also captures the type of ailments and the expenditure incurred on each in and out-patient medical incidence. The analysis is carried out using the 'Household monthly expenditure on medicine (in rupees)', as the dependent variable. Table D.1.3 in Appendix D lists the explanatory variables impacting household expenditure on medicine as well as the results of the regression.

An increase in per capita monthly consumer expenditure by Rs 100 induces an increase in household's monthly expenditure on medicine by Rs 6.4.

The results of the regression provide insights into how the social consumption of medicine varies with variation in other socio-economic variables. It is observed that Rs 100 increase in overall per capita monthly consumer expenditure induces Rs 6.4 increase in the household's monthly total expenditure on medicine. Significantly, as the level of education increases, the expenditure on medicine sharply increases, suggesting both income and increased level of awareness affect household spending. For instance, a household with a 'graduate or above' member spends on an average Rs 273 more per month on medicine than a household where all members are illiterate. Sanitary conditions of the households also play a vital role in its monthly expenditure on medicine. Households with no access to safe water sources spend, on an average, Rs 105 more per month on medicine than households with access to safe sources of drinking water. The expenditure on medicine also declines when households have access to better sanitation facilities.

Households with no access to safe drinking water sources spend, on an average, 105 rupees per month more on medicines than the households that have access to safe sources of drinking water

4.1.4. State potential and rankings

The previous section provided details of supply and demand analysis examining factors that are important for the pharmaceutical industry to thrive in India. Based on this analysis, indicators were identified both on the supply side and on the demand side. A Pharmaceutical Supply index and a Demand for Medicine Index were constructed out of the selected variables employing equal weights, and using the min-max approach for normalising the indicators.

4.1.4.1 Pharmaceutical Supply Index:

The parameters identified as significant contributors to the strong presence of the pharmaceutical industry in a state are:

- Gross sales of all firms in the state.
- Value of total land area used by all factories within the state.
- Number of workers in the pharmaceutical firm.
- Average ratio of working days per factory.
- Proportion of population working in the state pharma industry with at least higher secondary degree.
- Tax Incentives/Policy/Focus sector (binary variable)

Table 4.1.2 Pharmaceutical Supply Index

Rank	State
1	Maharashtra
2	Andhra Pradesh (including Telangana)*
3	Gujarat
4	Karnataka
5	Uttarakhand
6	Goa
7	Himachal Pradesh
8	Tamil Nadu
9	Chhattisgarh
10	Rajasthan

The index thus covers factor endowments such as land and labour climate, in addition to how effectively firms in the state allocate capital, generate sales, and manage inventory as indicated by the inventory-turnover ratio.

19 Hall B. H., [2002]. "The Financing of Research and Development," Oxford Review of Economic Policy, Oxford University Press, Vol. 18(1),35-51

* AP and Telangana are clubbed together as the sector reports were prepared using the latest ASI (Annual Survey of Industries) data for the year 2012-13 when Telangana was not a separate state.

A ranking of the states in order of the Pharmaceutical Supply Index (Table 4.1.2) shows:

- The top five states as per the supply side index are Maharashtra, Andhra Pradesh (including Telangana), Gujarat, Karnataka, and Uttarakhand.
- Apart from the above, other states with strong potential for the pharmaceutical industry are Goa, Himachal Pradesh, Tamil Nadu, Chhattisgarh, and Rajasthan, with Sikkim, ranked at the 11th, catching up very fast.

4.1.4.2 Demand-for-Medicine Index:

The following indicators were identified as significant in terms of their impact on the household monthly expenditure on medicine:

- Monthly per capita expenditure (MPCE)
- Highest education level attained by any household member
- Whether any household member is suffering from a chronic disease
- Whether any household member is covered by health insurance provided by employer
- Type of latrine in the household
- Source of drinking water

Table 4.1.3 Demand for Medicine Index

Rank	State
1	Kerala
2	Punjab
3	Karnataka
4	Jammu & Kashmir
5	Tamil Nadu
6	Goa
7	Mizoram
8	Andhra Pradesh
9	Telangana
10	Delhi

The index captures the economic conditions of the households (in terms of MPCE) and education level, external support in terms of health insurance, and the sanitation level of the household as captured by type of latrine and source of drinking water.

A ranking of the states in order of the Demand-for-Medicine Index (Table 4.1.3) shows:

- The top states in terms of demand of medicine (monthly household expenditure on medicine) are

Kerala, Punjab, Karnataka, J&K, and Tamil Nadu.

- The next 5 (potential) states where high demand of medicine is observed are Goa, Mizoram, Andhra Pradesh, Telangana, and Delhi.

4.1.5 State Prospects and Policy Note

4.1.5.1 State Prospects:

- Maharashtra, Telangana, Himachal Pradesh, and Gujarat have been the top performing states for the pharmaceutical industry. Maharashtra hosts three bulk drug clusters in Mumbai, Thane, and Aurangabad, while Gujarat boasts of a bulk drugs cluster in Ahmedabad and two SEZs – PHARMEZ (developed by Zydus Infrastructure) and PhaEZ Park (developed by Cadila Pharma). The growth of the pharma hub in Himachal Pradesh, especially in Baddi, can be attributed to tax incentives announced by the Union Government in 2002. However, the withdrawal of the tax holiday in 2010 resulted in dwindling growth prospects in the state.
- The pharmaceutical industry is one of the focus sectors of Goa for greenfield investment. Karnataka has also witnessed spectacular growth in the pharmaceutical industry in terms of both GVA and profit. The new Industrial Policy of Chhattisgarh for 2014-19 deems pharmaceuticals as one of the priority sectors in terms of investment promotion, and the state intends to set up a pharmaceutical park on its own/under PPP.
- The Jawaharlal Nehru Pharma City (JNPC) located at Parawada near Visakhapatnam (in the state of Andhra Pradesh), falls under the ambit of Special Economic Zone (SEZ). JNPC has attracted investments from some of the top pharma companies, including interests in investing on greenfield projects in the area. The Telangana state government, on the other hand, has proposed setting up India's largest integrated pharma city in Mucherla in Ranga Reddy district, and is expected to attract Rs.25,000 crore in investment.
- In terms of the supply-side analysis, one of the states that has captured the attention of the pharma industry is Sikkim, especially after the inclusion of Sikkim under the Centre's North-East Industrial and Investment Promotion Policy (NEIIPP), 2007. NEIIPP provides incentives for a period of ten years from the date of commencement of commercial production²⁰.

4.1.5.2 Policy and IPR:

- Following the 2005 WTO amendment to the 1970 Patent Act, India has evolved from process patents to product patent for “new drugs that were invented”, moving a step towards being TRIPS compliant²¹. In this context, Section 3(d) of the 2005 Amendment has introduced limitations with respect to such patentability, allowing for refusal of patents on discovery of new forms or new uses of old drugs, thus providing enough safeguards for the Indian generic drugs market.
- In the meantime, the 2005 Amendment has also served as an impetus for Indian pharmaceutical companies to capitalize on investments in Research and Development.
- The implications of the Trans-Pacific Partnership (TPP) on the IPM are not entirely clear, especially with India not being a member country on the list. However, such agreements tend to extend the protection of IPR beyond the international requirements in terms of data exclusivity, patentability criteria, etc. This has the potential to delay the production of generic life-saving drugs, and in turn can dent the export capacity of the industry.

The R&D investments of the top 15 Indian pharma manufacturing companies grew from 3% of total sales in 2000 to approximately 8.68% of sales in 2010 (Source: Planning Commission Report, 2012)

- More recently, the Central Board of Excise and Customs withdrew customs duty exemptions on imports of 74 drugs, including certain life-saving drugs. The move could potentially boost the domestic manufacturing industry and propel the ‘Make in India’ initiative, although on the flip side this will result in a sharp increase in drug prices and hurt millions of patients.
- It is noteworthy to mention that the Union Government is working on introducing a National IPR Policy in 2016. The new policy seeks to boost innovation by providing tax incentives and modifying intellectual property rights.
- The recently launched National Biotechnology Development Strategy 2015-2020 has provided a roadmap for establishing India as a global biotech innovation hub, with the government initiating a Rs.10,000-crore corpus for innovation-driven enterprises, a three-year corporate tax holiday from paying income tax on profits, a Rs.500-crore per year credit guarantee mechanism, and exemption from capital gains tax for start-ups. The aim is for the biotech sector to grow to \$100 billion, with potentially more focus on applied research and foreign collaborations to bring research grants.
- The Pharmaceutical Industry is slated to get a further boost over the coming year as the government aims to improve the ease of doing business in India by simplifying regulatory reforms, streamlining taxation, through the passage of Goods and Services Tax (GST), doling out R&D incentives, and increasing public capital expenditure and public health expenditure.

²⁰ <http://www.pharmabiz.com/NewsDetails.aspx?aid=61599&sid=1>

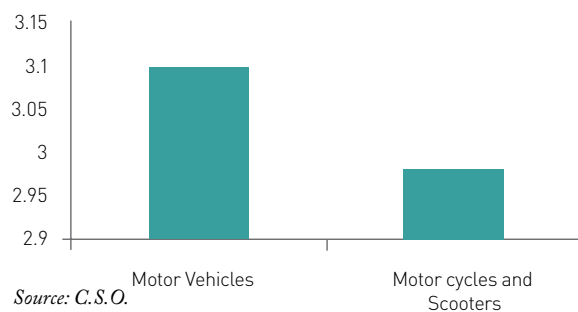
²¹ It is important to note in this context that the TRIPS Agreement allows each member country to formulate a patent regime that is more suited to its socio-economic environment.

4.2 THE AUTOMOBILE INDUSTRY IN INDIA

4.2.1 Introduction

The Indian auto sector is one of the largest in the world and a significant contributor to the country's economy accounting for 7.1% of the overall GDP, 26% of the industry GDP and 49% of the manufacturing GDP (SIAM). Direct and indirect employment in the industry currently stands at approximately 19 million. The industry is largely composed of the two-wheeler segment (81%), followed by passenger vehicles (13%) while commercial vehicles and three wheelers form a small share of around 3% each.²²

Figure 4.2.1 Auto Sector Multiplier



The automotive sector spawns an ecosystem of manufacturing and service units that support the industry through supply of raw materials to providing insurance, finance to the buyers, etc. Due to its deep forward and backward linkages, this sector has a strong multiplier effect and contributes significantly to economic growth. As per CSO's latest Input-Output Table for the year 2007-08, the output multiplier for 'Motor Vehicles' and 'Motorcycles and Scooters' is 3.01 and 2.98 respectively (Figure 4.2.1).

The Indian automobile market is estimated to become the 3rd largest in the world by 2016, accounting for more than 5% of global vehicle sales²². In addition, this

The Automotive Mission Plan (2016-26) aims to raise the share of Auto sector in India's GDP, from 7.1 % to 12%

sector is getting a boost from the 'Make in India' programme as automobile and automobile components comprise two of the 25 sectors chosen for attracting further investment. There is also a renewed policy

focus on the automotive industry with the Automotive Mission Plan 2016-26²³ aiming to catapult the sector to be the engine of the Government's "Make in India" and "Skill India" programmes and take its share from the current level of 7.1% to more than 12% of India's GDP.

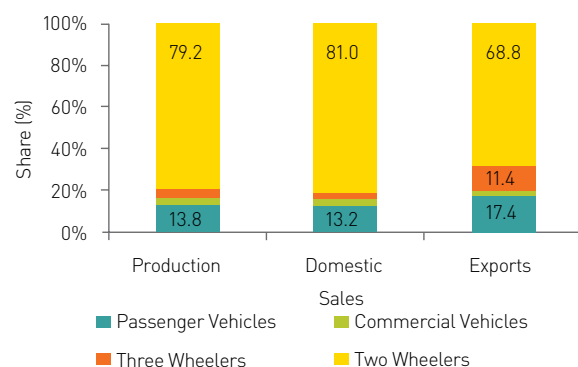
This report is organized as follows. Section 4.2.2 first analyses the trends and growth patterns in the Indian automobile sector. Section 4.2.3 then examines the firm-level determinants of auto sector performance followed by a state level analysis in section 4.2.4. Section 4.2.5 builds an Automobile Sector Index to rank states' potential in the auto sector based on certain key parameters that are important determinants of a state's capacity to emerge as an automobile industry hub. Based on this analysis, the top ten states are Tamil Nadu, Maharashtra, Haryana, Karnataka, Delhi, Andhra Pradesh, Gujarat, Uttarakhand, Rajasthan, Odisha.

4.2.2 Indian Automobile Sector Composition: Trends & Growth

The Auto sector is comprised of the following 4 segments:

- Passenger Vehicles (Passenger Cars, Utility Vehicles & Vans)
- Commercial Vehicles (Medium & Heavy and Light Commercial Vehicles)
- Two Wheelers
- Three Wheelers

Figure 4.2.2 Segment Share

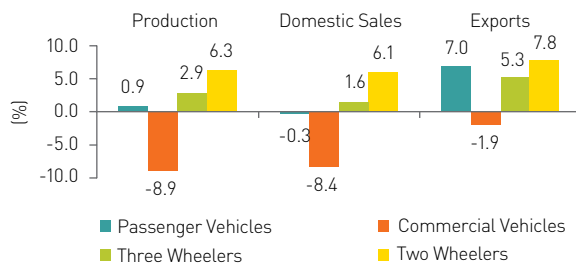


The Society of Indian Automobile Manufacturers (SIAM) data for the period 2012-13 to 2014-15, shows that two-wheelers (2W) are a very important segment of the Indian auto industry with the highest share in total production and sales, both domestic and foreign, followed by passenger vehicles (PV). Also noteworthy is that three-wheelers (3W) make up about 11 percent of exports (Figure 4.2.2).

²² Retrieved from-<http://makeinindia.com/sector/automobiles/>

²³ Retrieved from-<http://www.siamindia.com/uploads/filemanager/47AUTOMOTIVEMISSIIONPLAN.pdf>

Figure 4.2.3 Segment Growth



In addition, the 2W segment experienced the highest growth in output and sales followed by 3W segment. Commercial Vehicles (CV) segment is not only a small share but has also registered negative growth. For the PV segment, while exports have witnessed high positive growth, domestic sales fell and production has lumbered (Figure 4.2.3).

Two Wheelers

Indian Two-Wheeler (2Ws) Market is continuously expanding with rising domestic demand manifesting in growing production and sales volume. In addition, it is a segment which generally absorbs first-time job seekers. While exports are rising, demand from rural areas and tier III cities could provide a new boost to the sector in the domestic market.

The two-wheeler industry is performing consistently well

Passenger Vehicles

The Passenger Vehicles (PV) segment is the second largest after the 2W segment in India, with an annual production of 32.2 lakh units, domestic sales of 26.01 lakh units and exports of 6.22 lakh units approximately during the year 2014-15²⁴. The segment’s performance in terms of production and domestic sales has not been encouraging in the recent past although exports have been rising.

Passenger vehicle exports are growing and domestic sales are likely to pick up

Three Wheelers

India’s three-wheelers (3Ws) industry, with production of 9.49 lakh units, domestic sales of 5.13 lakh units and exports of 4.07 lakh units approximately during the year 2014-15²⁴ is the leading player in the world market. India has also emerged as a 3Ws export hub, selling

3W exports growth has been robust and holds immense potential

to emerging market economies (EMEs) with rising disposable incomes but inadequate public transport systems.

Commercial Vehicles

The Commercial Vehicles (CV) segment, with production of 6.97 lakh units, domestic sales of 6.14 lakh units and

CV has relatively untapped potential in semi-urban and rural areas

exports of 0.85 lakh units approximately during the year 2014-15²⁴ constitutes only a small fraction of the Indian automobile industry. However, with the infrastructure boom, greater urbanization, lower fuel costs and interest rates and implementation of GST in the offing, this segment is likely to experience growth in the future.

4.2.3 Firm Level Analysis of Determinants of Performance

Industry performance at the micro level has been analysed using, factory unit level data collected in the Annual Survey of Industries (ASI) for the year 2011-12. The performance of firms (i.e., the dependent variable)

Land positively impacts GVA owing to economies of scale, but negatively impacts ROA due to high associated fixed costs

is measured using Gross Value Added (GVA) and Return on Assets (ROA) ratio. Factors affecting firm performance and thus its locational choice such as firm size, level of imported inputs, average wages are taken as the independent variables. The detailed regression results along with the description of the variables considered are presented in Table D.2.1 in the Appendix.

All the independent variables have a statistically significant and positive impact on GVA at 1% level of significance. Since the location of the factory (whether the factory is located in urban or rural area) is not an important factor affecting its value addition, the location variable is dropped from the first regression on GVA. On the other hand, firm size, land, inventory turnover ratio and location have a significant impact on ROA ratio.

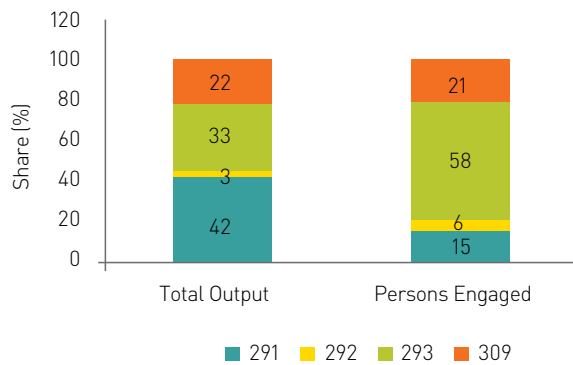
Land positively impacts GVA owing to economies of scale but negatively impacts profitability due to

24 Source: SIAM

high associated fixed costs. However, profitability is positively impacted by being located in an urban area capturing the benefits of greater connectivity and access to bigger markets and a skilled and educated workforce.

4.2.4 State Level Analysis

Figure 4.2.4 Output and employment in the auto sub-sectors²⁵



Source: ASI (2012-13), Ministry of Statistics & Programme Implementation

According to the Annual Survey of Industries (ASI) data for the year 2012-13, industry 291, encompassing the manufacture of motor i.e., passenger and commercial vehicles has the highest share in value of total output, followed by 293 and then 309. In terms of employment, 293 i.e., the auto ancillary industry manufacturing parts and accessories for motor vehicles, has the highest share in total persons engaged. 2W and 3W industry i.e., industry 309 contributes around 22% to both Output and employment. Industry 292 that involves the manufacture of bodies (coachwork) for motor vehicles and trailers, semi-trailers, makes only a marginal contribution to the overall auto sector (Figure 4.2.4).

In order to identify the states that are doing well in these different segments, we looked at the share of each state in all-India output (value) and employment (total persons engaged) in the year 2012-13. This was done separately for each of the segments, 291, 292, 293 and 309 and then aggregated into a weighted index using the share of each segment in the total auto sector as weights. The states' share presents the current scenario of the auto sector and potential for future investments in different states.

²⁵ As per NIC 2008 codes

* Whether or not automobile sector is a focus sector in State Industrial Policy document.

Figure 4.2.5 State level auto sector performance

TOP STATES



OUTPUT

- Tamil Nadu
- Maharashtra
- Haryana
- Uttarakhand
- Karnataka
- Uttar Pradesh



EMPLOYMENT

- Tamil Nadu
- Maharashtra
- Haryana
- Uttarakhand
- Punjab
- Karnataka

In terms of output and employment shares, Tamil Nadu, Maharashtra and Haryana clearly come out ahead as auto hubs. The auto sector has also grown significantly in Uttarakhand and Karnataka. Table D.2.2 in the Appendix gives the complete rankings based on the states' share in All- India output and employment in the auto sector.

4.2.5 Potential of the Auto Sector in the Indian States

While the firm level analysis of performance in section 4.2.3 above indicates factors affecting output and profitability, and the segment-wise disaggregation at the state level in section 4.2.4 above provides a more growth-oriented focus, this section seeks to rank states on a separate metric altogether. This metric combines a composite of indicators to form an Automobile Index that includes adequate and quality infrastructure, demand, proximity to market, and a policy focus. The specific indicators used in the construction of the Automobile Index using the distance to frontier methodology with equal weights include road density, cargo handled, power, discretionary spending, urban population and state industrial policy focus* (Figure 4.2.3). Table D.2.3 in the Appendix has the ranking of states under each of these indicators separately.

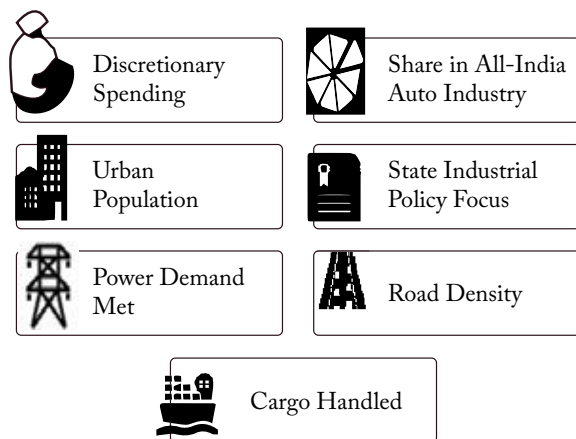
Based on the overall ranking in the Automobile Index, the top ten states for investment potential are Tamil Nadu, Maharashtra, Haryana, Karnataka, Delhi, Andhra Pradesh, Gujarat, Uttarakhand, Rajasthan, Odisha

Automobile Index

Top 10 States	
Tamil Nadu	1
Maharashtra	2
Haryana	3
Karnataka	4
Delhi	5
Andhra Pradesh	6
Gujarat	7
Uttarakhand	8
Rajasthan	9
Odisha	10

Gujarat, Uttarakhand, Rajasthan and Odisha. Of these, however, Tamil Nadu, Maharashtra, Haryana and Delhi / NCR are already existing automobile sector hubs. If we exclude these and look at potential growth centers for the automobile industry, then the states that hold potential are Karnataka, Andhra Pradesh, Gujarat, Uttarakhand, Rajasthan and Odisha.

Figure 4.2.6 Indicators used in the construction of the Automobile Index



4.2.6 Policy Brief

A number of initiatives have been taken by the Government of India and various state governments to support and encourage the automotive sector.

The major auto hubs in India are- Delhi-Gurgaon-Faridabad-Ghaziabad-Gautama Buddha Nagar in (North), Mumbai-Pune-Nasik-Aurangabad-Thane in (West), Chennai - Bangalore-Dharampuri-Vellore-Kanchipuram-Thiruvallore in (South) and Jamshedpur-Kolkata in (East), with Gujarat emerging as an attractive location in recent times. The pattern of cluster formation in West and South is different from the North. While for the former, it was proximity to the coast for the import of heavy machinery, availability of power supply, skilled labour pool, good infrastructure, concentration of Information Technology Enabled Services (ITES) etc. that supported the auto industry, for the North cluster it was the leading role played by Maruti Udyog and its supplier development strategy.

There are other region specific factors that played a key role including political leadership, well-established

family owned business houses and government interventions (South), access to wide market (West), differential tax treatment by different states and Industrial estates. More specific policies with regard to the automobile sector in four states – Andhra Pradesh, Karnataka, Chhattisgarh and West Bengal are discussed below.

The Government of Andhra Pradesh's new Industrial Policy (2015-2020) has a special automobile and auto components policy. Under this policy, the government would set up two major auto clusters in PPP mode in Nellore and Chittoor districts. In addition, to give a boost to the ancillary industry, all units of mega integrated projects would get a 75 per cent reimbursement of gross VAT/GST for ten years.

The Government of Karnataka aims to transform the state into an energetic automobile hub. Current initiatives include the setting up of major Auto Parks with 20% of the land earmarked for MSMEs, a venture fund for boosting MSMEs, and an incubation centre in PPP mode called the 'Karnataka Automobile Research & Innovation Centre'.

The Government of Chhattisgarh has a separate Automotive Policy 2012-2017 which offers various incentives to firms in the automotive industry in addition to the ones offered in the overall State Industrial Policy. These incentives include the reimbursement of VAT, rebate in CST, electricity duty, and exemptions from entry tax, stamp duty, registration fee.

The Government of West Bengal is encouraging dynamic investment in the sector and has in place a number of policy initiatives which include permitting 100% FDI and removal of minimum capital investment norms for fresh entrants, an international hub for small, affordable passenger cars and two-wheelers, and incentives for indigenous design and alternate, low emission auto fuel technology.

The following box summarizes some of the policy initiatives that have contributed to the importance of the auto sector in the Indian manufacturing sector. Of interest are the more recent policy measures including a ban on the registration of diesel vehicles above 2000cc in the NCR region that will certainly have an effect on the type of motor vehicles on the road in the future.

Box 4.2.1: Policy Initiatives

- **Auto Policy:** Encouragement to foreign investment, R&D and ease of doing business
- **Automotive Mission Plan (2016-26):** Aims to transform India into a global automotive hub, establishment of auto training institutes, design centres, auto parks & auto component virtual Special Economic Zones (SEZs)
- **National Automotive Testing and R&D Infrastructure Project:** Creating a state-of-art and dedicated testing, validation and R&D infrastructure
- **National mission for electric mobility 2020, Pilot Electric Vehicle Projects, FAME (Faster Adaptation & Manufacturing Of Hybrid And Electric Vehicles)**
- **Automotive Skills Development Council (ASDC):** First Sector Skill Council of India, promoted by the Auto industry and Department of Heavy Industry and National Skill Development Corporation (NSDC), Government of India.

Box 4.2.2: Recent Measures

- Ban on registration of diesel Vehicles above 2000cc and diesel autos and taxis in NCR
- Ban on registration of vehicles over 10 years
- Central and State Governments not to buy any diesel vehicles
- Phase out diesel vehicles, particularly trucks, being used by municipal corporations, DDA, police and other public departments
- Auto Scrappage Policy: Incentives to consumers to purchase new trucks and cars, those who are willing to scrap their old vehicles
- NATRiP proposal to buy in-use cars for conformity tests and mandatory recall policy of faulty vehicles

Impact on the Automobile Sector

- Adverse effect on demand for diesel vehicles, shift to CNG vehicle and a pan-India policy along similar lines will hit the automobile sector
- Boost to auto industry and kick start vehicle scrappage facilities

4.3 RETAIL SECTOR IN INDIA

4.3.1 Introduction

With a growth rate of 7.4% India is barreling ahead amidst global recessionary gloom. Such high growth coupled

The retail sector accounts for over 20% of India's GDP

with increased urbanization and working young population is every retailer's dream. As per AT Kearney's Global Retail Development Index (GRDI), the Indian Retail sector grew at a compound annual growth rate of 5.8% in the period 2010-2014. According to the Andhra Pradesh's "Retail Trade Policy 2015-2020" the sector is estimated at Rupees 33.4 lakh crore with a CAGR of 15% over the last five years in India.²⁶ Also the retail sector accounts for over 20% of the national GDP. Further according to a paper by Reardon, Timmer and Minten (2010), the Indian Retail chains registered a compound annual growth rate of 45.6% in their sales in the period 2001-05. Retail sector, therefore is one of the important pillars of Indian economy.

Retailing can be organized and unorganized. Unorganized retailing comprises of unincorporated businesses that are owned and run by individuals or households. The organized sector comprises of incorporated businesses, which include large incorporated stores, and all chain stores, supermarkets, hypermarkets, department stores and store-in-stores. Further, according to a FICCI report²⁷, unorganized retail is expected to grow at 5% and reach a size of US\$ 650 billion, while organized retail is expected to grow at 25% and reach a size of US\$ 200 billion by 2020.

The retail sector is gaining ground and has become attractive in India due to several socio-economic indicators. The following indicators have been found to be significant in locational choice for the retail industry.

a. Age and Education: 50.5% and 57.3% of the Indian population in the age group of 20-59 years of age live in the rural areas and urban areas respectively. The majority of the Indian states have over 25% of its population who are between 20-35 years. Of interest is that the million plus cities have the lowest percent of illiterate population compared to its rural, urban and all India

level counterparts. For instance, only 15 per cent of the population is estimated to be uneducated in Mega cities while Niche cities have the largest proportion of graduate degree holders (Table D.3.1 in Appendix D)²⁸. Owing to this favourable demographic situation of high working age population (coupled with fairly robust economic growth) India has become one of the most attractive markets in the world.

b. Rise in Discretionary Spending: The All-India average discretionary spending registered a growth rate of 155% in the period 2004 to 2011, with almost all Indian states displaying high trend rates. Significantly, over this period, the consumption patterns of households have been changing with a larger percentage of households spending more on consumer durables and consumer services. Figure D.3.1 in Appendix D gives the detailed consumption patterns of households in different groups in Million Plus cities.

c. Rapid urbanization: The proportion of urban population in Indian states is steadily rising. The number of tier two and tier three cities is growing, which are the growth engines of the Indian states. These cities present new opportunities for retailers.

d. Increase in access to internet: Access to internet on electronic devices not only indicates a rise in wealth (a proxy for assets) but also a rise in overall awareness. The internet has encouraged the Indian age of consumerism with online-retailing has been gaining ground particularly among the organized sector.

e. Infrastructure: For the organized retailers, brick and mortar stores still hold importance. To maintain a seamless supply chain and deliver quality products the retailers need good infrastructure in the form of roadways and power availability. Indian states have been spending on building infrastructure in order to realize a higher growth rate and this will have positive repercussions for the Retail sector.

f. Foreign Direct Investment (FDI): FDI policy in Indian states is important from the point of view of estimating future potential for Retail sector in the states. Whether the states allow for FDI in multi-brand retail or not will affect the inflow of investment in the sector in a particular state.

²⁶ <http://www.rai.net.in/E-Mailers/Retail-Trade-Policy-2016.pdf>

²⁷ http://ficci.in/sector/33/Project_docs/Sector-prof.pdf

²⁸ Detailed classification of cities are provided in Section 4.3.3

The retail sector in India is complex with wide variation across states. Hence, this report considers only the organized retail sector as data on the unorganized sector at the state-level is not available. Secondly, even for organized retailing, there is no direct access to data. Hence, to analyze the growth in the Retail sector and pinpoint the states that have the most potential for this sector, we have undertaken a study at two levels of disaggregation.

- A State Level Disaggregation: The focus here is on the current status of retail sector in states across India.
- A City Level Disaggregation: The focus here is on the retail sector in different groups of cities in India.

4.3.2 State Level Disaggregation

In order to analyze the current status of the Retail sector in Indian states a Retail Store Concentration Index was built. This index gives a general idea of

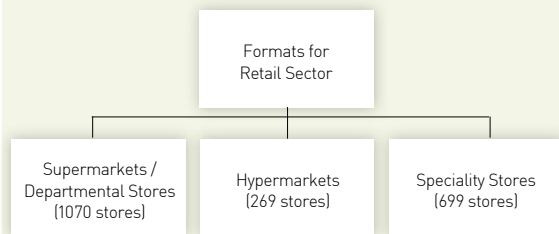
The Retail Store Concentration Index indicates the spatial concentration of stores across states

the current spatial concentration of retail stores in Indian states. The details of the retail chains in this Index and the Index values are given in Table D.3.2 in the Appendix. Andhra Pradesh, Maharashtra and Karnataka are the states with the highest retail store concentration (Figure 4.3.1). These three states also have a percentage urban population and percentage discretionary spending of households at the higher end. The Methodology for building this Index is in Figure 4.3.2.

Figure 4.3.2 Methodology of Retail Store Concentration Index

Step 1: The number of retail stores of top seven retail chains in the country was aggregated under different formats (supermarkets, hypermarkets and speciality stores) for each of the Indian states.
 Step 2: Figures for each state were then normalized using the Min-Max approach.
 Step 3: An average of these values for the three formats was computed for every state.

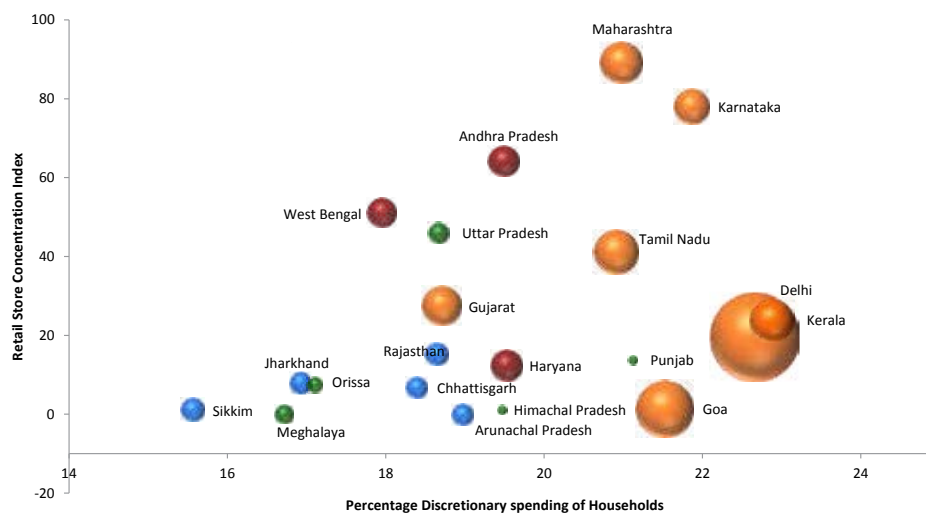
Formats of Retail Sector and the Total number of retail stores



4.3.3 City Level Disaggregation

A study of Retail sector at city level disaggregation is required as the dynamics of the consumer market may be different even within a state. To address asymmetric retail potentials even within a state, this report narrows down the analysis using an appropriate city level disaggregation. To do this we study the million plus cities in each Indian state. The characteristics of million plus cities in terms of its big population size, high purchasing power and share of consumption expenditure make these cities a more attractive place to invest.

Figure 4.3.1 Retail Store Concentration Index



Analyzing the state potential for investment in retail at the million plus cities level is also in consonance with the current policy which restricts foreign direct investment in multi brand retail trade to cities having a million plus population as per the 2011 census or any other cities as per the decision of respective state governments. Hence a detailed analysis of the spending potential and socio-economic characteristics in these million plus cities will give an idea of where to invest for both domestic and foreign investors. With 160.7 million persons living in 53 million plus cities as per the Census 2011 these cities alone cover close to 43 percent of the total urban population. Table D.3.3 in Appendix D gives the list of the 53 million plus cities in India. However, to further understand the differing dynamics in these cities to carve out distinct markets, the million plus cities have been classified as mega cities, boom towns, niche cities and other million plus cities (Figure 4.3.3).

Demand centers are identified by analyzing spending potential and socio-economic factors in 53 million plus cities

The 10 mega cities account for over two-thirds of the consumption expenditure in million plus cities

a. Mega cities: These cities account for 7.7 per cent of total country’s population and 15.5 percent of total expenditure at the All-India level. Mega cities account for over two-thirds of consumption expenditure in million plus cities.

b. Boomtowns: This group covers 2.1 per cent of India’s population but have a share of 18.5 and 4.2 per cent in total expenditure in million plus cities and total expenditure at all-India level. Monthly per capita expenditure which is also seen as a proxy to purchasing power is estimated to be around ₹2,861 as against ₹3,194 of mega cities.

c. Niche Cities: These have a comparatively smaller population size as compared to the above two classifications. However, these cities have the highest purchasing power with average monthly per capita expenditures at ₹3,315.

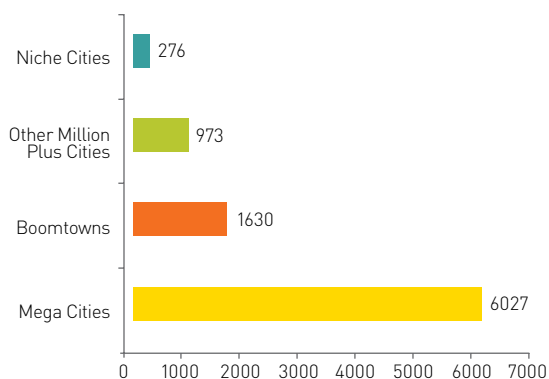
d. Other Million Plus cities: This group has the lowest MPCE as compared to the other group of cities. This group covers 2.4 per cent of total population and account for 3.1 percent of the total expenditure at the all-India level.

Figure 4.3.3 Classification of the Million Plus Cities



The classification of million plus cities has been made on the basis of population (size) and total consumption expenditure (Figure 4.3.4) and Monthly Per Capita Expenditure (purchasing power) at the household level.²⁹ Based on these parameters, a brief description of these cities is below with more details in Table 4.3.1.

Figure 4.3.4 Total Consumption Expenditure (in Rs Billion)



Of particular significance in million plus cities are the regular wage or salaried wage earners. Close to 50 percent of the population in these cities earn income from stable salaried sources. The salaried households also had the highest monthly per capita expenditures with the exception of the “others” category³⁰. The self-employed households account for about a third of the population in million plus cities (Table D.3.4 in Appendix).

²⁹ Monthly Per Capita Expenditure is abbreviated as MPCE.

Table 4.3.1 Characteristics of Million plus Cities

Classification	Population share (%)	MPCE	MPCE Growth rates (%)*	Share in total household expenditure at All India level (%)	Share in total household expenditure in Million Plus Cities (%)
Mega Cities	7.7	₹ 3,194	27.4	15.5	68.5
Boomtowns	2.1	₹ 2,861	30.0	4.2	18.5
Niche Cities	0.6	₹ 3,315	41.9	0.7	3.1
Other Million Plus Cities	2.6	₹ 2,089	13.4	2.5	11.1
All Million Plus Cities	13.0	₹ 2,945	26.9	22.6	100.0
Rural	68.8	₹ 1,287	-	54.5	-
Urban	31.2	₹ 2,477	-	47.4	-
All India	100.0	₹ 1,627	-	100.0	-

*Between 2004-05 & 2011-12

4.3.4 Potential of Retail Sector in Indian states

The Retail Sector in India is growing rapidly on the shoulders of various robust and rising socio-economic indicators. To estimate the potential of the retail sector in various states, a composite Retail Potential Index has been drawn up based on the factors that affect locational choice and consumption expenditure from an analysis in sections 4.3.2 and 4.3.3 above. These indicators include the levels of discretionary spending, urbanization levels, access to internet, availability of infrastructure, and population in million cities. In addition to these five variables that affect current potential, two factors that directly affect future potential and dynamics in the market have also been considered and include foreign direct investment policy and the setting up of smart cities. Figure 4.3.5 gives the final ranking of the states under the composite Retail Potential Index score. Tables D.3.5 and D.3.6 in the Appendix gives the details of the seven selected indicators and a ranking of the states under each of these seven indicators.

The Retail Potential Index signals the evolving dynamics of each market buoyed by critical growth factors

Methodology of Retail Potential Index

Step 1: Indicators that have an impact on the Retail Sector were selected on the basis of the state-level and city-level study.

Step 2: The values for each indicator for every state were then normalized using the Min-Max approach.

Step 3: A average of these values was computed for every state to get a composite index estimating the potential of a state in the Retail Sector.

Delhi leads the Retail Potential Index followed by Goa and Kerala. Some of the states like Maharashtra, Karnataka, Andhra Pradesh and Tamil Nadu have been ranked high on both the retail concentration index (section 4.3.2) and the retail potential index (section 4.3.4)

Retail Potential

Top 10 States

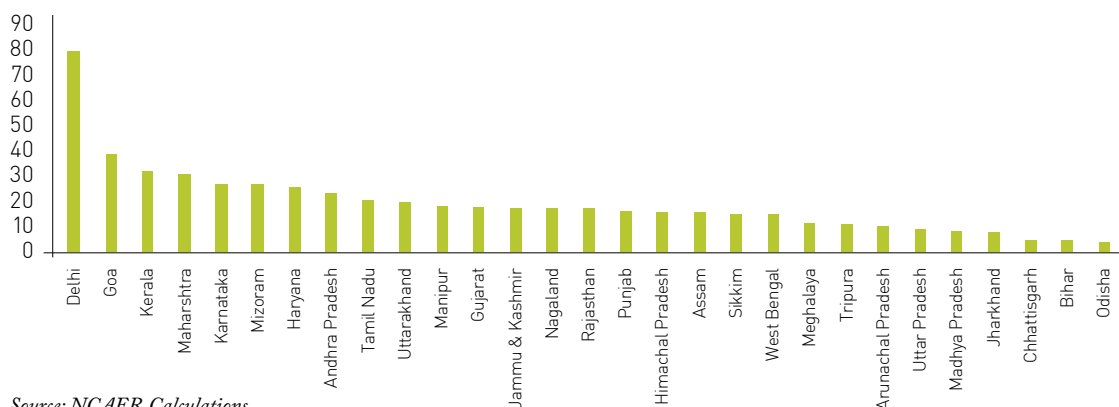
Delhi	1
Goa	2
Kerala	3
Maharashtra	4
Karnataka	5
Mizoram	6
Haryana	7
Andhra Pradesh	8
Tamil Nadu	9
Uttarakhand	10

implying a certain level of untapped potential. The states of Goa, Haryana, Kerala, Andhra Pradesh and Gujarat on the other hand are the upcoming states riding on high growth rate of urbanization and discretionary spending.

4.3.5 Policy

Organized retail in India is managed by the Ministries of Commerce and Consumer Affairs. While the Ministry of Commerce takes care of the retail policy, the Ministry of Consumer Affairs regulates retailing in terms of licenses and legislations.

Figure 4.3.5 State Rankings under the Retail Potential Index



Source: NCAER Calculations

In this regard one of the most important policy actions for Retail Sector growth has been the gradual opening up of FDI policy in India. According to the consolidated FDI Policy issued by Department of Industrial Policy and Promotion (DIPP) on 12th May, 2015, the retail trading is governed by the following rules:

- Single Brand product retail trading: 100% FDI is allowed with 49% through automatic route and beyond 49% through the government route. In respect of proposals involving FDI beyond 51%, sourcing of 30% of the value of goods purchased will be done from India, preferably from MSMEs, village and cottage industries, artisans and craftsmen.
- Norms for single brand retail are being gradually relaxed*
- Multi Brand Retail Trading: 51% FDI is allowed through government route. This comes with a policy imperative to invest at least 50% of total FDI brought in the first tranche of US \$ 100 million in 'back-end infrastructure' within three years. Also, at least 30% of the value of procurement of manufactured/ processed products purchased shall be sourced from Indian micro, small and medium industries, which have a total investment in plant and machinery not exceeding US \$ 2.00 million.
- Gradual relaxations of FDI norms have taken place across several states. So far, eleven states have allowed 51% FDI in multi-brand retail*

However, as of 30th July'15, only Foreign Portfolio Investment (FPI) has been permitted (includes foreign institutional investments, sub-accounts and qualified

foreign investments) and therefore, foreign retailers will not be able to have direct management control of an Indian venture. States that have allowed 51% FDI in multi-brand retail so far are Andhra Pradesh, Assam, Delhi, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Maharashtra, Manipur, Rajasthan and Uttarakhand.

Further, the current Union government is in the process of easing regulations for single brand retailing. It has already been declared that foreign companies do not need to comply with the 30% domestic sourcing norm from the day the first tranche of investment is made by them. International brands like Gas Jeans, Marks & Spencer, Zara, Hennes and Mauritz (H&M), Ikea, GAP, Adidas etc are gearing up to open wholly owned single brand retail stores in India. Already many of them are functioning through franchisees.

More recently, Andhra Pradesh became the first Indian state to announce a specific retail policy, easing regulations to attract investment in the retail sector in the state. The state government aims to attract new investments worth Rs 5,000 crore and create 20,000 additional employment opportunities in the sector by 2020. Retail giants such as Walmart, Future group, Spencer's and Arvind Lifestyle have agreed to set up large format stores, involving an aggregate investment of at least Rs 1,500 crore in the state. The state government has announced its plans to include food and grocery retail enterprises under the Essential Services Maintenance Act (ESMA) to dissuade strikes and declare distribution centres and warehouses of retail enterprises as public utilities under the Industrial Disputes Act, 1947 to prevent flash labour strikes. In the Retail Potential Index, Andhra Pradesh stands at the 8th rank but is likely to move up the rankings with its current retail focus policies.

30 The "others" category account for 10 percent of the households. The higher MPCE of the "others" category compared to the salaried households could be that this category is dominated by households living in niche cities where the MPCE is the highest among all the groups.

APPENDICES

Appendix A

Methodology, Data & Indicators

A.1 METHODOLOGY

The NCAER's State Investment Potential Index (N-SIPI) is constructed under five broad pillars that incorporate measures of labour, infrastructure, economic climate, the political and governance conditions, and perceptions of industrial climate using survey based data. Under each pillar there are a number of sub-indicators. The sub-indicators under each pillar are aggregated and the pillars are then put together to give a single composite investment score which is designed to give a holistic sense of how a state is positioned to encourage and attract investment. Details of the aggregation method, the pillars, and the sub-indicators under each pillar are described in the sections below.

Standardizing the data

The N-SIPI first makes the raw data comparable across states by using a reference point which is usually the All-India average or population. The indicators are then normalized or transformed into a unit-less index lying between 0 and 100 by using the Min-Max Transformation. The Min-Max transformation is applied as it preserves order and relative distance. The "distance to the frontier" in this transformation takes on an intuitive maximum value. This methodology is similar to the Global Competitiveness Index (GCI) published by the Global Economic Forum.

The Index (S_{ij}^k) for each of the sub-indicators (variables) across 29 states and 1 union territory for each of the five pillars is:

$$S_{ij}^k = \frac{X_{ij}^k - \min(X_{1j}^k, X_{2j}^k, \dots, X_{30j}^k)}{\max(X_{1j}^k, X_{2j}^k, \dots, X_{30j}^k) - \min(X_{1j}^k, X_{2j}^k, \dots, X_{30j}^k)}$$

where $i = 1, 2, \dots, 30$ represents the number of states, $j = 1, 2, \dots, n$ represents the number of sub-indicators in each pillar, and $k = 1, 2, \dots, 5$ represents the five pillars. Higher values of S_{ij}^k reflect better performance. For some indicators where higher values represent worse performance (for instance crime), the numerator has been adjusted to reflect the distance of the observed value from the maximum value using the following Index:

$$S_{ij}^k = \frac{\max(X_{1j}^k, X_{2j}^k, \dots, X_{30j}^k) - X_{ij}^k}{\max(X_{1j}^k, X_{2j}^k, \dots, X_{30j}^k) - \min(X_{1j}^k, X_{2j}^k, \dots, X_{30j}^k)}$$

Weighting

There are five broad pillars under which the N-SIPI is constructed. The five broad pillars are given equal weights, and within each pillar, equal weights are given to each of the sub-indicators. Some sub-indicators have two or more components. In this case, the sub-indicator weight is evenly distributed into its further components. The weighted arithmetic mean is used to aggregate the sub-indicators under each of the five pillars for each of the 'i' states.

$$P_i^k = \frac{\sum_{j=1}^n w_j S_{ij}^k}{n}$$

where w_j represents the weight for each sub-indicator, $k = 1, 2, \dots, 5$ represents the five pillars and n is the number of sub-indicators under each pillar

The geometric mean³¹ is used to aggregate the scores across the five pillars to get the final Composite Index (CI) for each state i . The geometric mean is used as it reduces the level of substitutability between the five broad pillars and at the same time ensures that a 1 percent decline in one pillar, say, labour, has the same impact on the overall Index as a 1 percent decline in the infrastructure or economic index. Thus, as a basis for comparisons of potential, this method helps smooth the intrinsic differences across the pillars better than the simple average.

$$CI_i = (P_i^1)^{1/5} (P_i^2)^{1/5} (P_i^3)^{1/5} (P_i^4)^{1/5} (P_i^5)^{1/5}$$

Two Rankings

The industry survey was conducted in only 21 states. Among the seven North-Eastern states, due to the constraints of time and weather, only Assam was covered. Other states not covered by surveys include Goa, Jammu and Kashmir and Sikkim. Hence, this study reports two types of rankings:

31 This method is similar to the United Nations Human Development Index (HDI) which has been using the geometric mean to aggregate across its three main dimensions – income, education and health (life expectancy) – since 2010.

32 N-SIPI 21 does not include Arunachal Pradesh, Goa, Jammu and Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

- I. N-SIPI 21: This is the main Index in this study. N-SIPI 21³² ranks 21 states based on all five pillars and 52 sub-indicators.
- II. N-SIPI 30: This Index ranks 30 states based on four pillars (labour, infrastructure, economic, and political and governance indicators) and 46 sub-indicators. N-SIPI30 does not include the fifth pillar based on surveys.

A.2 THE FIVE PILLARS AND SUB-INDICATORS: DETAILS AND DATA

The table below shows the five broad pillars, along with the list of sub-indicators under each pillar. The table also provides the year of data availability and source of data. This is followed by detailed definition for each of the variables and the reason for incorporating the respective sub-indicator in the index.

Pillars	Sub-Pillars	Importance	Source	Year	
Labour	Labour force Participation Rate	Availability	NSS 68th round 2011-12	2011-12	
	Percent of youth (aged 25-35 years) seeking/ available for work			2011-12	
	Above secondary level population as % of total (15-64 years)	Quality		2011-12	
	Vocationally trained persons as % of total (15-64 years)			2011-12	
	Seating capacity of ITIs	Quality		Ministry of Labour and Employment	2013
	Number of ITIs				2013
	Average wages of educated and vocationally trained labour	Competitiveness		NSS 68th round - 2011-12	2011-12
	Average wages in the Manufacturing sector				2011-12
	Share of workforce in Manufacturing sector				2011-12
	Average Labour Turnover	Labour Climate		Report on Absenteeism, Employment & labour cost, Ministry of Labour And Employment	2011-12
Infrastructure	Rail Density	Connectivity	Infrastructure Statistics, MOSPI	2011-12	
	Road Density			2011-12	
	Number of airports			2011-12	
	Cargo handled per day per airport			2011-12	
	Number of sea-ports			Basic port statistics of India 2013-14, Government of India	2011-12
	Cargo handled per port			2014-15	
	Average electricity tariff for Industry	Competitiveness	Annual report on state power utilities & Electricity department	2013-14	
	Power shortage		Ministry of Power, Govt. of India	2014-15	
	Net Annual Ground Water Availability	Access	Ground water year book 2010-11, Table 3	2011-12	
	ICT - Readiness Index	Access	Reserve Bank of India (RBI)	2014	
	Statutory Towns in Smart cities as percent of total in state	Growth potential	Integrated Power Development Scheme, Ministry of Power, Government of India (Based on Census 2011 data)	2013	
	Bank branches per lakh population		NCAER	2015	

Economy	Industry sector GSDP	Macro fundamentals	Central Statistical Office (CSO)	2013-14
	Services sector GSDP			2013-14
	Per capita GSDP	Macro fundamentals		2013-14
	Average GSDP growth (for last 3 years)	Macro fundamentals		2013-14
	Share of million plus cities in state's population	Demand	Census	2011
	Proximity of state border to metro city		Google Maps	2015
	Congestion Index		Central Pollution Control Board	2012
	Development expenditure as % of State's total expenditure	Government policies	RBI State Finances (Accounts: 2012-13)	2012-13
	Share of state in fuel production	Natural resources	Indian Bureau of Mines	2012-13
	Share of state in non-fuel production			2012-13
	Availability of land	Natural Resources	Annual Survey of Industries	2011-12
	VAT productivity	Government policies	RBI (VAT), GSDP (C.S.O.)	2012-13
	Financial Depth	Sources of Finance	RBI (Credit), C.S.O. (GSDP)	2013
Governance & Political Stability	Number of economic offences in total cases of crimes under IPC	Crime	National Crime Records Bureau (NCRB)	2014
	Cases pending investigation from previous year cases in total cases of investigation under prevention of corruption and related acts	Corruption		2014
	Weighted average of completion rate of cases under IPC and SLL by courts	Judiciary		2014
	Proportion of seats held by the largest party	Political equity	Election Commission of India	2015
	Ratio of winner candidates with serious criminal charges (Assembly and Lok Sabha average)		Press Release, Lok Sabha Elections 2014, Analysis of Criminal Background, Financial, Education, Gender and other details of Winners, Association for Democratic Reforms	
	Police Strength	Law & Order	Bureau of Police Research and Development (BPR&D), MHA, GOI	2013
	Share of state in total number of incidences of LWE or insurgency in the country		Ministry of Home Affairs	2014
	Share of land related stalled projects	Government efficiency	Capex database, Centre for Monitoring Indian Economy Pvt. Ltd. (CMIE)	2015
	E-Governance Index		NCAER	2011-12
DIPP Score	DIPP, Government of India		2015	
Survey	Land	Industry Perception	NCAER Survey	2015
	Labour			2015
	Infrastructure			2015
	Economic			2015
	Governance & Political Stability			2015
	Perception of business climate			2015

A.3 DEFINITION OF SUB-INDICATORS AND SIGNIFICANCE

This section discusses the sub-indicators listed above in greater detail, along with identifying reasons for incorporating these indicators in the respective pillars.

P.1 Labour

1. Labour force Participation Rate

The labour force participation rate (per 1000) is the ratio between the labour force and the overall size of the working age population, i.e. persons in the age group of 15-59 years.

Significance: The labour force participation rate provides a snapshot of the section of the population that is economically active and can be tapped into for productive activities.

2. Percent of youth (age 25-35 years) seeking/ available for work

Ratio of persons who, owing to lack of work, had not worked but either sought work or expressed their willingness or availability for work to the total number of persons in the age group 20-35 years, estimated using NSSO 68th round EU Survey.

Significance: India has the world's largest youth population giving its economy an unprecedented edge over others. In this scenario it is interesting to see how states differ in terms of demographic dividend.

3. Above secondary level population as % of total (15-64 years)

Percentage of population with at least secondary level of education within age group of 15-64 years is reported here using NSSO 68th round EU Survey.

Significance: Educated workforce expands economic opportunity for the residents of a state and improves employment opportunities through the supply of skilled labour force.

4. Vocationally trained persons as % of total (15-64 years)

Information on whether the household member is receiving or has received any vocational training is collected from NSSO 68th round EU survey, and the percentage of individuals who received vocational training out of total population within the age group of 15-64 is recorded here.

Significance: Vocationally trained workforce adds to the pool of a skilled labour force increasing chances of employability.

5. Seating capacity of ITIs

Total seating capacity at Industrial Training Institutes (ITIs) within each state is divided by the total seating capacity in India. Source: Ministry of Labour and Employment, Government of India.

Significance: Total seating capacity at ITI within a state signifies availability of technically trained workforce for related industries, aiding recruitment of technical staff for businesses.

6. Number of ITIs

Number of Industrial Training Institutes (ITIs) within each state is divided by the total number of Industrial Training Institutes (ITIs) in India.

Significance: same as above

7. Average wages of educated and vocationally trained labour

Average wage of labour (educated above secondary level and vocationally trained) is estimated using NSSO 68th round EU survey data.

Significance: Data related to wage rate of educated workforce helps in identifying variation in wage cost of skilled labour for businesses across different states

8. Average wages in the Manufacturing sector

Average wage of labour working in the Manufacturing sector is estimated using the NSSO 68th round EU survey data.

Significance: Wage rate in the manufacturing industry is used to analyze variations in labour cost across states.

9. Share of workforce in manufacturing sector

Percentage of labour force employed in the manufacturing sector is estimated using NSSO 68th round EU survey data.

Significance: The ratio reflects the variations in the rate of labour force absorption in the manufacturing sector across different states.

10. Average Labour Turnover

Labour Turnover measures the extent of change in the working force due to accession and separation during the reference period. 'Accession' is defined as the total number of workers added to the employment during the period, while 'separation' implies severance of

employment at the instance of workers or employer. The annual accession or separation rate is calculated as percentage of total accession or separation during the year to the average of number of workers in employment during the year.

Significance: While a low labour turnover could potentially indicate an environment where managers foster productive workforce and high level of job satisfaction, it could also signify a culture of entitlement and lack of new ideas being brought in. On the other hand, a high labour turnover is costly, lowers productivity, and potentially could indicate managerial inefficiency, inadequate wage levels, poor morale, or labour seeking more suitable employment. It could also reflect a more buoyant labour market with attractive opportunities. On balance, in this Index, a high labour turnover is considered as not being desirable for industry.

P.2 Infrastructure:

1. Rail Density

Rail density (length per 1000 sq km) is expressed in terms of passenger kilometers or net tonne kilometers per running track kilometer or route kilometer.

Significance: Rail density indicates the volume of traffic moving between any two points on the railway system.

2. Road Density

Road Length per 1000 square km of geographical area.

Significance: Higher road density paves the way for greater connectivity for trade and other economic activity.

3. Number of airports

Number of airports, domestic and international, in the state as a per cent of total airports in India.

Significance: Improves chances for trade and economic activities.

4. Cargo handled per day per airport (in tonnes)

Cargo is the goods or produce transported generally for commercial gain by ship or any other mode of transport.

Significance: Cargo handled at airport reflects the capacity of the airport to handle cargo load and the nature of airport activity in terms of trade.

5. Number of sea-ports in a state

Total number of sea ports, major and minor, is divided by the total number of sea-ports in India. Major ports are ports which are under the administrative purview of the Union Government while non-major ports are under the administrative jurisdiction of the respective State Government / UTs.

Significance: Indicates ease of connectivity by sea.

6. Cargo handled per port (in million tonnes)

Cargo handled at the port comprises of cargo loaded, cargo unloaded and Trans-shipment.

Significance: Cargo handled at a port indicates the capacity of a port for handling economic and trade related activities.

7. Average electricity tariff for Industry (Rs/KwH)

The average tariff represents the tariff charged for sale of electricity per unit of electricity sold by the utilities to various industries.

Significance: Average tariff reflects the cost of electricity, which is an important input for production of goods and services.

8. Power shortage (as percentage of Total Demand)

Actual power supply position in terms of Energy Requirement vis-à-vis Energy Availability of various States/ Systems during the year 2014-15.

Significance: Indicator helps in observing states' capability to handle power availability for a new establishment.

9. Net Annual Ground Water Availability (in mcm per 1000 Hc)

Ground water levels are measured four times a year by Central Ground Water Board, Ministry of Water Resources. Information on ground water levels and chemical quality are collected through representative sampling method across the country.

Significance: Water availability is crucial for many industries. Hence, availability of ground water indicates conducive environment for businesses to operate.

10. ICT-Readiness Index

This is a composite index prepared by NCAER³⁴ consisting of two components: readiness to use and readiness to produce. The former includes basic literacy, access to telephones, computers, and internet, while the latter takes into account education, specifically technical

education at the higher level that would capture the potential to enhance ICT in business. The index was estimated using Principal Component Analysis, using data from primary survey.

Significance: The index is an indicator for the ability to pursue value creation opportunities for inclusive economic development facilitated by ICT.

11. Statutory Towns in Smart cities as percentage of total in a state

As number of statutory towns has used by the Government as a criterion³⁵ for identifying Smart Cities, we have used the information for number of statutory towns being covered under the Smart Cities project and the total number of statutory towns in the state³⁶. A 'smart city' is defined as an urban region that is highly advanced in terms of overall infrastructure, sustainable real estate, communications, and market viability. It is a city where information technology is the principal infrastructure and economic development and activity is sustainable and driven by market forces of supply and demand.

Significance: The indicator has been incorporated in order to reflect potential access to markets for business and investment purposes.

12. Bank branches

Number of bank branches per lakh population.

Significance: Indicates access to banking and payment system.

P3 Economic

1. Industrial GSDP (gross state domestic product)

Percentage share of state's Industrial GDP in state's overall GSDP.

Significance: Indicates contribution of the industrial sector towards state economic activity measured by state GDP.

2. Services sector GSDP

Percentage share of state's Service sector GDP to state's overall GDP.

Significance: Indicates contribution of the service sector towards the state GDP.

3. Per capita GSDP

GSDP per population

Significance: Indicates state economic activity during the year after taking care of the size (population) of the state. This is done to offset variation in GSDP caused by size and population of the state.

4. Average GSDP growth (for last 3 years)

Average of growth rate of GSDP during the previous five years.

Significance: Indicates how the GSDP has grown over time, in terms of direction and magnitude of change.

5. Share of million plus cities in State's population

This is defined as the proportion of million plus cities population in a state over total state's population. There are 53 urban agglomerations in India with a population of 1 million or more as of 2011.

Significance: These cities are important demand centers for the states and also essential for stimulation of economic efficiencies.

6. Proximity of state border to metro city:

This indicator was prepared by estimating whether each state had any town, village, or city lying within 200 kilometres of metro cities. For each metro city lying within the area, the state got a score of 1. The metro cities taken in the computation of this indicator are New Delhi, Kolkata, Chennai, Bangalore, Hyderabad and Mumbai.

Significance: The indicator reflects proximity of state border to a metro city, thus indicating access to market for conducting economic activities.

7. Congestion Index:

To estimate congestion, level of air pollution was chosen as the proxy indicator. Level of PM10 or particulate matter up to 10 micro meter in size was taken as the indicator for air pollution. As prescribed by Central Pollution Control Board, 60ug/m³ of PM10 was made the threshold level for air pollution. Anything above 60ug/m³ is harmful for the atmosphere. After taking deviations of values of PM10 for each state from this threshold level, min-max approach was employed to normalize the values.

Significance: Higher level of congestion could potentially be deterrent for further economic activity.

34 Refer India: E-readiness Assessment Report 2011-12 For States and Union Territories

35 As per the Smart City Guidelines issued by the Government, the 100 Smart Cities have been distributed among the States and UTs on the basis of an equitable criterion. The formula gives equal weightage (50:50) to urban population of the State/UT and the number of statutory towns in the State/UT.

36 In most cases, the cities chosen under the 'Smart Cities' project cover a single statutory town comprising of one Municipal Corporation. Some exceptions to this rule are Vishakhapatnam, Guwahati, Aizawl, Kohima, and Raurkela.

8. Development Expenditure

Defined as state development expenditure as percentage of total state expenditures. State expenditure on social and economic services constitute development expenditure, comprising of expenditure on education, sports, art and culture, food storage and warehousing, relief on account of natural calamities, and rural development.

Significance: Indicates state welfare activities and efforts of the state government in promoting sustainable economic development across all strata of the society.

9. Share of state in fuel production

The ratio is defined as total production of fuel commodities in state as percentage of total production of the same in the country.

Significance: Indicates the prevalence of natural resources (fuel) of the state and how much advantaged the state has in terms of fuel production

10. Share of state in non-fuel production

Total production of non-fuel commodities in state as percentage to total production of non-fuel commodities in the country

Significance: Indicates the prevalence of non-fuel merchandise of the state and how much advantaged the state has in terms of non-fuel production.

11. Availability of land:

The ratio is defined as the value of additions to land during the year divided by beginning of year value of existing land for enterprises not older than 5 years. To avoid wide range fluctuations in land price, data has been taken only for enterprises that were established over the previous five years.

Significance: Availability of land is one of the prime factors for industrial activity.

12. VAT Productivity:

The VAT productivity ratio, also called the “efficiency ratio”, indicates the percentage yield for each one percentage point of the VAT rate.

The ratio was calculated in the following steps:

1. The VAT/Sales Tax revenue figures for each state were divided by commercial GSDP figures.
2. The above ratio was then divided by the standard VAT rate for each state to obtain the VAT Efficiency Ratio.
3. The commercial GSDP series for each state were computed by subtracting from GSDP the

Agriculture and Allied income figures for the respective states.

Significance: Lower VAT productivity indicates both design (difference in rates, exemptions, and zero-rating) and administrative inefficiencies. A higher number indicates a more efficient VAT with fewer exemptions.

13. Financial Depth:

The ratio is computed by dividing the outstanding credit of scheduled commercial banks in a year by the Gross State Domestic Product (GSDP) in current prices for the respective year for each Indian state.

Significance: Credit-GSDP ratio measures financial depth, capturing the size of financial sector relative to the economy.

P5 Political Stability and Governance

1. Number of economic offences as per cent of total cases of crimes under IPC (Indian Penal Code):

Indian Penal Code is the main criminal code of India. Economic offences cover tax evasion, evasion of excise duty, bank frauds, insurance frauds, credit cards, fraud, etc.

Significance: Higher economic offenses indicate weak enforcement mechanisms and lack of effective regulatory structures, eventually creating an environment that is less conducive for exploring further investment opportunities.

2. Cases pending investigation from previous year as per cent of total cases of investigation under prevention of corruption and related acts:

The data has been taken from ‘Statement of Cognizable Crimes Registered & Their Disposal by Anti-corruption and Vigilance Departments of States & UTs under Total offences under Prevention of Corruption Act 1988 during 2014³⁷. Cognizable crimes refer to heinous acts of violence where the police can take cognizance of the offense on its own and permission of the court to the police to investigate the crime is implicit.

Significance: Indicates the efficacy of the judiciary system in handling serious criminal offenses. A higher number of pending cases is a deterrent for both social and economic activity.

3. Completion rate of legal cases by courts

Completion Rate during 2014 for each category is defined as the ratio of cases in which trial was completed during the year to total number of cases for

trial during the year³⁸. A weighted average of crimes under IPC (Indian Penal Code) and SLL (Special and Local Laws) is considered with weights reflecting the proportion of total number of cases for trial in each category.

Significance: Indicates the efficacy of the judiciary system.

4. Seats held by the largest party to total seats

Total number of seats held by the single largest party is divided by the total number of seats. The data has been taken as per the seat distribution immediately after the last assembly elections in that state.

Significance: Greater the number of seats held by the single largest party, the greater is the potential for a stable government that can carry out economic reforms.

5. Political leaders with serious criminal charges

Number of winner candidates with serious criminal charges is taken as percentage of total winner candidates for Assembly and Lok Sabha elections.

Significance: Enterprises base their investment decisions on their perceived view of the investment climate, quality of legislature, and the government's performance. A higher ratio would bring into question the credibility of the respective government(s) in ensuring stability in terms of law and order situation in a state including protection of property rights.

6. Police Strength

Police strength is defined as total number of police personnel per one lakh of population.

Significance: A higher figure could potentially indicate better enforcement mechanism with more personnel readily available for maintaining law and order stability within the state.

7. Insurgency rate

Percentage share of total number of incidences of LWE and insurgency in the state compared to all such cases reported across the country.

Significance: Increase in such activities can indicate disruptive environment for businesses, and threats to property rights.

8. Ratio of land related stalled projects

The number of projects stalled due to land acquisition problem was calculated as a percentage of total stalled projects (which excluded projects for which no reason was available).

Significance: Indicates the degree to which land acquisition problems could potentially thwart projects.

9. E-Governance index

The NCAER E-Governance index relates to readiness through websites, government-to-citizen relationship, degree of decentralization, e-services, and e-Governance. The index has been constructed using Principal Component Analysis. The index was estimated using Principal Component Analysis, using data from primary survey³⁹.

Significance: The index captures the ability to skillfully use technology at the level of various state and local governments.

10. DIPP Score

The DIPP (Department of Industrial Policy and Promotion) score ranks states based on an assessment that was conducted during the first half of 2015 to take stock of reforms implemented by states based on an agreement between DIPP and State and Union Territory governments on December 29, 2014. The ranking covered parameters related to the ease of setting up of business, allotment of land, labour reforms, and procedure for environmental clearance.

Significance: The score provides a pathway for improving the business environment in the respective state and for creating employment opportunities for the labour force.

P.6 Survey

The following questions were asked to the survey respondents across 20 states in order to assess the industrial climate in those states. Respondents were asked to rate a set of general constraints (as mentioned below) faced while operating business on a scale of 'severe', 'moderate' or 'no problem'.

1. Land

1. Is there any problem in acquiring land?
2. How difficult do you find it to get permission/approvals from various government departments before starting business (for land related issues)?

37 The Prevention of Corruption Act, 1988, is an Act of the Parliament of India enacted to combat corruption in government agencies and public sector businesses in India.

38 Cases in which trial was completed = Cases Convicted + Cases Acquitted or Discharged
Total no. of cases for trial during the year = Cases pending trial from the previous year + Cases sent for trial during the year - No. of cases withdrawn by the Govt. - No. of cases disposed by plea bargaining.

39 Refer India: E-readiness Assessment Report 2011-12 For States and Union Territories

2. Labour

Six labour related questions covered in the survey are given below:

1. Availability of skilled labour
2. Quality of skilled labour
3. Availability of unskilled labour
4. Quality of unskilled labour
5. Labour relations
6. Labour laws

3. Infrastructure

Seven infrastructure related covered in the survey questions are as follows:

1. Availability of Power
2. Availability of Water
3. Availability of Net connectivity
4. Sewage facility
5. Road quality/connectivity
6. Rail connectivity
7. Access to finance

4. Economic

Three economic related questions covered in the survey are as follows:

1. Industry related policies
2. Availability of raw material
3. Tax Policy of your state

5. Governance + Political Stability

Six governance & political stability related questions are given below:

1. Getting approvals before starting your business
2. Getting environment clearance
3. Corruption in your state
4. Law and order situation in your state
5. Political stability in your state
6. Legal environment in your state

6. Business climate

1. Six months from now, do you think business conditions will be?
2. Do you think your firm's own financial position over the next six months will be?
3. How do you rate present investment climate as compared with six months ago?
[Survey responses for first three BES questions (given below) were reported in the form of the anticipated direction of change i.e. whether the condition will or has become better, same or worsen.]
4. How do you rate the current level of operation of your firm relative to its optimal capacity utilization? (Responses were recorded in the form of 'less', 'equal' or 'more')

Appendix B

State Rankings

Indicator	Description
L1	Labour force participation rate
L2	Percent of young (age 25-35 years) seeking/available for work
L3	Above secondary level population as % of total (15-64 years)
L4	Vocationally trained persons as % of total (15-64 years)
L5	Seating capacity of ITIs
L6	Number of ITIs
L7	Average wages of educated and vocationally trained labour
L8	Average wages in the manufacturing sector
L9	Share of workforce in the manufacturing sector
L10	Average labour turnover
I1	Rail density
I2	Road density
I3	Number of airports
I4	Cargo handled per day per airport
I5	Number of sea-ports
I6	Cargo handled per port
I7	Average electricity tariff for industry
I8	Power shortage as % of total demand
I9	Net annual ground water availability
I10	ICT - Readiness Index
I11	Statutory towns in smart cities as % of total in state
I12	Bank branches per lakh population
E1	Industry sector GSDP
E2	Services sector GSDP
E3	Per capita GSDP
E4	Average GSDP growth (last 3 yrs)
E5	Share of million plus cities in State's population
E6	Proximity of state border to metro city
E7	Congestion Index
E8	Development expenditure as % of State's total expenditure
E9	Share of State in fuel production

Indicator	Description
E10	Share of State in non-fuel production
E11	Availability of land
E12	VAT productivity
E13	Financial depth
G1	Number of economic offences as % of all cases of crime
G2	Cases pending investigation from previous years
G3	Completion rate of legal cases by courts
G4	Seats held by the largest party to total seats
G5	Political leaders with serious criminal charges
G6	Police strength
G7	Insurgency rate
G8	Land related stalled projects
G9	e-Governance Index
G10	DIPP Score
S1	Perception on land
S2	Perception on labour
S3	Perception on infrastructure
S4	Perception on economic conditions
S5	Perception on governance and political stability
S6	Perception on business climate

Table B.1	N-SIPI 30: Scores of states under FOUR BROAD PILLARS				
State	Score				
	Labour	Infrastructure	Economy	Governance & Political Stability	Overall
Andhra Pradesh	45.8	27.1	45.0	52.9	41.5
Arunachal Pradesh	22.6	18.1	21.5	51.4	25.9
Assam	30.5	30.5	34.0	42.8	34.1
Bihar	28.5	26.2	27.5	32.2	28.5
Chhattisgarh	41.0	24.4	35.1	59.4	38.0
Goa	36.9	42.4	45.2	52.7	43.9
Gujarat	48.6	38.3	42.5	62.4	47.2
Haryana	23.7	31.6	33.3	57.2	34.6
Himachal Pradesh	37.9	27.1	26.3	38.7	32.0
Jammu & Kashmir	35.9	13.8	24.5	44.0	27.0
Jharkhand	32.0	17.2	31.4	36.1	28.1
Karnataka	50.5	29.6	37.9	56.6	42.3
Kerala	57.2	34.8	31.3	46.5	41.3
Madhya Pradesh	35.9	24.4	34.0	62.3	36.9
Maharashtra	45.0	35.2	43.7	49.8	43.1
Manipur	39.2	21.4	20.1	51.7	30.5
Meghalaya	34.3	17.5	30.0	54.0	31.4
Mizoram	30.1	23.6	21.2	71.4	32.2
Nagaland	43.7	23.5	18.5	68.5	33.7
Odisha	46.4	27.3	34.7	52.2	38.9
Punjab	38.6	36.3	26.2	51.6	37.1
Rajasthan	44.1	22.0	36.2	51.1	36.6
Sikkim	31.3	23.6	30.5	57.9	33.8
Tamil Nadu	56.3	32.7	39.9	64.0	46.6
Telangana	45.8	26.4	41.2	42.0	38.0
Tripura	40.9	22.3	25.7	72.6	36.1
Uttar Pradesh	47.2	16.3	23.6	51.4	31.1
Uttarakhand	32.0	37.7	36.8	55.7	39.6
West Bengal	43.1	38.6	26.1	48.5	38.1
Delhi	31.4	63.9	51.7	48.9	47.5

Table B.2	N-SIPI 30: Ranks of states under FOUR BROAD PILLARS				
State	Rank				
	Labour	Infrastructure	Economy	Governance & Political Stability	Overall
Andhra Pradesh	7	15	3	13	7
Arunachal Pradesh	30	26	27	18	30
Assam	26	11	13	26	19
Bihar	28	17	20	30	27
Chhattisgarh	13	19	11	7	13
Goa	18	2	2	14	4
Gujarat	4	4	5	5	2
Haryana	29	10	15	9	18
Himachal Pradesh	17	14	21	28	23
Jammu & Kashmir	20	30	25	25	29
Jharkhand	22	28	16	29	28
Karnataka	3	12	8	10	6
Kerala	1	8	17	24	8
Madhya Pradesh	19	18	14	6	15
Maharashtra	9	7	4	21	5
Manipur	15	25	29	16	26
Meghalaya	21	27	19	12	24
Mizoram	27	21	28	2	22
Nagaland	11	22	30	3	21
Odisha	6	13	12	15	10
Punjab	16	6	22	17	14
Rajasthan	10	24	10	20	16
Sikkim	25	20	18	8	20
Tamil Nadu	2	9	7	4	3
Telangana	7	16	6	27	12
Tripura	14	23	24	1	17
Uttar Pradesh	5	29	26	19	25
Uttarakhand	23	5	9	11	9
West Bengal	12	3	23	23	11
Delhi	24	1	1	22	1

Table B.3	N-SIPI 21: Scores of states under FIVE BROAD PILLARS					
State	Score					
	Labour	Infrastructure	Economy	Governance & Political Stability	Survey	Overall
Andhra Pradesh	47.5	30.0	46.0	56.3	69.8	48.1
Assam	33.6	31.5	33.4	43.9	63.6	39.7
Bihar	27.8	26.0	26.8	33.3	52.4	32.1
Chhattisgarh	42.2	27.2	36.3	64.7	78.6	46.2
Gujarat	49.3	41.9	44.4	67.7	91.5	56.3
Haryana	22.1	36.9	34.2	61.6	54.3	39.3
Himachal Pradesh	38.0	34.3	27.4	41.3	62.3	39.2
Jharkhand	32.5	17.7	32.1	40.1	34.0	30.2
Karnataka	50.8	33.8	38.4	59.9	54.6	46.4
Kerala	63.9	40.6	32.0	48.8	43.7	44.6
Madhya Pradesh	34.9	25.8	34.0	66.2	68.7	42.5
Maharashtra	43.3	37.1	44.8	54.8	58.8	47.1
Odisha	48.2	30.1	34.7	55.0	63.5	44.6
Punjab	39.3	42.2	26.6	56.8	28.9	37.3
Rajasthan	44.2	23.7	36.6	53.7	88.8	44.9
Tamil Nadu	59.7	35.9	41.1	67.6	62.5	51.8
Telangana	47.5	29.2	42.9	42.4	52.0	42.0
Uttar Pradesh	47.8	14.3	22.9	53.0	40.0	31.9
Uttarakhand	33.2	41.3	35.3	59.4	73.3	46.2
West Bengal	46.6	40.0	25.3	48.9	40.8	39.3
Delhi	31.9	71.1	52.2	54.9	58.6	52.0

Table B.4		N-SIPI 21: Ranks of states under FIVE BROAD PILLARS				
State	Rank					
	Labour	Infrastructure	Economy	Governance & Political Stability	Survey	Overall
Andhra Pradesh	7	14	2	9	5	4
Assam	16	12	14	17	7	14
Bihar	20	17	18	21	15	19
Chhattisgarh	12	16	9	4	3	7
Gujarat	4	3	4	1	1	1
Haryana	21	8	12	5	14	16
Himachal Pradesh	14	10	17	19	10	17
Jharkhand	18	20	15	20	20	21
Karnataka	3	11	7	6	13	6
Kerala	1	5	16	16	17	10
Madhya Pradesh	15	18	13	3	6	12
Maharashtra	11	7	3	12	11	5
Odisha	5	13	11	10	8	11
Punjab	13	2	19	8	21	18
Rajasthan	10	19	8	13	2	9
Tamil Nadu	2	9	6	2	9	3
Telangana	7	15	5	18	16	13
Uttar Pradesh	6	21	21	14	19	20
Uttarakhand	17	4	10	7	4	8
West Bengal	9	6	20	15	18	15
Delhi	19	1	1	11	12	2

Table B.5 N-SIPI 30: Scores of states under LABOUR PILLAR indicators										
State	Score									
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
Andhra Pradesh	72.41	7.06	24.83	14.35	36.87	21.50	83.19	75.38	45.86	76.98
Arunachal Pradesh	39.31	4.96	12.61	1.52	0.16	0.30	16.97	66.14	0.00	84.04
Assam	25.52	12.19	0.00	6.05	2.88	1.95	53.21	94.07	25.42	84.04
Bihar	0.00	3.61	0.53	0.00	46.47	35.13	80.94	95.59	23.22	0.00
Chhattisgarh	89.66	5.21	5.28	12.26	8.55	8.34	100.00	89.26	18.90	72.58
Goa	29.31	17.22	67.35	66.54	1.70	0.77	91.60	0.00	67.68	27.08
Gujarat	54.14	0.00	19.45	17.64	41.15	32.35	86.65	75.02	97.56	62.47
Haryana	21.03	6.30	38.27	27.31	17.72	11.47	0.00	37.36	69.00	8.89
Himachal Pradesh	92.76	6.82	25.59	45.75	11.54	11.59	71.67	80.68	30.22	1.96
Jammu & Kashmir	40.69	12.85	21.76	9.24	1.98	2.19	62.78	85.83	55.42	66.55
Jharkhand	36.55	6.29	10.21	1.69	19.83	10.41	50.57	65.97	34.33	84.49
Karnataka	49.66	4.57	32.05	23.43	67.08	86.52	72.80	67.76	56.96	44.01
Kerala	40.00	27.87	43.98	100.00	35.52	31.22	82.13	65.09	64.22	81.70
Madhya Pradesh	46.55	1.57	12.67	13.74	23.51	20.40	80.89	67.79	31.35	60.88
Maharashtra	57.59	3.60	37.88	48.96	78.80	45.83	34.45	28.85	58.13	55.47
Manipur	42.41	16.18	32.91	5.63	0.12	0.35	58.56	91.03	48.10	96.75
Meghalaya	73.79	2.32	8.82	1.23	0.33	0.35	75.33	80.96	7.51	91.90
Mizoram	73.45	13.07	14.52	7.96	0.00	0.00	36.83	59.54	4.11	91.90
Nagaland	50.69	100.00	53.13	16.23	0.33	0.41	57.91	54.98	2.92	100.00
Odisha	55.86	6.31	5.72	7.57	55.92	36.37	87.47	83.64	40.48	84.62
Punjab	38.62	4.30	19.91	31.85	27.02	20.34	62.47	81.35	86.71	13.64
Rajasthan	56.90	2.80	16.75	5.58	53.10	49.62	81.69	75.71	43.06	55.86
Sikkim	100.00	4.46	3.79	7.18	0.14	0.18	17.57	74.14	13.09	92.87
Tamil Nadu	60.69	8.59	38.77	36.70	45.98	42.11	83.10	80.46	100.00	67.06
Telangana	72.41	7.06	24.83	14.35	36.87	21.50	83.19	75.38	45.86	76.98
Tripura	61.38	41.39	0.76	2.68	0.42	0.41	72.88	100.00	32.20	97.14
Uttar Pradesh	29.31	4.02	16.14	3.92	100.00	100.00	49.95	83.70	62.15	22.54
Uttarakhand	43.10	12.15	30.33	26.79	5.95	6.33	36.25	56.80	46.98	54.93
West Bengal	43.10	8.13	15.77	18.25	9.50	6.03	62.22	88.40	96.99	82.95
Delhi	15.86	9.03	100.00	10.49	7.95	4.55	1.88	52.68	99.29	12.51

Table B.6	N-SIPI 30: Ranks of states under LABOUR PILLAR indicators									
State	Rank									
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
Andhra Pradesh	6	13	12	13	9	10	5	15	15	13
Arunachal Pradesh	22	20	22	28	27	28	28	21	30	9
Assam	27	8	30	22	21	22	21	3	23	9
Bihar	30	25	29	30	6	7	10	2	24	30
Chhattisgarh	3	19	26	16	18	17	1	5	25	15
Goa	25	4	2	2	23	23	2	30	7	24
Gujarat	13	30	16	11	8	8	4	17	3	18
Haryana	28	17	6	7	15	15	30	28	6	28
Himachal Pradesh	2	15	11	4	16	14	15	12	22	29
Jammu & Kashmir	20	7	14	18	22	21	16	7	12	17
Jharkhand	24	18	23	27	14	16	22	22	19	8
Karnataka	15	21	9	9	3	2	14	20	11	23
Kerala	21	3	4	1	11	9	8	23	8	12
Madhya Pradesh	16	29	21	15	13	12	11	19	21	19
Maharashtra	10	26	7	3	2	4	26	29	10	21
Manipur	19	5	8	23	29	26	19	4	13	3
Meghalaya	4	28	24	29	26	26	12	11	27	5
Mizoram	5	6	20	19	30	30	24	24	28	5
Nagaland	14	1	3	12	25	24	20	26	29	1
Odisha	12	16	25	20	4	6	3	9	18	7
Punjab	23	23	15	6	12	13	17	10	5	26
Rajasthan	11	27	17	24	5	3	9	14	17	20
Sikkim	1	22	27	21	28	29	27	18	26	4
Tamil Nadu	9	11	5	5	7	5	7	13	1	16
Telangana	6	13	12	13	9	10	5	15	15	13
Tripura	8	2	28	26	24	24	13	1	20	2
Uttar Pradesh	25	24	18	25	1	1	23	8	9	25
Uttarakhand	17	9	10	8	20	18	25	25	14	22
West Bengal	17	12	19	10	17	19	18	6	4	11
Delhi	29	10	1	17	19	20	29	27	2	27

Table B.7 N-SIPI 30: Scores of states under INFRASTRUCTURE PILLAR indicators												
State	Score											
	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12
Andhra Pradesh	11.52	3.74	50.00	1.39	13.00	47.00	45.85	74.35	16.74	23.29	14.46	24.86
Arunachal Pradesh	0.00	0.07	20.00	0.00	0.00	0.00	84.58	48.17	11.73	0.00	11.54	15.07
Assam	18.79	16.84	80.00	0.19	0.00	0.00	45.63	63.35	81.42	25.74	6.82	6.74
Bihar	23.03	6.36	60.00	0.10	0.00	0.00	19.57	85.34	70.61	15.50	6.47	4.81
Chhattisgarh	5.45	1.93	20.00	0.26	0.00	0.00	56.55	93.19	21.07	39.82	3.57	12.28
Goa	11.52	13.77	10.00	1.09	12.00	11.15	55.03	95.29	9.45	100.00	21.43	100.00
Gujarat	16.36	3.25	100.00	0.61	84.00	44.09	31.85	100.00	21.98	63.07	9.23	23.11
Haryana	21.21	3.90	0.00	0.00	0.00	0.00	38.63	97.91	54.74	53.53	7.50	38.11
Himachal Pradesh	3.03	3.61	40.00	0.00	0.00	0.00	66.27	95.29	2.05	22.42	5.36	52.48
Jammu & Kashmir	0.61	0.00	30.00	0.30	0.00	0.00	83.73	0.00	3.96	5.44	0.00	28.76
Jharkhand	15.76	0.81	10.00	0.32	0.00	0.00	27.12	85.34	17.64	0.09	7.50	12.45
Karnataka	9.70	6.90	50.00	7.93	24.00	13.40	31.41	77.49	18.88	60.99	8.18	34.60
Kerala	16.36	26.19	30.00	6.83	36.00	5.19	39.63	92.15	38.53	46.91	5.08	44.31
Madhya Pradesh	9.70	2.38	80.00	0.12	0.00	0.00	37.15	97.38	26.53	14.12	5.77	10.93
Maharashtra	10.91	5.48	80.00	15.13	100.00	13.20	0.00	93.19	25.66	82.96	11.72	17.91
Manipur	0.00	3.40	10.00	0.90	0.00	0.00	100.00	80.10	4.09	10.26	10.71	0.00
Meghalaya	0.00	1.83	10.00	0.00	0.00	0.00	66.54	19.90	17.45	18.92	30.00	15.44
Mizoram	0.00	1.81	10.00	0.00	0.00	0.00	57.85	65.45	0.00	28.48	52.17	24.89
Nagaland	0.61	9.53	10.00	0.00	0.00	0.00	81.91	79.58	7.99	10.98	31.58	7.57
Odisha	9.70	7.17	20.00	0.19	28.00	26.68	47.50	91.62	26.33	27.60	8.41	17.65
Punjab	26.06	8.28	30.00	0.41	0.00	0.00	35.97	94.76	100.00	27.24	6.29	48.94
Rajasthan	10.30	2.74	60.00	0.20	0.00	0.00	36.84	96.86	7.54	14.64	6.49	14.26
Sikkim	0.00	3.06	0.00	0.00	0.00	0.00	25.62	100.00	1.22	21.39	37.50	47.59
Tamil Nadu	18.18	7.82	70.00	9.24	36.00	27.85	7.01	83.77	36.72	66.21	4.99	31.24
Telangana	11.52	3.74	50.00	1.39	13.00	47.00	45.85	67.54	16.74	23.29	14.29	24.86
Tripura	8.48	12.78	40.00	0.31	0.00	0.00	49.31	18.32	55.57	21.60	18.75	18.18
Uttar Pradesh	0.61	7.35	80.00	0.10	0.00	0.00	6.89	18.32	73.63	1.58	5.56	9.34
Uttarakhand	100.00	3.99	20.00	0.00	0.00	0.00	69.64	84.29	8.95	24.09	4.05	44.21
West Bengal	27.27	16.50	70.00	3.19	4.00	100.00	23.58	96.86	74.15	38.80	9.30	10.95
Delhi	75.15	100.00	20.00	100.00	0.00	0.00	38.63	97.91	47.91	71.10	100.00	48.14

Table B.8		N-SIPI 30: Ranks of states under INFRASTRUCTURE PILLAR indicators											
State	Rank												
	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	
Andhra Pradesh	12	17	10	7	7	2	13	22	19	16	8	13	
Arunachal Pradesh	26	29	18	23	11	11	2	26	21	30	11	20	
Assam	7	3	2	18	11	11	15	25	2	14	19	28	
Bihar	5	13	8	22	11	11	27	15	5	22	21	29	
Chhattisgarh	21	25	18	16	11	11	9	11	15	9	29	23	
Goa	12	5	23	9	9	9	10	8	22	1	6	1	
Gujarat	9	21	1	11	2	4	22	1	14	5	14	15	
Haryana	6	16	29	23	11	11	17	3	7	7	17	8	
Himachal Pradesh	22	19	13	23	11	11	7	8	28	18	25	2	
Jammu & Kashmir	23	30	15	15	11	11	3	30	27	27	30	11	
Jharkhand	11	28	23	13	11	11	24	15	17	29	17	22	
Karnataka	17	12	10	4	6	7	23	21	16	6	16	9	
Kerala	9	2	15	5	3	10	16	13	9	8	26	6	
Madhya Pradesh	17	24	2	20	11	11	19	5	11	24	23	25	
Maharashtra	15	14	2	2	1	8	30	11	13	2	10	17	
Manipur	26	20	23	10	11	11	1	19	26	26	12	30	
Meghalaya	26	26	23	23	11	11	6	27	18	21	5	19	
Mizoram	26	27	23	23	11	11	8	24	30	11	2	12	
Nagaland	23	7	23	23	11	11	4	20	24	25	4	27	
Odisha	17	11	18	18	5	6	12	14	12	12	15	18	
Punjab	4	8	15	12	11	11	21	10	1	13	22	3	
Rajasthan	16	23	8	17	11	11	20	6	25	23	20	21	
Sikkim	26	22	29	23	11	11	25	1	29	20	3	5	
Tamil Nadu	8	9	6	3	3	5	28	18	10	4	27	10	
Telangana	12	17	10	7	7	2	13	23	19	16	9	13	
Tripura	20	6	13	14	11	11	11	28	6	19	7	16	
Uttar Pradesh	23	10	2	21	11	11	29	28	4	28	24	26	
Uttarakhand	1	15	18	23	11	11	5	17	23	15	28	7	
West Bengal	3	4	6	6	10	1	26	6	3	10	13	24	
Delhi	2	1	18	1	11	11	17	3	8	3	1	4	

Table B.9 N-SIPI 30: Scores of states under ECONOMIC CLIMATE PILLAR indicators													
State	Score												
	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
Andhra Pradesh	19.77	43.50	25.88	35.02	37.68	100.00	84.39	72.85	30.57	5.04	38.62	100.00	23.01
Arunachal Pradesh	39.84	16.24	26.04	14.60	0.00	0.00	85.55	81.77	1.72	0.00	0.00	6.32	0.65
Assam	25.42	44.63	7.40	34.25	0.00	0.00	56.07	38.60	66.06	0.05	100.00	33.28	4.36
Bihar	17.08	53.37	0.00	91.19	3.21	0.00	31.79	65.44	0.00	0.15	13.03	21.22	2.42
Chhattisgarh	64.06	14.36	16.13	44.04	13.86	0.00	59.54	100.00	51.66	49.39	4.56	24.75	7.75
Goa	45.86	55.97	100.00	100.00	0.00	0.00	97.11	68.45	0.00	11.35	33.38	3.23	7.25
Gujarat	55.78	31.33	40.92	53.30	28.02	66.67	79.19	73.80	73.26	3.36	24.63	36.05	13.39
Haryana	35.23	45.49	50.43	48.54	6.50	33.33	24.86	71.74	0.00	0.00	15.00	31.93	12.94
Himachal Pradesh	55.47	22.57	37.26	44.92	0.00	0.00	75.14	38.76	0.00	0.94	14.21	19.24	5.02
Jammu & Kashmir	29.96	41.62	17.17	40.27	8.12	0.00	59.54	34.88	0.02	0.02	16.27	33.56	8.27
Jharkhand	54.42	26.79	8.50	50.02	14.94	0.00	40.46	57.23	100.00	12.66	13.90	22.97	5.15
Karnataka	33.39	47.37	29.88	32.70	19.16	33.33	80.35	88.78	0.00	23.72	27.94	38.08	24.55
Kerala	20.45	68.89	37.19	37.65	28.23	0.00	95.95	16.85	0.00	0.37	18.69	53.46	18.60
Madhya Pradesh	31.54	27.04	10.66	76.15	10.45	0.00	44.51	87.95	53.36	8.18	11.75	36.24	9.24
Maharashtra	37.71	56.03	42.74	44.46	43.33	66.67	69.36	58.07	35.50	4.78	34.35	30.73	52.84
Manipur	31.35	41.29	6.00	59.35	0.00	0.00	73.99	31.47	0.00	0.00	0.00	6.56	0.06
Meghalaya	42.77	37.94	15.80	73.25	0.00	0.00	93.64	71.82	21.27	1.07	1.41	12.33	2.68
Mizoram	11.47	61.00	22.48	12.84	0.00	0.00	100.00	68.41	0.00	0.00	0.00	0.00	2.42
Nagaland	7.34	52.20	22.49	52.10	0.00	0.00	73.99	22.63	0.00	0.00	0.00	3.12	0.00
Odisha	45.71	34.80	12.95	0.00	0.00	33.33	80.35	64.80	26.90	100.00	54.41	24.65	7.93
Punjab	35.42	35.00	31.60	32.55	8.38	0.00	39.31	0.00	0.00	0.00	49.78	38.74	23.01
Rajasthan	42.37	31.42	17.61	44.32	13.16	66.67	27.75	73.72	93.72	38.21	11.03	28.11	11.99
Sikkim	100.00	0.00	72.55	74.13	0.00	0.00	71.10	29.81	0.00	0.00	1.11	3.47	0.40
Tamil Nadu	37.69	56.79	40.58	37.81	31.35	66.67	87.86	62.47	29.40	3.28	17.33	38.14	30.36
Telangana	28.92	51.15	33.09	35.36	31.48	33.33	84.39	72.85	30.57	5.04	0.00	100.00	23.01
Tripura	26.02	41.81	16.99	80.20	0.00	0.00	48.55	40.03	3.05	0.00	7.38	24.24	2.40
Uttar Pradesh	23.08	44.61	3.18	29.94	10.88	33.33	22.54	29.05	20.40	0.34	21.09	43.21	8.91
Uttarakhand	57.88	35.37	38.14	69.59	0.00	33.33	45.66	55.37	0.00	0.13	21.83	25.09	4.87
West Bengal	18.17	58.20	19.30	42.60	21.69	33.33	34.10	20.21	62.21	0.07	8.50	17.09	15.73
Delhi	0.00	100.00	84.24	47.72	100.00	33.33	0.00	82.36	0.00	0.00	31.91	25.84	100.00

Table B.10	N-SIPI 30: Ranks of states under ECONOMIC CLIMATE PILLAR indicators												
State	Rank												
	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
Andhra Pradesh	25	15	15	23	3	1	7	8	9	8	4	1	6
Arunachal Pradesh	11	28	14	28	19	14	6	5	16	23	26	26	27
Assam	22	13	27	24	19	14	19	22	4	20	1	11	22
Bihar	27	8	30	2	18	14	26	14	18	17	18	21	25
Chhattisgarh	2	29	22	17	11	14	17	1	7	2	23	17	17
Goa	7	7	1	1	19	14	2	12	18	6	6	28	18
Gujarat	4	24	6	9	7	2	11	6	3	11	9	9	10
Haryana	15	12	4	12	17	6	28	11	18	22	15	12	11
Himachal Pradesh	5	27	9	14	19	14	12	21	18	14	16	22	20
Jammu & Kashmir	19	17	20	19	16	14	17	23	17	21	14	10	15
Jharkhand	6	26	26	11	10	14	23	18	1	5	17	20	19
Karnataka	16	11	13	25	9	6	9	2	18	4	8	7	4
Kerala	24	2	10	21	6	14	3	29	18	15	12	3	8
Madhya Pradesh	17	25	25	4	14	14	22	3	6	7	19	8	13
Maharashtra	12	6	5	15	2	2	16	17	8	10	5	13	2
Manipur	18	18	28	8	19	14	13	24	18	23	26	25	29
Meghalaya	9	19	23	6	19	14	4	10	13	13	24	24	23
Mizoram	28	3	17	29	19	14	1	13	18	23	26	30	24
Nagaland	29	9	16	10	19	14	13	27	18	23	26	29	30
Odisha	8	22	24	30	19	6	9	15	12	1	2	18	16
Punjab	14	21	12	26	15	14	24	30	18	23	3	5	5
Rajasthan	10	23	19	16	12	2	27	7	2	3	20	14	12
Sikkim	1	30	3	5	19	14	15	25	18	23	25	27	28
Tamil Nadu	13	5	7	20	5	2	5	16	11	12	13	6	3
Telangana	20	10	11	22	4	6	7	8	9	8	26	1	6
Tripura	21	16	21	3	19	14	20	20	15	23	22	19	26
Uttar Pradesh	23	14	29	27	13	6	29	26	14	16	11	4	14
Uttarakhand	3	20	8	7	19	6	21	19	18	18	10	16	21
West Bengal	26	4	18	18	8	6	25	28	5	19	21	23	9
Delhi	30	1	2	13	1	6	30	4	18	23	7	15	1

Table B.11 N-SIPI 30: Scores of states under GOVERNANCE & POLITICAL STABILITY PILLAR indicators										
State	Score									
	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
Andhra Pradesh	73.19	40.18	35.92	44.84	37.65	10.67	94.96	48.20	44.50	98.54
Arunachal Pradesh	75.60	24.44	0.00	62.11	81.18	82.81	88.13	100.00	0.00	0.00
Assam	62.95	0.00	16.86	50.18	75.29	16.80	11.51	100.00	75.39	19.47
Bihar	88.25	40.13	7.26	7.46	0.00	6.50	55.76	17.65	77.64	21.71
Chhattisgarh	96.69	37.67	81.94	39.18	89.41	17.44	15.11	43.48	85.86	87.57
Goa	53.61	47.83	29.97	36.32	81.18	27.23	100.00	42.86	78.23	29.34
Gujarat	96.39	64.25	13.67	53.68	51.76	10.70	100.00	40.91	92.68	100.00
Haryana	72.59	49.64	35.49	35.91	92.94	14.21	100.00	41.75	72.84	56.40
Himachal Pradesh	86.45	25.56	10.27	36.97	62.35	19.66	100.00	0.00	13.71	32.50
Jammu & Kashmir	95.18	30.86	16.60	6.38	97.65	57.32	92.45	27.27	9.92	6.72
Jharkhand	83.43	40.66	26.78	22.63	28.24	16.86	0.36	32.20	21.08	88.49
Karnataka	72.59	35.96	30.43	39.21	62.35	11.10	100.00	46.67	100.00	67.62
Kerala	53.92	27.19	34.52	0.00	88.24	13.46	100.00	53.85	62.57	30.95
Madhya Pradesh	100.00	52.38	33.47	64.67	64.71	9.92	98.92	76.00	36.13	86.93
Maharashtra	76.51	60.81	7.82	21.37	5.88	16.07	79.86	61.41	99.13	68.95
Manipur	90.66	10.34	4.29	62.11	100.00	92.85	0.00	100.00	52.34	4.51
Meghalaya	79.52	100.00	2.41	32.63	100.00	40.07	35.61	100.00	45.19	4.51
Mizoram	84.64	40.91	74.04	80.53	100.00	94.44	98.92	100.00	33.41	7.35
Nagaland	99.70	29.73	50.03	71.93	100.00	100.00	72.30	100.00	58.06	3.12
Odisha	90.66	35.40	12.42	76.24	55.29	10.38	69.78	35.59	63.03	72.79
Punjab	68.07	54.72	35.30	33.26	82.35	20.85	100.00	40.43	29.98	50.78
Rajasthan	0.00	24.17	23.68	76.84	82.35	11.78	100.00	81.82	24.86	85.55
Sikkim	83.73	11.32	62.17	55.66	92.94	59.98	100.00	71.43	33.41	8.58
Tamil Nadu	88.55	35.87	73.69	54.04	69.41	13.10	100.00	67.21	75.90	62.01
Telangana	32.53	35.92	28.52	36.97	8.24	0.00	96.40	78.43	44.50	58.96
Tripura	93.37	100.00	18.54	79.30	90.59	60.97	97.12	100.00	74.58	11.53
Uttar Pradesh	89.16	31.82	63.24	40.86	40.00	7.66	100.00	66.67	8.61	66.00
Uttarakhand	89.46	48.00	100.00	34.74	91.76	16.57	100.00	41.82	17.76	17.35
West Bengal	79.22	0.00	4.54	51.18	55.29	7.35	100.00	33.33	88.91	65.33
Delhi	99.70	28.19	19.48	100.00	9.41	36.99	100.00	4.76	38.74	51.67

Table B.12 N-SIPI 30: Ranks of states under GOVERNANCE & POLITICAL STABILITY PILLAR indicators										
State	Rank									
	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
Andhra Pradesh	22	12	8	15	25	24	19	16	17	2
Arunachal Pradesh	21	25	30	8	14	4	21	1	30	30
Assam	26	29	20	14	16	15	28	1	9	21
Bihar	13	13	26	28	30	29	25	28	7	20
Chhattisgarh	4	14	2	18	10	13	27	18	5	4
Goa	28	9	14	21	14	10	1	19	6	19
Gujarat	5	3	22	12	23	23	1	22	3	1
Haryana	23	7	9	22	6	18	1	21	11	14
Himachal Pradesh	14	24	24	19	19	12	1	30	27	17
Jammu & Kashmir	6	20	21	29	5	7	20	27	28	26
Jharkhand	17	11	16	26	26	14	29	26	25	3
Karnataka	23	15	13	17	19	22	1	17	1	9
Kerala	27	23	11	30	11	19	1	15	13	18
Madhya Pradesh	1	6	12	7	18	26	15	10	20	5
Maharashtra	20	4	25	27	29	17	22	14	2	8
Manipur	8	28	28	8	1	3	30	1	15	27
Meghalaya	18	1	29	25	1	8	26	1	16	27
Mizoram	15	10	3	2	1	2	15	1	21	25
Nagaland	2	21	7	6	1	1	23	1	14	29
Odisha	8	18	23	5	21	25	24	24	12	7
Punjab	25	5	10	24	12	11	1	23	23	16
Rajasthan	30	26	17	4	12	21	1	8	24	6
Sikkim	16	27	6	10	6	6	1	11	21	24
Tamil Nadu	12	17	4	11	17	20	1	12	8	12
Telangana	29	16	15	19	28	30	18	9	17	13
Tripura	7	1	19	3	9	5	17	1	10	23
Uttar Pradesh	11	19	5	16	24	27	1	13	29	10
Uttarakhand	10	8	1	23	8	16	1	20	26	22
West Bengal	19	29	27	13	21	28	1	25	4	11
Delhi	2	22	18	1	27	9	1	29	19	15

Table B.13 N-SIPI 21: Scores of states under LABOUR PILLAR indicators										
State	Score									
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
Andhra Pradesh	78.07	25.35	24.83	14.35	35.00	19.93	83.19	69.72	33.25	90.98
Assam	27.51	43.72	0.00	6.05	0.00	0.00	53.21	97.72	8.04	99.32
Bihar	0.00	12.94	0.53	0.00	44.88	33.84	80.94	100.00	5.33	0.00
Chhattisgarh	96.65	18.69	5.28	12.26	5.83	6.51	100.00	90.52	0.00	85.78
Gujarat	58.36	0.00	19.45	17.64	39.41	31.00	86.65	69.18	96.99	73.83
Haryana	22.68	22.59	38.27	27.31	15.28	9.71	0.00	12.75	61.77	10.51
Himachal Pradesh	100.00	24.46	25.59	45.75	8.91	9.83	71.67	77.66	13.96	2.31
Jharkhand	39.41	22.58	10.21	1.69	17.45	8.62	50.57	55.61	19.03	99.85
Karnataka	53.53	16.41	32.05	23.43	66.10	86.25	72.80	58.29	46.93	52.01
Kerala	43.12	100.00	43.98	100.00	33.60	29.86	82.13	54.30	55.89	96.55
Madhya Pradesh	50.19	5.63	12.67	13.74	21.24	18.82	80.89	58.35	15.36	71.94
Maharashtra	62.08	12.90	37.88	48.96	78.17	44.75	34.45	0.00	48.37	65.55
Odisha	60.22	22.63	5.72	7.57	54.61	35.10	87.47	82.10	26.61	100.00
Punjab	41.64	15.42	19.91	31.85	24.86	18.76	62.47	78.66	83.62	16.12
Rajasthan	61.34	10.03	16.75	5.58	51.71	48.61	81.69	70.21	29.79	66.02
Tamil Nadu	65.43	30.82	38.77	36.70	44.37	40.95	83.10	77.33	100.00	79.25
Telangana	78.07	25.35	24.83	14.35	35.00	19.93	83.19	69.72	33.25	90.98
Uttar Pradesh	31.60	14.43	16.14	3.92	100.00	100.00	49.95	82.19	53.33	26.64
Uttarakhand	46.47	43.60	30.33	26.79	3.15	4.46	36.25	41.88	34.62	64.92
West Bengal	46.47	29.16	15.77	18.25	6.81	4.16	62.22	89.22	96.29	98.04
Delhi	17.10	32.41	100.00	10.49	5.22	2.65	1.88	35.71	99.12	14.79

Table B.14 N-SIPI 21: Ranks of states under LABOUR PILLAR indicators										
State	Rank									
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
Andhra Pradesh	3	7	9	11	9	10	4	11	12	6
Assam	18	2	21	17	21	21	15	2	19	3
Bihar	21	17	20	21	6	7	9	1	20	21
Chhattisgarh	2	13	19	14	18	17	1	3	21	8
Gujarat	9	21	12	10	8	8	3	13	3	10
Haryana	19	11	4	6	15	15	21	20	6	19
Himachal Pradesh	1	9	8	3	16	14	12	8	18	20
Jharkhand	16	12	17	20	14	16	16	16	16	2
Karnataka	10	14	6	8	3	2	11	15	10	15
Kerala	14	1	2	1	11	9	7	17	7	5
Madhya Pradesh	11	20	16	13	13	12	10	14	17	11
Maharashtra	6	18	5	2	2	4	19	21	9	13
Odisha	8	10	18	16	4	6	2	6	15	1
Punjab	15	15	11	5	12	13	13	7	5	17
Rajasthan	7	19	13	18	5	3	8	10	14	12
Tamil Nadu	5	5	3	4	7	5	6	9	1	9
Telangana	3	7	9	11	9	10	4	11	12	6
Uttar Pradesh	17	16	14	19	1	1	17	5	8	16
Uttarakhand	12	3	7	7	20	18	18	18	11	14
West Bengal	12	6	15	9	17	19	14	4	4	4
Delhi	20	4	1	15	19	20	20	19	2	18

Table B.15 N-SIPI 21: Scores of states under INFRASTRUCTURE PILLAR indicators												
State	Score											
	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12
Andhra Pradesh	10.98	2.96	50.00	1.39	13.00	47.00	65.84	68.59	15.00	27.99	11.29	42.06
Assam	18.29	16.16	80.00	0.19	0.00	0.00	65.53	55.13	81.04	30.95	3.37	4.04
Bihar	22.56	5.60	60.00	0.10	0.00	0.00	28.10	82.05	70.00	18.59	3.01	0.00
Chhattisgarh	4.88	1.13	20.00	0.26	0.00	0.00	81.20	91.67	19.42	47.94	0.00	15.66
Gujarat	15.85	2.47	100.00	0.61	84.00	44.09	45.74	100.00	20.35	75.99	5.87	38.37
Haryana	20.73	3.11	0.00	0.00	0.00	0.00	55.48	97.44	53.79	64.49	4.07	69.86
Himachal Pradesh	2.44	2.83	40.00	0.00	0.00	0.00	95.17	94.23	0.00	26.94	1.85	100.00
Jharkhand	15.24	0.00	10.00	0.32	0.00	0.00	38.95	82.05	15.92	0.00	4.07	16.01
Karnataka	9.15	6.14	50.00	7.93	24.00	13.40	45.10	72.44	17.18	73.49	4.78	62.50
Kerala	15.85	25.58	30.00	6.83	36.00	5.19	56.91	90.38	37.25	56.49	1.57	82.85
Madhya Pradesh	9.15	1.59	80.00	0.12	0.00	0.00	53.36	96.79	24.99	16.93	2.28	12.82
Maharashtra	10.37	4.71	80.00	15.13	100.00	13.20	0.00	91.67	24.10	100.00	8.45	27.47
Odisha	9.15	6.41	20.00	0.19	28.00	26.68	68.21	89.74	24.79	33.19	5.02	26.93
Punjab	25.61	7.53	30.00	0.41	0.00	0.00	51.66	93.59	100.00	32.76	2.82	92.58
Rajasthan	9.76	1.95	60.00	0.20	0.00	0.00	52.90	96.15	5.61	17.56	3.02	19.81
Tamil Nadu	17.68	7.07	70.00	9.24	36.00	27.85	10.06	80.13	35.40	79.79	1.47	55.44
Telangana	10.98	2.96	50.00	1.39	13.00	47.00	65.84	60.26	15.00	27.99	11.11	42.06
Uttar Pradesh	0.00	6.59	80.00	0.10	0.00	0.00	9.90	0.00	73.08	1.79	2.06	9.49
Uttarakhand	100.00	3.21	20.00	0.00	0.00	0.00	100.00	80.77	7.05	28.96	0.50	82.65
West Bengal	26.83	15.82	70.00	3.19	4.00	100.00	33.87	96.15	73.61	46.71	5.94	12.88
Delhi	75.00	100.00	20.00	100.00	0.00	0.00	55.48	97.44	46.82	85.69	100.00	90.90

Table B.16	N-SIPI 21: Ranks of states under INFRASTRUCTURE PILLAR indicators											
State	Rank											
	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12
Andhra Pradesh	12	14	10	7	7	2	5	18	17	14	2	9
Assam	7	3	2	14	10	10	7	20	2	12	11	20
Bihar	5	10	8	18	10	10	18	13	5	17	13	21
Chhattisgarh	19	20	16	12	10	10	3	9	14	8	21	16
Gujarat	9	17	1	9	2	4	14	1	13	4	6	11
Haryana	6	13	21	19	10	10	9	2	6	6	9	6
Himachal Pradesh	20	16	13	19	10	10	2	7	21	16	17	1
Jharkhand	11	21	20	11	10	10	16	13	16	21	9	15
Karnataka	16	9	10	4	6	7	15	17	15	5	8	7
Kerala	9	2	14	5	3	9	8	11	8	7	18	4
Madhya Pradesh	16	19	2	16	10	10	11	4	10	19	15	18
Maharashtra	14	11	2	2	1	8	21	9	12	1	4	12
Odisha	16	8	16	14	5	6	4	12	11	10	7	13
Punjab	4	5	14	10	10	10	13	8	1	11	14	2
Rajasthan	15	18	8	13	10	10	12	5	20	18	12	14
Tamil Nadu	8	6	6	3	3	5	19	16	9	3	19	8
Telangana	12	14	10	7	7	2	5	19	17	14	3	9
Uttar Pradesh	21	7	2	17	10	10	20	21	4	20	16	19
Uttarakhand	1	12	16	19	10	10	1	15	19	13	20	5
West Bengal	3	4	6	6	9	1	17	5	3	9	5	17
Delhi	2	1	16	1	10	10	9	2	7	2	1	3

Table B.17	N-SIPI 21: Scores of states under ECONOMIC CLIMATE PILLAR indicators												
State	Score												
	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
Andhra Pradesh	30.86	34.02	30.72	38.41	37.68	100.00	87.95	72.85	30.57	5.04	38.62	100.00	21.09
Assam	39.69	35.34	8.79	37.56	0.00	0.00	58.43	38.60	66.06	0.05	100.00	19.53	1.98
Bihar	26.66	45.55	0.00	100.00	3.21	0.00	33.13	65.44	0.00	0.15	13.03	4.98	0.00
Chhattisgarh	100.00	0.00	19.15	48.29	13.86	0.00	62.05	100.00	51.66	49.39	4.56	9.24	5.46
Gujarat	87.06	19.81	48.58	58.45	28.02	66.67	82.53	73.80	73.26	3.36	24.63	22.87	11.24
Haryana	54.99	36.35	59.86	53.23	6.50	33.33	25.90	71.74	0.00	0.00	15.00	17.90	10.78
Himachal Pradesh	86.59	9.58	44.23	49.26	0.00	0.00	78.31	38.76	0.00	0.94	14.21	2.60	2.66
Jharkhand	84.95	14.51	10.09	54.85	14.94	0.00	42.17	57.23	100.00	12.66	13.90	7.10	2.80
Karnataka	52.12	38.54	35.47	35.86	19.16	33.33	83.73	88.78	0.00	23.72	27.94	25.32	22.68
Kerala	31.92	63.67	44.15	41.28	28.23	0.00	100.00	16.85	0.00	0.37	18.69	43.87	16.58
Madhya Pradesh	49.24	14.80	12.66	83.51	10.45	0.00	46.39	87.95	53.36	8.18	11.75	23.10	6.99
Maharashtra	58.86	48.65	50.74	48.76	43.33	66.67	72.29	58.07	35.50	4.78	34.35	16.46	51.67
Odisha	71.35	23.86	15.38	0.00	0.00	33.33	83.73	64.80	26.90	100.00	54.41	9.12	5.65
Punjab	55.29	24.10	37.52	35.69	8.38	0.00	40.96	0.00	0.00	0.00	49.78	26.12	21.10
Rajasthan	66.14	19.92	20.90	48.60	13.16	66.67	28.92	73.72	93.72	38.21	11.03	13.29	9.81
Tamil Nadu	58.84	49.55	48.17	41.46	31.35	66.67	91.57	62.47	29.40	3.28	17.33	25.39	28.63
Telangana	45.14	42.95	39.28	38.78	31.48	33.33	87.95	72.85	30.57	5.04	0.00	100.00	21.09
Uttar Pradesh	36.03	35.32	3.78	32.83	10.88	33.33	23.49	29.05	20.40	0.34	21.09	31.50	6.65
Uttarakhand	90.34	24.53	45.28	76.31	0.00	33.33	47.59	55.37	0.00	0.13	21.83	9.65	2.51
West Bengal	28.36	51.19	22.91	46.71	21.69	33.33	35.54	20.21	62.21	0.07	8.50	0.00	13.64
Delhi	0.00	100.00	100.00	52.33	100.00	33.33	0.00	82.36	0.00	0.00	31.91	10.55	100.00

Table B.18	N-SIPI 21: Ranks of states under ECONOMIC CLIMATE PILLAR indicators												
State	Rank												
	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
Andhra Pradesh	18	12	12	16	3	1	3	7	9	7	4	1	6
Assam	15	10	19	17	18	14	11	17	4	18	1	10	20
Bihar	20	6	21	1	17	14	17	10	14	15	16	19	21
Chhattisgarh	1	21	15	11	11	14	10	1	7	2	20	16	16
Gujarat	3	17	4	4	7	2	7	5	3	10	8	9	10
Haryana	11	9	2	6	16	6	19	9	14	19	13	11	11
Himachal Pradesh	4	20	7	8	18	14	8	16	14	12	14	20	18
Jharkhand	5	19	18	5	10	14	14	14	1	5	15	18	17
Karnataka	12	8	11	18	9	6	5	2	14	4	7	7	4
Kerala	17	2	8	14	6	14	1	20	14	13	11	3	8
Madhya Pradesh	13	18	17	2	14	14	13	3	6	6	17	8	13
Maharashtra	8	5	3	9	2	2	9	13	8	9	5	12	2
Odisha	6	15	16	21	18	6	5	11	12	1	2	17	15
Punjab	10	14	10	19	15	14	15	21	14	20	3	5	5
Rajasthan	7	16	14	10	12	2	18	6	2	3	18	13	12
Tamil Nadu	9	4	5	13	5	2	2	12	11	11	12	6	3
Telangana	14	7	9	15	4	6	3	7	9	7	21	1	6
Uttar Pradesh	16	11	20	20	13	6	20	18	13	14	10	4	14
Uttarakhand	2	13	6	3	18	6	12	15	14	16	9	15	19
West Bengal	19	3	13	12	8	6	16	19	5	17	19	21	9
Delhi	21	1	1	7	1	6	21	4	14	20	6	14	1

Table B.19	N-SIPI 21: Scores of states under GOVERNANCE & POLITICAL STABILITY PILLAR indicators									
State	Score									
	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
Andhra Pradesh	73.19	62.54	32.87	44.84	40.51	28.84	94.95	48.20	39.27	98.23
Assam	62.95	0.00	12.91	50.18	81.01	45.42	11.19	100.00	73.07	2.56
Bihar	88.25	62.45	2.85	7.46	0.00	17.58	55.60	17.65	75.53	5.28
Chhattisgarh	96.69	58.63	81.08	39.18	96.20	47.15	14.80	43.48	84.53	84.96
Gujarat	96.39	100.00	9.56	53.68	55.70	28.92	100.00	40.91	91.99	100.00
Haryana	72.59	77.26	32.42	35.91	100.00	38.42	100.00	41.75	70.28	47.25
Himachal Pradesh	86.45	39.79	6.00	36.97	67.09	53.16	100.00	0.00	5.58	18.33
Jharkhand	83.43	63.28	23.29	22.63	30.38	45.58	0.00	32.20	13.64	86.07
Karnataka	72.59	55.97	27.11	39.21	67.09	30.00	100.00	46.67	100.00	60.82
Kerala	53.92	42.32	31.40	0.00	94.94	36.39	100.00	53.85	59.05	16.46
Madhya Pradesh	100.00	81.52	30.31	64.67	69.62	26.81	98.92	76.00	30.11	84.18
Maharashtra	76.51	94.65	3.43	21.37	6.33	43.44	79.78	61.41	99.05	62.43
Odisha	90.66	55.09	8.25	76.24	59.49	28.06	69.68	35.59	59.54	67.08
Punjab	68.07	85.16	32.22	33.26	88.61	56.38	100.00	40.43	23.38	40.45
Rajasthan	0.00	37.62	20.05	76.84	88.61	31.86	100.00	81.82	17.78	82.52
Tamil Nadu	88.55	55.83	72.43	54.04	74.68	35.42	100.00	67.21	73.63	54.03
Telangana	32.53	55.90	25.12	36.97	8.86	0.00	96.39	78.43	39.27	50.35
Uttar Pradesh	89.16	49.52	61.49	40.86	43.04	20.70	100.00	66.67	0.00	58.86
Uttarakhand	89.46	74.71	100.00	34.74	98.73	44.81	100.00	41.82	10.01	0.00
West Bengal	79.22	0.00	0.00	51.18	59.49	19.87	100.00	33.33	87.86	58.05
Delhi	99.70	43.88	15.64	100.00	10.13	100.00	100.00	4.76	32.96	41.52

Table B.20	N-SIPI 21: Ranks of states under GOVERNANCE & POLITICAL STABILITY PILLAR indicators									
State	Rank									
	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
Andhra Pradesh	14	8	5	9	16	15	15	9	12	2
Assam	18	20	15	8	7	6	20	1	8	20
Bihar	9	9	20	20	21	20	18	19	6	19
Chhattisgarh	3	10	2	12	3	4	19	11	5	4
Gujarat	4	1	16	6	14	14	1	14	3	1
Haryana	15	5	6	15	1	9	1	13	9	14
Himachal Pradesh	10	18	18	13	10	3	1	21	20	17
Jharkhand	11	7	12	18	17	5	21	18	18	3
Karnataka	15	11	10	11	10	13	1	10	1	9
Kerala	19	17	8	21	4	10	1	8	11	18
Madhya Pradesh	1	4	9	4	9	17	13	4	15	5
Maharashtra	13	2	19	19	20	8	16	7	2	8
Odisha	5	14	17	3	12	16	17	16	10	7
Punjab	17	3	7	17	5	2	1	15	16	16
Rajasthan	21	19	13	2	5	12	1	2	17	6
Tamil Nadu	8	13	3	5	8	11	1	5	7	12
Telangana	20	12	11	13	19	21	14	3	12	13
Uttar Pradesh	7	15	4	10	15	18	1	6	21	10
Uttarakhand	6	6	1	16	2	7	1	12	19	21
West Bengal	12	20	21	7	12	19	1	17	4	11
Delhi	2	16	14	1	18	1	1	20	14	15

Table B.21	N-SIPI 21: Scores of states under SURVEY PILLAR indicators					
State	Score					
	S1	S2	S3	S4	S5	S6
Andhra Pradesh	92.94	90.41	84.79	79.14	58.49	12.90
Assam	73.52	82.17	67.31	68.72	58.69	30.93
Bihar	85.17	78.06	34.25	47.13	70.00	0.00
Chhattisgarh	83.39	93.64	86.73	100.00	95.20	12.62
Gujarat	100.00	94.57	100.00	93.53	94.87	66.00
Haryana	28.88	80.80	44.87	73.93	46.14	51.25
Himachal Pradesh	90.99	47.89	18.89	76.54	100.00	39.77
Jharkhand	26.94	65.72	0.00	40.04	45.07	26.51
Karnataka	69.72	55.18	52.53	47.76	55.77	46.69
Kerala	65.68	48.71	32.12	10.01	49.93	55.92
Madhya Pradesh	49.22	92.70	82.62	75.29	76.11	36.44
Maharashtra	56.75	67.53	61.93	65.17	71.71	29.83
Odisha	32.61	90.62	63.30	73.31	80.40	41.04
Punjab	65.92	0.00	48.84	0.00	14.77	44.01
Rajasthan	90.99	100.00	92.11	92.18	94.93	62.74
Tamil Nadu	66.69	84.15	19.08	67.88	37.15	100.00
Telangana	99.59	49.70	53.76	50.89	43.15	14.92
Uttar Pradesh	69.41	58.42	21.26	36.08	30.84	24.11
Uttarakhand	87.11	78.06	55.50	71.32	84.06	63.63
West Bengal	0.00	91.17	88.24	35.97	0.00	29.55
Delhi	69.64	71.75	72.98	43.69	41.28	51.96

Table B.22		N-SIPI 21: Ranks of states under GOVERNANCE & POLITICAL STABILITY PILLAR indicators					
State	Rank						
	S1	S2	S3	S4	S5	S6	
Andhra Pradesh	3	7	5	4	11	19	
Assam	9	9	8	10	10	13	
Bihar	7	11	16	15	9	21	
Chhattisgarh	8	3	4	1	2	20	
Gujarat	1	2	1	2	4	2	
Haryana	19	10	15	7	14	7	
Himachal Pradesh	4	20	20	5	1	11	
Jharkhand	20	15	21	17	15	16	
Karnataka	10	17	13	14	12	8	
Kerala	15	19	17	20	13	5	
Madhya Pradesh	17	4	6	6	7	12	
Maharashtra	16	14	10	12	8	14	
Odisha	18	6	9	8	6	10	
Punjab	14	21	14	21	20	9	
Rajasthan	4	1	2	3	3	4	
Tamil Nadu	13	8	19	11	18	1	
Telangana	2	18	12	13	16	18	
Uttar Pradesh	12	16	18	18	19	17	
Uttarakhand	6	11	11	9	5	3	
West Bengal	21	5	3	19	21	15	
Delhi	11	13	7	16	17	6	

Appendix C

Survey Results

Table C.1		Problem in Acquiring Land		
State	Yes	No	Total	
Andhra Pradesh	8.6	91.4	100.0	
Assam	7.5	92.5	100.0	
Bihar	15.0	85.0	100.0	
Chhatisgarh	25.0	75.0	100.0	
Delhi	34.0	66.0	100.0	
Gujarat	6.4	93.7	100.0	
Haryana	52.5	47.5	100.0	
Himachal Pradesh	10.0	90.0	100.0	
Jharkhand	30.0	70.0	100.0	
Karnataka	27.1	72.9	100.0	
Kerala	23.3	76.7	100.0	
Maharashtra	24.7	75.3	100.0	
Madhya Pradesh	42.9	57.1	100.0	
Odisha	65.1	34.9	100.0	
Punjab	31.0	69.1	100.0	
Rajasthan	0.0	100.0	100.0	
Tamil Nadu	28.2	71.8	100.0	
Telangana	0.0	100.0	100.0	
Uttar Pradesh	16.4	83.6	100.0	
Uttarakhand	5.0	95.0	100.0	
West Bengal	82.6	17.4	100.0	
Total	27.0	73.0	100.0	

Table C.2		Which industry gets land more easily [%]		
State	Service Industry	Non-service industry	Both	
Andhra Pradesh	22.9	2.9	74.3	
Assam	47.5	25.0	27.5	
Bihar	17.5	27.5	55.0	
Chhatisgarh	22.0	14.6	63.4	
Delhi	46.0	18.0	36.0	
Gujarat	3.1	4.7	92.2	
Haryana	45.0	25.0	30.0	
Himachal Pradesh	12.5	0.0	87.5	
Jharkhand	42.5	27.5	30.0	
Karnataka	35.7	12.9	51.4	
Kerala	68.2	11.4	20.5	
Maharashtra	25.8	23.7	50.5	
Madhya Pradesh	31.0	11.9	57.1	
Odisha	53.5	14.0	32.6	
Punjab	40.5	33.3	26.2	
Rajasthan	15.0	35.0	50.0	
Tamil Nadu	66.7	0.0	33.3	
Telangana	20.0	77.1	2.9	
Uttar Pradesh	23.0	39.3	37.7	
Uttarakhand	17.5	7.5	75.0	
West Bengal	54.3	41.4	4.3	
Total	33.5	21.7	44.8	

Table C.3		Perception on business condition in next 6 months (% respondent)		
State	Better	Same	Worse	
Andhra Pradesh	48.6	51.4	0.0	
Assam	37.5	40.0	22.5	
Bihar	12.5	72.5	15.0	
Chhatisgarh	29.3	61.0	9.8	
Delhi	58.0	38.0	4.0	
Gujarat	63.1	26.2	10.8	
Haryana	60.0	30.0	10.0	
Himachal Pradesh	52.5	47.5	0.0	
Jharkhand	50.0	45.0	5.0	
Karnataka	55.7	41.4	2.9	
Kerala	61.4	29.6	9.1	
Maharashtra	35.5	54.8	9.7	
Madhya Pradesh	40.5	50.0	9.5	
Odisha	48.8	39.5	11.6	
Punjab	38.1	19.1	42.9	
Rajasthan	62.5	35.0	2.5	
Tamil Nadu	87.2	12.8	0.0	
Telangana	28.6	71.4	0.0	
Uttar Pradesh	35.5	48.4	16.1	
Uttarakhand	57.5	42.5	0.0	
West Bengal	22.9	48.6	28.6	

Table C.4		Perception on present investment climate vis-a-vis 6 months ago (% respondent)		
State	Better	Same	Worse	
Andhra Pradesh	8.6	91.4	0.0	
Assam	47.5	42.5	10.0	
Bihar	12.5	67.5	20.0	
Chhatisgarh	24.4	61.0	14.6	
Delhi	60.0	40.0	0.0	
Gujarat	66.2	26.2	7.7	
Haryana	60.0	32.5	7.5	
Himachal Pradesh	55.0	45.0	0.0	
Jharkhand	40.0	60.0	0.0	
Karnataka	55.7	42.9	1.4	
Kerala	65.9	29.6	4.6	
Maharashtra	39.8	53.8	6.5	
Madhya Pradesh	50.0	45.2	4.8	
Odisha	53.5	41.9	4.7	
Punjab	69.1	28.6	2.4	
Rajasthan	52.5	42.5	5.0	
Tamil Nadu	84.6	15.4	0.0	
Telangana	25.7	74.3	0.0	
Uttar Pradesh	37.1	53.2	9.7	
Uttarakhand	60.0	40.0	0.0	
West Bengal	41.4	37.1	21.4	
Total	48.4	45.4	6.2	

Table C.5			
Perception on financial position in next 6 months (% respondent)			
State	Better	Same	Worse
Andhra Pradesh	14.3	85.7	0.0
Assam	35.0	42.5	22.5
Bihar	10.0	80.0	10.0
Chhatisgarh	14.6	70.7	14.6
Delhi	48.0	42.0	10.0
Gujarat	63.1	29.2	7.7
Haryana	42.5	45.0	12.5
Himachal Pradesh	37.5	47.5	15.0
Jharkhand	20.0	72.5	7.5
Karnataka	41.4	51.4	7.1
Kerala	54.6	38.6	6.8
Maharashtra	31.2	48.4	20.4
Madhya Pradesh	23.8	69.1	7.1
Odisha	27.9	65.1	7.0
Punjab	50.0	47.6	2.4
Rajasthan	55.0	32.5	12.5
Tamil Nadu	76.9	20.5	2.6
Telangana	22.9	68.6	8.6
Uttar Pradesh	14.5	62.9	22.6
Uttarakhand	45.0	52.5	2.5
West Bengal	28.6	51.4	20.0
Total	36.2	52.4	11.4

Table C.6			
Ease of operating business in other state (% respondent)			
State	Yes	No	Can't say
Andhra Pradesh	0.0	80.0	20.0
Assam	30.0	25.0	45.0
Bihar	15.0	47.5	37.5
Chhatisgarh	12.2	41.5	46.3
Delhi	34.0	36.0	30.0
Gujarat	4.6	64.6	30.8
Haryana	32.5	50.0	17.5
Himachal Pradesh	15.0	60.0	25.0
Jharkhand	62.5	20.0	17.5
Karnataka	12.9	25.7	61.4
Kerala	27.3	34.1	38.6
Maharashtra	58.1	23.7	18.3
Madhya Pradesh	31.0	31.0	38.1
Odisha	27.9	53.5	18.6
Punjab	9.5	81.0	9.5
Rajasthan	22.5	60.0	17.5
Tamil Nadu	10.3	25.6	64.1
Telangana	0.0	97.1	2.9
Uttar Pradesh	50.0	12.9	37.1
Uttarakhand	25.0	10.0	65.0
West Bengal	50.0	11.4	38.6
Total	27.7	39.5	32.8

Table C.7		Planning business expansion in next five years (% respondent)		
State	Not Likely	Somewhat likely	Definetely	
Andhra Pradesh	60.0	20.0	20.0	
Assam	47.5	42.5	10.0	
Bihar	17.5	52.5	30.0	
Chhatisgarh	2.4	58.5	39.0	
Delhi	10.0	40.0	50.0	
Gujarat	23.1	13.9	63.1	
Haryana	5.0	30.0	65.0	
Himachal Pradesh	15.0	37.5	47.5	
Jharkhand	10.0	60.0	30.0	
Karnataka	5.7	40.0	54.3	
Kerala	15.9	22.7	61.4	
Maharashtra	25.8	38.7	35.5	
Madhya Pradesh	2.4	23.8	73.8	
Odisha	9.3	41.9	48.8	
Punjab	2.4	71.4	26.2	
Rajasthan	5.0	50.0	45.0	
Tamil Nadu	2.6	15.4	82.1	
Telangana	5.7	48.6	45.7	
Uttar Pradesh	12.9	25.8	61.3	
Uttarakhand	7.5	25.0	67.5	
West Bengal	15.7	37.1	47.1	
Total	14.6	37.2	48.2	

Table C.8		Problem related to availability of skilled labour		
State	Severe	Moderate	No Problem	
Andhra Pradesh	8.6	77.1	14.3	
Assam	20.0	62.5	17.5	
Bihar	17.5	65.0	17.5	
Chhatisgarh	14.6	26.8	58.5	
Delhi	10.0	36.0	54.0	
Gujarat	7.7	15.4	76.9	
Haryana	10.0	45.0	45.0	
Himachal Pradesh	32.5	25.0	42.5	
Jharkhand	30.0	52.5	17.5	
Karnataka	35.7	51.4	12.9	
Kerala	25.0	54.5	20.5	
Maharashtra	16.1	51.6	32.3	
Madhya Pradesh	4.8	54.8	40.5	
Odisha	14.0	53.5	32.6	
Punjab	59.5	23.8	16.7	
Rajasthan	5.0	27.5	67.5	
Tamil Nadu	7.7	56.4	35.9	
Telangana	42.9	42.9	14.3	
Uttar Pradesh	21.0	43.5	35.5	
Uttarakhand	10.0	30.0	60.0	
West Bengal	7.1	22.9	70.0	
Total	18.7	42.8	38.5	

Table C.9		Problem related to quality of skilled labour		
State	Severe	Moderate	No Problem	
Andhra Pradesh	8.6	77.1	14.3	
Assam	20.0	67.5	12.5	
Bihar	10.0	72.5	17.5	
Chhatisgarh	9.8	26.8	63.4	
Delhi	12.0	42.0	46.0	
Gujarat	7.7	35.4	56.9	
Haryana	10.0	50.0	40.0	
Himachal Pradesh	25.0	40.0	35.0	
Jharkhand	15.0	70.0	15.0	
Karnataka	25.7	61.4	12.9	
Kerala	20.5	59.1	20.5	
Maharashtra	21.5	50.5	28.0	
Madhya Pradesh	16.7	47.6	35.7	
Odisha	7.0	65.1	27.9	
Punjab	50.0	33.3	16.7	
Rajasthan	5.0	32.5	62.5	
Tamil Nadu	7.7	56.4	35.9	
Telangana	37.1	45.7	17.1	
Uttar Pradesh	30.6	45.2	24.2	
Uttarakhand	12.5	30.0	57.5	
West Bengal	8.6	31.4	60.0	
Total	17.4	48.8	33.8	

Table C.10		Problem related to availability of unskilled labour		
State	Severe	Moderate	No Problem	
Andhra Pradesh	5.7	45.7	48.6	
Assam	2.5	17.5	80.0	
Bihar	12.5	67.5	20.0	
Chhatisgarh	2.4	12.2	85.4	
Delhi	12.0	38.0	50.0	
Gujarat	3.1	9.2	87.7	
Haryana	7.5	12.5	80.0	
Himachal Pradesh	27.5	22.5	50.0	
Jharkhand	5.0	42.5	52.5	
Karnataka	4.3	31.4	64.3	
Kerala	9.1	40.9	50.0	
Maharashtra	9.7	26.9	63.4	
Madhya Pradesh	2.4	21.4	76.2	
Odisha	4.7	14.0	81.4	
Punjab	28.6	45.2	26.2	
Rajasthan	5.0	42.5	52.5	
Tamil Nadu	12.8	28.2	59.0	
Telangana	5.7	45.7	48.6	
Uttar Pradesh	14.5	33.9	51.6	
Uttarakhand	7.5	12.5	80.0	
West Bengal	1.4	10.0	88.6	
Total	8.5	28.4	63.1	

Table C.11		Problem related to quality of unskilled labour		
State	Severe	Moderate	No Problem	
Andhra Pradesh	2.9	57.1	40.0	
Assam	2.5	35.0	62.5	
Bihar	12.5	67.5	20.0	
Chhatisgarh	7.3	34.1	58.5	
Delhi	10.0	44.0	46.0	
Gujarat	6.2	10.8	83.1	
Haryana	7.5	15.0	77.5	
Himachal Pradesh	22.5	27.5	50.0	
Jharkhand	10.0	62.5	27.5	
Karnataka	10.0	52.9	37.1	
Kerala	15.9	45.5	38.6	
Maharashtra	12.9	36.6	50.5	
Madhya Pradesh	7.1	40.5	52.4	
Odisha	11.6	27.9	60.5	
Punjab	40.5	42.9	16.7	
Rajasthan	5.0	37.5	57.5	
Tamil Nadu	10.3	35.9	53.8	
Telangana	0.0	60.0	40.0	
Uttar Pradesh	12.9	51.6	35.5	
Uttarakhand	12.5	15.0	72.5	
West Bengal	8.6	21.4	70.0	
Total	11.0	38.3	50.7	

Table C.12		Problem related to labour relations		
State	Severe	Moderate	No Problem	
Andhra Pradesh	8.6	5.7	85.7	
Assam	2.5	32.5	65.0	
Bihar	2.5	75.0	22.5	
Chhatisgarh	0.0	26.8	73.2	
Delhi	6.0	34.0	60.0	
Gujarat	1.5	6.2	92.3	
Haryana	7.5	7.5	85.0	
Himachal Pradesh	2.5	20.0	77.5	
Jharkhand	12.5	45.0	42.5	
Karnataka	11.4	51.4	37.1	
Kerala	25.0	45.5	29.5	
Maharashtra	9.7	46.2	44.1	
Madhya Pradesh	0.0	31.0	69.0	
Odisha	0.0	25.6	74.4	
Punjab	14.3	11.9	73.8	
Rajasthan	2.5	17.5	80.0	
Tamil Nadu	2.6	71.8	25.6	
Telangana	14.3	60.0	25.7	
Uttar Pradesh	4.8	30.6	64.5	
Uttarakhand	7.5	17.5	75.0	
West Bengal	8.6	35.7	55.7	
Total	7.0	33.7	59.2	

Table C.13		Problem related to labour laws		
State	Severe	Moderate	No Problem	
Andhra Pradesh	5.7	5.7	88.6	
Assam	7.5	42.5	50.0	
Bihar	7.5	70.0	22.5	
Chhatisgarh	0.0	41.5	58.5	
Delhi	24.0	34.0	42.0	
Gujarat	6.2	10.8	83.1	
Haryana	15.0	12.5	72.5	
Himachal Pradesh	7.5	7.5	85.0	
Jharkhand	12.5	47.5	40.0	
Karnataka	17.1	55.7	27.1	
Kerala	20.5	54.5	25.0	
Maharashtra	11.8	49.5	38.7	
Madhya Pradesh	4.8	38.1	57.1	
Odisha	2.3	44.2	53.5	
Punjab	11.9	11.9	76.2	
Rajasthan	0.0	15.0	85.0	
Tamil Nadu	10.3	76.9	12.8	
Telangana	14.3	54.3	31.4	
Uttar Pradesh	14.5	38.7	46.8	
Uttarakhand	12.5	17.5	70.0	
West Bengal	4.3	31.4	64.3	
Total	10.3	36.8	52.9	

Table C.14		Problem related to availability of power		
State	Severe	Moderate	No Problem	
Andhra Pradesh	8.6	8.6	82.9	
Assam	22.5	60.0	17.5	
Bihar	32.5	57.5	10.0	
Chhatisgarh	2.4	12.2	85.4	
Delhi	4.0	48.0	48.0	
Gujarat	0.0	3.1	96.9	
Haryana	27.5	40.0	32.5	
Himachal Pradesh	0.0	10.0	90.0	
Jharkhand	27.5	57.5	15.0	
Karnataka	28.6	52.9	18.6	
Kerala	38.6	36.4	25.0	
Maharashtra	6.5	32.3	61.3	
Madhya Pradesh	2.4	16.7	81.0	
Odisha	9.3	48.8	41.9	
Punjab	4.8	2.4	92.9	
Rajasthan	0.0	17.5	82.5	
Tamil Nadu	12.8	59.0	28.2	
Telangana	42.9	31.4	25.7	
Uttar Pradesh	19.4	51.6	29.0	
Uttarakhand	12.5	42.5	45.0	
West Bengal	8.6	21.4	70.0	
Total	14.1	33.7	52.1	

Table C.15		Problem related to availability of water		
State	Severe	Moderate	No Problem	
Andhra Pradesh	0.0	14.3	85.7	
Assam	0.0	32.5	67.5	
Bihar	10.0	65.0	25.0	
Chhatisgarh	4.9	9.8	85.4	
Delhi	4.0	32.0	64.0	
Gujarat	0.0	4.6	95.4	
Haryana	30.0	30.0	40.0	
Himachal Pradesh	20.0	10.0	70.0	
Jharkhand	35.0	47.5	17.5	
Karnataka	10.0	51.4	38.6	
Kerala	4.5	52.3	43.2	
Maharashtra	12.9	39.8	47.3	
Madhya Pradesh	4.8	23.8	71.4	
Odisha	11.6	25.6	62.8	
Punjab	2.4	0.0	97.6	
Rajasthan	0.0	17.5	82.5	
Tamil Nadu	46.2	38.5	15.4	
Telangana	5.7	54.3	40.0	
Uttar Pradesh	22.6	25.8	51.6	
Uttarakhand	10.0	5.0	85.0	
West Bengal	0.0	11.4	88.6	
Total	10.8	28.3	60.9	

Table C.16		Problem related to availability of internet connectivity		
State	Severe	Moderate	No Problem	
Andhra Pradesh	8.6	11.4	80.0	
Assam	12.5	60.0	27.5	
Bihar	32.5	60.0	7.5	
Chhatisgarh	2.4	9.8	87.8	
Delhi	6.0	34.0	60.0	
Gujarat	0.0	7.7	92.3	
Haryana	2.5	35.0	62.5	
Himachal Pradesh	20.0	17.5	62.5	
Jharkhand	47.5	42.5	10.0	
Karnataka	7.1	50.0	42.9	
Kerala	6.8	59.1	34.1	
Maharashtra	11.8	32.3	55.9	
Madhya Pradesh	7.1	11.9	81.0	
Odisha	14.0	32.6	53.5	
Punjab	2.4	0.0	97.6	
Rajasthan	0.0	25.0	75.0	
Tamil Nadu	5.1	79.5	15.4	
Telangana	2.9	54.3	42.9	
Uttar Pradesh	27.4	33.9	38.7	
Uttarakhand	17.5	45.0	37.5	
West Bengal	0.0	7.1	92.9	
Total	10.8	32.6	56.6	

Table C.17		Problem related to sewage facility		
State	Severe	Moderate	No Problem	
Andhra Pradesh	8.6	48.6	42.9	
Assam	5.0	37.5	57.5	
Bihar	30.0	52.5	17.5	
Chhatisgarh	14.6	24.4	61.0	
Delhi	28.0	38.0	34.0	
Gujarat	7.7	16.9	75.4	
Haryana	22.5	25.0	52.5	
Himachal Pradesh	15.0	22.5	62.5	
Jharkhand	42.5	40.0	17.5	
Karnataka	17.1	41.4	41.4	
Kerala	25.0	54.5	20.5	
Maharashtra	16.1	35.5	48.4	
Madhya Pradesh	11.9	33.3	54.8	
Odisha	23.3	48.8	27.9	
Punjab	9.5	2.4	88.1	
Rajasthan	10.0	17.5	72.5	
Tamil Nadu	12.8	69.2	17.9	
Telangana	2.9	51.4	45.7	
Uttar Pradesh	38.7	38.7	22.6	
Uttarakhand	10.0	15.0	75.0	
West Bengal	4.3	24.3	71.4	
Total	17.0	34.5	48.5	

Table C.18		Problem related to road quality/ connectivity		
State	Severe	Moderate	No Problem	
Andhra Pradesh	5.7	11.4	82.9	
Assam	7.5	37.5	55.0	
Bihar	32.5	60.0	7.5	
Chhatisgarh	9.8	31.7	58.5	
Delhi	20.0	30.0	50.0	
Gujarat	3.1	6.2	90.8	
Haryana	20.0	40.0	40.0	
Himachal Pradesh	60.0	30.0	10.0	
Jharkhand	32.5	42.5	25.0	
Karnataka	17.1	51.4	31.4	
Kerala	25.0	43.2	31.8	
Maharashtra	23.7	36.6	39.8	
Madhya Pradesh	7.1	33.3	59.5	
Odisha	11.6	32.6	55.8	
Punjab	28.6	2.4	69.0	
Rajasthan	7.5	27.5	65.0	
Tamil Nadu	71.8	15.4	12.8	
Telangana	14.3	34.3	51.4	
Uttar Pradesh	37.1	40.3	22.6	
Uttarakhand	20.0	22.5	57.5	
West Bengal	7.1	35.7	57.1	
Total	21.4	32.2	46.4	

Table C.19		Problem related to rail connectivity		
State	Severe	Moderate	No Problem	
Andhra Pradesh	2.9	0.0	97.1	
Assam	0.0	32.5	67.5	
Bihar	5.0	80.0	15.0	
Chhatisgarh	2.4	14.6	82.9	
Delhi	2.0	44.0	54.0	
Gujarat	0.0	1.5	98.5	
Haryana	12.5	22.5	65.0	
Himachal Pradesh	67.5	17.5	15.0	
Jharkhand	20.0	50.0	30.0	
Karnataka	7.1	44.3	48.6	
Kerala	2.3	43.2	54.5	
Maharashtra	12.9	35.5	51.6	
Madhya Pradesh	11.9	23.8	64.3	
Odisha	14.0	30.2	55.8	
Punjab	23.8	35.7	40.5	
Rajasthan	10.0	50.0	40.0	
Tamil Nadu	23.1	51.3	25.6	
Telangana	0.0	45.7	54.3	
Uttar Pradesh	11.3	32.3	56.5	
Uttarakhand	25.0	42.5	32.5	
West Bengal	11.4	55.7	32.9	
Total	12.1	35.9	52.0	

Table C.20		Problem related to industry related policies		
State	Severe	Moderate	No Problem	
Andhra Pradesh	2.9	22.9	74.3	
Assam	10.0	52.5	37.5	
Bihar	15.0	67.5	17.5	
Chhatisgarh	0.0	75.6	24.4	
Delhi	26.0	46.0	28.0	
Gujarat	0.0	21.5	78.5	
Haryana	17.5	40.0	42.5	
Himachal Pradesh	7.5	22.5	70.0	
Jharkhand	22.5	60.0	17.5	
Karnataka	18.6	64.3	17.1	
Kerala	43.2	47.7	9.1	
Maharashtra	9.7	55.9	34.4	
Madhya Pradesh	9.5	38.1	52.4	
Odisha	14.0	53.5	32.6	
Punjab	45.2	28.6	26.2	
Rajasthan	0.0	32.5	67.5	
Tamil Nadu	7.7	79.5	12.8	
Telangana	22.9	42.9	34.3	
Uttar Pradesh	27.4	50.0	22.6	
Uttarakhand	10.0	22.5	67.5	
West Bengal	51.4	28.6	20.0	
Total	17.9	45.6	36.5	

Table C.21		Problem related to access to finance		
State	Severe	Moderate	No Problem	
Andhra Pradesh	8.6	22.9	68.6	
Assam	32.5	30.0	37.5	
Bihar	7.5	50.0	42.5	
Chhatisgarh	2.4	75.6	22.0	
Delhi	4.0	32.0	64.0	
Gujarat	0.0	7.7	92.3	
Haryana	12.5	15.0	72.5	
Himachal Pradesh	0.0	25.0	75.0	
Jharkhand	17.5	40.0	42.5	
Karnataka	24.3	52.9	22.9	
Kerala	52.3	38.6	9.1	
Maharashtra	7.5	43.0	49.5	
Madhya Pradesh	2.4	33.3	64.3	
Odisha	4.7	34.9	60.5	
Punjab	47.6	16.7	35.7	
Rajasthan	0.0	37.5	62.5	
Tamil Nadu	10.3	51.3	38.5	
Telangana	40.0	20.0	40.0	
Uttar Pradesh	21.0	40.3	38.7	
Uttarakhand	10.0	15.0	75.0	
West Bengal	4.3	32.9	62.9	
Total	14.0	34.6	51.3	

Table C.22		Problem related to availability of raw material		
State	Severe	Moderate	No Problem	
Andhra Pradesh	5.7	25.7	68.6	
Assam	15.0	55.0	30.0	
Bihar	7.5	50.0	42.5	
Chhatisgarh	0.0	31.7	68.3	
Delhi	14.0	18.0	68.0	
Gujarat	1.5	7.7	90.8	
Haryana	2.5	22.5	75.0	
Himachal Pradesh	12.5	20.0	67.5	
Jharkhand	7.5	32.5	60.0	
Karnataka	12.9	52.9	34.3	
Kerala	13.6	56.8	29.5	
Maharashtra	8.6	34.4	57.0	
Madhya Pradesh	7.1	19.0	73.8	
Odisha	9.3	44.2	46.5	
Punjab	19.0	33.3	47.6	
Rajasthan	7.5	35.0	57.5	
Tamil Nadu	7.7	59.0	33.3	
Telangana	11.4	20.0	68.6	
Uttar Pradesh	6.5	41.9	51.6	
Uttarakhand	12.5	15.0	72.5	
West Bengal	10.0	34.3	55.7	
Total	9.1	33.9	57.0	

Table C.23		Problem related to getting approvals before starting business		
State	Severe	Moderate	No Problem	
Andhra Pradesh	5.7	31.4	62.9	
Assam	15.0	57.5	27.5	
Bihar	12.8	69.2	17.9	
Chhattisgarh	4.9	70.7	24.4	
Delhi	32.0	44.0	24.0	
Gujarat	7.8	18.8	73.4	
Haryana	57.5	32.5	10.0	
Himachal Pradesh	0.0	25.6	74.4	
Jharkhand	28.2	53.8	17.9	
Karnataka	37.1	50.0	12.9	
Kerala	58.1	37.2	4.7	
Maharashtra	14.0	54.8	31.2	
Madhya Pradesh	19.0	57.1	23.8	
Odisha	9.3	55.8	34.9	
Punjab	33.3	35.7	31.0	
Rajasthan	2.5	42.5	55.0	
Tamil Nadu	35.9	64.1	0.0	
Telangana	39.4	24.2	36.4	
Uttar Pradesh	31.1	50.8	18.0	
Uttarakhand	10.0	80.0	10.0	
West Bengal	68.6	25.7	5.7	
Total	25.8	46.3	27.9	

Table C.24		Problem related to getting environment clearance		
State	Severe	Moderate	No Problem	
Andhra Pradesh	11.4	31.4	57.1	
Assam	7.5	47.5	45.0	
Bihar	2.5	92.5	5.0	
Chhattisgarh	7.3	58.5	34.1	
Delhi	38.0	22.0	40.0	
Gujarat	6.3	17.5	76.2	
Haryana	20.5	28.2	51.3	
Himachal Pradesh	2.5	10.0	87.5	
Jharkhand	20.5	61.5	17.9	
Karnataka	38.6	48.6	12.9	
Kerala	52.3	38.6	9.1	
Maharashtra	20.4	45.2	34.4	
Madhya Pradesh	14.3	52.4	33.3	
Odisha	12.2	39.0	48.8	
Punjab	47.6	38.1	14.3	
Rajasthan	10.0	37.5	52.5	
Tamil Nadu	28.2	71.8	0.0	
Telangana	31.4	37.1	31.4	
Uttar Pradesh	33.9	40.3	25.8	
Uttarakhand	12.5	62.5	25.0	
West Bengal	54.3	34.3	11.4	
Total	24.0	42.7	33.3	

Table C.25		Problem related to corruption		
State	Severe	Moderate	No Problem	
Andhra Pradesh	74.3	17.1	8.6	
Assam	47.5	37.5	15.0	
Bihar	40.0	55.0	5.0	
Chhatisgarh	7.1	75.0	17.9	
Delhi	42.0	42.0	16.0	
Gujarat	3.1	35.9	60.9	
Haryana	47.5	42.5	10.0	
Himachal Pradesh	0.0	45.0	55.0	
Jharkhand	50.0	32.5	17.5	
Karnataka	39.7	55.9	4.4	
Kerala	20.9	69.8	9.3	
Maharashtra	35.5	46.2	18.3	
Madhya Pradesh	23.8	66.7	9.5	
Odisha	30.2	51.2	18.6	
Punjab	56.1	34.1	9.8	
Rajasthan	5.0	47.5	47.5	
Tamil Nadu	71.8	28.2	0.0	
Telangana	26.5	61.8	11.8	
Uttar Pradesh	55.7	29.5	14.8	
Uttarakhand	10.0	22.5	67.5	
West Bengal	64.3	22.9	12.9	
Total	36.5	42.9	20.6	

Table C.26		Problem related to law and order situation		
State	Severe	Moderate	No Problem	
Andhra Pradesh	2.9	26.5	17.6	
Assam	25.6	43.6	30.8	
Bihar	21.1	71.1	7.9	
Chhatisgarh	0.0	75.9	24.1	
Delhi	20.0	44.0	36.0	
Gujarat	0.0	7.8	92.2	
Haryana	27.5	32.5	40.0	
Himachal Pradesh	2.5	5.0	92.5	
Jharkhand	25.0	62.5	12.5	
Karnataka	2.9	71.4	25.7	
Kerala	7.0	46.5	46.5	
Maharashtra	5.4	63.4	31.2	
Madhya Pradesh	11.9	23.8	64.3	
Odisha	4.7	46.5	48.8	
Punjab	57.5	25.0	17.5	
Rajasthan	0.0	37.5	62.5	
Tamil Nadu	7.7	71.8	20.5	
Telangana	0.0	68.6	31.4	
Uttar Pradesh	38.7	51.6	9.7	
Uttarakhand	7.5	20.0	72.5	
West Bengal	40.0	44.3	15.7	
Total	15.0	45.3	39.7	

Table C.27		Problem related to political stability		
State	Severe	Moderate	No Problem	
Andhra Pradesh	2.9	22.9	74.3	
Assam	15.0	47.5	37.5	
Bihar	7.7	84.6	7.7	
Chhatisgarh	0.0	42.1	57.9	
Delhi	28.0	24.0	48.0	
Gujarat	0.0	1.6	98.4	
Haryana	2.5	22.5	75.0	
Himachal Pradesh	0.0	10.0	90.0	
Jharkhand	25.0	57.5	17.5	
Karnataka	11.4	45.7	42.9	
Kerala	6.8	40.9	52.3	
Maharashtra	5.4	53.8	40.9	
Madhya Pradesh	4.8	21.4	73.8	
Odisha	2.3	41.9	55.8	
Punjab	45.0	22.5	32.5	
Rajasthan	0.0	35.0	65.0	
Tamil Nadu	41.0	56.4	2.6	
Telangana	0.0	54.3	45.7	
Uttar Pradesh	19.4	64.5	16.1	
Uttarakhand	7.5	10.0	82.5	
West Bengal	62.9	30.0	7.1	
Total	14.6	37.9	47.4	

Table C.28		Problem related to tax policy		
State	Severe	Moderate	No Problem	
Andhra Pradesh	11.4	60.0	28.6	
Assam	5.0	52.5	42.5	
Bihar	28.2	69.2	2.6	
Chhatisgarh	0.0	80.5	19.5	
Delhi	14.0	46.0	40.0	
Gujarat	4.7	17.2	78.1	
Haryana	5.0	30.0	65.0	
Himachal Pradesh	2.5	17.5	80.0	
Jharkhand	27.5	60.0	12.5	
Karnataka	18.6	70.0	11.4	
Kerala	29.5	50.0	20.5	
Maharashtra	15.1	61.3	23.7	
Madhya Pradesh	7.1	52.4	40.5	
Odisha	2.3	48.8	48.8	
Punjab	31.7	34.1	34.1	
Rajasthan	0.0	17.5	82.5	
Tamil Nadu	15.4	84.6	0.0	
Telangana	11.8	61.8	26.5	
Uttar Pradesh	27.4	61.3	11.3	
Uttarakhand	5.0	25.0	70.0	
West Bengal	0.0	27.5	72.5	
Total	12.6	48.9	38.5	

Table C.29		Problem related to legal environment		
State	Severe	Moderate	No Problem	
Andhra Pradesh	0.0	31.4	68.6	
Assam	17.5	45.0	37.5	
Bihar	10.3	82.1	7.7	
Chhatisgarh	0.0	81.1	18.9	
Delhi	20.0	34.0	46.0	
Gujarat	3.1	7.8	89.1	
Haryana	10.0	30.0	60.0	
Himachal Pradesh	0.0	10.0	90.0	
Jharkhand	20.0	55.0	25.0	
Karnataka	7.1	78.6	14.3	
Kerala	9.1	63.6	27.3	
Maharashtra	8.6	63.4	28.0	
Madhya Pradesh	2.4	33.3	64.3	
Odisha	4.7	62.8	32.6	
Punjab	19.5	22.0	58.5	
Rajasthan	2.6	30.8	66.7	
Tamil Nadu	7.7	84.6	7.7	
Telangana	0.0	77.1	22.9	
Uttar Pradesh	32.3	59.7	8.1	
Uttarakhand	5.0	17.5	77.5	
West Bengal	12.9	48.6	38.6	
Total	9.8	49.2	41.1	

Appendix D

Sector Focus Reports

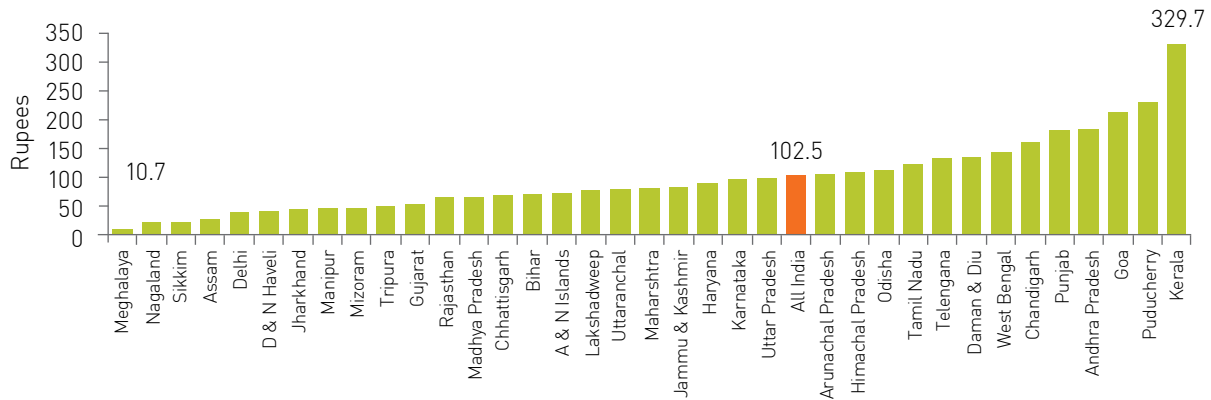
D.1 PHARMACEUTICAL INDUSTRY

Table D.1.1 Top Pharmaceutical Exports Destination (Rs. Billion)

Year	Exports	USA	Russia	UK	South Africa	Germany	Nigeria
FY11	488	113	21	18	15	16	10
FY12	635	156	20	23	18	22	15
FY13	798	202	31	28	24	25	19
FY14	903	240	33	32	34	24	23
FY15	943	263	26	33	31	23	26

Source: Pharmaceuticals Export Promotion Council of India

Figure D.1.1 Monthly per capita expenditure on medicine (Rs.)



Source: 71st round of NSSO (Social Consumption: Health) survey

Figure D.1.2 Share of monthly per capita expenditure on medicine in monthly per capita health expenditure (%)

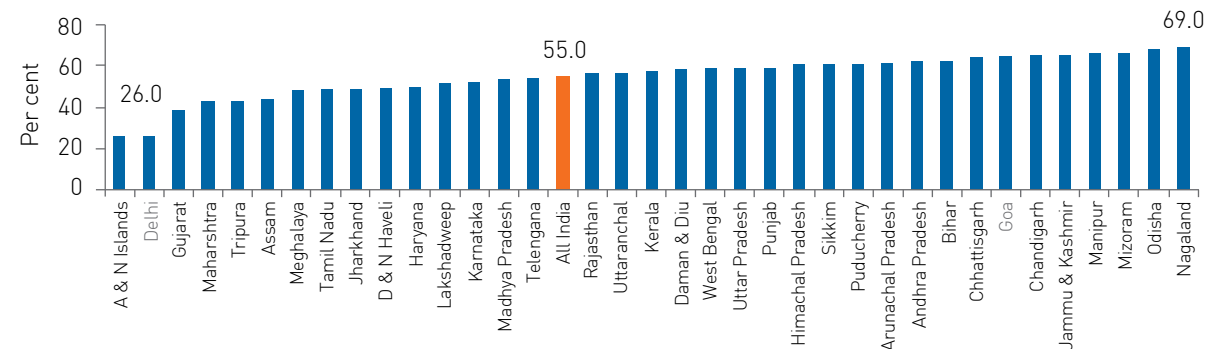


Table D.1.2 Supply side Regression Result for Pharmaceutical Industry

Dependent Variable:	GVA (log)	ROA
	I	II
Ratio of Working Days	1.3208 (0.3018)***	0.0099 (0.1000)
Average Wage	0.0007 (0.0000)***	0.0001 (0.0000)***
Year-end value of land (log)	0.3770 (0.0119)***	0.0078 (0.0044)*
Credit (log)	-0.0207 (0.0041)***	-0.0202 (0.0015)***
Inventory Turnover Ratio	-0.0023 (0.0017)	0.0091 (0.0015)***
Urban	-0.0644 (0.0515)	0.0417 (0.0231)*
Inventory Turnover Ratio*Urban		-0.0038 (0.0016)**
Firm Size (log)	0.2227 (0.0083)***	0.0166 (0.0029)***
Market Share	19.1736 (3.3034)***	15.1363 (1.2441)***
Constant	6.4509 (0.2980)***	0.0319 (0.0984)
R ²	0.55	0.17
N	2,823	3,014

Figures in parentheses indicate standard errors.

*, ** and *** corresponds to statistical significance at the 10%, 5%, and 1% levels, respectively

Variables: GVA=gross value added; ROA=return on assets; Land=Year-end value of total land owned by the company; Ratio of working days=Total number of working days divided by the total number of days in a year (366); Average wage rate=Ratio of total wage over total labour; Credit=Sum of overdraft, cash credit, and other short term and long term loans from banks and financial institutions; Inventory Turnover Ratio=Cost of goods sold divided by average inventory; Firm size=Gross sale value of the final product offered by the firm is used as proxy for firm size; Market Share=Ratio of revenue of the firm from the sales of its final product to the revenue of all firms located within the state; Urban=Indicator variable set to 1 if the unit is located in urban area and set to 0 if the firm is located in a rural area.

Table D.1.3 Demand for Medicines Regression Result

Dependent Variable:	Monthly HH expenditure on medicine
	MPCE
Primary	93.9301 (0.4311)***
Middle	157.6222 (0.4329)***
Secondary	146.2873 (0.4412)***
HS	171.1030 (0.4567)***
Graduate	273.7013 (0.4555)***
Chronic	1519.5830 (0.2750)***
RSBY	-81.0175 (0.2852)***
Emp_ins	47.2846 (0.8164)***
Own_ins	-128.5469 (0.8157)***
Pit	-16.6739 (0.2996)***
Flush	-19.2019 (0.2570)***
Safe_water	-104.7811 (0.7126)***
Constant	54.2970 (0.7879)***
R ²	0.1231
N	248444893

Figures in parentheses indicate standard errors.

*, ** and *** corresponds to statistical significance at the 10%, 5%, and 1% levels, respectively

Variables: HH=household; Mpce=usual monthly HH consumer expenditure (Rs.); Illiterate=if highest level of education in the HH is Illiterate/ informally literate; Primary, Middle, Secondary, HS, Graduate=if highest level of education in the HH is Primary, Middle, Secondary, Higher Secondary, and above HS (Including diploma etc.) respectively; Chronic=if HH member is suffering any chronic illness; RSBY=whether any member is covered by any health insurance provided by government, such as RSBY, CGSH, ESIS etc.; Emp_Ins=whether any member is covered by any health insurance provided by employer; Own_Ins=whether any member is covered by any health insurance bought by self; Pit=whether any member is covered by any household-purchased health insurance; Flush=type of latrine: Service or Pit; Safe_water=type of latrine: Septic tank/ flush system.

D.2 AUTOMOBILE INDUSTRY

Table D.2.1 Automobile Industry Regression Results

Dependent Variable	GVA	ROA
Firm size	0.1036 (0.0136)***	-0.0377 (0.0165)**
Credit	0.0236 (0.0087)***	-0.0013 (0.0108)
Imported Inputs	0.0750 (0.0093)***	-0.0153 (0.0117)
Ratio of Working Days	2.6913 (0.7482)***	1.4839 (1.0124)
Average Wage	0.0012 (0.0001)***	0.0022 (0.0002)***
Land	0.2483 (0.0220)***	-0.0554 (0.0268)**
Inventory Turnover Ratio	0.0077 (0.0015)***	0.0130 (0.0020)***
Location		0.5221 (0.1492)***
Constant	7.9476 (0.6746)***	-0.9213 (0.9170)
R ²	0.62	0.27
N	783	829

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Variables: GVA = Log (Gross Value Added) = Log (Total output - Total Input); ROA = Return on Assets = Net Income/Total Assets, where Net Income = GVA - Depreciation - Rent Paid - Interest Paid and Total Assets (at opening value) = Fixed Assets + Current Assets; Firm size = Log (Gross Sale Value of the final product offered by the firm), used as proxy for firm size; Credit = Log (Overdraft, Cash Credit, Short Term Loan + Outstanding Loan); Imported Inputs = Log (purchase value of Imported Input Items Consumed); Working Days = Total number of working days/365; Average Wage= Total Wages or Salaries Paid/Total Man Days Worked; Land = Log (Net Closing Value of Land); Inventory Turnover Ratio = Cost of Goods Sold/Average Inventory; Location: Urban=1, Rural=0

Table D.2.2 Ranking of state based on Share in output and employment aggregated across sub-sectors

Employment	Output
Tamil Nadu	Tamil Nadu
Maharashtra	Maharashtra
Haryana	Haryana
Uttarakhand	Uttarakhand
Punjab	Karnataka
Karnataka	Uttar Pradesh
Uttar Pradesh	Punjab
Madhya Pradesh	Jharkhand
Jharkhand	Rajasthan
Rajasthan	Madhya Pradesh
Gujarat	Gujarat
West Bengal	Himachal Pradesh
Himachal Pradesh	Telangana
Telangana	West Bengal
Andhra Pradesh	Delhi
Delhi	Andhra Pradesh
Goa	Goa
Kerala	Assam
Assam	Odisha
Odisha	Kerala
Jammu & Kashmir	Jammu & Kashmir
Bihar	Bihar
Chhattisgarh	Chhattisgarh
Manipur	Manipur
Meghalaya	Meghalaya
Nagaland	Nagaland
Sikkim	Sikkim
Tripura	Tripura

Table D.2.3 Ranking of state under each of the indicators in the Automobile Index

Road Density (length per 1000 sq km) (2011-12)	Cargo handled (million tonnes) per port (2014-15)	% of Total Power demand met (2014-15)	State Industrial Policy Focus (Yes=1 No=0)	Proportion of urban population, (2011)	Share in All-India Auto Sector Output (Weighted) (2012-13)	Growth Rate of Discretionary Spending (2004-05 to 2011-12)	Overall Auto Index
Delhi	West Bengal	Gujarat	Andhra Pradesh (1)	Delhi	Tamil Nadu	Karnataka	Tamil Nadu
Kerala	Andhra Pradesh	Sikkim	Chhattisgarh(1)	Goa	Maharashtra	Andhra Pradesh	Maharashtra
Assam	Gujarat	Delhi	Gujarat(1)	Mizoram	Haryana	Rajasthan	Haryana
West Bengal	Tamil Nadu	Haryana	Haryana(1)	Tamil Nadu	Uttarakhand	Arunachal Pradesh	Karnataka
Goa	Odisha	Madhya Pradesh	Himachal Pradesh*(1)	Kerala	Karnataka	Maharashtra	Delhi
Tripura	Karnataka	Rajasthan	Jammu & Kashmir (1)	Maharashtra	Uttar Pradesh	Uttarakhand	Andhra Pradesh
Nagaland	Maharashtra	West Bengal	Jharkhand(1)	Gujarat	Punjab	Kerala	Gujarat
Punjab	Goa	Goa	Karnataka(1)	Karnataka	Jharkhand	Goa	Uttarakhand
Tamil Nadu	Kerala	Himachal Pradesh	Madhya Pradesh(1)	Haryana	Rajasthan	Odisha	Rajasthan
Uttar Pradesh	Arunachal Pradesh	Punjab	Maharashtra (1)	Andhra Pradesh	Madhya Pradesh	Tamil Nadu	Odisha
Odisha	Assam	Chhattisgarh	Odisha(1)	Manipur	Gujarat	Jharkhand	West Bengal
Karnataka	Bihar	Maharashtra	Punjab(1)	West Bengal	Himachal Pradesh	Tripura	Madhya Pradesh
Bihar	Chhattisgarh	Kerala	Rajasthan (1)	Uttarakhand	West Bengal	Himachal Pradesh	Jharkhand
Maharashtra	Delhi	Odisha	Tamil Nadu(1)	Nagaland	Andhra Pradesh	Bihar	Punjab
Uttarakhand	Haryana	Bihar	Uttarakhand* (1)	Madhya Pradesh	Delhi	Punjab	Himachal Pradesh
Haryana	Himachal Pradesh	Jharkhand	Arunachal Pradesh (0)	Jammu & Kashmir	Goa	Haryana	Chhattisgarh
Andhra Pradesh	Jammu & Kashmir	Uttarakhand	Assam (0)	Tripura	Assam	Delhi	Goa
Himachal Pradesh	Jharkhand	Tamil Nadu	Bihar (0)	Sikkim	Odisha	Uttar Pradesh	Kerala
Manipur	Madhya Pradesh	Manipur	Delhi (0)	Rajasthan	Kerala	Madhya Pradesh	Jammu & Kashmir
Gujarat	Manipur	Nagaland	Goa (0)	Jharkhand	Jammu & Kashmir	Jammu & Kashmir	Bihar
Sikkim	Meghalaya	Karnataka	Kerala (0)	Chhattisgarh	Bihar	Assam	Manipur

*Special Package of industrial incentives by government of India for the state of Himachal Pradesh and Uttarakhand.

Rajasthan	Mizoram	Andhra Pradesh	Manipur (0)	Arunachal Pradesh	Arunachal Pradesh	Chhattisgarh	Sikkim
Madhya Pradesh	Nagaland	Mizoram	Meghalaya (0)	Uttar Pradesh	Chhattisgarh	Meghalaya	Arunachal Pradesh
Chhattisgarh	Punjab	Assam	Mizoram (0)	Meghalaya	Manipur	West Bengal	Mizoram
Meghalaya	Rajasthan	Arunachal Pradesh	Nagaland (0)	Odisha	Meghalaya	Gujarat	Assam
Mizoram	Sikkim	Meghalaya	Sikkim (0)	Assam	Mizoram	Manipur	Nagaland
Jharkhand	Tripura	Tripura	Tripura (0)	Bihar	Nagaland	Sikkim	Tripura
Arunachal Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh (0)	Himachal Pradesh	Sikkim	Mizoram	Uttar Pradesh
Jammu & Kashmir	Uttarakhand	Jammu & Kashmir	West Bengal (0)	Punjab	Tripura	Nagaland	Meghalaya

D.3 RETAIL SECTOR

Table D.3.1 Education Profile of Million Plus Cities

Classification	Illiterate	Below Primary	Primary	Middle to Higher	Graduate & Above
Mega Cities	16.5	13.2	12.6	38.8	18.8
Boomtowns	18.2	14.4	10.9	37.0	19.5
Niche Cities	18.5	13.3	9.6	37.9	20.7
Other Million Plus Cities	22.3	15.0	13.3	36.3	13.1
All Million Plus Cities	17.9	13.7	12.3	38.0	18
Rural	36.3	19.3	14.4	26.9	3.1
Urban	20.4	15.0	12.6	37.0	15.1
All India	31.7	18.0	13.9	29.8	6.6

Table D.3.2 List of Retail Store Chains

Name of the Company	Retail Stores with different formats
Aditya Birla Group	More stores, Pantaloons Fashion
Future Group	Big Bazaar, Food Bazaar, Fashion at Big Bazaar, Home Town, E Zone
K Raheja Group	Shopper's Stop, Departmental Store, HyperCity, Home Stop, Crossword
Tata Group	Trent:West Side, Star Bazaar, Landmark, Croma Retail
RPG Group: Spencer's	Hypermarkets and Supermarkets
Landmark Group	Max/ Value Fashion Chain, Lifestyle Store, Home Centre
Titan Group	Titan World
Bharti Retail Group	Easy Day

Table D.3.3 List of Million Plus cities

State	Million plus cities			
Jammu and Kashmir	Srinagar (OC)	Gujarat	Ahmedabad (MC)	
Punjab	Ludhiana (OC)		Surat (MC)	
	Amritsar (OC)		Vadodara (BT)	
Haryana	Faridabad (NC)		Rajkot (NA)	
Delhi	Delhi (MC)	Maharashtra	Greater Mumbai (MC)	
Rajasthan	Jaipur (MC)		Pune (MC)	
	Jodhpur (OC)		Nagpur (BT)	
	Kota (OC)		Nashik (BT)	
Uttar Pradesh	Kanpur (BT)		Andhra Pradesh	Vasai Virar City (NA)
	Lucknow (BT)			Aurangabad (OC)
	Ghaziabad (BT)	Hyderabad (MC)		
	Agra (OC)	GVMC (BT)		
	Varanasi (OC)	Vijayawada (NC)		
	Meerut (OC)	Karnataka	Bangalore (MC)	
Allahabad (NC)	Kochi (BT)			
Bihar	Patna (BT)	Kerala	Kozhikode (OC)	
West Bengal	Kolkata (MC)		Thrissur (NC)	
	Asansol (NA)		Malappuram (OC)	
Jharkhand	Jamshedpur (OC)		Thiruvananthapuram (BT)	
	Dhanbad (OC)		Kannur (OC)	
	Ranchi (OC)		Kollam (OC)	
Chhattisgarh	Raipur (OC)	Tamil Nadu	Chennai (MC)	
	Durg-Bhilainagar (OC)		Coimbatore (BT)	
Madhya Pradesh	Indore (OC)		Madurai (OC)	
	Bhopal (BT)		Tiruchirappalli (OC)	
	Jabalpur (OC)			
	Gwalior (OC)			

Where, MC: Mega Cities; BT: Boom Towns; NC: Niche Cities; OC: Other Cities and NA: Not Applicable

Table D.3.4 Education and Wage profile of Million Plus Cities (in %)

Classification	Self-employed	Regular wage/ salary earning	Casual labour	Others	Total
Mega Cities	30.9	53.1	6.8	9.2	100
Boomtowns	30.7	45.9	12.1	11.2	100
Niche Cities	27.5	37.4	11.8	23.3	100
Other Million Plus Cities	38.0	33.5	17.5	11.0	100
All Million Plus Cities	31.8	48.3	9.6	10.4	100
Urban	34.4	41.5	12.5	11.5	100
MPCE (Urban) in Rs.	2229	2936	1388	3537	

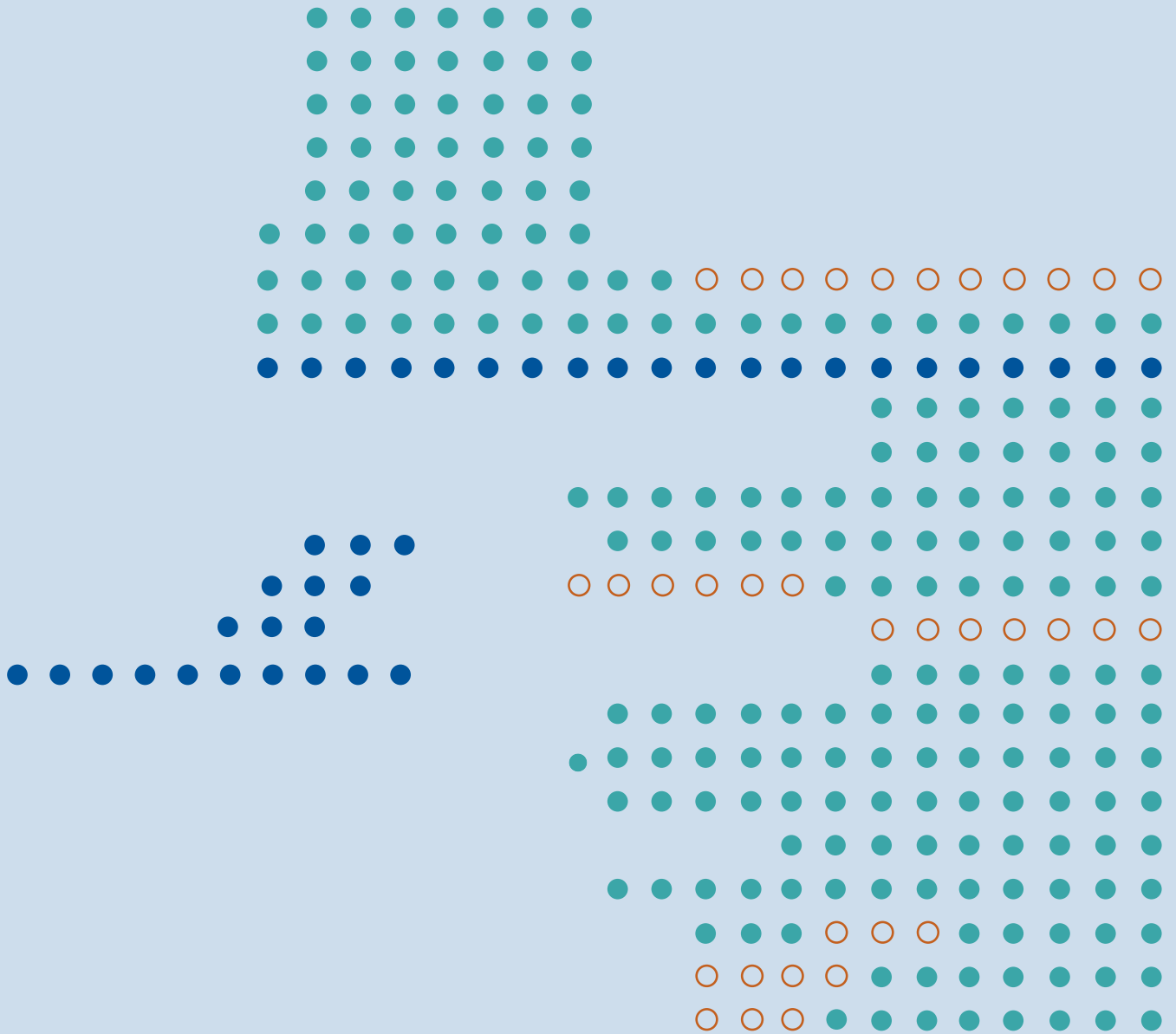
Table D.3.5 The Seven Indicators used in the Retail Potential Index

Indicator	Proxy Variables
Urbanization and Market Demand	Proportion of urban population (2011)
	Population in million plus cities to total population in states
Discretionary Spending	Discretionary spending (2011-12)
Internet Access	Percentage households with computers having access to internet (2011)
Infrastructure	Road Density (length per 1000 square km)
Future Potential	Number of smart cities as a percentage of total number of towns
	States that have allowed FDI in Multi-brand retail

Table D.3.6 Ranking of states for different indicators

	1	2	3	4	5	6	7	8	9	10
Proportion of urban population (2011)	Delhi	Goa	Mizoram	Tamil Nadu	Kerala	Maharashtra	Gujarat	Karnataka	Haryana	Andhra Pradesh
Discretionary spending (2011-12)	Delhi	Goa	Kerala	Punjab	Haryana	Maharashtra	Tamil Nadu	Karnataka	Andhra Pradesh	Himachal Pradesh
Percentage households with computers having access to internet (2011)	Goa	Mizoram	Delhi	Kerala	Sikkim	Karnataka	Haryana	Uttarakhand	Assam	Maharashtra
Road Density (length per 1000 square km)	Delhi	Kerala	Assam	West Bengal	Goa	Tripura	Nagaland	Punjab	Tamil Nadu	Uttar Pradesh
Population in million plus cities to total population in states	Delhi	Kerala	Maharashtra	Gujarat	Tamil Nadu	West Bengal	Karnataka	Andhra Pradesh	Jharkhand	Jammu and Kashmir
FDI Policy	In alphabetical order: Andhra Pradesh, Assam, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Maharashtra, Manipur, Rajasthan, Uttarakhnad									
Number of smart cities as a percentage of total number of towns	Delhi	Mizoram	Sikkim	Nagaland	Meghalaya	Goa	Tripura	Andhra Pradesh	Telangana	Maharashtra





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