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India and the Coronavirus Pandemic: Economic Losses for Households Engaged in Tourism and Policies for Recovery

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NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH

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Foreword

The advent of the Coronavirus or COVID-19 pandemic since March 2020 has led to multiple challenges for both economies and health systems across the world. The outbreak of the disease continued globally for several months, claiming the lives of millions of people while simultaneously triggering a decline in almost all economies. In India, although the severity of the first wave of the disease reduced somewhat towards the end of 2020, the arrival in early 2021 of the second wave, which is still continuing in many countries, dealt another shock to economies, with the fear of a third wave compounding the situation and adversely affecting both economic revival and people's confidence. The repeated lockdowns announced by various governments to arrest the spread of the disease, wherein only the sale of essential commodities was exempted, also brought all economic activity to a standstill for sustained periods. Even after announcing phased unlocking, most of the countries have had to follow strict protection norms for resuming productive activities in order to ensure the safety of their populations. Among the businesses that have been most profoundly affected by the pandemic, the tourism and hospitality businesses have taken big hits.

India is among the countries that have been worst affected by the pandemic. With a consistent rise in the number of infections and mortalities, the Indian Government has been compelled to implement a slew of measures entailing social distancing, community lockdowns, work-from-home, self-imposed or mandatory quarantines, and curbs on crowding by shutting down or curtailing rail and air travel, and inter-state public road transport, all of which have brought tourism activities to a near-halt for several months.

Since India is one of the favoured tourist destinations for both domestic and international tourists due to its unique natural endowments, culture, and hospitality, its tourism industry generates employment opportunities for millions of job-seekers. Tourism is estimated to have directly contributed 2.7 per cent to GDP and 6.7 per cent to the employment of the country in 2019-20. If indirect contribution were to be included in these estimates, the corresponding shares would go up to 5.2 per cent and 15.3 per cent, respectively. However, the pandemic has not only jeopardised the growth prospects of the sector but also caused a significant economic slump, which the sector would take some time to recover from.

It is, therefore, critical for policy-makers to assess the economic repercussions of the pandemic in real time to facilitate policy initiatives for restoring and supporting livelihoods for households without compromising on their health and protection. It is in this context that NCAER has conducted this study with the objective of measuring the actual impact of the pandemic on the tourism sector in India in terms of loss of income and employment both overall in the sector as well as in individual households. The study also provides a roadmap for recovery of the sector, outlining various policy recommendations that would enable the sector to achieve its pre-pandemic status.

I take this opportunity to thank Shri Arvind Singh, Secretary, Ministry of Tourism, for initiating this critical and timely study. The NCAER team is grateful to him for providing valuable comments, allowing us to enrich and bolster the report. The team also wishes to thank other senior officials in the Ministry of Tourism, including Mr Gyan Bhushan, Economic Adviser; Ms Rupinder Brar, Additional Director General; and Mr Rakesh Kumar Verma, Joint Secretary, for offering their insights in carrying out this study. The team also expresses its gratitude to all the officials of the Market Research Division, Ministry of Tourism, including Ms Anita Baghel, Additional Director General; Mr Fakhre Alam, Director; Ms Kirti Gaikwad, Deputy Director; Mr Vinod Kumar, Assistant Director; and Mr Ujjaval Srivastava, Assistant Director, for their continued support through the course of the study.

The NCAER team that undertook this study, led by Dr Poonam Munjal, Senior Fellow, included Mr K.A. Siddiqui, Senior Fellow; Mr Devender Pratap Rana, Fellow; and Mr Asrar Alam, Senior Research Analyst. The team was also supported by an external Consultant, Mr Dripto Mukhopadhyay. I hope that this study will not only help drive policy for the recovery of the tourism sector in India but also prove to be a useful contribution in the long run to the literature on tourism for both policy-makers as well as the research fraternity.

New Delhi
September 2021

Dr Poonam Gupta
Director General, NCAER

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Executive Summary

Background

The spread of Coronavirus has impacted the tourism sector drastically all over the world. Be it aviation or hospitality, transportation, tour operators or eateries, every activity related to tourism has been adversely affected in an unprecedented manner. India has been no exception. During the first wave itself, the sector was affected the most among all other economic sectors. The industry saw gradual signs of recovery, post-October 2020, for the next three-four months. However, the sudden surge in cases from March 2021 onward stalled tourism activities almost completely except for a few special occasions to selective locations.

This grim scenario triggers a thorough understanding of the estimated losses at a granular level and how to recuperate in the coming days. A roadmap on recovery is a must not only because tourism is the largest contributor to the economy and employment, but also because a large chunk of the population of the country is directly or indirectly linked to activities in the tourism sector. However, the implementation of any policy measures to support the tourism sector and the affected households requires a systematic estimation of the losses and requirements of relief. Thus, resilient policies are needed to address these challenges at all levels to put back the tourism sector on the path it was traversing before the pandemic.

This study captures the economic losses resulting from the changes experienced during the entire period of the pandemic with the help of data from different sources that reflect changes over the said period. The study also probed the likely recovery phases of the tourism sector post the pandemic in order to understand how the sector would regain its pre-pandemic position.

Objectives of the Study

This study aims to assess the estimated loss to the economy and to the income of households because of the COVID-19 pandemic. The key objectives of the study are:

• Quantify the sector-wise (or industry-wise) direct and indirect impacts of tourism activities on the overall economy, and especially on household income, which may be further disaggregated into different types of households like formal and informal;

• Quantify the sector-wise loss in income, and in the overall economy and of the household sector; and also the loss in jobs due to the impact of the Coronavirus pandemic on the tourism sector;

• Estimate the impact of the gradual opening up of domestic tourism activities and the sectors related to tourism;

• Estimate the likely impact of the opening of international tourism, in a phased manner; and

• Propose policy measures appropriate for providing relief to the tourism sector, in general, and households involved in tourism-related activities, in particular, based on feedback received from various stakeholders.

Approach and Methodology

The study captures the impact of the pandemic on the Indian tourism sector from a 360 degree perspective. It looks into the sectoral activity level to understand its contribution to employment and GDP, and finally into the income loss, especially for households that are directly or indirectly involved with tourism activities. The study has also used macro-economic modelling including the Input-Output model and Social Accounting Matrix. This facilitated capturing of the multiplier effects that reflect the economy-wide impacts emanating from the loss of tourism activities.

In order to quantify the economic impact of the fall in tourism activities on Gross Value Added (GVA), the study estimated the values of Tourism Direct GVA (TDGVA) from the following perspectives:

- Tourism economy in a normal situation;
- Tourism economy due to the supply-side shock caused by the COVID-19 pandemic;
- Tourism economy due to the demand-side shock caused by the COVID-19 pandemic, which can be further dissected into:
    - Inbound tourism demand-side shock; and
    - Domestic tourism demand-side shock.

The TDGVA for each tourism industry has been estimated by applying the Tourism Industry Ratios (TIRs) on the industry's overall GVA. The TIRs indicate the part of GVA which is on account of Tourism. This has been done in the Supply and Use Table (SUT) framework of the Tourism Satellite Account (TSA). In a normal situation and in the case of an impact caused by a supply shock, the TIRs are assumed to be the same as those derived in the TSA for 2015-16.

In order to estimate the impact of the demand-side shock, the study required an estimation of tourism demand during the study reference period, which covers the pandemic situation, that is, the first three quarters of 2020-21 [till the latest data on GDP are available from the Ministry of Statistics and Programme Implementation, (MoSPI)]. This, in turn, required the estimates of inbound and domestic tourist arrival during the same period, which were provided by the Ministry of Tourism (MoT). The new TIRs were derived by applying the quarter-wise year-on-year fall in the number of inbound and domestic tourists on the inbound and domestic tourism expenditure, respectively. Further, in order to estimate the loss in jobs in the tourism sector, the key data source used in this study were the employment data obtained from the Periodic Labour Force Survey (PLFS) conducted by MoSPI. The PLFS provides annual employment estimates. In order to derive the estimates at the quarterly level, employment elasticities were used. The study also estimates the loss in jobs by work status, that is, employees and the self-employed.

Besides, the study estimates the impact on income of the households engaged in tourism activities. The income estimates have also been categorised into income drawn by employees (wage income) and income earned by the self-employed (non-wage income). The data for this exercise were sourced from the National Accounts Statistics, 2021, and through estimation at the sectoral level. In addition, estimation was also done at the quarterly level using the SUT framework of TSA and using the growth estimated in the number of employees and self-employed respectively.

This study also presents the expected outlook for the tourism sector in the coming years and answers questions on the time required for the revival of the sector and the expected time by which the tourism economy will reach the pre-pandemic levels. This points to the number of years lost due to the pandemic, the aftermath of which continues to be felt.

This is followed by a section on Recommendations proposed for the revival of the tourism sector in India, based on international experiences and feedback from stakeholders.

Key Findings

The Tourism Economy in a Normal Situation

- The Tourism Satellite Account (TSA) is an important tool for estimating the contributions of tourism to the economy. According to the second and third TSAs, the tourism sector contributed as much as 6.8 per cent and 5.2 per cent directly and indirectly to the country's total GDP. The direct shares for these years were 3.7 per cent and 2.7 per cent, respectively.

- For the present study, we have also derived the income multiplier to estimate the impact of an increase in tourism demand on the overall household income of the economy through the preparation of a Social Accounting Matrix (SAM). This is because SAM constitutes not only the production account but also incorporates the household account. Hence, it presents the transactions between the production sectors and the households drawing income from these sectors. The SAM-based multiplier analysis reveals that the income multiplier of the tourism sector is 1.6332. Hence, if the tourism demand or tourism expenditure increases by, say, Rs. 1 crore, then owing to the direct and indirect linkages among the sectors of the economy, the overall household income of the economy is expected to increase by Rs. 1.63 crore.

The Tourism Economy during the COVID-19 Pandemic

The impact of the pandemic on tourism has been captured through the estimation of TDGVA for all the three quarters of 2020-21, and across the following aspects in such a way that the impact of the pandemic due to different types of shocks has been captured separately.

- Impact due to the Supply-side Shock: This relates to the overall economic slowdown during 2020-21 and assumes that tourism was rather resilient and continued as before. Hence, this scenario takes into account only the supply-side shock. Therefore, the TIRs are assumed to remain the same for all the quarters of 2020-21 as those for pre-pandemic years. The findings are as follows:
    - While the overall economy fell by 20.1 per cent in Q1, and by 5.1 per cent in Q2, and grew at a positive rate of 4.3 per cent in Q3, all in nominal terms, the tourism economy or TDGVA saw a much greater fall of 42.8

per cent in Q1, and 15.5 per cent in Q2, and continued to experience negative growth even in Q3, recording a fall of 1.1 per cent.

- Impact due to the Demand-side Shock: This refers to the impact of the pandemic on the tourism economy, with both the supply-side shock emanating from the economic slowdown and the demand-side shock resulting from the limited tourism activity in the country during the three quarters of the study. The limited tourism activity translates into a huge reduction in tourism expenditure incurred by all types of tourists— inbound, domestic, and outbound. Hence these estimates reflect the most likely loss in TDGVA. The findings are as follows:
    - It is estimated that the TDGVA plummeted by as much as 93.3 per cent in Q1 of 2020-21 over its level during the same quarter of the previous year. It picked up slightly to post a fall of 79.5 per cent in Q2 and that of 64.3 per cent in Q3, but continued to remain at an extremely low level, and in fact, in negative territory, while overall the economy posted a positive growth of 4.3 per cent in Q3.

- Impact due to Inbound Demand-side Shock: This refers to the independent impact of a fall in the inbound tourism expenditure, assuming that all other forms of tourism remained the same during the study reference period. The TDGVA is estimated to have decreased by 61.7 per cent in Q2 of 2020-21 over the same quarter of 2019-20. Going forward, this is estimated to have fallen by 38.0 per cent in Q2 and 25.7 per cent in Q3.

- Impact due to Domestic Demand-side Shock: This refers to the independent impact of a fall in domestic tourism expenditure, assuming that all other forms of tourism remained the same. Notably, the negative impact of a fall in domestic tourism activity is much more significant than that of inbound tourism activity. The fall in domestic tourism activity in all the three quarters is estimated to be 20 to 30 percentage points higher than that in the case of inbound tourism.

Estimated Loss in Jobs during the COVID-19 Pandemic

A significant number of jobs were lost in the tourism sector once the lockdown was implemented. However, once the unlock phases started and the economy was opened up, the recovery was fast. The findings are as follows:

- As many as 14.5 million jobs, out of an estimated 34.8 million active jobs during the pre-pandemic period of 2019, are expected to have been lost as a repercussion of the pandemic and the resultant lockdown in the first quarter of 2020-21. This is equivalent to a fall of 41.7 per cent.
- In terms of absolute numbers, the loss of jobs has been more pronounced in the case of salary/wage earners, 7.8 million of whom were left without jobs during Q1. However, in terms of a percentage fall, the self-employed were hit harder as their number fell by 42.8 per cent, as compared to regular employees with full-time jobs, whose number shrunk by 40.7 per cent.
- As the economy, in general, and tourism activity, in particular, started picking up during the subsequent quarters of the years, many jobs are estimated to have gradually returned in these quarters. Till the third quarter, however, the deficit in the number of tourism jobs was still estimated to be 1.8 million.

Estimated Loss in Household Income during the COVID-19 Pandemic

- The impact on income is estimated to be much more severe as compared to the impact in terms of loss of jobs. This could be due to the cut in salaries, which explains the huge loss in wage income and the much higher loss in non-wage income among business owners who did not just pay salaries to their staff but were also required to incur other committed expenditures like payment of rent, utility bills, and so on.
- While wage income fell by 41.6 per cent in Q1, non-wage income, that is, the income of the self-employed or business owners nosedived by 124.4 per cent. It is for this reason that many businesses did not just witness a severe fall in income but also posted a deficit in Q1.
- Going forward, with a pick-up in activities, the income levels have shown an improvement but a negative growth of 3.4 per cent in the case of wage income and 21.2 per cent in the case of non-wage income has recorded, both in Q3.
- On the other hand, in sharp contrast to the tourism household income, the total household income saw a steeper drop in income levels in the case of wage income or the salaried income of employees. This is because while tourism industries are mostly service industries, overall the economy also includes a large proportion of the primary sector and manufacturing industries, both of which are highly labour-intensive.

Tourism Economy Going Forward—Future Outlook

With the gradual opening up of international borders, restoration of the confidence to travel among the public, success of the vaccination drive, and the lessons learnt from previous waves of infections, tourism activity is soon expected to move towards normalcy. In order to present our outlook for the sector, we have envisaged the following three scenarios for all forms of tourism, that is, inbound, domestic, and outbound, as also for outbound tourists diverted to domestic trips:

- Optimistic;
- Most likely; and
- Pessimistic.

These scenarios are based on assumptions made using our judgement of the likely situation going forward. The key findings are as follows:

- It is expected that the tourism economy, in terms of tourism expenditure, will regain its pre-pandemic level by 2024-25, primarily driven by domestic tourism. As regards inbound tourism, its revival is expected to be slower and it is not likely to reach the pre-pandemic level before 2026-27, even as per the optimistic scenario.
- On the other hand, domestic tourism (complemented by the outbound-turned domestic tourism) is likely to reach the pre-pandemic level much sooner, that is, by 2024-25, even as per the pessimistic scenario.

Recommendations for the Revival of Tourism in India

The proposed recommendations for facilitating the revival of the tourism sector are as follows:

- Promotion of Domestic Tourism: An average domestic trip costs much less than other types of trips, that is, only Rs. 5,429, as compared to the corresponding prices of Rs. 2.10 lakhs for an inbound trip and Rs. 14,286 as pre-trip and about Rs. 60,000 on-trip for an outbound trip. However, given its huge volume in terms of the number of trips, the total tourism expenditure incurred by domestic tourists is over 70 per cent of the total internal tourism expenditure. Hence, the contribution of tourism to the economy is mainly on account of domestic tourism.
- Diverting Outbound Tourists to Domestic Trips: This can be achieved through various innovative measures such as creating an enticing bucket for domestic destinations, developing a new approach such as that of 'working holidays' or 'work

from home by travelling to an interesting destination', and promoting regional or local destinations.

- Targeting Incentives to Industries Contributing the Most to the Tourism Economy: The data on tourism expenditure reveal that of all the tourism characteristic products and services, food-providing services, road transport services, and healthcare-providing services account for close to 80 per cent of the total tourism expenditure. Hence, government policies need to be prioritised and targeted towards these important industries.
- The other broad recommendations include:
    - Re-establishing trust in travel and tourism among travellers;
    - Adherence to safety and mandatory health and hygiene protocols to the highest standards possible;
    - Ensuring that the protocols are also mandatorily followed by tourists:
    - Adoption of a high-value, low-volume (HVLV) approach (as followed in Bhutan);
    - Urging the Government to be responsive by preparing a Tourism Recovery Plan;
    - Providing tax benefits, subsidies, and incentives to industry players to enable them to sustain themselves and overcome the pandemic shock;
    - Integrating public health with tourism;
    - Issuance of vaccine certificates;
    - Creating a healthy environment which would act as a natural barrier to future pandemics;
    - Promoting and exploiting technological innovations like digital marketing, and creation of virtual tours;
    - Using digital services to improve the customer safety experience and adapting quickly to changes in the health context in local areas;
    - Targeting support for vulnerable communities;
    - Supporting businesses in diversifying their revenue sources;
    - Identifying and targeting a diverse customer base; and
    - Maintaining customer and employee confidence.

It is imperative for policy measures to take into account all the above key areas identified in the proposed recommendations, in order to foster the immediate revival and subsequent growth of the tourism industry in the country post the COVID-19 pandemic.

India and the Coronavirus Pandemic

Economic Losses for the Households in Tourism and the Policies for Recovery

I. Background

The spread of Coronavirus has had a drastic impact on the tourism sector all over the world. Be it aviation or hospitality, transportation, tour operators or eateries, every activity related to tourism has been adversely affected in an unprecedented manner. India has been no exception. The decline in tourist arrivals or movements in India started in February 2020 itself. However, this trend reached its trough when the lockdown was declared by the Central and State Governments in late March 2020. Besides, there were cancellations of travel by people owing to the fears of Coronavirus infection, without the universal adoption of preventive measures such as wearing of masks, social distancing, and hand hygiene.

There is no doubt that the pace of recovery of the economies has been fragile but some efforts have been made by governments. This is especially true for the tourism sector in India and any other country. The reason for this is the imposition of economic, psychological as well as certain restrictions in movements irrespective of locations, for almost the entire year 2020 because of the first wave of the pandemic. However, when COVID cases started declining in the country post the first wave and the situation started moving towards normalcy, albeit with the prescribed precautions being taken, the second wave hit the country in March 2021.

> India's GDP is estimated to have contracted by 8.0 per cent in real terms in 2020-21 because of the pandemic in the country. This implies an overall economic loss of Rs. 11.6 trillion.

Unfortunately, because of several reasons including the ability of the virus to change its strain and a delay in vaccination programmes, the second wave proved to be more devastating than the first. Between April and May 2021, the total infected population crossed more than 20 million and the number of daily infected people touched more than 4 lakhs. The lack of adequate infrastructure and supply chains not only increased fatalities but also led to widespread panic among the general population.

With the imposition of lockdowns by both the Central and State governments, around 15th May the number of daily infected came down to about 3.25 lakhs around 15 May 2021. Although the sheer number of infected people was still alarming, the good news was the declining trend for about a week, though the number of daily deaths in the country kept rising. This trend was an indication that perhaps the second wave had reached its peak and one could expect to see a flattening of the curve within the forthcoming month or fortnight. However, concern about the pandemic situation has persisted, especially in view of the overwhelming shortage of vaccines. Presently, with new companies having been given permission to sell vaccines in India and also with reports that state governments are planning to procure vaccines through global tenders, perhaps the hope of controlling the situation would be materialised.

> The pandemic and consequential lockdown announced by the Central and State Governments hit the tourism sector the most among various sectors and economic activities that faced huge employment and income losses.

This situation has wrought havoc on the tourism industry. During the first wave too, the sector was the most affected among all the economic sectors. There was a ray of hope post October 2020, when tourism activities started in a restricted way, albeit slowly. The industry saw gradual signs of recovery during the subsequent 3-4 months. However, the sudden surge in cases from March 2021 onwards completely stalled tourism activities again except travel on a few special occasions to selective locations. It is obvious that this more than a year-long episode has virtually brought all tourism-related businesses, be they large, small, or micro, to their knees. There has been an unprecedented adverse impact on employment and income that no one had either anticipated or been prepared for. This loss of income and employment for households involved in tourism activities also led to a reduction in expenditure across goods and services, particularly 'discretionary expenditure'. All these unfolding developments have significantly impacted the output of the tourism sector as well as of the other sectors linked to it.

The above analysis clearly indicates the estimated losses at a granular level and how to recover from the losses in the coming days. It is imperative to create a roadmap on recovery not only because tourism is the largest contributor to the economy and employment, but also because a large chunk of the population of the country is directly or indirectly linked with tourism sector activities. Here it may be noted that since the formal sector is impacted directly and is expected to take some time to recover from the pandemic-induced shock, the informal sector engaged with tourism activities would have been even more adversely impacted. Some of these informal sector enterprises include small hotels, homestays/Bed and Breakfast (B&B) outlets, eateries/dhabas, shops, tour guides, and small scale tour and transport operators, among others.

Job losses in both the formal and informal sectors have also been unavoidable. A large number of households in the country depend completely on earnings from tourism-related activities for sustenance. The current situation also indicates that tourism activities will take time to recover even after the spread of COVID-19 is brought under control and normal life can be resumed in the country with people becoming less vulnerable to the risk of contracting the disease. The revival of confidence to travel among tourists after the COVID-19 shock may take some time, though some green shoots are already visible with the initiation of domestic tourism to some extent.

The obvious income losses for households engaged in the tourism sector call for urgent policy interventions. However, any policy measures to support the tourism sector and the affected households necessitate a systematic estimation of the losses and relief requirements. This, in turn, points to the need for resilient policies to address these challenges at all levels to put the tourism sector back on the path it was traversing before the pandemic. All stakeholders and policy makers need to adopt innovative and sensitive approaches, and identify the vulnerable enterprises to counter the adverse situation confronting the tourism sector during the last one year. According to the latest TSA for reference year 2015-16, the direct share of tourism in GDP and employment is estimated at 2.7 per cent and 5.4 per cent, respectively. These shares increase to 5.2 per cent and 12.4 per cent, respectively, when direct as well as indirect contributions are taken into account.[1] The loss to the economy caused by the absence of tourism may exceed what the sector contributes directly, as it depends critically on the impact on other sectors with which the tourism sector has strong inter-linkages, like accommodation and food-providing services, transport services, and recreational and cultural activities.

> The tourism sector contributes 5.2 per cent to India's GDP and 12.4 per cent to India's employment according to India's Third Tourism Satellite Account (TSA) (2015-16).

Evidently, the loss to income of households associated with tourism has also resulted in further loss due to the reduced demand for goods and services in the economy. Hence, it is equally important to estimate the total loss to the economy caused by the decline of tourism due to the pandemic, as it is to estimate the benefits of tourism by virtue of its contribution to economy. Even more important is the need to assess the losses incurred by households which draw income from the tourism related industries and the multiplier impact of this income loss on the economy. After the gradual relaxation of the lockdown and concomitant restrictions on the movement of goods and people in most of the States, there were signs of at least partial revival in tourism activities. However, the second wave of the pandemic since March 2021 again severely impacted the tourism sector. The second wave did not only restrict movement due to the high daily numbers of infected persons,

[1] "The Third Tourism Satellite Account of India, 2015-16." *Report 20181102*, November 2018, New Delhi: National Council of Applied Economic Research (NCAER).

but also had a severe adverse impact on the confidence of the people to travel. This study captures the economic losses resulting from the changes experienced during the entire period of the pandemic, using data from different sources. The study has also probed the likely recovery phases of the tourism sector post the pandemic in order to understand the how the sector would be able to regain its pre-pandemic position. Various country experiences have been added as best practices that may be implemented in India for developing a future roadmap for recovery of the sector. This would help policymakers in decision-making based on the impacts captured on a more or less real-time basis.

II. Key Objectives of the Study

This study aims to assess the estimated loss to the economy and to the income of households caused by the COVID-19 pandemic. The key objectives of the study are to:

- Quantify the sector-wise (or industry-wise) direct and indirect impacts of tourism activities on the overall economy as a whole and especially on household income, which may be further disaggregated into different types of households like formal and informal;
- Quantify the loss in income, sector-wise, and in the overall economy and of the household sector; and also the loss in jobs due to the impact of the Coronavirus pandemic on the tourism sector;
- Estimate the impact of a gradual opening up of domestic tourism activities and the sectors related to tourism;
- Estimate the likely impact of opening of international tourism, in a phased manner; and
- Propose appropriate policy measures for providing relief to the tourism sector, in general, and households involved in tourism-related activities, in particular, based on the feedback received from various stakeholders.

III. Approach and Methodology

The study captures the impact of the pandemic on the Indian tourism sector from a 360 degree perspective. It has looked into the sectoral activity level to understand its contribution to employment and GDP, and finally into the income loss, especially for households that are directly and indirectly involved with tourism activities. Since it is not reasonably possible to obtain these macro perspectives, especially the direct and indirect or spill-over effects, through a simple analysis of the numbers, the study has used macro-economic modelling, including the Input-Output Model and Social Accounting Matrix. This has facilitated assessment of the multiplier effects reflecting the economy-wide impacts emanating from the loss of tourism activities. The study is based on secondary data available from different sources, especially pertaining to the macro-economic parameters, tourist arrivals, and employment. The study constructs different scenarios on tourism activities for understanding the trajectory of the recovery path. In order to quantify the economic impact of a fall in tourism activities on Gross Value Added (GVA), the study estimates the values of Tourism Direct GVA (TDGVA) from the following perspectives:

> Using Macro-economic modelling including the Input-Output model and the Social Accounting Matrix, this study has captured the multiplier effects that reflect the economy-wide impact of the loss resulting from a fall in tourism activities.

- Tourism economy in a normal situation;
- Tourism economy due to the supply-side shock during the COVID-19 pandemic;
- Tourism economy due to the demand-side shock during the COVID-19 pandemic, which can be further categorised as:
    - Inbound tourism demand-side shock; and
    - Domestic tourism demand-side shock.

The TDGVA for each tourism industry is estimated by applying the Tourism Industry Ratios (TIRs) on the industry's overall GVA. This has been done in the Supply and Use Table (SUT) framework of the Tourism Satellite Account (TSA). Hence, a TIR of, say, 72 per cent for a particular industry suggests that of the total GVA of this industry, 72 per cent, is on account of tourism activities or on account of the demand generated by tourists. In a normal situation and in the case of an impact due to the supply shock, the TIRs are assumed to be the same as derived in the TSA for 2015-16.

In order to estimate the impact of the demand-side shock, the study needed to estimate the tourism demand during the study reference period, which covers the pandemic, that is, the first three quarters of 2020-21 [(this is the period till which the latest data on GDP are available from the Ministry of Statistics and Programme Implementation, (MoSPI)]. This in turn, necessitated procuring estimates of inbound and domestic tourist arrival during the same period. The month-wise data on International Tourist Arrivals (ITAs) and the annual data on Domestic Tourist Visits (DTVs) were obtained from the Ministry of Tourism (MoT). The study imputed the quarter-wise number of domestic tourists (as discussed in Appendix II). The new TIR was derived by applying the quarter-wise year-on-year fall in the number of inbound and domestic tourists on the inbound and domestic tourism expenditure, respectively. In the combined demand-side shock, the fall in both inbound and domestic tourism expenditure was considered. However, in the case of the individual demand-side shock arising from inbound and domestic tourism, the fall was assumed in only inbound tourism expenditure in the first case, and in only domestic tourism in the latter case.

Further, in order to estimate the loss of jobs in the tourism sector, the key data source used in this study were the employment data obtained from the Periodic Labour Force Survey (PLFS) conducted by MoSPI. The PLFS provides annual employment estimates. In order to derive the estimates at the quarterly level, employment elasticities were used. The employment elasticity for an industry is the ratio of the percentage change in employment to the percentage change in GVA for that industry over a period of time. Since the PLFS data are available for 2017-18 and 2018-19 only, the study derived the point elasticity using the employment and GVA growth seen between these two years. It may be noted that the study also estimates the loss in jobs by work status, that is, jobs lost for both employees and the self-employed.

In addition, the study estimates the impact on income of the households engaged in the tourism activities. The income estimates have also been categorised into those drawn by employees (wage income) and those earned by the self-employed (non-wage income). In order to estimate the wage and non-wage incomes, various statements on "Output, Value Added, Compensation of employees and Operating Surplus by industry" from the National Accounts Statistics, NAS-2021, were referred to. However, these provide the annual estimates. The quarterly estimates of wage and non-wage incomes were thus derived using the percentage growth estimated in the number of employees and the self-employed, respectively. The detailed methodology is given in Appendix III.

This study also presents the expected outlook for the tourism sector in the coming years and answers the questions on the time required for the revival in the sector and the period by when the tourism economy is expected to reach the pre-pandemic levels. This points to the number of years lost due to the pandemic, the aftermath of which is still persisting.

The concluding sections of the study present the experiences of the other countries and their responses to tackle the pandemic situation and to revive the economy, as a whole, and the tourism sector, in particular. This is followed by a section on recommendations proposed for the revival of the tourism sector in India, based on international experiences and feedback from stakeholders.

The following section presents all the dimensions of the study, discussed above, along with the key findings.

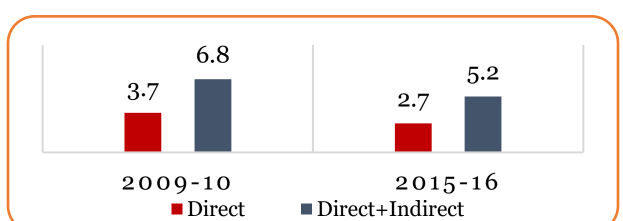
IV. Impacts of the Pandemic on the Tourism Economy, Employment and Income

This section delineates the estimated impacts on various macro-economic parameters linked with tourism activities in the country. Since these economic parameters were estimated on the basis of different envisaged situations, their analyses and findings are presented in accordance with the relevant situations to make the study more comprehensive and reader-friendly.

IV.1. The Tourism Economy in a Normal Situation

The tourism sector has been a significant contributor to the value generation, employment, and foreign exchange earnings of any economy. The Tourism Satellite Account (TSA) is an important tool for estimating these contributions to the economy. For India, the latest TSA was prepared for the reference year of 2015-16. This was the Third TSA for India. This and the previous TSA for 2009-10 were both based on the framework suggested by the United Nations World Tourism Organisation (UNWTO) in its publication "Tourism Satellite Account: Recommended Methodological Framework – 2008" (TSA: RMF-2008).

Figure 1: Share of Tourism in Overall GDP



Source: 2nd and 3rd TSA of India, NCAER.

These TSAs estimate both the direct and indirect contributions of tourism to the country's GDP. The indirect contributions result from the spill-over effects of an economic activity owing to its inter-linkages with all the other economic activities. According to the second and third TSAs, the direct and indirect contributions of the tourism sector to the country's total GDP were 6.8 per cent and 5.2 per cent, respectively. The corresponding figures for the direct shares for these years were 3.7 per cent and 2.7 per cent, respectively (Figure 1).

The direct and indirect shares have been obtained through the derivation of the GVA multiplier, which stood at 1.9236, according to the Third TSA. The interpretation of this multiplier is that if the tourism demand increases by one unit, the overall GVA of the economy is estimated to increase by 1.9236 units, owing to the activities triggered in other sectors of the economy due to the increased demand for tourism.

For the present study, we have also derived the income multiplier for estimating the impact of an increase in the demand for tourism on the overall household income of the economy. For this purpose, a Social Accounting Matrix (SAM) has been prepared for the normal year of 2018-19. The SAM is used to capture the direct as well as indirect impacts on household income. It may be noted here that an Input-Output (IO) Table was prepared as part of the Third TSA in order to derive the direct and indirect contribution of tourism to the overall economy. However, for the current study, the SAM has been prepared instead as it is more appropriate for estimating the impact on household income. Following are the key differences between an IO Table and a SAM:

- SAM is an extension of an IO Table.
- An IO Table is a production account which presents the transactions among the production sectors of the economy. On the other hand, SAM not only constitutes the production account but also incorporates the household account. Hence, it presents the transactions between the production sectors and the households drawing income from these sectors.
- An IO Table quantifies the impact of a sector, say tourism, on the overall economy whereas SAM also quantifies the impact on income earned by different types of households, thereby enabling more specific and focused policy recommendations to assist the sector and the economy as a whole.
- For this study, SAM is based on the production sectors, as given in the SUT framework of the Third TSA. Hence, it comprises a total of 24 production sectors, of which 11 are the tourism-characteristic sectors, 8 are tourism-connected sectors, and 5 are non-tourism-specific sectors.

- The multipliers based on the IO Table reflect the direct and indirect impacts of an increased or reduced demand on the overall economy. On the other hand, SAM-based multipliers present this impact on the income of the households engaged in different economic activities.

- In summary, the IO model captures the economic impact of a sector while SAM helps in capturing the socio-economic impact of that sector while also incorporating the impact on the household sector.

The SAM-based multiplier analysis reveals that the income multiplier of the tourism sector is 1.6332. Hence, if the tourism demand increases by one unit, then, owing to the direct and indirect linkages among the sectors of the economy, the overall income is expected to increase by 1.6332 units.

As an example, if the tourism expenditure increases by just Rs. 1 crore (the original tourism expenditure for 2018-19 is estimated at Rs. 11.8 lakh crore), then the overall household income of the economy is expected to increase by Rs. 1.63 crore. This indicates the impact that the tourism sector has on the incomes drawn by households.

IV.2. The Tourism Economy during the Covid-19 Pandemic

> This study estimates the Tourism Direct Gross Value Added (TDGVA) for the first, second, and third quarters of FY 2020-21.

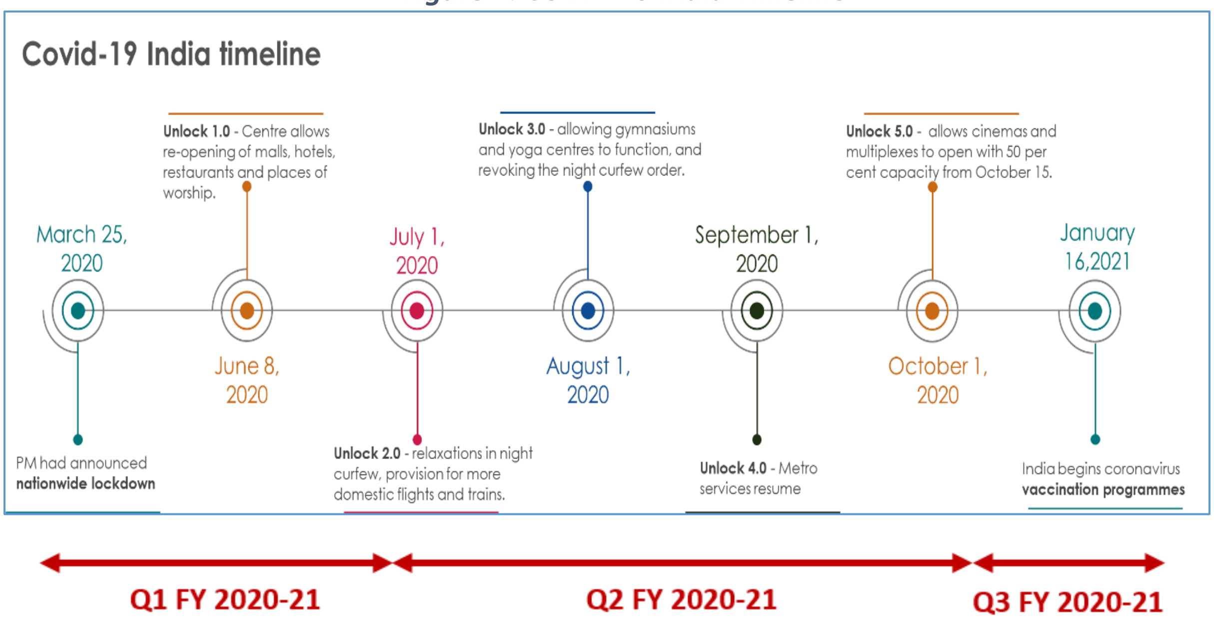
This section presents the estimated impact of the pandemic and its after-effects on the tourism sector. The pandemic not only resulted in restrictions on the movement of people, especially during the lockdown period, but also caused huge losses in the demand for tourism, as generated by tourists while they are on a trip. The study estimates the TDGVA for the first, second, and third quarters of 2020-21, that is, the period for which the data on the overall GVA are available from MoSPI.[2] The same have also been estimated for the corresponding quarters of the previous year, in order to derive the year-on-year fall in TDGVA during 2020-21.

According to the COVID-19 timeline for India (Figure 2), the first quarter of 2020-21 witnessed a lockdown and also a curfew in some areas of many States. The movement of people and many economic activities were restricted during this lockdown period. Towards the end of the first quarter (Q1), that is, on June 8, 2020, Unlock 1.0 was

[2] The quarterly estimates of sectoral GVA have been sourced from the CSO's Press Release, dated 26th February, 2021.

announced under which the government allowed re-opening of malls, hotels, restaurants, and places of worship. In the second quarter (Q2), several Unlock measures (Unlock 2.0 to Unlock 4.0) were announced, including resumption of train and flight services. With the tapering down of COVID-19 new cases, onset of festivals, occurrence of social ceremonies and people getting desperate to travel, some amount of domestic tourism activities started during the third quarter (Q3), with due Standard Operating Procedures (SOPs) and exhorting people to follow precautions.

Figure 2: COVID-19 India Timeline



Source: NCAER compilation

The impact of the pandemic on tourism, through the estimation of TDGVA, has been captured for all these three quarters and across the following aspects:

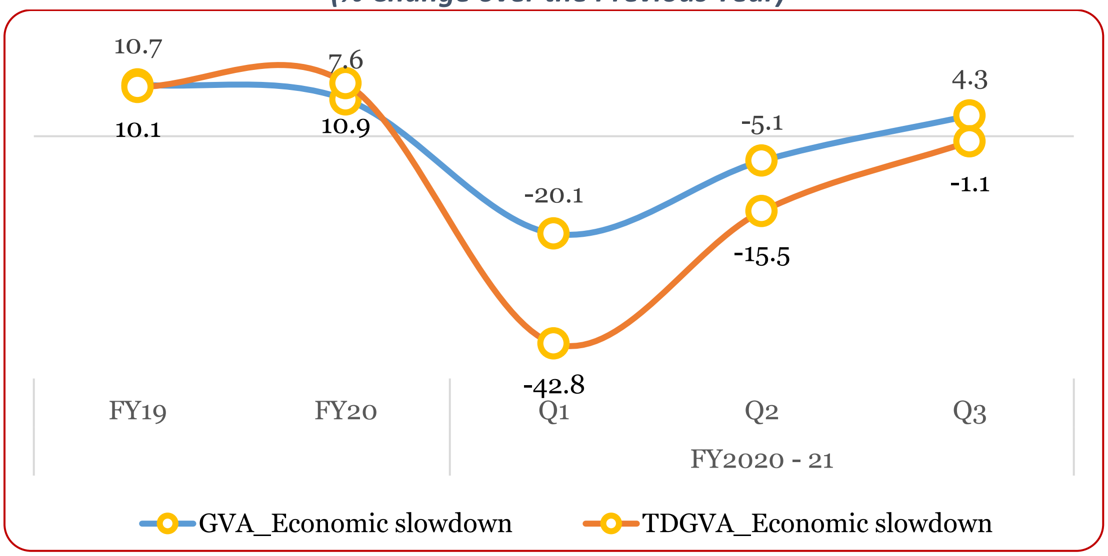
- **Impact due to the Supply-side Shock**

  This relates to the overall economic slowdown during 2020-21 and assumes that tourism was rather resilient and continued as before. Hence, this scenario takes into account only the supply-side shock. Therefore, for all the quarters of 2020-21, the TIRs are assumed to remain the same as those for the pre-pandemic years.

The GVA by all industries, on which the TIRs are applied to derive the TDGVA, are presented in Table A1, Appendix I. Further, the TIRs used in estimating the supply-side shock (in this case, TIRs have been kept unchanged), are presented in Table A2, Appendix I. Also presented are the TDGVA figures based on these TIRs, for all the quarters of reference.

Figure 3 presents the impact of pandemic on the TDGVA during the three quarters of 2020-21, resulting from the overall economic slowdown and assuming that the TIRs remained the same as in the TSA year of 2015-16.

Figure 3: Impact on TDGVA due to Supply-side Shock (% Change over the Previous Year)



Source: NCAER computations.

Figure 3 shows that while the overall economy showed a decline of 20.1 per cent, in nominal terms, in the first quarter of 2020-21, the tourism economy or TDGVA saw a much greater fall of 42.8 per cent in the same quarter. In Q2, when some economic activities started picking up, the overall economy saw a milder fall of 5.1 per cent over the same quarter of the previous year. The economy grew at a positive rate of 4.3 per cent in Q3, owing to several unlocking measures undertaken by the government. However, TDGVA continued to record negative growth even in Q3 when it posted a fall of 1.1 per cent. The supply-side slowdown, particularly in the service industries, took a toll on the tourism sector throughout the first three quarters of 2020-21.

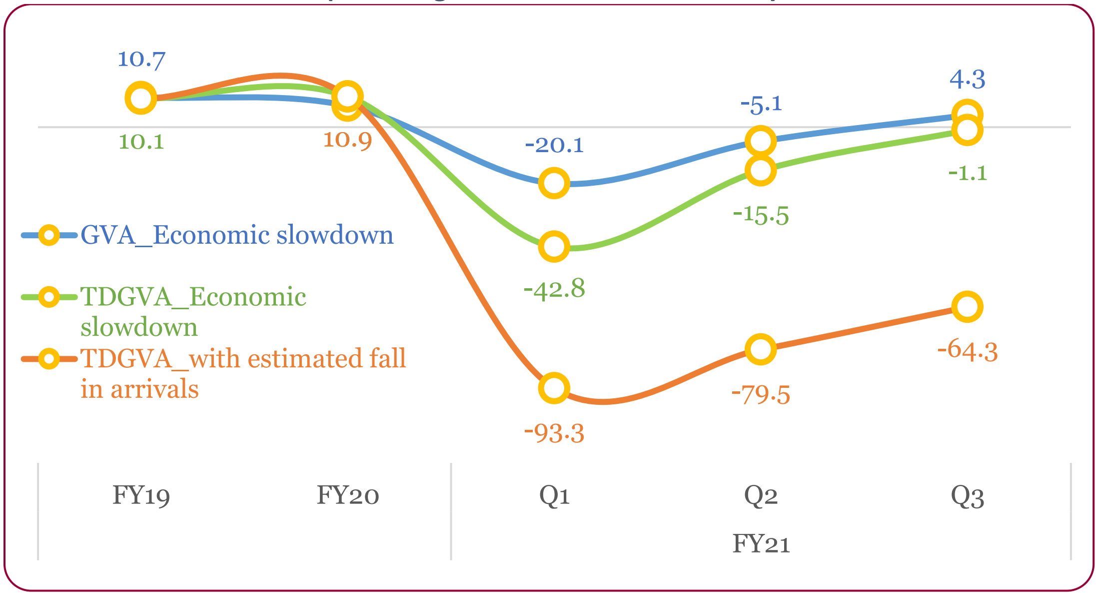
- **Impact due to the Demand-side Shock**

In this section, we estimate the impact of the pandemic on the tourism economy, given both the supply-side shock emanating from the economic slowdown and the demand-side shock resulting from the limited tourism activity in the country during the three quarters under study. The limited tourism activity translates into a huge reduction in tourism expenditure incurred by all types of tourists—inbound, domestic, and outbound.

The tourism expenditure has been estimated using the per-tourist expenditure and the estimated number of tourists by all forms of tourism. The figures for the per-tourist expenditure by all forms of tourism have been obtained from the Third TSA-2015-16, after adjusting for a price change between 2015-16 and 2020-21. The number of inbound tourists during the three quarters of the study period has been obtained from the MoT and the number of domestic tourists is estimated by using the annual estimates on DTVs provided by the MoT. The methodology for disaggregating the annual estimates into quarterly estimates is discussed in Appendix II.

Figure 4 presents the impact of the pandemic on the TDGVA during the three quarters of 2020-21, resulting from both the overall economic slowdown and from the loss in tourism demand or tourism expenditure. The values of TIRs, derived after taking into account the fall in tourist arrivals and tourism expenditure, for all the three quarters are given in Appendix I Table A3. Also presented are the values of TDGVA.

Figure 4: Impact on TDGVA due to Supply and Demand Shocks (% Change over the Previous Year)



Source: NCAER computations.

> While the overall economy contracted by 20.1 per cent in Q1 of FY 2020-21, in nominal terms, the tourism economy plummeted by a mammoth 93.3 per cent in the same quarter, showing no respite even in Q3 of FY 2020-21.

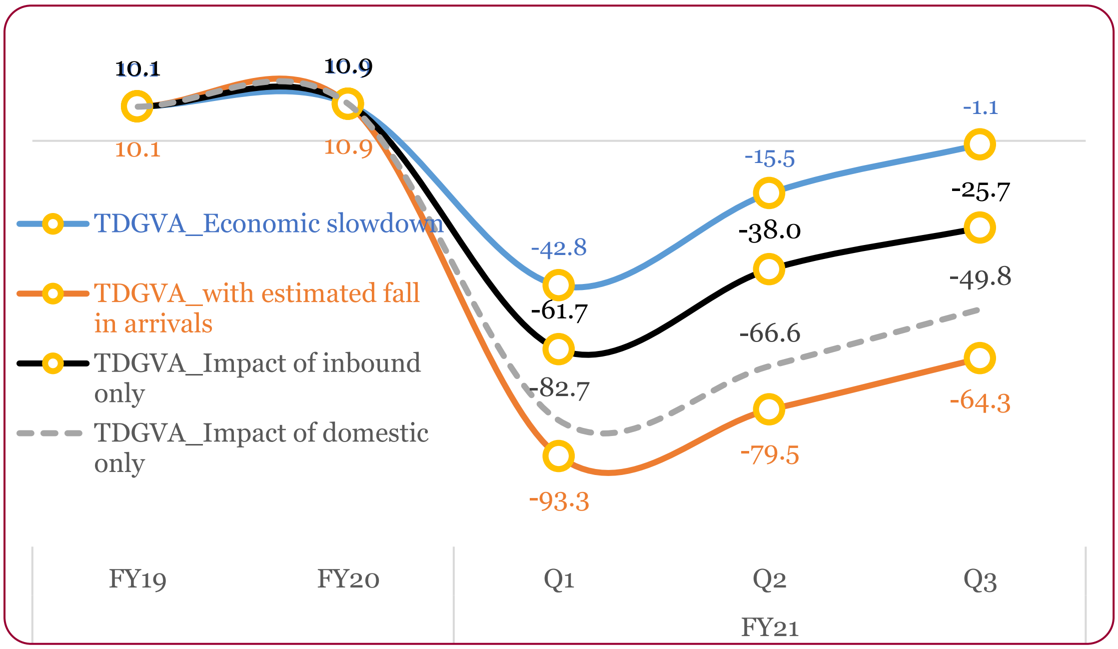
Figure 4 presents the most likely loss in TDGVA resulting from the significant drop in tourist arrivals, and hence in tourism expenditure, during the pandemic. It is estimated that TDGVA plummeted by as much as 93.3 per cent in Q1 of 2020-21 over its level in the same quarter of previous year. It picked up slightly to post a fall of 79.5 per cent in Q2 and that of 64.3 per cent in Q3, but continued to remain at an extremely low level and in negative territory while overall the economy posted a positive growth of 4.3 per cent in Q3.

The fall in TDGVA seen in Figure 4 has been estimated to result from the combined fall in tourist arrivals of all types—inbound, domestic, and outbound. While outbound tourism expenditure accounts for just 3 per cent of the tourism expenditure, the inbound and domestic tourism expenditure are the key contributors to the total tourism expenditure. The following section estimates the impact of a fall in inbound tourism expenditure and domestic tourism expenditure, independently of each other.

- **Impact due to the Inbound and Domestic Demand Shocks**

While Figure 4 showed the combined impact of the demand shock arising from the fall in inbound, domestic, and outbound tourism expenditure, Figure 5 presents the impact of a fall in inbound tourism expenditure and domestic tourism expenditure separately and independently of each other.

Figure 5: Impact on TDGVA due to the Inbound and Domestic Demand Shocks (% Change over the Previous Year)



Source: NCAER computations.

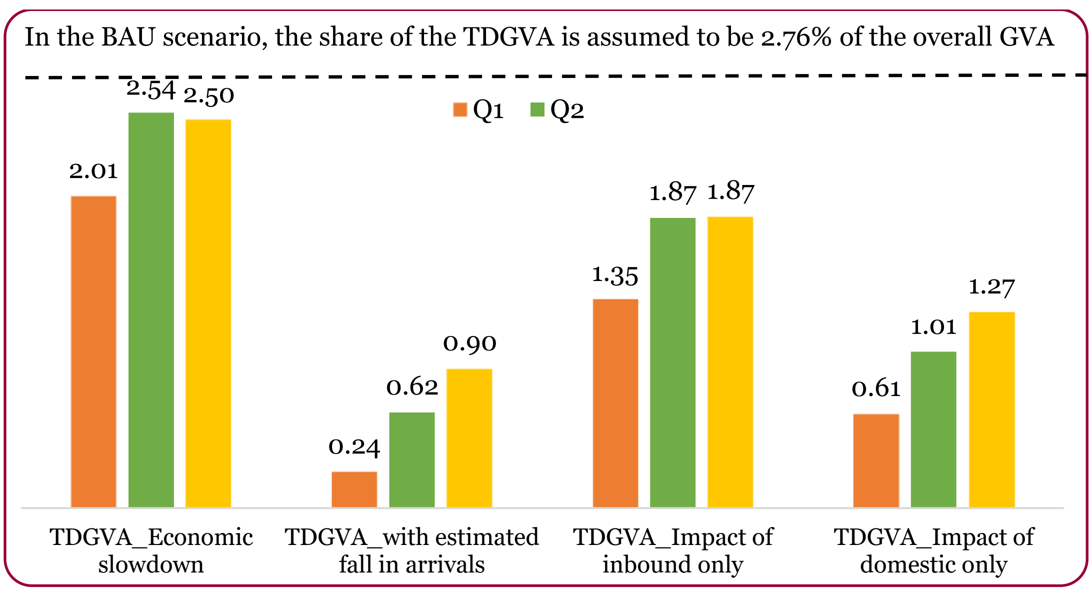
In addition to the combined impact, Figure 5 captures the independent impact of a fall in inbound tourism expenditure, assuming that all other forms of tourism remained the same during the reference period of the study. The TDGVA is estimated to have decreased by 61.7 per cent in Q2 of 2020-21 over the same quarter of 2019-20. Going forward, this is estimated to have fallen by 38.0 per cent in Q2 and 25.7 per cent in Q3. The corresponding estimated tourism expenditures and TIRs, resulting from the fall in only inbound tourist arrivals, are presented in Table A4, Appendix I.
Similarly, Figure 5 also captures the independent impact of domestic tourism expenditure, assuming that all other forms of tourism remained the same. Notably,

the negative impact of the fall in domestic tourism activity is much more significant than that of inbound tourism activity. The fall in domestic tourism in all the three quarters is estimated to be 20 to 30 percentage points higher than that in the case of inbound tourism. The corresponding estimated tourism expenditures and TIRs, resulting from the fall in only domestic tourist arrivals, are presented in Table A5, Appendix I.

- **Share of the TDGVA in the Overall GVA**

In normal circumstances or in a Business-as-usual (BAU) scenario, tourism directly contributes about an average of 2.76 per cent to the overall GVA. This is the average of the past years' shares, starting from the Third TSA year, that is, 2015-16. However, as a result of the pandemic and subsequent fall in the TDGVA, as discussed in previous sections, the share of tourism to the overall economy also moderated significantly. Figure 6 presents the changing shares of the TDGVA in the overall GVA during the period under study, that is, the first three quarters of 2020-21.

Figure 6: Share of the TDGVA to the Overall GVA (%)



Source: NCAER computations.

- **Estimated Loss in Jobs during the Study Period**

With regard to employment, the number of jobs in the entire tourism-characteristic industries is referred to as 'tourism employment', as per the recommendations made by the United Nations World Tourism Organisation (UNWTO). This is because relating employment to a specific product or group of products of a given establishment is a complex issue in measuring tourism direct employment.

For this reason, tourism employment, referring to the employment strictly related to the goods and services (tourism-characteristic, tourism-connected, and other) acquired by visitors and produced by either the tourism industries or other industries cannot be assessed directly. Its measurement would require the use of techniques that go beyond the present recommendations by UNWTO. As a result, the recommendations in UNWTO's Tourism Satellite Account: Recommended Methodological Framework: 2008 are restricted to employment in tourism-characteristic industries.

These tourism-characteristic industries are as follows:

- Accommodation services/Hotels;
- Food and beverage serving services/Restaurants;
- Railway passenger transport services;
- Road passenger transport services;
- Water passenger transport services;
- Air passenger transport services;
- Transport equipment rental services;
- Travel agencies and other reservation services;
- Cultural and religious services;
- Sports and other recreational services; and
- Health and medical related services.

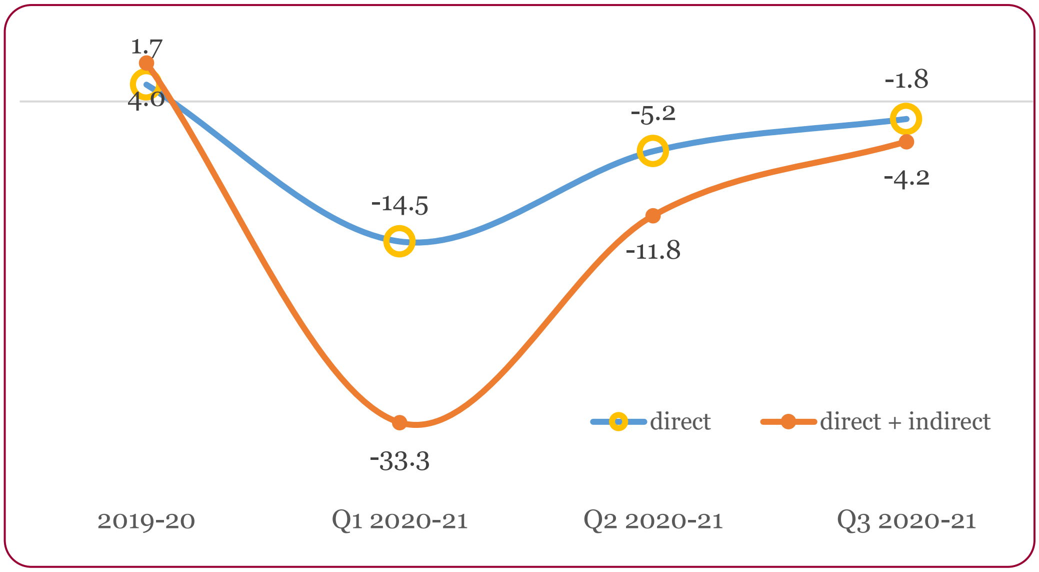
In this study, the jobs have also been categorised as self-employed (or business owners) and employees (or salary/wage earners) to understand which category suffered more during the pandemic, in terms of the loss in work as also loss of income.

The data on employment (number of jobs) have been sourced from the PLFS for 2018-19, conducted by MoSPI. For the later years, employment elasticities have been used to derive the estimated number of jobs. The monthly surveys conducted by the Centre for Monitoring Indian Economy (CMIE) on Unemployment Rates in India have also been referred to.

The study estimated job losses, both as a direct impact and as a direct plus indirect impact of the pandemic. In order to estimate the direct jobs in the tourism industry, employment elasticities were calculated at the sub-sectoral level. These sub-sectoral level estimates were aggregated to obtain the overall industry level estimates. The direct plus indirect jobs were calculated using the employment multiplier derived in the Third TSA for India. The estimates on tourism employment, by categories, are presented in Tables A6 to A8, Appendix I.

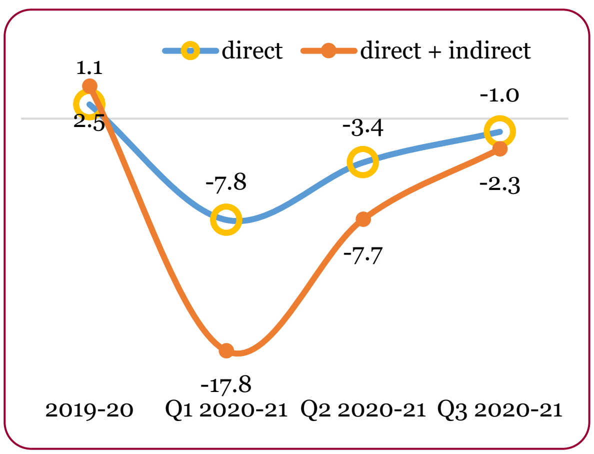
At the aggregate level, the loss of jobs in the tourism sector, both direct and a combination of direct and indirect, is presented in Figure 7. Figures 8 and 9 present the jobs lost among employees and the self-employed. A significant number of jobs were lost in the tourism sector after implementation of the lockdown.. However, the recovery was fast once the unlock phases started and the economy was opened up. Tourism industry jobs showed a significant upturn during Q2 and Q3 of FY 2020-21.

Figure 7: Tourism Jobs Lost through the Pandemic (in Million Numbers)



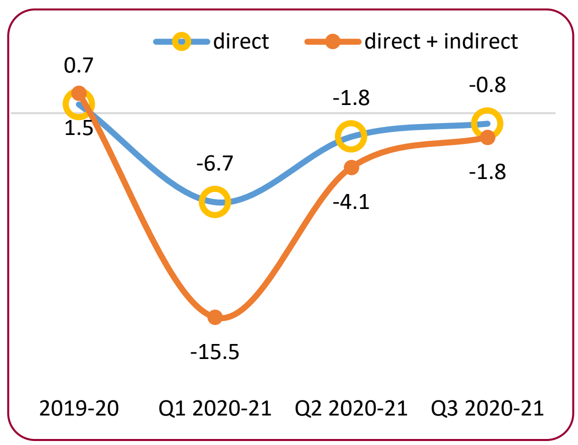
Source: NCAER calculations

Figure 8: Loss of Jobs among Employees (Million Numbers)



Source: NCAER calculations

Figure 9: Loss of Jobs among the Self-employed (Million Numbers)



Source: NCAER calculations

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> An estimated 14.5 million tourism jobs were lost and employees thrown out of the workforce as a repercussion of the pandemic and the resultant lockdown in Q1 of 2020-21.

As many as 14.5 million jobs, out of an estimated 34.8 million jobs during the pre-pandemic period of 2019, are expected to have been lost as a repercussion of the pandemic and the resultant lockdown in the first quarter of 2020-21. This is equivalent to a fall of 41.7 per cent. With about 80.7 per cent[3] of the total jobs in tourism-characteristic industries being informal in nature, such an extent of job loss is quite expected.

In terms of absolute numbers, the loss of jobs was more pronounced in the case of salary/wage earners, 7.8 million of whom were left without jobs during Q1. However, in terms of a percentage fall, those with the status of self-employed were hit harder as their number fell by 42.8 per cent, as compared to employees, whose number shrunk by 40.7 per cent.

With the estimated employment multiplier (as derived in the Third TSA) of 2.2931, which is an indicator of the spillover effects of the loss in tourism jobs, a total of 33.3 million jobs are expected to have been lost in Q1.

As the economy, in general, and tourism activity, in particular, started picking up in the subsequent quarters, many jobs are estimated to have gradually returned in these quarters. Till the third quarter, however, there was still an estimated deficit of 1.8 million tourism jobs.

- **Estimated Loss in Household Income during the Study Period**

The impact of loss of jobs is felt in the income of households engaged in tourism activities, both as their principal and subsidiary activities. For this study, the household income has also been categorised into that drawn by employees (as wage income) and that earned by the self-employed (as non-wage income).

The NAS statements provide the values of these incomes by a broad industry level. These are categorised into the 24 tourism-specific and non-specific industries. The methodology to estimate the wage and non-wage income by tourism industries is

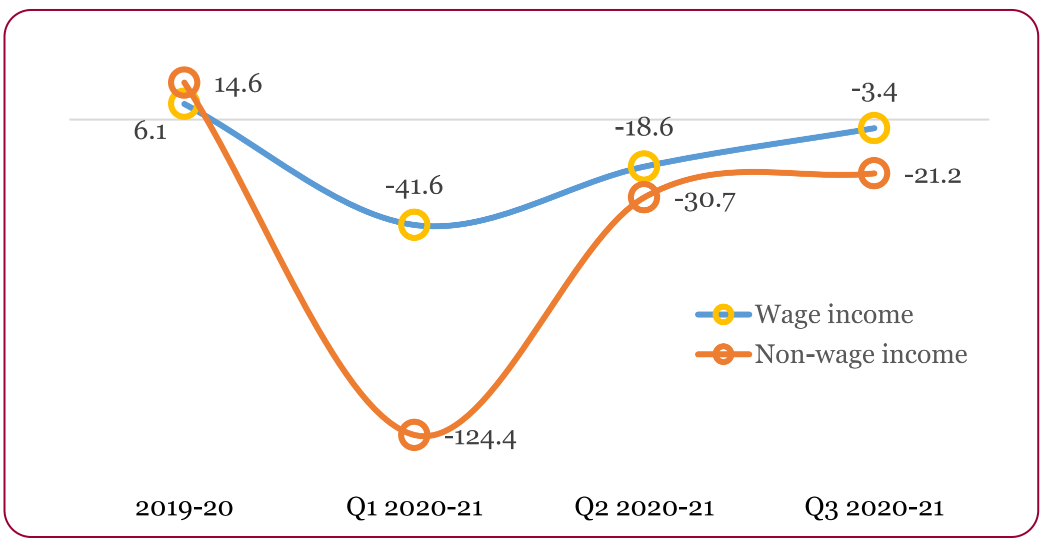
[3] Derived from the PLFS-2018-19 survey data by classifying the workers into formal and informal based on the type of enterprise they work in, their work status, and nature of the job contract.

described in Appendix III. The estimated wage and non-wage incomes by the major tourism-characteristic industries are presented in Table A9, Appendix I.

Figure 10 presents an estimation of the expected loss in the income of households engaged in tourism activities, in real terms. The impact on income is estimated to be much more severe as compared to the impact on the loss of jobs. With regard to jobs, in some of the tourist service-providing industries, many people were laid off and businesses were shut down resulting in a loss in jobs for both employees and the self-employed.

However, in a much larger number of cases, jobs continued to remain but due to minimal demand, very little or no economic activity was pursued, especially during the lockdown period. This may have resulted in a cut in salaries, which explains the huge loss in wage income. This may have also resulted in much higher income losses among business owners who were not only not paid salaries but were also required to incur other committed expenditures like payment towards rent and bills for utility services, and so on.

Figure 8: Loss in Tourism Household Income (% Change over the Previous Year)

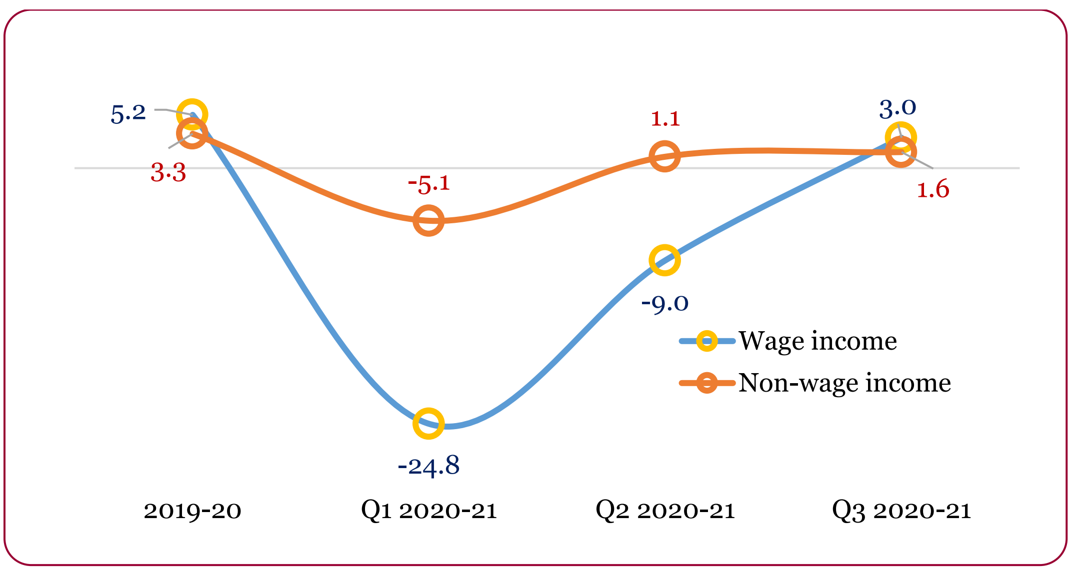


Source: *NCAER calculations.*

Figure 10 shows that while the wage income fell by 41.6 per cent in Q1, the non-wage income, that is, the income of the self-employed or business owners nosedived by 124.4 per cent. This indicates that many businesses not only witnessed a severe fall in income but also posted a deficit in Q1. Interestingly, the disaggregation of the estimated income by industries shows that the food and beverage serving industries (including restaurants, *dhaba*s, and so on) accounted for the highest fall in non-wage income. Going forward, with a pick-up in activities, the income levels also showed an improvement but continued to post a negative growth of 3.4 per cent in the case of wage income and 21.2 per cent in the case of non-wage income, both in Q3.

Figure 11 shows the fall in the overall household income of the economy. In sharp contrast to the tourism household income, the total household income saw a steeper drop in income levels in the case of wage income or salary income of the employees. This is because while tourism industries are mostly service industries, the overall economy also includes a large proportion of the primary sector and manufacturing industries, both of which are highly labour-intensive. Clearly, tourism industries bore the brunt of the pandemic much more severely than the overall economy.

Figure 9: Loss in Overall Household Income (% Change over the Previous Year)



Source: *NCAER calculations.*

IV.3. Tourism Economy Going Forward—Future Outlook

The previous sections discussed the impact of the pandemic on the tourism economy with respect to the TDGVA, employment, and household income, in 2020-21. This section presents our outlook for the future, given the possibility of a third wave of COVID-19 infections and also the possibility of its fading away with time, which is expected to result in a very strong rebound in tourism activity and the tourism economy, as a whole.

With the gradual opening up of international borders, revival of confidence to travel among people, success of the vaccination drive, and the lessons learnt from the previous waves of COVID-19 infection, tourism activity is expected to move towards normalcy soon. Besides, a new form of tourists are likely to emerge, that is, potential outbound tourists who will switch from international travel to domestic trips to exotic destinations in India like Srinagar, Goa, and Rajasthan, among others. These tourists are already being seen in the country.

In order to put forward our outlook, we have built the following three scenarios for all forms of tourism, that is, inbound, domestic, and outbound, and also outbound tourists who have switched to domestic trips:

- Optimistic;
- Most likely; and
- Pessimistic.

Starting with the most likely scenario, which is also quite realistic, the assumptions that have been taken into account, with respect to all forms of tourism are delineated below.

Assumptions for Domestic Tourism—Most likely Scenario

- The current wave reached its peak somewhere by the end of May. Hence, we consider the peak to be in May-end.
- Considering similar trends as those noticed during the first wave, the impact of the second wave will be minimised (in terms of the detection of new infections) by around August-end.
- In that case, with State governments allowing movement within and across the borders, and people regaining the confidence to travel, tourism activities should resume by around October 2021.

- This leaves us with about six months that can be considered for renewed but restricted tourism activities during FY 2021-22.
- Therefore, assuming that all other conditions remain the same as in 2020-21, a similar number of domestic trips/tourists or slightly less can be assumed to take place (it may be noted that in 2020 also, tourism activity started during August/September).
- However, with the second wave having had a much higher impact, prospective tourists would have much lower confidence to travel as compared to the first wave. This will also result in the implementation of more stringent measures by State governments in the wake of the second wave.
- On the other hand, in case an adequate number of vaccinations are done pan India, the response rate to travel activities could attain the same level as that of last year.
- If the above scenario occurs and COVID is brought under control at the end of FY 2021-22, one may expect buoyancy in tourism in FY 2022-23 and 2023-24.
- We can assume that with the suppressed desire to travel because of restrictions and reduced confidence levels during FY 2021-22, a 50 per cent increase can easily be seen in subsequent years provided the COVID situation is brought completely under control.
- Similarly FY 2023-24 can also see a significant upturn and a similar increase in the number of tourists could be seen (in terms of absolute numbers). Again, the assumption is that COVID remains under control.
- From 2024-25 onward, we should expect buoyant years, provided COVID is controlled (25 per cent growth every year).

Assumptions for Inbound Tourism—Most likely Scenario

- In normal circumstances, about 24 per cent of the total ITAs are from Bangladesh. About 35 per cent of these arrive in India for business or medical purposes.
- Assuming a figure of 25 per cent of the pre-pandemic level for Bangladesh tourists and 20 per cent for others in FY21-22, the expected ITA is about 60 per cent lower than that of FY20-21.
- At least 30 per cent of the pre-pandemic level is expected in FY22-23, with enough people vaccinated, safety measures implemented, and COVID under control.
- Assume a rebound in tourism activity thereon and an annual 30 per cent increase every year thereafter.

Assumptions for Outbound Tourism—Most likely Scenario

- About 20 per cent of the pre-pandemic level tourists start travelling abroad, mostly for medical, educational, or business purposes, with the expectation of relaxation in international travel restrictions.
- Thereon, 10 per cent growth is assumed every year.
- About 30 per cent of the potential outbound tourists take domestic trips, with the return of confidence and the urge to travel.
- A 25 per cent annual growth in such outbound-turned-domestic tourists is envisaged.
- Outbound tourists, being high-profile tourists, are assumed to spend about five times more on domestic trips as compared to the average expenditure on a domestic trip.

Assumptions for All Forms of Tourism—Optimistic Scenario

- A figure of 5 per cent more than that in the most likely scenario is assumed for all forms of tourism except outbound tourists, for which our expectation remains the same as in the most likely scenario.

Assumptions for All Forms of Tourism—Pessimistic Scenario

- If there is a third wave of COVID-19, we assume that it would start from October 2021 and its impact would last till December 2021.
- However, the government will be much more prepared to face the third wave after the second wave experience. Also, it is anticipated that by that time, around 50 per cent of the population would have been vaccinated.
- Hence, inbound tourism activities would take place more or less for about three months in FY 2021-22 and would account for 80 per cent of the tourist activity as envisaged in the most likely scenario, for all the years after FY 2021-22.
- Domestic tourists are assumed to constitute 60 per cent of the total number of tourists in FY 2020-21.
- A rebound in domestic tourism is assumed to occur in FY 2022-23, with twice the number expected in FY2021-22.
- A similar buoyancy is assumed for the next year.
- We assume a 25 per cent annual growth thereon.
- We assume that about 20 per cent of the outbound-turned-domestic tourists at the FY 2020-21 level will travel in FY 2021-22.
- A 25 per cent annual increase thereon is assumed.

The number of tourist arrivals, based on these assumptions, across all forms of tourism, is presented in Table A10, Appendix I. The tourism expenditure for all forms of tourism has been estimated and presented in Table 1, based on the estimated per-tourist expenditure, taking into account the price escalation over the years

Table 1: Projected Tourism Expenditure by All Forms of Tourism (Rs. crore)

		Inbound			Domestic		
		Optimistic	**Most Likely**	**Pessimistic**	**Optimistic**	**Most Likely**	**Pessimistic**
Pre-pandemic	2016-17	274117	274117	274117	649000	649000	649000
	2017-18	316102	316102	316102	689759	689759	689759
	2018-19	346126	346126	346126	801652	801652	801652
	2019-20	376137	376137	376137	1058151	1058151	1058151
Pandemic	**2020-21**	**170137**	**170137**	**170137**	**298177**	**298177**	**298177**
Projections	2021-22	78069	74351	59481	353334	336509	203533
	2022-23	145926	138977	111182	548017	521921	413277
	2023-24	198842	189374	151499	941342	896516	848393
	2024-25	270947	258044	206436	1231571	1172925	1109966
	2025-26	369198	351617	281293	1611283	1534555	1452184
	2026-27	503076	479120	383296	2108065	2007681	1899914
	2027-28	685502	652859	522287	2758012	2626678	2485685
	2028-29	934080	889600	711680	3608348	3436522	3252058

.

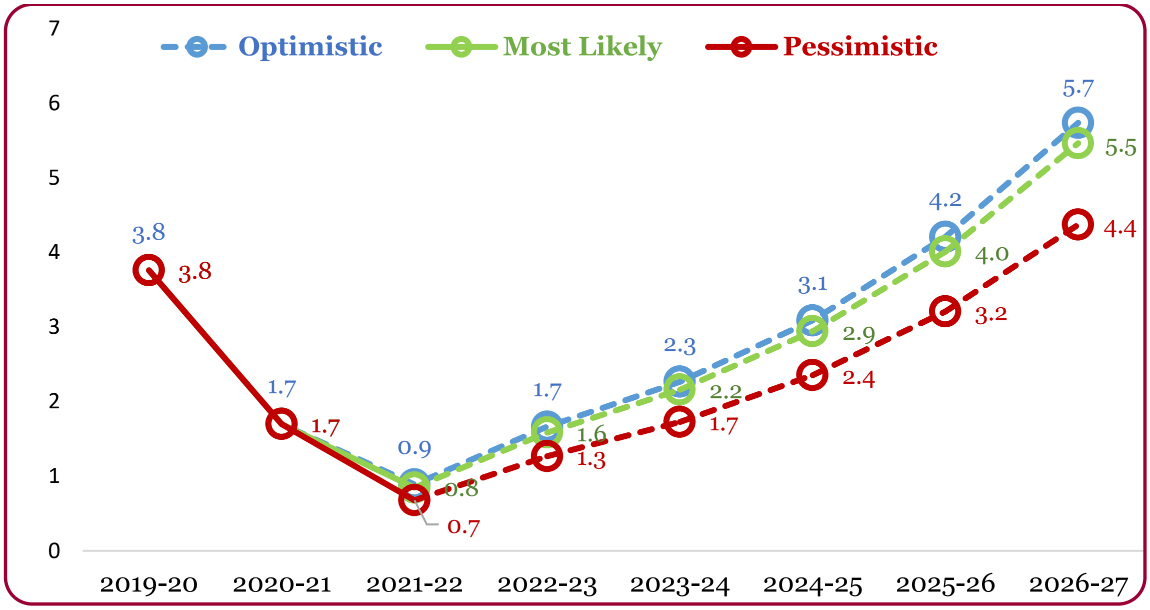
Table 1: Projected Tourism Expenditure by Forms of Tourism (Rs. crore) contd.

		Outbound			Outbound-turned-domestic		
		Optimistic	Most Likely	Pessimistic	Optimistic	Most Likely	Pessimistic
Pre-pandemic	2016-17	27545	27545	27545	NA	NA	NA
	2017-18	31231	31231	31231	NA	NA	NA
	2018-19	35655	35655	35655	NA	NA	NA
	2019-20	38452	38452	38452	NA	NA	NA
Pandemic	2020-21	0	0	0	NA	NA	NA
Projections	2021-22	8568	8568	8568	25643	24421	16281
	2022-23	9865	9865	9865	33548	31951	21301
	2023-24	11358	11358	11358	43892	41802	27868
	2024-25	14265	14265	14265	57425	54690	36460
	2025-26	17917	17917	17917	75129	71552	47701
	2026-27	22503	22503	22503	98293	93612	62408
	2027-28	28263	28263	28263	128598	122474	81649
	2028-29	35498	35498	35498	168247	160235	106823

Source: *NCAER calculations.*

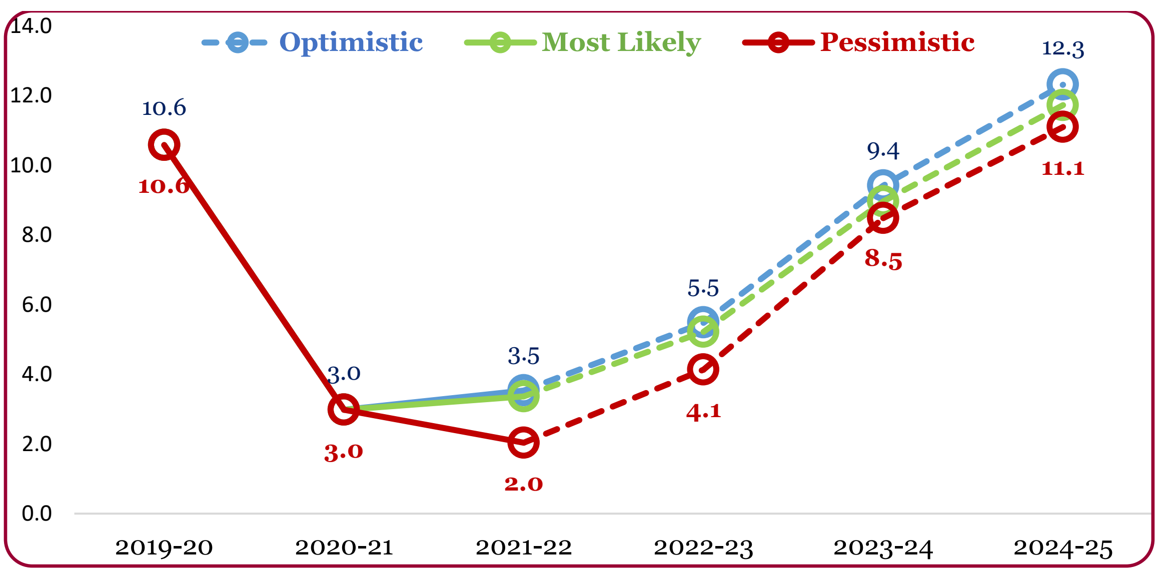
Figures 12-14 present the findings on future outlook, based on Table 1, pointing to the revival in the tourism economy.

Figure 10: Outlook for Inbound Tourism Expenditure (Rs. lakh crore)



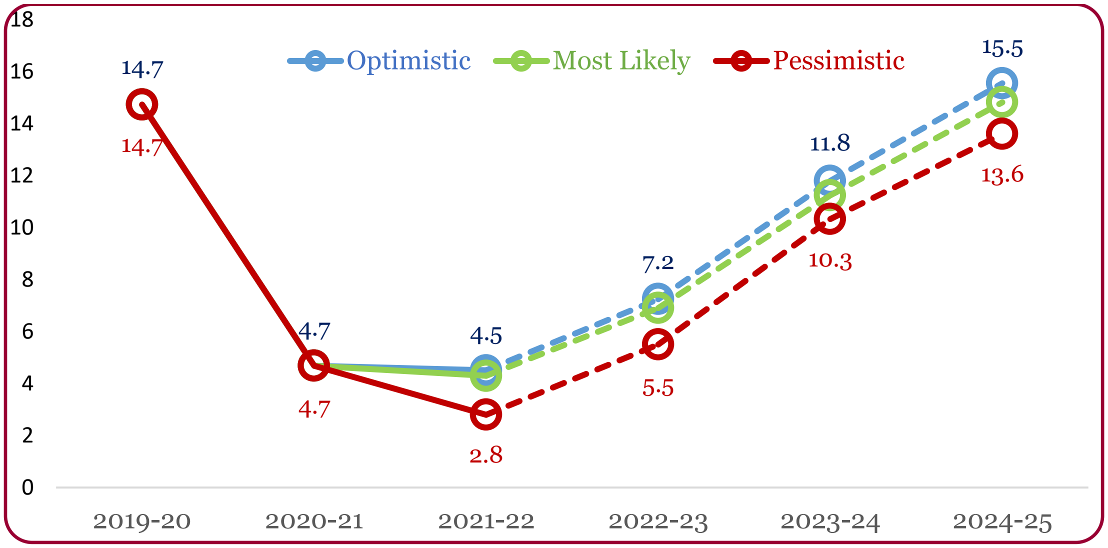
Source: *NCAER calculations.*

Figure 11: Outlook for Domestic (including Outbound-turned-domestic) Tourism Expenditure (Rs. lakh crore)



Source: *NCAER calculations.*

Figure 12: Outlook for Total Internal Tourism Expenditure (Rs. lakh crore)



Source: *NCAER calculations.*

With the assumptions stated above, it is expected that the tourism economy, in terms of tourism expenditure, will regain its pre-pandemic level by 2024-25, primarily driven by domestic tourism. As regards inbound tourism, its revival is expected to be slower and is likely to reach the pre-pandemic level not sooner than 2026-27, even as per the optimistic scenario.

The tourism sector is likely to reach its pre-pandemic levels by 2024-25, with the current optimistic and pessimistic conditions envisaged.

However, even as per pessimistic scenario, domestic tourism (complemented by the outbound-turned domestic tourism) is likely to reach the pre-pandemic level much sooner, that is, by 2024-25.

V. Perspectives on the Tourism Industry Recovery Measures

It has been observed in the past that the tourism industry quickly bounces back after natural disasters or even pandemics or epidemics. The experiences from episodes of outbreak of Ebola, Severe Acute Respiratory Syndrome (SARS), or natural disasters like earthquakes or floods in past years point to this pattern. Governments at all levels have aided the industry's recovery by attracting investments through tax breaks, lenient land-use rules, and other measures (Brouder, 2020[4]; Ioannides and Gyimothy, 2020[5]). The recovery strategies require effective and timely coordination, implementation of relevant crisis management techniques, responsive relationships among all the stakeholders involved including Governments, recognition of risks and opportunities, and timely and scalable interventions (Alves et al., 2020[6]; Fitriasari, 2020[7]). Before international travel can resume, domestic tourism will boost the resumption of the tourism industry in the wake of the pandemic. Other factors, including technological resilience, local belongingness, and customer and employee confidence, may help build industry resilience, which is the need of the hour.

Four key elements relating to recovery of this industry, as identified by researchers, are essential for responding to the current situation. It is imperative to implement all these in tandem with well-crafted policy measures. These key elements are:

1. Government responsiveness;
2. Technological innovation;
3. Local belongingness; and
4. Customer and employee confidence.

Promoting these elements can provide an opportunity to develop the industry from a new perspective which would fulfil the requirements of the new normal or the new economic order. The dimensions of the new normal that can be targeted through these measures are:

- Sustainable tourism;
- Well-being of the society towards a lager goal;
- Mitigating climate change; and
- Engaging local communities.

Different countries have taken various measures to address the tourism recovery process. A summary of these measures is given in Table 2. If these efforts are clubbed into broad

[4] Lew, Alan and Cheer, Joseph and Haywood, Michael and Brouder, Patrick and Salazar, Noel B. (2020). "Visions of travel and tourism after the global COVID-19 transformation of 2020." *Tourism Geographies*. 1-12. 10.1080/14616688.2020.1770326.

[5] Ioannides, Dimitri and Gyimóthy, Szilvia. (2020). "The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path." *Tourism Geographies*. 22. 1-9. 10.1080/14616688.2020.1763445.

[6] Alves, Lok, Luo, and Hao, 2020. "Crisis Management for Small Business during the COVID-19 Outbreak: Survival, Resilience and Renewal Strategies of Firms in Macau." *Research Square*.

[7] Fitriasari, Fika. (2020). "How do Small and Medium-sized Enterprises (SME) survive the COVID-19 outbreak?" *Journal Inovasi Ekonomi*. 5. 10.22219/jiko.v5i3.11838.

categories, the following would emerge as the key areas that are generally addressed by various countries:

- **Protecting the Livelihoods of Workers**: This implies granting of monetary financial help to protect the incomes of millions of workers facing severe financial difficulties.
- **Providing Fiscal Support**: Governments extend vital, unlimited interest-free loans to global travel and tourism companies as well as to millions of small and medium-sized businesses as a stimulus to prevent their collapse.
- **Injecting Liquidity and Cash:** This entails offering cash flow assistance to support big and small businesses in the travel and tourism sector as well as offering targeted support to the severely affected industries within the sector.

For some of the countries, detailed information was available on government initiatives, especially those pertaining to the tourism sector. However, for many others, more general information was available, which was not specific to the tourism sector. We provide a comprehensive understanding of these country-wise initiatives in Tables 2 and 3, Table 2 highlights the measures taken by governments of countries earning a high tourism revenue while Table 3 presents a comparative view of India and other South Asian countries with regard to their responses to the COVID-19 pandemic.

Table 2: The Responses of Different Governments to COVID-19

Country	Government Responses to COVID-19
Austria	• The Federal Ministry of Agriculture, Regions, and Tourism, along with the Austrian Bank for Tourism Development has introduced a Coronavirus Package for tourism. Austria is currently in lockdown. • Current government plans include opening hotels and changing entry rules for European Union travellers from 19 May 2021. At the moment, all travellers need to obtain pre-travel clearance before travelling to Austria. Travellers from most countries worldwide will need to be quarantined upon arrival and additionally show a negative COVID test. • Hotels and restaurants as well as leisure and culture facilities will be allowed to reopen from 19 May 2021, with strict protective measures in place.
Australia	• In addition to the first AUS$17.6 billion stimulus plan, announced in May 2020, the Government announced further measures and extensions bringing the total value of support to well over AUS$300 billion. • Within the plan, the Government pledged an AUS$1 billion (US$613 million) package to support business investment; provide cash flow assistance to support small and medium enterprises (SMEs); offer targeted support for the

Country	Government Responses to COVID-19
	most severely affected sectors, including travel and tourism; and make household stimulus payments that will benefit the wider economy. • The Government pledged AUS$1 billion to support those sectors, regions, and communities that have been disproportionately affected by the economic impacts of COVID-19, including those heavily reliant on industries such as tourism, agriculture, and education. • Australia's 'JobKeeper' programme is helping to keep more Australians in jobs and supporting businesses affected by the significant economic impact of COVID-19. It is worth over AU$100 billion and has been adapted over time in response to the evolving circumstances. • The Government also implemented cash injections and subsidies specifically to enable certain tourism businesses to stay afloat. Tourism support covers aviation programmes, regional tourism packages, business tourism grants, and infrastructure investments. • It is estimated that the Government's tax relief package to reduce the personal income tax burden and encourage business investment would create around 100,000 jobs by the end of 2021-22 and boost GDP by around AU$6 billion in 2020-21 and AU$19 billion in 2021-22.
Brazil	• The National Development Bank has opened a working capital loan in the tourism industry for SMEs. An airline relief package has also been prepared. • The analysis of the public policies suggests that these may have temporarily reduced the main negative impacts of the pandemic on the various segments that constitute the production chain of tourism, especially when it comes to the maintenance of jobs and income through emergency financial aid.
Canada	• The Government passed a C$107 billion (USD 75 billion) package in emergency aid and economic stimulus. Through its measures, the Government is providing up to $27 billion in direct support to Canadian workers and businesses, plus $55 billion through tax deferrals to help meet cash needs and stabilise the economy. • General support for individuals includes increasing the maximum annual Canada Child Benefit (CCB) payment amounts by $300 per child; postponing the individual tax filing date; and mortgage deferrals and loan re-amortisation, among others, for homeowners. Support for people facing unemployment includes a taxable benefit of C$2,000 a month through the Canada Emergency Response Benefit (CERB) and includes, among others, people quarantined and those helping a sick family member; up to $5 billion in support to workers not eligible for Employment Insurance (EI) benefits; and up to $900 bi-weekly, for up to 15 weeks for, among others, the self-employed, those who are quarantined or sick with COVID-19 but do not qualify for EI sickness benefits, and parents who require care or supervision due to school closures.

Country	Government Responses to COVID-19
	• Support for businesses includes amendments to the eligibility for the Work Sharing Program, which provides benefits to workers who agree to reduced normal working hours; a temporary wage subsidy equal to 10 per cent of the remuneration paid during that period for small employers; more than $10 billion of additional support, largely targeted to SMEs; tax deferrals; lowering the Domestic Stability Buffer to allow large banks to inject $300 billion of additional lending; a 75 per cent wage subsidy for businesses; up to $40 billion in lending for SMEs; stable funding to banks and mortgage lenders to continue lending; and providing up to $25 billion to eligible financial institutions to provide Government-guaranteed and funded interest-free loans to small businesses.
China	• The Ministry of Culture and Tourism and the Industrial and Commercial Bank of China (ICBC) signed a strategic cooperation agreement to help cultural and tourism enterprises. ICBC is providing RMB100 billion credit lines for affected cultural and tourism enterprises and making financing succession arrangements to meet capital needs through "anti-epidemic loan", "employment loan", and "tax loan", among others, so as to help privately-owned enterprises and small-medium-micro culture and tourism enterprises. • The Civil Aviation Administration of China's measures includes tax relief and subsidies; VAT exemptions for revenues from transporting anti-epidemic materials and express delivery; waiving airlines' payment to the civil aviation development fund starting from 1 January 2021; and more. • What's more, local Governments came up with credit risk-sharing policies to increase bank lending to SMEs and the People's Bank of China offered 500 billion yuan of re-lending and rediscount funding to help small banks provide low-cost funds to SMEs and the agricultural sector.
France	• The French Government announced a plan of €45 billion to support the economy, of which around €35 billion are dedicated to the deferral of social and tax charges of companies. The self-employed were also considered in these measures. • Within the €45 billion plan, €8.5 billion have been dedicated to the funding of short-time working/partial unemployment measures. To use short-time working, companies pay compensation equal to 70 per cent of the gross salary (around 84 per cent of the net salary) to employees; employees with minimum wage or less are 100 per cent compensated. • The State will also fully reimburse partial unemployment for wages up to €6,927 gross monthly, that is, 4.5 times the minimum wage. • The Government is also implementing an exceptional guarantee scheme up to €300 billion to support the bank financing of companies to facilitate those banks granting loans to businesses of all sizes to preserve employment. In addition, French banks have committed to postponing the reimbursement of corporate loans for up to six months, free of charge.

Country	Government Responses to COVID-19
	• Based on recommendations from the Tourism Sector Committee—a committee created by the Government and comprised of Atout France and both public and private sector actors—a draft ordinance has been put together to support the cash flow of tourism operators in the face of cancellations.
Hong Kong **SAR**	• Following the $30 billion measures under the Anti-epidemic Fund and the $120 billion relief package in the 2020-21 budget, the Hong Kong SAR Government announced a new round of measures totalling $130 billion with wide coverage, aiming to safeguard employment and the self-employed; provide extra relief to those sectors hard hit by the epidemic, and pave the way for post-epidemic economic recovery. These measures include an $81 billion Employment Support Scheme, as well as sector-specific initiatives totalling $21 billion. • For the travel and tourism sector, the Government provided all licensed travel agents with cash subsidies ranging from HK$20,000 to HK$200,000; provided travel agents' staff and active freelance tourist guides and tour escorts holding a valid pass with a monthly subsidy of $5,000 each for six months and provided licensed hotels with cash subsidies between HK$300,000 to HK$400,000. • Other relief measures for the industry included a one-off subsidy of HK$10,000 for each tourist coach driver, waiving the monthly rent and management fees of the operator of Kai Tak Cruise Terminal for six months, as well as providing subsidies to cruise lines in the form of refunds of berth deposits for cancelled ship calls during the suspension of immigration service. • Another round of support for travel agents, tourist guides, and tourist coach drivers was announced in September 2020 and those who had received previous support were contacted directly about the additional support.
New Zealand	• The Government announced a $12.1 billion package to support New Zealanders and protect their jobs from the global impact of COVID-19. The package represents 4 per cent of GDP and is more than the total of all three budgets' new operating spending in this term of Government put together. • The package includes $5.1 billion in wage subsidies for affected business in all sectors and regions as of 17 March; $126 million in COVID-19 leave and self-isolation support; $2.8 billion income support for the most vulnerable; and $2.8 billion in business tax changes to free up cash flow, including a provisional tax threshold lift. • This cash injection is on top of the $12 billion New Zealand Upgrade Programme announced in January. The Government will open a NZ$900 million (US$580 million) loan facility to the national carrier as well as an additional NZ$600 million relief package for the aviation sector. • Key measures introduced include the re-introduction, from the 2020-21 income year, of a 2 per cent DV depreciation deduction for commercial and industrial buildings, including hotels and motels; an emergency policy rate

Country	Government Responses to COVID-19
	cut to 0.25 per cent, for at least 12 months, by the reserve bank; and a Small Business Cashflow Loan scheme, offering up to $100,000 to firms employing 50 or fewer full-time equivalent employees. • In September 2020, the Government announced a scheme to pay travel agents to secure refunds or credit for cancelled travel plans on behalf of consumers.
Portugal	• The Government launched over 30 initiatives to protect workers and families and mitigate the economic impacts of COVID-19. • It placed particular emphasis on the travel and tourism sector by establishing a dedicated €60 million credit line for micro-businesses in the sector and by working closely with Turismo de Portugal to bolster national capacity to respond to the challenges resulting from COVID-19. • Business support measures include extraordinary support for the maintenance of employment contracts in a company in the amount of two-thirds of the remuneration, and ensuring 70 per cent of Social Security, the remainder being borne by the employer; offering training scholarships in the Institute for Employment and Vocational Training in Portugal (IEFP); the extension of deadlines for the payment of taxes and other declarative obligations; exceptional financial support for employees and the self-employed who have to stay at home to accompany their children aged up to 12 years; guaranteeing social protection for trainees and trainers in the course of training actions; and more. • The Government approved State-guaranteed credit lines including €200 million for travel agencies, recreational services enterprises, and event organisers, of which €75 million are for micro and small businesses; €900 million for hotels and accommodation establishments, of which €300 million are for micro and small businesses; rent relief; and more. Turismo de Portugal has created a €60 million support line for tourism micro-enterprises. • For residents, all Turismo de Portugal's Tourism Schools are now delivering online classes and the tuition fees were suspended during this period. Together with private sector associations Turismo de Portugal has made available a fund of €250,000 to support accommodation and hotel owners with electricity, water, gas, and cleaning costs.
Singapore	• The Government rolled out several policies and measures to support the travel and tourism sector with a focus on confidence-building and providing aid. • To build confidence, the Government is providing support for professional environmental cleaning and disinfection costs for hotels that provided accommodation for suspected/confirmed cases. Singapore created a Clean Certification to provide assurance to locals and visitors on tourism venues and facilities implementing rigorous preventive measures.

Country	Government Responses to COVID-19
	• Among other measures to support the sector, Singapore also waived the licence fees for STB-licensed hotels, travel agents, and tourist guides for 2020; reduced by 50 per cent the industry participation fees for STB-led tradeshows; enhanced the training scheme, and funding up to 90 per cent of training course fees and trainer fees; provided salary support through Workforce Singapore of up to 70 per cent of fixed monthly salaries, capped at $2,000 per month per employee for the training duration for up to six months; provided licensed self-employed tourist guides with wage support of $1,000 to assist with some of their basic living expenses, provided they are Singaporean citizens or permanent residents; implemented rebates on aircraft landing and parking charges as well as rental rebates for shops and cargo agents at Changi; and more. • The Government is ready to consider further measures if and when necessary.
United Kingdom	• The Chancellor set out a package of targeted measures currently amounting to £330 billion to support public services, people, and businesses. The measures include but are not limited to, 12-month business rates holiday for all retail, hospitality, and leisure businesses in England; grant funding of £25,000 for retail, hospitality, and leisure businesses with property with a rateable value of more than £15,000 and less than £51,000; small business grant funding of £10,000 for all businesses in receipt of small business rate relief or rural rate relief; the Coronavirus Business Interruption Loan Schemes (CBILS) offering Government-guaranteed loans of up to £5 million for SMEs, up to £50 million of finance for larger businesses, and up to £5 million for others that cannot access the CIBLS; cash grants of up to 80% of their normal profits for self-employed individuals; and short-term debt options through the Bank of England for larger companies. • The Government also stepped in to pay wages with the Job Retention Scheme; a grant covered 80 per cent of wages up to £2,500 for those employees on furlough kept on payroll as well as national insurance and pension contributions. Revised wage support is available from 1 November 2020. • Tourism-specific support includes the Destination Management Resilience Scheme, which re-purposes £1.3 million of DEF funding to help support DMOs so they can lead the recovery of the industry in their area. The Scottish Government is providing two funding packages worth £15 million to support T&T.

Source: NCAER compilation using different sources including OECD, WTTC, etc.

In addition to the countries mentioned in Table 2, we have also tried to examine the initiatives taken by the Governments of South Asian countries in response to the COVID-19 pandemic to support the tourism sector. The World Bank collated these initiatives from all the South Asian countries on different support initiatives that were apt for the survival and recovery of the tourism sector.

Table 3: Summary of COVID-19 Response Activities by Governments in South Asia

Support Initiatives	Bangladesh	Bhutan	India	Mal-dives	Nepal	Pakistan	Sri Lanka
Cash grants/subsidies/transfers (or similar)	Yes		Yes			Yes	Yes
Wage subsidies	Yes		Yes				
Tax rebates/relief/extension		Yes	Yes			Yes	yes
Loans/loan repayment support	Yes	Yes	Yes	Yes			Yes
Rules alleviation	Yes		Yes		Yes		Yes
Licence fee waivers for businesses							Yes
Fees/bills waivers				Yes	Yes	Yes	
Training or mentoring incentives/programmes		Yes					
Loans or grants for upgrades							Yes
Strategic programme launch for tourism		Yes					Yes
Tourism communications or crisis task force	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Health/sanitation certification for tourism							Yes
Monitoring tourism industry data					Yes		
Support for industry to address contamination			Yes		Yes	Yes	Yes
Repurposing tourism assets for crisis operations	Yes		Yes	Yes		Yes	Yes
Retraining tourism workers to support the health crisis	Yes				Yes		
National carriers waiving cancellation fees		Yes	Yes	Yes	Yes	Yes	Yes
Maintaining cargo operations of national carriers	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ports waiving port-related fees	Yes		Yes				

Source: World Bank. (2020). "COVID-19 and Tourism in South Asia: Opportunities for Sustainable Regional Outcomes." Washington, D.C.: The World Bank Group.

VI. Recommendations for the Revival of Tourism in India

This section discusses the recommendations proposed for the revival of the Indian tourism industry, which are based on the profile of Indian tourists and other countries' experiences. These are also based on the feedback received from the tourism industry stakeholders like the Federation of Indian Chambers of Commerce and Industry (FICCI) Tourism Committee, Confederation of Indian Industry (CII) National Committee on Tourism and Hospitality, Associated Chambers of Commerce and Industry of India (ASSOCHAM), PHDCCI Tourism Committee, PATA (Pacific Asia Travel Association) India Chapter, Responsible Tourism Society of India (RTSOI), Indian Association of

Tourism Parks and Industries (IATPI), Indian Golf Union, World Travel and Tourism Council India Initiative (WTTCII), Adventure Tour Operators Association of India (ATOAI), Association of Domestic Tour Operators of India (ADTOI), Indian Association of Tour Operators (IATO), Travel Agents Association of India (TTAI), Travel Agents Federation of India (TAFI), India Convention Promotion Bureau (ICPB), Internet and Mobile Association of India (IAMAI), Federation of Associations in Indian Tourism and Hospitality (FAITH), and Association of Buddhist Tour Operators (ABTO).

The proposed recommendations are detailed below.

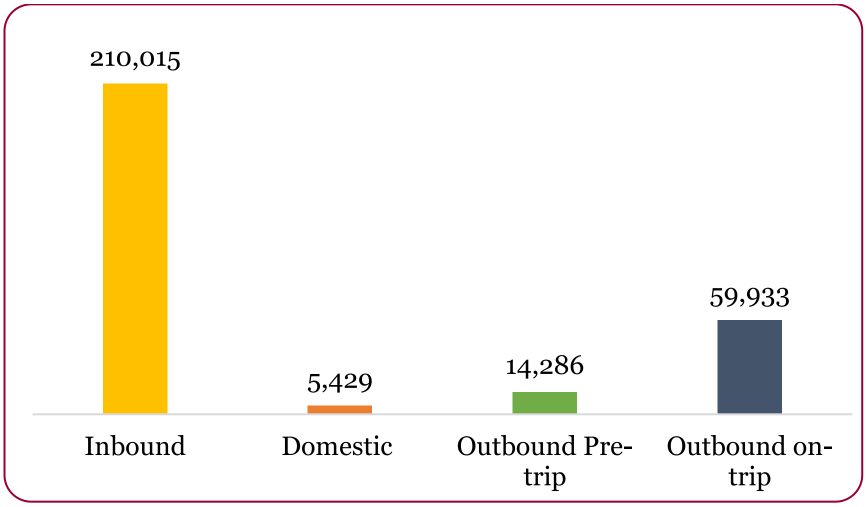
VI.1. Promotion of Domestic Tourism

With the current restrictions on international travel to and from several countries, and their likely continuation amid worries of a third wave of COVID-19 in India, both inbound and outbound tourism would be the most adversely impacted. However, if the State borders remain open, there is a possibility of the domestic industry holding steady. Although a domestic trip costs only about a fraction of an international trip (both inbound and outbound), statistics reveal that in terms of the total demand generated by all forms of tourism, domestic tourism is the key driving force, given its huge incomparable volume.

Figures 15 and 16 present the per-tourist expenditure and percentage distribution of tourism expenditure incurred by all forms of tourism (including expenditure incurred by outbound tourists during their trips abroad)[8] estimated for the pre-pandemic year of 2019-20.

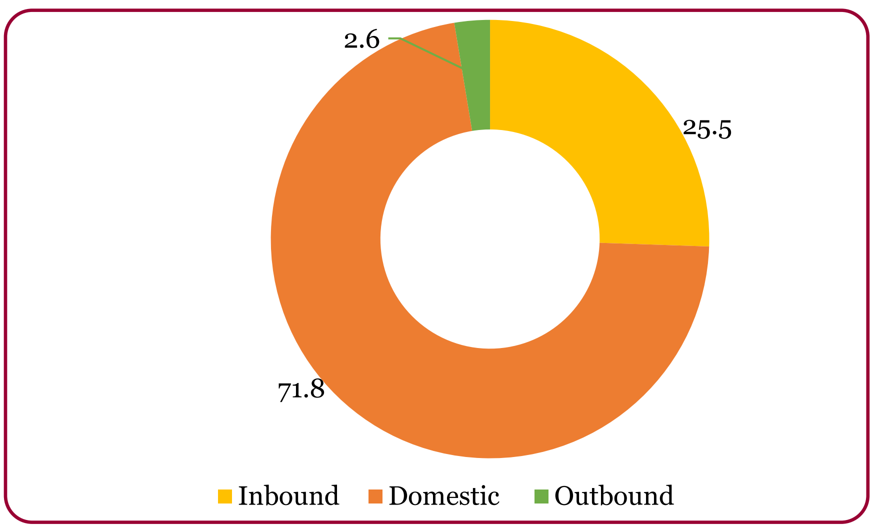
[8] The figure for outbound tourism expenditure has been obtained from the Reserve Bank of India's Balance of Payments statements, in which the debit value under the 'Travel' head is considered as expenditure incurred by Indian residents abroad.

Figure 13: Per Tourist Expenditure Incurred by All Forms of Tourism



Source: *NCAER computation.*

Figure 14: Percentage Distribution of Tourism Expenditure by All Forms of Tourism



Source: *NCAER computation.*

Figure 15 and 16 indicate that while a domestic trip costs the least, at only Rs. 5429, as compared to the cost of an inbound trip (Rs. 2.10 lakh) and an outbound trip (Rs. 14,286 as pre-trip and about Rs. 60,000 on-trip), given its huge volume in terms of the number of trips, the total tourism expenditure incurred by domestic tourists is over 70 per cent of the total internal tourism expenditure. Hence, the contribution of tourism to the economy is mainly on account of domestic tourism.

Besides, domestic tourism is more resilient to natural calamities or pandemics as trips undertaken especially for social, health, and business purposes seldom get severely impacted unless there are extreme situations like the imposition of a curfew.

This study, therefore, recommends that domestic tourism should be promoted much more aggressively than inbound tourism. The Government has already launched several initiatives to boost domestic tourism like the 'Dekho Apna Desh' campaign under which tourists are rewarded if they visit at least 15 destinations in the country in a year and submit pictures of the trips. There is also need for State-level promotions of such schemes. Further, given the prevalent conditions, the minimum number of trips to be taken under this scheme may be relaxed.

We propose the following possible boosters for domestic tourism:

- **Rural tourism:** This is popular among people living in urban settings, wishing to escape from the hustle and bustle of the cities to experience calm in serene rural locations and to treat themselves to lavish village cuisine. Encouraging rural tourism will offer immense opportunities to tourism business entities in the regional and rural destinations. The expected policy stimulus to encourage people to visit regional and rural areas will help in boosting the recovery of tourism.

- **Affordable accommodation:** Policies by both the Central as well as State governments should encourage accommodation alternatives that can provide staying facilities at affordable prices and also in remote areas while also providing a unique experience to tourists. This should include facilities like homestays, camping, bed and breakfast (B&B) arrangements, and short-term rentals, among other things. Some of the digital platforms connecting consumers to low-cost accommodation, such as AirBnB, Makemytrip, and Goibibo should be encouraged to connect with more homestays and such options, albeit with a monitoring mechanism so that the accommodation owners are also able to reap the benefits. The homestays are becoming particularly popular due to their affordability, hygienic conditions, provision of privacy, and capacity to host tourists arriving in large groups.

- **Road trips:** The pandemic affected travel by air and railways the most due to the restricted operations of flights and trains. In such a situation, people resorted to short road trips when the previous wave subsided. With better infrastructure and the availability of basic amenities on highways, road trips can turn out to be among the most promising boosters to domestic tourism.

- **Trips to off-beat destinations:** Mass tourism in many tourist destinations had led to the popularity of off-beat or lesser known destinations during the last few years. With lower density of people and fewer tourists in these places, it would be easy to impose safety measures like social distancing.
- **Promoting digitally-enabled businesses:** Promoting digitally-enabled businesses will be an immense advantage as these businesses can help both customers and business owners explore many potential opportunities.

VI.2. Diverting Outbound Tourists to Domestic Trips

If Indians are prepared to spend their international travel budgets on home soil this year, individual operators may succeed by adopting bold and forward-thinking strategies that recognise and cater to the requirements of those who prefer to visit foreign countries, especially for the purpose of leisure. The tourists, especially those seeking recreational travel experiences away from home, will be driven by the following three key behavioural changes:

1. **Creating an enticing bucket for domestic destinations**: This signifies an opportunity to attract those outbound tourists who prefer to travel abroad for acquiring a unique tourism experience. The adoption of a new approach from by policymakers and destination managers may alter the trend of people travelling abroad for a unique experience.
2. **New approach through working holidays:** The recent flexible working arrangement including work-from-home during the pandemic has opened up a new horizon of travelling without compromising the productivity of the organisations. The tourism sector would certainly benefit from policies that can promote the opportunity for extended travel for tourists without being constrained by the need to take annual leave or adjust vacations to public holidays.
3. **Promoting regional or local destinations**: Given the fact that much of the anticipated growth of tourism is expected to come from domestic travel, tourism policies and promotions need to highlight regional and local destinations for travellers. It should be kept in mind that a lot of travels will be shorter in nature, entailing frequent visits to various places at short distances and also offering affordable holidays for a large segment of the tourists. Many of these will include

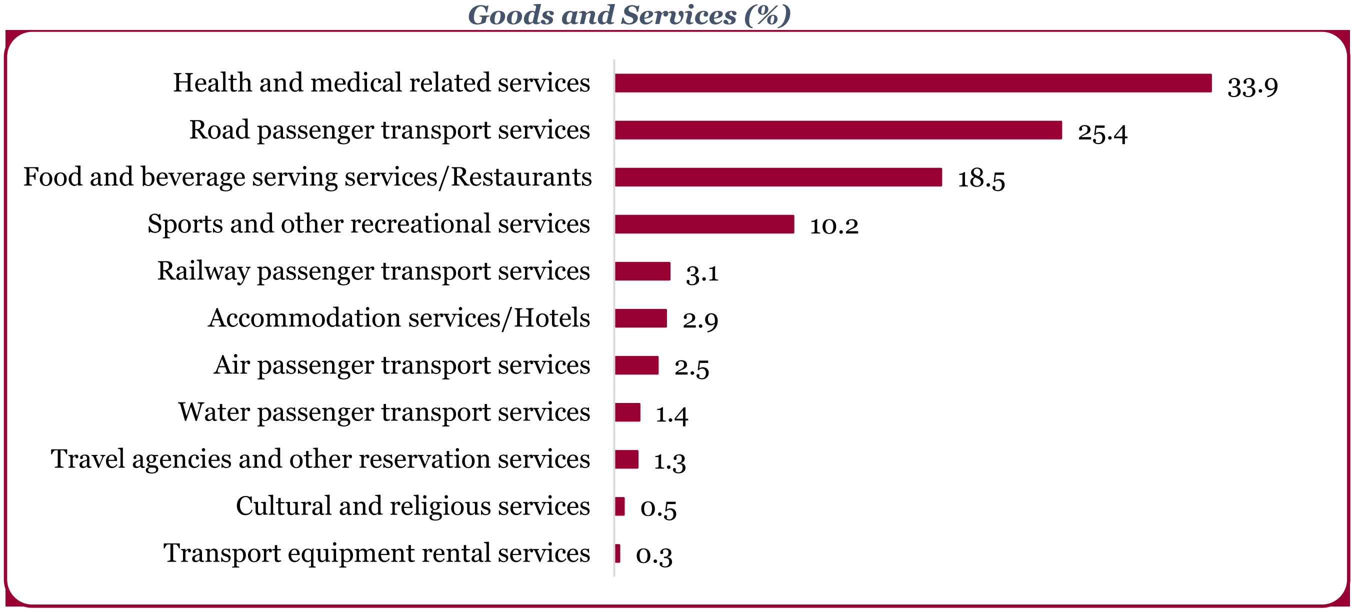
more young professionals, older families, and backpackers who look for adventures and unique experiences through tourism.

VI.3. Target Incentives to Industries Contributing Most to the Tourism Economy

The data on tourism expenditure reveal that of all the tourism-characteristic products and services, food and beverage providing services, road passenger transport services, and healthcare providing services account for close to 80 per cent of the total tourism expenditure on tourism-characteristic goods and services. The percentage distribution of all tourism-characteristic goods and services, taken as an average of the previous six years (2015-16 to 2019-20) is presented in Figure 17.

Figure 17 suggests that the largest contributor to tourism is healthcare providing services (33.9 per cent), indicating the popularity of medical tourism in the country. In the aftermath of the pandemic, medical tourism is likely to contribute even more as people are willing to travel to other States or districts in search of better medical facilities. Food providing services, which include restaurants and dhabas, among others, account for another 25.4 per cent of the tourism activity, and road passenger transport, which is the most popular transport service among domestic tourists, accounts for 18.5 per cent of the total tourism expenditure on characteristic goods and services.

Figure 15: Percentage Distribution of Expenditure across Tourism-characteristic Goods and Services (%)



1. *Source:* NCAER computation

Hence, if the government policies are to be prioritised and targeted towards the most important industries catering to tourists, they should focus on the three key industries of healthcare providing services, food providing services, and road passenger transport services.

VI.4. Other Recommendations

Some of the other recommendations are as follows:

- Re-establish trust in travel and tourism among tourists.
- Ensure adherence to safety and mandatory health and hygiene protocols to the highest standards possible.
- Make Protocols mandatory for tourists also.
- Adopt a High-Value, Low-Volume (HVLV) approach (as that followed in Bhutan).
- Seek Government responsiveness for preparing a Tourism Recovery Plan.
- Provide tax benefits, subsidies, and incentives to industry players so that they can survive and overcome this pandemic shock.
- Integrate public health with tourism.
- Secure the issuance of vaccine certificates.
- Create a healthy environment which is a natural barrier against future pandemics.
- Promote technological innovations like digital marketing and virtual tours in the tourism industry.
- Increase the use of digital services to improve the customer safety experience and adapt quickly if the health context in the local area changes.
- Offer targeted support for the vulnerable communities.
- Support businesses in diversifying revenue sources.
- Identify and target a diverse customer base.
- Maintain customer and employee confidence.

It is imperative for the policy measures to take into account all the above key areas which are identified in the proposed recommendations, in order to foster the growth of the tourism industry in the country. Simultaneously, it is also important to consider that a large portion of the households involved in the tourism sector belong to the informal sector and do not have the bargaining power enjoyed by the formal sector players. Therefore, it is critical for the policy measures to reach the last mile representatives of the tourism sector so that the measures prescribed as the policy recommendations percolate to the bottom of the pyramid relevant to the tourism sector.

Appendix I

Table A1: GVA by Industries (Rs. lakh)

			2019-20			2020-21		
	2018-19	2019-20	Q1	Q2	Q3	Q1	Q2	Q3
Agriculture and allied	301627676	339403252	74890000	64121000	109671700	78869400	68744000	117785000
Mining, other manufacturing, construction, electricity, gas and water supply	265444606	254795227	65058627	62242128	61816502	40799262	60817910	63369952
Trade	195429813	212442883	52003470	50008842	52495107	31101716	46374811	50758879
Transport freight services	52090903	55391244	13559112	13039043	13687299	1181126	7672595	11421247
All non-tourism specific services	766837936	840357022	217141110	224381117	197663731	191287005	210899881	211969060
Accommodation services/Hotels	2467124	2719902	665799	640262	672094	398195	593736	649865
Food and beverage serving services/Restaurants	15601829	17200376	4210446	4048951	4250251	2518141	3754723	4109678
Railway passenger transport services	2464982	2727464	667650	642042	673962	-2627	23379	119988
Road passenger transport services	20958168	22070430	5402576	5195357	5453652	670146	4316485	6104411
Water passenger transport services	1215828	1422106	348115	334762	351406	20671	75192	153702
Air passenger transport services	1155473	1950335	477419	459107	481932	28349	103122	210793
Transport equipment rental services	221790	250847	72176	77178	63385	68696	71928	67868
Travel agencies and other reservation services/Supporting and auxiliary transport activities	1002278	1047241	256352	246520	258776	15337	89722	149637
Cultural and religious services	426913	482842	138927	148557	122006	132229	138451	130635
Sports and other recreational services	8049651	9104231	2619543	2801112	2300477	2493246	2610570	2463194
Health and medical related services	28320877	32753902	7882304	8428650	6922223	7502270	7855304	7411842
Readymade garments	7710075	7606419	1613235	1596773	1544981	796286	1469357	1454694
Processed food	26073908	25886817	5972260	5911314	5719579	4599358	5948441	5772716
Alcohol and tobacco products	6995211	6924361	2246343	2223419	2151302	1729954	2237384	2171289
Travel related consumer goods	4393327	4232536	963155	953326	922405	499797	889120	889353
Footwear	7816	7527	1623	1607	1555	801	1479	1464
Soaps, cosmetics and glycerine	2576478	2528962	495812	490752	474834	312689	484656	505194
Gems and jewellery	642839	620544	189208	187277	181203	119326	184951	192789
Books, journals, magazines, stationery, etc.	4405776	4207854	846138	837503	810339	533626	827101	862149
Total TDGVA	1716121274	1846134326	457721400	449016600	468690700	365675000	426184300	488725400

Source: *NCAER computations.*

Table A2: TIRs and TDGVA to Estimate Impact due to Overall Economic Slowdown (Rs. lakh)

				2019-20			2020-21		
	TIR for All the Years, Quarters	2018-19	2019-20	Q1	Q2	Q3	Q1	Q2	Q3
Agriculture and allied	0.0000	0	0	0	0	0	0	0	0
Mining, other manufacturing, construction, electricity, gas and water supply	0.0021	5470	5251	1341	1283	1274	841	1253	1306
Trade	0.7864	1536860	1670651	408955	393270	412822	244584	364692	399168
Transport freight services	2.3684	1233696	1311860	321127	308810	324163	27973	181714	270495
All non-tourism specific services	1.3731	10529730	11539248	2981643	3081059	2714193	2626631	2895943	2910624
Accommodation services/Hotels	71.3609	1760562	1940947	475121	456897	479612	284155	423695	463750
Food and beverage serving services/Restaurants	54.2109	8457886	9324472	2282519	2194971	2304098	1365106	2035468	2227892
Railway passenger transport services	69.8046	1720671	1903896	466051	448175	470457	-1834	16320	83758
Road passenger transport services	52.4399	10990445	11573714	2833106	2724441	2859890	351424	2263561	3201148
Water passenger transport services	3.7996	46197	54035	13227	12720	13352	785	2857	5840
Air passenger transport services	81.0964	937047	1581652	387169	372319	390830	22990	83628	170946
Transport equipment rental services	38.0000	84280	95322	27427	29328	24086	26104	27333	25790
Travel agencies and other reservation services/ Supporting and auxiliary transport activities	51.2532	513699	536744	131389	126349	132631	7861	45985	76694
Cultural and religious services	20.1000	85809	97051	27924	29860	24523	26578	27829	26258
Sports and other recreational services	5.7156	460084	520360	149722	160100	131486	142503	149209	140786
Health and medical related services	29.5841	8378489	9689961	2331912	2493544	2047880	2219482	2323924	2192730
Readymade garments	0.0001	8	8	2	2	2	1	2	2
Processed food	0.0003	72	72	17	16	16	13	16	16
Alcohol and tobacco products	0.0061	428	423	137	136	132	106	137	133
Travel related consumer goods	0.0131	577	555	126	125	121	66	117	117
Footwear	0.0002	0	0	0	0	0	0	0	0
Soaps, cosmetics and glycerine	0.0014	37	36	7	7	7	4	7	7
Gems and jewellery	0.0328	211	204	62	62	60	39	61	63
Books, journals, magazines, stationery, etc.	0.0009	38	36	7	7	7	5	7	7
Total TDGVA		46742297	51846498	12838993	12833480	12331640	7345419	10843757	12197528

Source: *NCAER computations.*

Table A3: TIRs and TDGVA to Estimate Impact due to Combined Demand Shock

	Tourism Industry Ratios (%) 2020-21			*2020-21 (Rs. Lakh)*		
	Q1	*Q2*	*Q3*	*Q1*	*Q2*	*Q3*
Agriculture and allied	*0.0000*	*0.0000*	*0.0000*	*0*	*0*	*0*
Mining, other manufacturing, construction, electricity, gas and water supply	*0.0004*	*0.0005*	*0.0007*	*146*	*313*	*440*
Trade	*0.0651*	*0.1754*	*0.2607*	*20238*	*81356*	*132333*
Transport freight services	*0.2268*	*0.5819*	*0.9473*	*2678*	*44644*	*108194*
All non-tourism specific services	*0.2378*	*0.3433*	*0.4622*	*454785*	*723978*	*979675*
Accommodation services/Hotels	*4.8129*	*16.2375*	*19.3641*	*19165*	*96408*	*125841*
Food and beverage serving services/Restaurants	*4.3785*	*12.7098*	*18.0095*	*110257*	*477219*	*740133*
Railway passenger transport services	*6.6588*	*17.1047*	*27.8131*	*-175*	*3999*	*33372*
Road passenger transport services	*5.0211*	*12.8835*	*20.9751*	*33648*	*556116*	*1280407*
Water passenger transport services	*0.3226*	*0.9105*	*1.3321*	*67*	*685*	*2047*
Air passenger transport services	*7.3333*	*19.4031*	*30.5226*	*2079*	*20009*	*64340*
Transport equipment rental services	*3.2605*	*9.0297*	*13.4940*	*2240*	*6495*	*9158*
Travel agencies and other reservation services/Supporting and auxiliary transport activities	*3.9229*	*11.1937*	*16.1725*	*602*	*10043*	*24200*
Cultural and religious services	*1.3057*	*4.5642*	*5.2227*	*1726*	*6319*	*6823*
Sports and other recreational services	*0.3538*	*1.2480*	*1.4129*	*8820*	*32581*	*34802*
Health and medical related services	*2.7775*	*7.1988*	*11.5890*	*208373*	*565486*	*858955*
Readymade garments	*0.0000*	*0.0000*	*0.0000*	*0*	*0*	*1*
Processed food	*0.0000*	*0.0001*	*0.0001*	*2*	*4*	*5*
Alcohol and tobacco products	*0.0011*	*0.0015*	*0.0021*	*18*	*34*	*45*
Travel related consumer goods	*0.0023*	*0.0033*	*0.0044*	*11*	*29*	*39*
Footwear	*0.0000*	*0.0001*	*0.0001*	*0*	*0*	*0*
Soaps, cosmetics and glycerine	*0.0002*	*0.0004*	*0.0005*	*1*	*2*	*2*
Gems and jewellery	*0.0057*	*0.0082*	*0.0111*	*7*	*15*	*21*
Books, journals, magazines, stationery, etc.	*0.0001*	*0.0002*	*0.0003*	*1*	*2*	*2*
Total TDGVA				*864690*	*2625738*	*4400835*

Source: *NCAER computations.*

TABLE A4: TIRS AND TDGVA TO ESTIMATE IMPACT DUE TO INBOUND TOURISM DEMAND SHOCK

	Tourism Industry ratios (%) 2020-21			2020-21 (Rs. Lakh)		
	Q1	Q2	Q3	Q1	Q2	Q3
Agriculture and allied	0.0000	0.0000	0.0000	0	0	0
Mining, other manufacturing, construction, electricity, gas and water supply	0.0013	0.0013	0.0013	533	795	828
Trade	0.4854	0.5257	0.5320	150965	243791	270061
Transport freight services	2.1429	2.1786	2.1843	25310	167159	249472
All non-tourism specific services	0.8709	0.8709	0.8709	1665981	1836796	1846108
Accommodation services/Hotels	13.0247	23.0807	24.6653	51864	137038	160291
Food and beverage serving services/Restaurants	29.0625	33.2799	33.9444	731836	1249567	1395006
Railway passenger transport services	62.7670	63.8616	64.0340	-1649	14930	76833
Road passenger transport services	47.4482	48.2395	48.3642	317972	2082251	2952349
Water passenger transport services	2.3595	2.6078	2.6470	488	1961	4068
Air passenger transport services	64.4030	66.9611	67.3642	18258	69052	141999
Transport equipment rental services	25.2721	27.3727	27.7037	17361	19689	18802
Travel agencies and other reservation services/Supporting and auxiliary transport activities	27.6546	30.9701	31.4926	4241	27787	47125
Cultural and religious services	2.2041	5.3129	5.8028	2915	7356	7580
Sports and other recreational services	0.5019	1.3715	1.5086	12515	35805	37159
Health and medical related services	25.6452	26.2552	26.3513	1923972	2062427	1953120
Readymade garments	0.0001	0.0001	0.0001	1	1	1
Processed food	0.0002	0.0002	0.0002	8	10	10
Alcohol and tobacco products	0.0039	0.0039	0.0039	67	87	84
Travel related consumer goods	0.0083	0.0083	0.0083	42	74	74
Footwear	0.0001	0.0001	0.0001	0	0	0
Soaps, cosmetics and glycerine	0.0009	0.0009	0.0009	3	4	5
Gems and jewellery	0.0208	0.0208	0.0208	25	39	40
Books, journals, magazines, stationery, etc.	0.0005	0.0005	0.0005	3	4	5
Total TDGVA				4922710	7956623	9161022

Source: *NCAER computations.*

Table A5: TIRs and TDGVA to Estimate Impact due to Domestic Tourism Demand Shock

	Tourism Industry Ratios (%) 2020-21			2020-21 (Rs. Lakh)		
	Q1	Q2	Q3	Q1	Q2	Q3
Agriculture and allied	0.0000	0.0000	0.0000	0	0	0
Mining, other manufacturing, construction, electricity, gas and water supply	0.0004	0.0005	0.0007	146	313	440
Trade	0.2937	0.3638	0.4427	91350	168697	224707
Transport freight services	0.4295	0.7489	1.1087	5073	57457	126623
All non-tourism specific services	0.2378	0.3433	0.4622	454785	723978	979675
Accommodation services/Hotels	61.8578	63.2264	64.7684	246314	375398	420907
Food and beverage serving services/Restaurants	28.3023	32.4163	37.0514	712692	1217143	1522695
Railway passenger transport services	12.8679	22.2193	32.7552	-338	5195	39302
Road passenger transport services	9.5099	16.5811	24.5480	63730	715720	1498508
Water passenger transport services	1.7314	2.0709	2.4533	358	1557	3771
Air passenger transport services	21.8449	31.3565	42.0730	6193	32335	88687
Transport equipment rental services	15.1766	18.8452	22.9785	10426	13555	15595
Travel agencies and other reservation services/Supporting and auxiliary transport activities	22.7311	26.6864	31.1427	3486	23943	46601
Cultural and religious services	18.9408	19.0906	19.2593	25045	26431	25159
Sports and other recreational services	5.2867	5.3114	5.3392	131810	138657	131515
Health and medical related services	6.2379	10.0492	14.3433	467987	789398	1063101
Readymade garments	0.0000	0.0000	0.0000	0	0	1
Processed food	0.0000	0.0001	0.0001	2	4	5
Alcohol and tobacco products	0.0011	0.0015	0.0021	18	34	45
Travel related consumer goods	0.0023	0.0033	0.0044	11	29	39
Footwear	0.0000	0.0001	0.0001	0	0	0
Soaps, cosmetics and glycerine	0.0002	0.0004	0.0005	1	2	2
Gems and jewellery	0.0057	0.0082	0.0111	7	15	21
Books, journals, magazines, stationery, etc.	0.0001	0.0002	0.0003	1	2	2
Total TDGVA				2219098	4289864	6187402

Source: *NCAER computations.*

TABLE A6: ESTIMATED NUMBER OF TOTAL JOBS IN TOURISM-CHARACTERISTIC INDUSTRIES

	2019-20	2020-21		
		Q1	Q2	Q3
Accommodation services/Hotels	923490	552061	818328	842980
Food and beverage serving services/Restaurants	9173388	6487413	8412917	8591184
Railway passenger transport services	803115	331587	350538	417054
Road passenger transport services	13718723	6690899	12361511	12935789
Water passenger transport services	92942	-12511	6013	29868
Air passenger transport services	57331	25793	31333	38468
Transport equipment rental services	120590	110412	117680	121079
Travel agencies and other reservation services/Supporting and auxiliary transport activities	954700	429775	599577	719225
Cultural and religious services	1120680	752752	1015500	1138357
Sports and other recreational services	1611566	351876	1251458	1672085
Health and medical related services	6248999	4593640	4702773	6508857
Total Tourism Jobs (Sum of above)	34825523	20313698	29667629	33014945

Source: NCAER computations.

TABLE A7: ESTIMATED NUMBER OF EMPLOYEES IN TOURISM-CHARACTERISTIC INDUSTRIES

	2019-20	2020-21		
		Q1	Q2	Q3
Accommodation services/Hotels	784984	469263	695595	716550
Food and beverage serving services/Restaurants	3952135	2794947	3624504	3701306
Railway passenger transport services	779221	321722	340109	404646
Road passenger transport services	5959283	2906463	5369723	5619184
Water passenger transport services	89406	-12035	5784	28732
Air passenger transport services	57331	25793	31333	38468
Transport equipment rental services	55824	51112	54477	56050
Travel agencies and other reservation services/Supporting and auxiliary transport activities	652168	293585	409579	491312
Cultural and religious services	515724	346408	467322	523859
Sports and other recreational services	908147	198289	705220	942251
Health and medical related services	5316545	3908193	4001041	5537627
Total Tourism Jobs (Sum of above)	19070769	11303740	15704688	18059985

Source: *NCAER computations.*

Table A8: Estimated Number of Self-employed in Tourism-characteristic Industries

	2019-20	2020-21		
		Q1	Q2	Q3
Accommodation services/Hotels	138505	82798	122733	126430
Food and beverage serving services/Restaurants	5221253	3692466	4788413	4889878
Railway passenger transport services	23894	9865	10429	12408
Road passenger transport services	7759440	3784436	6991788	7316605
Water passenger transport services	3535	-476	229	1136
Air passenger transport services	-	-	-	-
Transport equipment rental services	64766	59299	63203	65028
Travel agencies and other reservation services/ Supporting and auxiliary transport activities	302532	136190	189998	227913
Cultural and religious services	604956	406344	548178	614498
Sports and other recreational services	703419	153588	546238	729834
Health and medical related services	932454	685447	701732	971230
Total Tourism Jobs (Sum of above)	15754754	9009958	13962941	14954960

Source: *NCAER computations.*

Table A9: Estimated Wage and Non-wage Income in Major Tourism-characteristic Industries (at Constant Prices)

	2019-20	2020-21		
		Q1	Q2	Q3
	Wage Income			
Accommodation services/Hotels	725212	221565	582617	616043
Food and beverage serving services/Restaurants	4106543	3611461	3966372	3999231
Road passenger transport services	3486589	1026274	3011453	3212498
Other Transport services	2664495	1238909	1415756	1690718
Others	18600985	11186280	15113248	19054127
Total Tourism Wage Income	29583825	17284488	24089446	28572616
	Non-wage Income			
Accommodation services/Hotels	1306665	1195821	1275282	1282638
Food and beverage serving services/Restaurants	12490205	-19737634	3365655	5504593
Road passenger transport services	13581648	1001987	11152265	12180212
Other Transport services	941519	962549	955790	950294
Others	10717126	7050956	10303274	10827691
Total Tourism Non-wage Income	39037162	-9526322	27052265	30745428

Source: *NCAER computations.*

Table A10: Estimated Number of tourist Arrivals by Forms of Tourism and across Different Scenarios

	Optimistic				Most Likely			
	Inbound	Domestic	Outbound	Outbound Diverted to Domestic	Inbound	Domestic	Outbound	Outbound Diverted to Domestic
2016-17	15030000	1355913459	21870000	0	15030000	1355913459	21870000	0
2017-18	16810000	1391301391	23940000	0	16810000	1391301391	23940000	0
2018-19	17420000	1556019791	26300000	0	17420000	1556019791	26300000	0
2019-20	17910000	1949005462	26915034	0	17910000	1949005462	26915034	0
2020-21	6337122	515930518	0	0	6337122	515930518	0	0
2021-22	3163605	541727044	5383007	8478236	3012957	515930518	5383007	8074510
2022-23	5641650	812590566	5921307	10597795	5373000	773895778	5921307	10093138
2023-24	7334145	1354317611	6513438	13247243	6984900	1289826296	6513438	12616422
2024-25	9534389	1692897013	7816126	16559054	9080370	1612282870	7816126	15770528
2025-26	12394705	2116121267	9379351	20698818	11804481	2015353587	9379351	19713160

Source: *NCAER outlook.*

Table A10: Estimated Number of Tourist Arrivals by Forms of Tourism and across Different Scenarios (contd.)

	Pessimistic			
	Inbound	Domestic	Outbound	Outbound Diverted to Domestic
2016-17	15030000	1355913459	21870000	0
2017-18	16810000	1391301391	23940000	0
2018-19	17420000	1556019791	26300000	0
2019-20	17910000	1949005462	26915034	0
2020-21	6337122	515930518	0	0
2021-22	2410366	309558311	5383007	5383007
2022-23	4298400	619116622	5921307	6728759
2023-24	5587920	1238233244	6513438	8410948
2024-25	7264296	1547791555	7816126	10513685
2025-26	9443585	1934739444	9379351	13142106

Source: *NCAER outlook.*

Appendix II

Estimation of Number of Tourist Arrivals on a Quarterly Basis

The annual estimates (January-December, 2020) of DTVs were obtained from the MoT, according to which there were a total of 556.07 million DTVs during 2020. These estimates excluded the DTVs undertaken in the states of Maharashtra, Delhi, and Jharkhand. The values for these three States were imputed using their shares in the previous year's values of DTV. Hence the number of DTVs obtained was estimated at 614.66 million.

The DTV was further converted into Domestic Tourist Arrivals (DTAs) so that the per-tourist domestic expenditure may be applied on them, to derive the total domestic tourism expenditure. The estimated DTA works out to be 515.9 million for 2020.

In order to disaggregate the annual DTA into quarterly estimates, we have made certain assumptions. Table A12 presents the estimated DTA and assumptions used to derive these estimates.

TABLE A12: QUARTERLY ESTIMATED DOMESTIC TOURIST ARRIVALS

	DTA (million)	Assumptions
January – December 2020	515.9	-
Q4 FY 2019-20	120.0	23% of annual*
Q1 FY 2020-21	45.3	-90% (q-o-q)
Q2 FY 2020-21	130.8	-75% (q-o-q)
Q3 FY 2020-21	219.8	-58% (q-o-q)**

Source: *RBI, MoT and NCAER computations.*

Note: **This is assumed using the proportion of DTAs who travel during the months of January-March, as obtained from the Domestic Tourism Survey, 2014-15. It is assumed that the same proportion of people travelled in the pre-pandemic quarter.*

***The estimate for Q3 is derived as a residual.*

Appendix III

Estimation of Wage and Non-wage Incomes by industries

In order to estimate the wage and non-wage incomes, various statements on "Output, Value Added, Compensation of employees and Operating Surplus by industry" from National Accounts Statistics, NAS-2021, were referred to. These statements provide the disaggregation of Gross Value Added into the following:

- Production taxes less production subsidies;
- Consumption of Fixed Capital (CGC);
- Compensation of Employee (CoE); and
- Operating Surplus (OS).

These statements provide the above details by industry and by different institutions like the public sector, private corporations, and households. Table A13 provides the aggregation scheme for deriving the household "wage income" and "non-wage income" using these statements.

TABLE A13: AGGREGATION SCHEME OF HOUSEHOLD INCOME

Institutions	Components	Whether Considered as Household Income	Income Category
Public Sector	CFC	No	-
	CoE	Yes	Wage
	OS	No	-
Private Corporations	CFC	Yes	Non-Wage
	CoE	Yes	Wage
	OS	Yes	Non-Wage
Households	CFC	Yes	Non-Wage
	CoE	Yes	Wage
	OS	Yes	Non-Wage

Source: NCAER compilation.

Further disaggregation of these annual wage and non-wage income into quarterly estimates has been done using the employment elasticities of income. Employment elasticity refers to the percentage change in employment with respect to the percentage change in income over a period of time. Since employment data are available for 2017-81 and 2018-19 from the PLFS, conducted by NSSO, the income data have also been taken from these years to derive the point elasticities.

With the estimation of employment, by status of work (that is, employees and self-employed) and by quarters of 2019 and 2020, the elasticities have been used to derive the percentage change in income at the quarterly level, which in turn, are used to derive the quarterly estimates. The elasticities are computed separately for wage and non-wage incomes and for each tourism characteristic industry.

$$Employment\ elasticity\ for\ Employees = \frac{Percent\ change\ in\ number\ of\ employees}{Percent\ change\ in\ wage\ income}$$

$$Employment\ elasticity\ for\ Selfemployed = \frac{Percent\ change\ in\ number\ of\ selfemployed}{Percent\ change\ in\ non - wage\ income}$$

Hence the derived estimates of wage and non-wage incomes at the quarterly level are presented in Table A9, Appendix I.

Appendix IV

Description of Social Accounting Matrix

The Social Accounting Matrix (SAM) presents the economic transactions among the following institutional accounts:

- **Production Account**: Its rows depict the use of production sectors as inputs in other production sectors. The columns depict the cost of production of each production sector. The production account comprises the following 25 sectors, including the "Tourism" sector, which has been created as a separate sector using the Tourism Product Ratios and Tourism Industry Ratios, obtained in the Third TSA:
    - Agriculture and allied
    - Mining, other manufacturing, construction, electricity
    - Trade
    - Transport freight services
    - All non-tourism specific services
    - Accommodation services/Hotels
    - Food and beverage serving services/Restaurants
    - Railway passenger transport services
    - Road passenger transport services
    - Water passenger transport services
    - Air passenger transport services
    - Transport equipment rental services
    - Travel agencies and other reservation services
    - Cultural and religious services
    - Sports and other recreational services
    - Health and medical related services
    - Readymade garments
    - Processed food
    - Alcohol and tobacco products
    - Travel related consumer goods
    - Footwear
    - Soaps, cosmetics and glycerine
    - Gems and jewellery
    - Books, journals, magazines, stationery, etc.
    - Tourism

- **Factors of production**: This comprises the following two categories:

    - Labour (Wage), and
    - Capital (Non-wage).

  The rows depict the wage and non-wage incomes drawn from each production sector. The columns depict the flow of wage and non-wage incomes into different categories of the household account.

- **Households**: The rows of this account depict the income earned by the households and the columns depict the private household consumption expenditure incurred by households on the purchase of goods and services produced by the production sectors.

- **Net Indirect Taxes**: This account includes:

    - Net taxes (taxes less subsidies) paid by the production sectors on the production, and
    - Net taxes (taxes less subsidies) paid on the products.

  The rows depict the taxes paid by the production sectors whereas the columns present the flow of these taxes to the government account.

- **Government Account**: The row of this account presents the income earned by the government from the production account in the form of indirect taxes; the income earned by the government from the household account in the form of direct taxes; and the income earned by the government on the export of goods and services.

- **Capital Account**: This account presents the savings in the row vector, which include household savings, and savings by public non-financial and public-financial corporations. In the column vector, this presents the use of production sectors as Gross Capital Formation or to meet the investment demand.

- **Rest of the World**: This account presents the imports in the row vector and exports in the column vector.

The schematic structure of the SAM featuring these accounts is presented in Table A14.

TABLE A14: SCHEMATIC STRUCTURE OF THE SAM

Receipt	Expenditure						
	Prod-uction Account	**Factors of Prod-uction**	**House-holds**	**Indi-rect Taxes**	**Govern-ment Account**	**Capital Account**	**Rest of the World**
Production Account	Inter-industry matrix A11		Private Consumpti on A13		Governmen t Consumpti on A15	Investment A16	Exports A17
Factors of Production	Value Added A21						
Households		Value Added Income A32			Governmen t Transfers, A35	Discrepanci es, errors and omissions, A36	Transfe rs from abroad A37
Indirect Taxes	Indirect Taxes on Purchases A41		Consumpti on Taxes A43		Indirect Taxes on Purchases A45	Indirect Taxes on Purchases A46	
Government	Income from Entreprene ur-ship A51		Direct taxes A53	Total Indire ct Tax A54			
Capital Account			Private Savings A63		Governmen t Savings A65		Foreign Savings A67
Rest of the World	Imports A71				Governmen t Transfers to ROW A75		

Source: NCAER compilation

The SAM-based multipliers are derived through the Leontief Inverse Matrix, which captures interlinkages among the production sectors and also between these sectors and the household account. The income multipliers quantify the impact of the tourism sector on the incomes of the households engaged in this sector. Such analyses are not only important for monitoring the tourism activity in an economy but also provide the basis for policymakers to formulate relevant policies.

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