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

Estimating the Impact of the Second and Third Waves and Projections for Possible Future Waves of the Pandemic

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Estimating the Impact of the Second and Third Waves and Projections for Possible Future Waves of the Pandemic

Study sponsored by **The Ministry of Tourism, Government of India**

May 2023



NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH NCAER India Centre 11 Indraprastha Estate, New Delhi 110 002, INDIA.

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The findings, interpretations, and conclusions expressed are those of the authors and do not necessarily reflect the views of the Governing Body or Management of NCAER.

Foreword

The impact of the COVID-19 pandemic on the overall economic activities started being felt in the beginning of March 2020. The subsequent measures to curtail the pandemic, including complete lockdowns, curfews in several parts of the country, travel restrictions, closure of international borders, and suspension of air travel, had severe adverse effect on all sectors of the economy. However, the tourism sector bore the brunt of the restrictions for a very long time, more so due to self-imposed abstinence of travel by the public. Although there were gradual relaxations in curtailment measures through 2020-21, they were re-imposed when the pandemic returned with a second more deadly wave in the first quarter of 2021-22, and yet another wave in the fourth quarter of the same year. Since by then, the nation was better prepared to deal with the pandemic due to the advent of vaccinations, improved healthcare, and adoption of safety measures, the economy, as a whole, started reviving during the second and third waves after suffering from the biggest contraction in the first wave. Being a highly contact-intensive sector, tourism has been an exception, exhibiting much slower revival than the other sectors.

In this context, it was pertinent to conduct a study to measure the extent of the pandemic's impact on tourism to enable policymakers to devise appropriate revival measures, especially because the economic value of tourism is not apparent in the country's national accounts. The National Council of Applied Economic Research (NCAER) was commissioned by the Ministry of Tourism (MoT) to conduct this study in two phases. The first phase of the study estimated the impact of the first wave of the pandemic on tourism. It revealed that the tourism economy or Tourism Direct Gross Value Added (TDGVA) had suffered an unprecedented fall of over 93 per cent in the first quarter of 2020-21, with 14.5 million tourism jobs also estimated to have been lost during this period. Phase I of the study also delineated the future outlook for the sector, based on different scenarios (optimistic, most likely and pessimistic), and offered recommendations for reviving tourism in India. This report, representing Phase II of the study, estimates the impact of the second and third waves of the pandemic on tourism (GDP, employment, and household incomes), presents the revised projections for the sector, and recommends new measures based on the current situation, best practices being implemented by the tourism industries around the world, and inputs from the MoT's meetings with the stakeholders.

I take this opportunity to thank Shri Arvind Singh, Secretary, Ministry of Tourism, for entrusting NCAER with the task of carrying out this critical and timely study. The NCAER team is grateful to him for providing valuable comments, insights and sharp observations, which have helped us enrich the report. On behalf of the team, I also wish to thank other senior officials in the Ministry of Tourism for offering their inputs for this study. We also express our gratitude to all the officials of the Market Research Division, Ministry of Tourism, for their continued support through the course of the study.

The NCAER team that undertook this study, led by Professor Poonam Munjal, included Mr K.A. Siddiqui, Senior Advisor; Dr Palash Baruah, Associate Fellow; and Mr Asrar Alam, Senior Research Analyst. I hope 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 extant tourism literature for both policymakers as well as the research fraternity.

New Delhi

Dr Poonam Gupta Director General NCAER

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Executive Summary

1. Background

The COVID-19 pandemic had a severe impact on the economies of countries across the world, resulting in a sharp contraction in their respective Gross Domestic Product (GDP) figures and in the loss of jobs, particularly during the first half of 2020-21. India was no exception and suffered from the second wave of the pandemic during April-June 2021, followed by the third wave during the period November 2021-January 2022. These waves, resulting most prominently in travel restrictions and even travel abstinence, had the most severe impact on tourism economy.

In order to quantify the impact of pandemic on tourism, this study aimed to estimate the impact in terms of GDP, employment and household incomes during all the three waves of the pandemic. This study is a sequel to the Phase I study in which the impact was estimated during the first three quarters of 2020-21.

2. Objectives of the Study

The broad objectives of the study are to:

- Assess the impact of the second and third waves of the pandemic on the following:
 - Quarterly as well as annual Tourism Direct Gross Values Added (TDGVA)
 - Tourism Employment. This will be disaggregated into 'employees' and the 'self-employed' to assess the impact on salary/wage earners and employers or business owners.
 - Tourism Income of the households. This will also be disaggregated into the 'employee' and 'self-employed' households engaged in the tourism sector.
- Revise the projections made in Phase I of the study, based on more recent data that are available and also based on the likelihood of occurrence of the fourth/future waves of the pandemic.
- Review, assess, and compare the tourism-related country estimates, as published by UNWTO, with the study estimates.
- Propose appropriate policy measures for providing relief to the tourism sector, in general, and households involved in tourism-related activities, in particular, based on feedback received from the various stakeholders.

3. Methodology

The study made use of the following data points to meet the study objectives:

• The annual GDP statements from National Accounts Statistics (NAS-2023) by Central Statistics Office

- The quarterly GDP statements (Q1 to Q3) from latest press release by Central Statistics Office (dated February 28, 2023) and Q4 statement from Press Release dated May 31, 2022.
- Monthly data on International Tourist Arrivals, MoT
- Data on Domestic Tourist Visits, MoT
- Third TSA Tourism Product Ratios and Tourism Industry Ratios
- Quarterly and Annual PLFS unit level data for employment/number of jobs
- Estimated fall in number of jobs, as per latest estimates on Employment and Unemployment. This parameter will be used as an indicator of fall in tourist demand.
- UNWTO World Tourism Barometer, January 2023.

The tourism economy is measured through an internationally recommended framework called Tourism Satellite Account (TSA). In order to quantify the economic impact of a fall in tourism activities on the Gross Value Added (GVA), the study estimates the values of Tourism Direct GVA (TDGVA) for the following specifications:

- 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:
 - o Inbound tourism demand-side shock; and
 - o 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 using the Supply and Use Table (SUT) framework of the Tourism Satellite Account (TSA). These ratios have been derived for all the quarters of all the specifications given above to arrive at the values of TDGVA. Further, in order to estimate the loss of jobs in the tourism sector, the key data source used in this study was the employment data obtained from the Periodic Labour Force Survey (PLFS) conducted by the Ministry of Statistics and Programme Implementation (MoSPI). For the impact on income of the households engaged in the tourism activities, income has been categorised into those drawn by employees (wage income) and those earned by the self-employed (non-wage income). The National Accounts Statistics has been used to arrive at these estimates.

4. Key Findings

Impact on TDGVA

- While the overall economy showed a decline of 11.8 per cent, in nominal terms, in the first quarter of 2020-21 over the corresponding quarter in 2018-19 (a full normal pre-pandemic year), the tourism economy or TDGVA saw a much greater fall of 49.6 per cent in the same quarter owing to the supply side shock.
- However, considering the demand side impact too, which presents the most likely loss in TDGVA, it is estimated that TDGVA plummeted by as much as 93.0 per cent in Q1 of 2020-21 over its level in the same quarter of FY 2018-19. This represents the impact of first wave.
- The second wave had almost the similar impact on tourism economy when TDGVA fell by 87.2 per cent in Q1 of FY 2021-22. The third wave had a lesser impact but the tourism economy posted a negative growth throughout 2020-21 and 2021-22 over the pre-pandemic level in 2018-19.
- Examining the impact on each of the tourism industries reveals that the first wave had the most severe impact on all the tourism industries, except "Travel agencies", which saw the sharpest contraction in the second wave. All other industries were operating better during the second wave than they did in the first wave of lockdown and restrictions.
- The impact of fall in domestic tourism was much more severe than that of fall in inbound tourism, in all the waves.
- In terms of annual year-on-year growth, the growth in TDGVA had been almost in tandem with overall GVA till the pandemic year. But in 2020-21, the TDGVA fell by unprecedented 71.4 per cent while overall GVA fell by 1.0 per cent (both in nominal terms).
- At the same time, the rebound in tourism economy, in 2021-22, was also higher than that in overall economy, which was owing to both low base and also significant pick-up in tourism activities, especially domestic.

Impact on Employment

- With regard to employment, the number of jobs in the entire tourismcharacteristic industries is referred to as 'employment in tourism industries' or tourism employment. 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 PLFS data suggests that tourism jobs had fallen by 16.7 per cent during the first quarter of 2020-21, as per current weekly status. The second and third waves also witnessed the declines of 6.9 per cent and of 3.6 per cent respectively.
- The fall in overall tourism jobs in the first quarter of 2020-21 is found to be driven by the fall in number of self-employed, while number of employees

showed little change in this quarter. However, in the second quarter, number of employees fell by 16.9 per cent and number of self-employed posted a slight growth of 1.8 per cent, which together resulted in the overall fall of 9.0 per cent over the corresponding levels in 2018-19.

• The findings also suggest that taking the entire year into account, it was only the salaried/wage earners employees (both tourism-related and overall jobs in the economy) whose number shrank during 2020-21, over the previous year. The self-employed persons posted a positive growth in number, even in 2020-21. Besides, while the overall number of employees in the economy fell by 3.85 per cent in 2020-21, the number of tourism related employees fell by a much higher 7.61 per cent in the same year.

Impact on Jobs

- In the pre-pandemic year of 2019-20, both wage and non-wage income of tourism households grew faster than the corresponding incomes at national aggregate level. However, during the pandemic year of 2020-21, both of these in the tourism sector saw a very sharp decline, further validating the severe impact of pandemic on tourism, in terms of its economic value; jobs associated with it; and incomes of households dependent on it.
- The tourism-related wage income fell by 11.4 per cent in 2020-21 over the previous year level, and its non-wage income suffered a much bigger setback, contracting by sharp 31.0 per cent. On the other hand, the wage income for the overall economy almost stood the same as in previous year, falling by a tad 0.1 per cent, and non-wage income fell by just 2.0 per cent over the same period.
- Meanwhile, the rebound in 2021-22 is much larger in the tourism-related non-wage income (44.7 per cent) as against overall non-wage income (18.1 per cent).
- The bigger fall in non-wage income suggests that the business-owners suffered from higher income losses as they were not only not paying salaries but were also required to incur other committed expenditures like payment towards rent and bills for utility services, and so on. On the other hand, income situation gradually normalized in other sectors of the economy, hence showing a little impact at aggregate level of the economy.

5. Projections

The projections for inbound, domestic and overall tourism expenditures have been made under optimistic, most likely and pessimistic scenarios. While the forecasting model has been used to estimate the number of tourist arrivals starting from 2023-24, for the year 2022-23, the data have been estimated using certain assumptions as the growth in 2022-23 is expected to be significantly high owing to low base effect.

The findings on future outlook point towards the revival in the tourism economy and its reaching the pre-pandemic level in 2022-23 itself. The inbound tourism, in terms of expenditure, is expected to reach its pre-pandemic peak (seen in 2019-20) by 2023-24, under Optimistic scenario. Similar outlook is expected under most likely and pessimistic scenarios too but with a slight shortfall. However, the domestic tourism is expected to have reached the pre-pandemic peak already, that is, in 2022-23. The robust domestic tourism is expected to have reached the pre-pandemic level under "most likely scenario" and close to that level, even under pessimistic scenario.

6. Tourism Across the World

The number of International Tourist Arrivals (ITA) saw an unprecedented fall in most of the countries in the pandemic years of 2020 and 2021, over pre-pandemic year of 2019, but some of the countries saw a bigger fall in ITAs in 2021 as against in 2020, both over 2019 and some recorded a bigger fall in 2020 which gradually decelerated in 2021.

The data, as provided by UNWTO World Tourism Barometer and Ministry of Tourism finds that in India, the impact of pandemic on International Tourist Arrivals and International Tourism Receipts was more drastic in 2020, which improved slightly in 2021. So was the case with the world average.

However, for some of the countries, the impact was even greater in 2021 than in 2020. Most of the other Asia-Pacific countries lie in this category, such as, Australia, Indonesia, Malaysia, Philippines, Thailand, Vietnam etc.

7. International Best Practices and Recommendations

The study proposes some recommendation to give a boost to tourism economy, based on international best practices, considering the Indian context, literature review, and inputs from the MoT's meetings with the stakeholders. The international best practices are summarized as follows:

- Some of the countries announced the fiscal support and financial assistance to the tourism industry. For example, Thailand allocated USD 700 million to revive domestic tourism and Vanuatu offered financial assistance to its small and medium-sized tourism enterprises. In Australia, the 'JobKeeper' wage subsidy programme introduced at the end of March 2020, assisted in the preservation of jobs in tourism, and other affected sectors of the economy. Denmark government's Travel Guarantee Fund provided guarantee to support business liquidity.
- France introduced a career guidance platform targeting seasonal tourism workers to support the recovery of employment in the tourism sector.
- Vietnam gave a huge focus to developing natural, peaceful, and less crowded tourism products, such as sea tourism and unexplored islands.
- Zimbabwe launched a tourism recovery strategy with a biased focus on domestic tourism promotion during the second half of 2020

The recommendations proposed are as follows:

• Promote domestic tourism by adopting several measures such as making travel safe and affordable; offering tax breaks and subsidies; developing

physical as well as soft infrastructure like upgrading transportation services, internet connectivity, trained tourist guides, banking facilities, providing better accommodation options, and improving sanitation and hygiene standards.

- Promote digital and virtual tours by collaborating with tour operators and travel agencies. These tours can be marketed to people who are unable to travel due to financial or health reasons. The government can also create a centralized platform that hosts virtual tours of various destinations in the country. Livestreaming of cultural activities, festivals or recreational shows may be added.
- Virtual tours can also be developed and utilised for the marketing purposes as well. Hotels or Resorts can develop tours to their properties for the prospective clients/tourists to get a sense of the facilities available before they decide to do the booking.
- Promote new types of tourism like sports tourism. the government can collaborate with sports federations and organizers to promote and host international sporting events in the country. This can include popular sports like football, cricket, and tennis, as well as traditional sports like kabaddi and kho-kho. Hosting such events can attract sports enthusiasts from around the world, generating revenue for the tourism industry.
- The government can promote adventure sports like trekking, mountaineering, and water sports in destinations like the Himalayas, the Western Ghats, and the Andaman and Nicobar Islands. These sports can attract adventure seekers and nature lovers, providing a unique experience of India's diverse landscapes.
- Besides, the government can promote sports museums and heritage sites like the National Museum of Indian Sport, the Jawaharlal Nehru Stadium, and the Eden Gardens.
- Focus on sustainable tourism. This can be done by encouraging and conducting evidence-based research on studies related to sustainable tourism, such as measuring tourism carrying capacities of popular destinations and propose alternative destinations.
- The development of a statistical framework to Measure the Sustainability of Tourism (MST) is also very critical. In addition to the economic dimension, which is already being covered through the TSAs and other tourism statistics, the social dimension includes health, education, skills, income, governance, culture, and heritage; and environmental dimension includes water, energy, waste, emissions, ecosystems, and biodiversity.
- Last but not the least, the strengthening of tourism statistical system should be made an area of priority. These include the collection and compilation of tourism statistics, like tourist arrivals, especially domestic, should be streamlined so that the impacts of any types of shocks can be measured in an efficient way, so that the targeted rescue and restoration strategies are made. These statistics may be improved with the digitization of data which can be collected administratively.

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

Estimating the Impact of the Second and Third Waves and Projections for Possible Future Waves of the Pandemic

I. Introduction

The COVID-19 pandemic had a severe impact on the economies of countries across the world, resulting in a sharp contraction in their respective Gross Domestic Product (GDP) figures and in the loss of jobs, particularly during the first half of 2020-21. Several economies did see a turnaround but the pandemic kept showing up in various waves and through different variants. The tourism sector was among the worst hit sectors during each of these waves, all over the world. Many countries fell victims to the second, third, and even sixth waves by the onset of 2022.

India is among the many countries that have been worst affected by the pandemic. With a consistent rise in the number of infections and mortalities, particularly during the first half of 2020-21, the Indian Government was 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 brought tourism activities to a near-halt for several months.

India saw the second wave of the pandemic during April-June 2021, followed by the third wave during the period November 2021-January 2022. During these waves, in particular, the entire spectrum of tourism activities, including accommodationproviding services, food-serving facilities, passenger transport services, and tour operators, among others, was adversely affected in an unprecedented manner.

This was a huge blow to the tourism industry. The criticality of the industry for India's economy is evident from the fact that it contributed an estimated 2.7 per cent to GDP and 6.7 per cent to the employment of the country in 2019-20, as per India's Third Tourism Satellite Account prepared by NCAER. It may be noted that tourism contributes to the economy directly through the demand-side pressures exerted by tourism expenditure and the employment it supports.

In addition, there is a significant indirect contribution of tourism, resulting from its linkages with several other economic activities. If this indirect contribution were to be included in these estimates, the corresponding shares would go up to 5.2 per cent in GDP and 15.3 per cent in employment. In absolute terms, tourism is estimated to have generated Gross Value Added (GVA) to the tune of USD 70 billion and supported nearly 34.83 million jobs in India in 2019-20.

Therefore, the severe impact caused by the pandemic on tourism necessitates a thorough understanding of the estimated losses at a granular level so that revival measures can be taken by the policymakers. This impact is assessed through the loss in GVA, jobs and household incomes. All the stakeholders and policymakers need to adopt innovative and sensitive approaches, and identify the vulnerable enterprises to tackle the adverse situation confronting the tourism sector.

In order to realise the estimated impact of the first wave of the pandemic on the tourism economy, the Ministry of Tourism commissioned NCAER to undertake a study for assessing the impact of the pandemic on Tourism Direct Gross Value Added (TDGVA), Tourism Employment, and on income earned by households engaged in tourism. The study captured the economic losses resulting from the changes experienced during the first wave of the pandemic and also in the following period of gradual recovery. This was achieved with the help of data from different sources that reflected 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 and growth levels. This was the first phase of the economic impact assessment study for the tourism sector in India.

The Phase I economic impact assessment study estimated the impact of the pandemic on the tourism economy through the supply- as well as demand-side shocks. According to these estimates, while the overall economy showed a decline of 20.1 per cent in the first quarter of 2020-21 (Q1), and of 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

The worst impact of the first wave of pandemic was felt during the first quarter of 2020-21 when the tourism economy fell by 42.8 per cent as a result of the supply-side shock and by 93.3 per cent resulting from both supply- and demand-side shocks.

negative growth even in Q3, recording a fall of 1.1 per cent. These estimates account for only the supply-side shock.

The study estimated the gross impact of the pandemic on tourism by including the demand-side shock too, which is the result of a fall in tourist arrivals. It found 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 decline 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 was in fact, in negative territory, whereas overall the economy posted a positive growth of 4.3 per cent in Q3.

The first phase of the study also estimated the loss in the number of tourism jobs during the first three quarters of 2020-21, accounting for the first wave of the

A total of 14.5 million jobs were estimated to have been lost during the first quarter of 2020-21, translating into a fall by 41.7 per cent. pandemic. These estimates were obtained by using the employment elasticities, as quarterly data on employment was not available for 2020-21, when the study was being carried out. The study estimated that as many as 14.5 million jobs, out of an estimated 34.8 million active tourism 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. As the economy, in general, and tourism activity, in particular, started picking up during the subsequent quarters of the years, it was estimated that many jobs had gradually returned in these quarters. However, until the third quarter of the year, the deficit in the number of tourism jobs was still estimated to be 1.8 million.

As a sequel of Phase I, this report presents findings for the second phase of the study, which estimates the economic impact of the second and third waves of the pandemic.

II. Objectives of the Study

The broad objectives of the study are to:

- Assess the impact of the second and third waves of the pandemic on the following:
 - Quarterly as well as annual Tourism Direct Gross Values Added (TDGVA).
 - Tourism Employment. This will be disaggregated into 'employees' and the 'self-employed' to assess the impact on salary/wage earners and employers or business owners.
 - Tourism Income of the households. This will also be disaggregated into the 'employee' and 'self-employed' households engaged in the tourism sector.
- Revise the projections made in Phase I of the study, based on more recent data that are available and also based on the likelihood of occurrence of the fourth/future waves of the pandemic.
- Review, assess, and compare the tourism-related country estimates, as published by UNWTO, with the study estimates.
- Propose appropriate policy measures for providing relief to the tourism sector, in general, and households involved in tourism-related activities, in particular, based on feedback received from the various stakeholders.

III. Review of Literature

The review of literature finds a few studies which estimate the impact of COVID-19 on various sectors of the economy, including tourism. An Asian Development Bank (ADB) Brief (Abiad et al, 2020¹), estimates the impact of the COVID-19 outbreak at the very initial stage, in March 2020, when there were uncertainties about the spread of the virus and its ramifications. The ADB paper anticipates the impact of the pandemic on the Chinese economy as well as on the economies of other developing Asian countries through various channels like trade, tourism, and production linkages.

Given the uncertainty of the spread of the virus, the paper explores a range of scenarios for presenting the impact estimates. The best case scenario assumes that that the outbreak would be contained in around two months; the moderate scenario assumes that the travel bans would be lifted after three months; and worst case scenario assumes the persistence of restrictions for a rather longer period of around six months. The impact of COVID-19 on the economies of the Asian countries has been

¹ Abdul Abiad, Mia Arao, Suzette Dagli, Benno Ferrarini, Ilan Noy, Patrick Osewe, Jesson Pagaduan, Donghyun Park, and Reizle Platitas. (2020), "The Economic Impact of the COVID-19 Outbreak on Developing Asia", ADB Briefs, No. 128, March 6.

estimated with respect to the decline in GDP, and decline in tourism revenues as a per centage to GDP.

Another paper by Ribeiro et al (June 2020²) estimates the impact of COVID-19 on tourism in Brazil. This paper finds that the Brazilian economy is expected to suffer a decline of 31 per cent in its GDP due to the first scenario but the government policies could help in curtailing the decline to 17 per cent. The paper also finds lodging services to be the most adversely affected tourist activity.

The research paper, "COVID-19 and Tourism—Assessing the Economic Consequences", published by United Nations Conference on Trade and Development (UNCTAD)³, uses the Computable General Equilibrium (CGE) model to assess the impact of the COVID-19 crisis on the tourism sector. Depending on the duration of the global lockdown, this paper estimates the direct and indirect costs of the shutdown for 65 individual countries and regions, and 65 sectors. The paper finds that due to strong backward and forward linkages of tourism with the other sectors of the economy, the impact of the pandemic on GDP and employment, resulting from reduced tourism activities, is expected to be much greater than the impact due to a fall in inbound tourist expenditure.

Abbas et al. (2021⁴) provide insights for restoration of the tourism industry's operational activities and offer helpful suggestions to government officials, scholars, and tourism firms for re-investing in the tourism industry to help it regain its normal position and growth levels. The study makes several recommendations for not just increasing the number of tourists but also for facilitating better, more comfortable travel and personalised services for tourists while maintaining affordable prices.

IV. Data Sources for the Study

As in Phase I, the *data sources* used in the Phase II for impact analysis are:

- a. The annual GDP statements from National Accounts Statistics (NAS-2023) by Central Statistics Office
- b. The quarterly GDP statements (Q1 to Q3) from latest press release by Central Statistics Office (dated February 28, 2023) and Q4 statement from Press Release dated May 31, 2022.
- c. Monthly data on International Tourist Arrivals, MoT
- d. Data on Domestic Tourist Visits, MoT
- e. Third TSA Tourism Product Ratios and Tourism Industry Ratios
- f. Quarterly and Annual PLFS unit level data for employment/number of jobs.

² Ribeiro, Luiz Carlos De Santana, Santos, Cerqueira, Rodrigo, and de Souza, Kenia B.. (2020),

[&]quot;Economic impact of Covid-19 on tourism in Brazil", DOI:10.13140/RG.2.2.10902.78405. 3 United Nations. (2020), "Covid-19 and Tourism – Assessing the Economic Consequences".

Published by United Nations Conference on Trade and Development (UNCTAD).

⁴ Jaffar Abbas, Riaqa Mubeen, Paul Terhemba Iorember, Saqlain Raza, Gulnara Mamirkulova, (2021), "Exploring the impact of COVID-19 on tourism: Transformational potential and implications for a sustainable recovery of the travel and leisure industry", Current Research in Behavioral Sciences, Volume 2, 100033, ISSN 2666-5182, https://doi.org/10.1016/j.crbeha.2021.100033.

g. Estimated fall in number of jobs, as per latest estimates on Employment and Unemployment. This parameter will be used as an indicator of fall in tourist demand.

V. Methodology and Findings

The tourism economy is measured through an internationally recommended framework called Tourism Satellite Account (TSA). This framework has been recommended by the United Nations World Tourism Organisation (UNWTO) and is mandated to be used to assess the size and contribution of tourism to the economy with respect to its GDP and employment.

This framework lists the tourism-specific products as per the recommended list by UNWTO, and also includes the products and services which are relevant to the Indian tourism sector. The list of products and services is 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
- Health and medical related services
- Readymade garments
- Processed food
- Alcohol and tobacco products
- Travel related consumer goods
- Footwear
- Toiletries/Soaps, cosmetics, etc.
- Gems and jewellery
- Books, journals, magazines, stationery, etc.

This study constructs different scenarios pertaining to tourism activities for understanding the trajectory of the recovery path for the sector. In order to quantify the economic impact of a fall in tourism activities on GVA, the study estimates the values of TDGVA from the following perspectives:

- 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:
 - o Inbound tourism demand-side shock; and
 - o 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 using the

The TIR of an industry is the ratio of its output on account of tourism to its total output. Supply and Use Table (SUT) framework of the Tourism Satellite Account (TSA). Hence, a TIR of, say, 72 per cent for a particular industry indicates 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.

However, the TIRs are bound to change completely when the demand-side shock is also taken into consideration. In order to estimate the impact of the demand-side shock, this study needed to estimate the tourism demand during the study reference period, covering the first, second, and third waves of the pandemic or the entire period of 2020-21 and 2021-22. Using the month-wise data on International Tourist Arrivals (ITAs) and the annual data on Domestic Tourist Visits (DTVs), obtained from the Ministry of Tourism (MoT), the study imputed the quarter-wise number of domestic tourists.

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. In the combined demand-side shock, the fall in both inbound and domestic tourism expenditure was considered. However, in the case of the

The impact of the pandemic has been estimated for all its three waves and by both supply- and demand-side shocks.

individual demand-side shock arising from inbound and domestic tourism, the fall was assumed only for inbound tourism expenditure in the first case, and only for 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 was the employment data obtained from the Periodic Labour Force Survey (PLFS) conducted by the Ministry of Statistics and Programme Implementation (MoSPI). The PLFS provides annual as well as quarterly employment estimates, across several parameters, like work status (self-employed and employees); nature of work (formal and informal); gender (male and female); and also by the States of India. The second wave of the pandemic occurred during the first quarter of 2021-22 while the third occurred during the fourth quarter of the same year. In addition, the study estimates the impact on the 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 selfemployed (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 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 Phase II projections signify an upward revision from the Phase I projections. Like Phase I, Phase II also delineates the expected outlook for the tourism sector in the coming years and answers 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. With the impact of the pandemic on travel and tourism getting

normalised faster than expected, the projections in this phase signify an upward revision from those provided in Phase I of the study.

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

V.1. Tourism during the COVID-19 Pandemic

Most of the first quarter of 2020-21 witnessed lockdowns and also curfews in parts of many States. It was towards the end of the first quarter (Q1), that is, on 8 June 2020, that Unlock 1.0 was announced under which the government allowed the re-opening of malls, hotels, restaurants, and places of worship. In the second quarter (Q2),

The first wave of pandemic occurred during the first quarter of 2020-21.

several more unlock measures (Unlock 2.0 to Unlock 4.0) were announced. Unlock 2.0 was announced on 1 July 2020 with relaxations in night curfew, provision for resumption of more domestic flights and trains, and clearance for allowing more than five people in a shop at a given time. Unlock 3.0 (announced on 1 August 2020) allowed gymnasiums and yoga centres to resume functioning, and revoked the night curfew order.

The clinical trials of COVID-19 vaccines started around this time in India, as also in Russia. With the tapering down of COVID-19 new cases, the onset of festivals, the occurrence of social ceremonies, and people getting desperate to travel, some amount of domestic tourism activities started during the third and fourth quarters (Q3 and Q4), with due Standard Operating Procedures (SOPs) and exhortations to people to strictly follow precautions.

The COVID-19 timeline in India, as also in several other countries, shows that 2020-21 was the most critical year for the tourism sector in India, marked with a

complete lockdown in Q1 and the gradual opening of tourism activities during the following quarters of 2020-21. The onset of 2021-22 coincided with the second wave of the pandemic in the country caused by the Delta variant. The death rate was the highest during this wave, which lasted the whole of the first quarter. Although there were few restrictions on any economic activities or on general public movement travel for tourism experienced another downturn. This was followed by a few months of gradual return to normalcy until December 2021, when the country fell victim to the third wave caused by the Omicron variant, which lasted until about February 2022. The COVID-19 timeline is presented in Figure 1.



Figure 1: COVID-19 Timeline in India

Source: NCAER compilation.

The impact of the pandemic, especially during the first and second waves, is evident in the values of GDP at constant prices, and also in the number of tourist arrivals (Figures 2, 3, and 4).



Figure 2: GVA at Constant Prices (Value Terms, in Rs Lakh Crore)

Source: Ministry of Statistics and Programme Implementation, Government of India.



Figure 3: International Tourist Arrivals (Million Numbers)

Source: Ministry of Tourism, Government of India.



Figure 4: Domestic Tourist Visits (Crore Numbers)

Source: Ministry of Tourism, Government of India.

As discussed above, the impact of the pandemic on the tourism economy has been estimated for all the quarters of FY21 and FY22, and for both the supply- and demand-side shocks. These are discussed in detail below.

V.2. Impact due to the Supply-side Shock

This relates to the overall economic slowdown during the pandemic, along with the assumption that tourism activity continued as before and that there was no change in tourism demand. Hence, this scenario considers only the supply-side shock, when the supplying industries were either not operational or operational at below-capacity level, owing to the impact of the pandemic. Therefore, for all the quarters of 2020-21 and 2021-22, the TIRs are assumed to have remained the same as those recorded during 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 for estimating the supplyside shock (in this case, the TIRs have been kept unchanged), are presented in Table A2, Appendix I. Also presented are The TDGVA figures based on these TIRs are also presented, for all the quarters of reference, at both the quarter and annual levels.

Figure 5 depicts the impact of the pandemic on the TDGVA during the three waves, resulting from the overall economic slowdown, and assuming that the TIRs remained the same as in the TSA year of 2015-16. It may be noted that the growth figures in the first three quarters of 2020-21 are different from those reported in the Phase I of the study. This is due to the following two reasons:

- In Phase I, the year-on-year growth figures in GVA and TDGVA were presented over 2019-20. However, in this report, the growth figures are presented over 2018-19, which can be considered as a complete normal year before the pandemic.
- The revisions in GDP numbers have also resulted in different estimates.



Figure 5: Impact on TDGVA due to the Supply-side Shock (% Change over 2018-19)

Source: NCAER computations.

While the overall economy fell by 11.8 per cent during the first quarter of 2020-21, the tourism economy or TDGVA shrank by 49.6 per cent during the same quarter. Figure 5 shows that while the overall economy showed a decline of 11.8 per cent, in nominal terms, in the first quarter of 2020-21, the tourism economy or TDGVA saw a much greater fall of 49.6 per cent in the same quarter. The economy gradually moved towards normalcy in the subsequent quarters of the same year, and so did the tourism economy. But the second wave slowed

down the pace of the economy yet again in Q1 of 2021-22. Parallelly, the tourism economy was severely impacted yet again, and the TDGVA again slipped into negative territory, registering a fall of 12.0 per cent over the same quarter of 2018-19. The third wave did not see much impact and the overall as well as tourism economy witnessed a consistent growth path post Q1 of 2021-22.

V.3. Impact due to the Demand-side Shock

In this section, we estimate the impact of the pandemic on the tourism economy, considering 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 price change between 2015-16 and 2020-21 and 2021-22. The number of inbound tourists during all the quarters of the study period has been obtained from the MoT and the number of domestic tourists has been estimated by using the annual estimates on DTVs provided by the MoT.

Figure 6 depicts the impact of the pandemic on the TDGVA during all the quarters of 2020-21 and 2021-22, resulting from both the overall economic slowdown and from the loss in tourism demand or tourism expenditure. The values of GVA and TIRs, derived after considering the fall in tourist arrivals and tourism expenditure, for all the study quarters are given in Appendix I, Tables A1 to A8, which also present the values of TDGVA.





Source: NCAER computations.

Figure 6 indicates 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 93.0 per cent in Q1 of 2020-21 over its level in the same quarter of FY 2018-19. This represents the impact of the first wave

While the overall economy contracted by 11.8 per cent in Q1 of FY 2020-21 over the same quarter in FY 2018-19, in nominal terms, the tourism economy fell by as much as 93.0 per cent in the same quarter.

of the pandemic. The second wave had almost a similar impact on the tourism

economy when the TDGVA fell by 87.2 per cent in Q1 of FY 2021-22. The third wave had a lesser impact but the tourism economy posted negative growth throughout 2020-21 and 2021-22 over the pre-pandemic level in 2018-19.

It is also interesting to note the fall in tourism economy at the sectoral level, that is, by each tourism-specific industry. Figure 7 presents the fall in the industry-wise TDGVA during all the three waves of the pandemic. Clearly, the first wave had the most severe impact on all the tourism industries, except "travel agencies", which saw the sharpest contraction in the second wave. Being heavily dependent on tourism, especially that for leisure, this industry was the worst affected in the second wave, not because of any restrictions but because of the very high death rate during this wave. All the other industries recorded better outcomes during the second wave than they during the first wave which was characterised by the lockdown and restrictions.





Source: NCAER computations.

It is estimated that the fall in TDGVA seen in Figure 6 resulted 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 expenditures are the key contributors to the total tourism expenditure. The following section presents an estimation of the impact of a fall in both inbound tourism expenditure and domestic tourism expenditure, independently of each other.

V.4. Impact due to the Inbound and Domestic Demand-side Shocks

While Figure 6 showed the combined impact of the demand-side shock arising from the fall in inbound, domestic, and outbound tourism expenditure, Figure 8 presents the impact of a fall in inbound tourism expenditure and domestic tourism expenditure separately and independently of each other, by plotting the growth/fall in TDGVA in each quarter of 2020-21 and 2021-22 over the corresponding quarters of the prepandemic normal year of 2018-19. This shows that the severity of impact of the fall in

domestic tourism activity is much more significant than that of inbound tourism activity, especially in the second wave.

The corresponding estimated TIRs, resulting from the fall in only inbound tourist arrivals, and the values of TDGVA, are presented in the Appendix Table A5.

 TDGVA_supply side impact TDGVA-Inbound Impact TDGVA-Domestic Impact • TDGVA-total impact 36.1 20.0 19.9 11.1 10.5 8.1 5.7 -3.0 -4.0 -11.6 -12.0 16.1 20.0 24.8 -23.2 8. 35.5 -36.1 -41.4 49.6 -52.9 61.8 -34.9 -35.1 20.C 74.3 -50.8 -54.9 -66.8 75.2 -87.2 -93.0 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 2019-20 2020-21 2021-22

Figure 8: Impact on TDGVA due to the Inbound and Domestic Demand-side Shocks (% Change over 2018-19)

The numbers for the fall in TDGVA across all tourism industries, as a result of the fall in inbound tourist demand and domestic tourist demand are separately are presented in Figures 9 and 10, respectively.

Figure 9: Impact on Industry-wise TDGVA due to Only Inbound Demand-side shock (% Change over 2018-19)



Source: NCAER computations.

Source: NCAER computations.

Figure 10: Impact on Industry-wise TDGVA Due to only Domestic Demand-Side Shock (% Change over 2018-19)



Source: NCAER computations.

While the previous sections presented the fall in TDGVA and overall GVA during the quarters of the years 2020-21 and 2021-22, covering the entire course of the pandemic period, Figure 11 illustrates the annual situation of both tourism and the overall economy. The annual growth in TDGVA had been almost in tandem with the overall GVA till the pandemic year. However, in 2020-21, the TDGVA fell by an unprecedented 71.4 per cent while the overall GVA fell by 1.0 per cent (both in nominal terms). The much lower contraction in the overall GVA was because of positive growth in the other economic sectors, like agriculture, manufacturing, and financial services, among others. The data on the fall in TDGVA during the calendar years 2020 and 2021, both over 2019 (which was the complete normal calendar year before the pandemic), are also presented in Appendix Table A9 of this report.



Figure 11: Annual Growth in TDGVA and GVA (y-o-y, %)

Source: NCAER computations.

The rebound in the tourism economy, in 2021-22, was due to both the low base and a significant pick-up in tourism activities, especially domestic tourism.

V.5. Estimated Loss in Jobs during the Study Period

As regards employment, the number of jobs in the entire tourism-characteristic industries is referred to as 'employment in the tourism industries' (hereafter referred to as 'tourism employment'), as per the recommendations made by the UNWTO. This is because relating employment to a specific product or group of products of a given establishment is a complex issue in terms of measuring tourism direct employment.

Tourism employment refers to the entire employment in all tourismcharacteristic industries, as recommended by UNWTO TSA: RMF 2008. For this reason, tourism employment, implying 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 the tourism-characteristic industries.

These tourism-characteristic industries for India 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 those of the self-employed (or business owners) and employees (or salary/wage earners) in order to understand which category suffered more during the pandemic, in terms of both the loss of work and loss of income.

The data on employment (the number of jobs) have been sourced from the quarterly as well as annual PLFS, conducted by MoSPI. The industry codes, as identified by the National Industrial Classification (NIC-2008), have been mapped with the tourism-characteristic industries to arrive at details of tourism employment.

In order to meaningfully capture the impact of the pandemic in each study quarter, the "current weekly status" has been used to estimate employment.

It may be noted that in Phase I of the study, the employment estimates were obtained using the employment elasticities, as official employment data were not available. However, in Phase II, the PLFS data could be used to arrive at the estimated employment in the tourism industries. These estimates have been updated to account for the under-estimation in the overall population.

The rates of growth/decline have been estimated for both the self-employed and employees (Figure 12). The estimates of tourism employment, by categories, are presented in Appendix Tables A10 and A11.

Figure 12: Growth/Fall in Number of Tourism Jobs during the pandemic (% Change over 2018-19)



Source: NCAER calculations using PLFS of various years.

The data suggests that tourism jobs had fallen by 16.7 per cent during the first quarter of 2020-21, as per the current weekly status. The second wave also witnessed a decline of 6.9 per cent in tourism jobs. This is directionally in line with the fall in TDGVA over the corresponding period. However, unlike the TDGVA, tourism jobs posted a negative growth (-3.6 per cent) during the third wave of the pandemic too.

Figure 13 presents the estimated growth/fall in the number of employees and selfemployed separately. The fall in overall tourism jobs in the first quarter of 2020-21 is found to be driven by the fall in the number of self-employed, while the number of employees showed little change in this quarter. The data points to a turnaround in the second quarter, when the number of employees fell by 16.9 per cent and the number of self-employed posted a slight growth of 1.8 per cent, which together resulted in an overall fall of 9.0 per cent over the corresponding levels in 2018-19.

Figure 13: Growth/Fall in Number of Tourism Jobs by Work Status (% Change over 2018-19)



Source: NCAER calculations using PLFS of various years.

Further, Figure 14 depicts the year-on-year growth or fall in the number of tourism-characteristic jobs as well as in the number of overall jobs, on an annual basis. The findings suggest that if the entire year were taken into account, only the number of salaried/wage earners employees shrank during 2020-21 over the previous year. There was a positive growth in the number of self-employed persons even in 2020-21. Besides, while the overall number of employees in the economy fell by 3.85 per cent in 2020-21, the number of tourism-related employees fell by a much higher figure of 7.61 per cent in the same year.

Figure 14: Annual Growth/Fall in number of Jobs by Work Status (year-on-year, % Change)



Source: NCAER calculations using PLFS of various years.

V.6. Estimated Loss in Household Income during the Study Period

This study also estimates the impact of the fall in the tourism economy on the incomes of households that are dependent on tourism. This impact is evident as a number of people either lost their jobs (as discussed in previous section) or had to suffer from cuts in salaries/wages, in the case of employees; and profits, in the case of the selfemployed. 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 nonwage income).

The NAS statements provide the values of these incomes by a broad industry level. These have been categorised into the 24 tourism-specific and non-specific industries, for this study. The income generated by tourism-characteristic industries has been identified as tourism-related income. The NAS statements provide the disaggregation of GVA into the following:

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

These details have been given for each broad level of industry and for different institutions like the public sector, private corporations, and households. The CoE figures for all the three institutions have been classified as "Wage Income". The Operating Surplus as well as the CFC figures for the private sector and households have been classified as "Non-wage Income", whereas the corresponding figure for the public sector has been kept out of household income as it falls under "Government Income". The estimated wage and non-wage incomes by the major tourism-characteristic industries are presented in Appendix Tables A12 to A14. The estimates are provided for the pre-pandemic year of 2019-20; and for the pandemic years of 2020-21 and 2021-22.

The data suggests that in 2019-20, the nominal growth witnessed in tourism-

related wage income was faster, at 10.3 per cent, than that of the overall economy, which stood at 9.1 per cent. The difference in growth is more glaring in the case of non-wage income, as seen in Figure 15.

However, during the pandemic year of 2020-21, both wage and non-wage income in the tourism sector saw a very sharp decline, In the pre-pandemic year of 2019-20, both wage and non-wage income of tourism households grew faster than the corresponding incomes at the national aggregate level.

underscoring the severe impact of the pandemic on tourism, in terms of its economic value; jobs associated with it; and incomes of households dependent on it. The tourism-related wage income fell by 11.4 per cent in 2020-21 over the previous year level, and its non-wage income suffered a much bigger setback, contracting by sharp 31.0 per cent. On the other hand, the wage income for the overall economy almost stood the same as in previous year, falling by a tad 0.1 per cent, and non-wage income fell by just 2.0 per cent over the same period. Meanwhile, the rebound in 2021-22 is much larger in the tourism-related non-wage income (44.7 per cent) as against overall non-wage income (18.1 per cent).

This shows that due to little or no tourism activity, especially during the lockdown period, even if some people were able to retain their jobs, they might have suffered cuts in salaries. The bigger fall in non-wage income suggests that the business owners suffered from higher income losses, as they were not only not paying salaries but also had to incur other committed expenditures like payment towards rent and bills for utility services, and so on. On the other hand, the income situation gradually normalised in the other sectors of the economy, thereby showing little impact at the aggregate level of the economy.



Figure 15: Annual Growth/Fall in Household Income by Type (year-on-year, % Change)

The quarterly estimates of wage and non-wage income have been derived using their respective shares in annual GDP and applying these on quarterly GDP. This is done for each industry. Figure 16 presents the income loss for each quarter over the corresponding quarter of previous year, in percentage terms. It is evident that the nonwage income earners of tourism industry had to face the most severe consequences of the pandemic, especially during its resultant lockdown in the first wave in the first quarter of 2020-21. In the second wave too, tourism-dependent households suffered a fall in both wage (-3.7 per cent) and non-wage income (-22.5 per cent), whereas the corresponding incomes for overall economy saw only a decelerated growth of 16.8 per cent and 10.3 per cent, respectively.

Source: NCAER calculations using NAS-2023.



Figure 16: Annual Growth/fall in household income by type (quarter-on-quarter, % change over 2018-19)

Source: NCAER calculations using NAS-2023.

VI. Tourism Economy Going Forward

The previous sections discussed the impact of the pandemic on the tourism economy with respect to the TDGVA, employment, and household income, during the years 2020-21 and 2021-22. This section presents our outlook for the future of tourism in the country.

In Phase I of this study, our projections on the tourism economy were based on three scenarios, as follows:

- The most likely scenario was mainly based on the assumption that the complete vaccination drive would be a success. It also assumed that even if there are more waves of the pandemic, people would be better informed about the safety measures; and that people would be more confident to travel on the back of government efforts to restore normalcy.
- The optimistic scenario assumed that the growth in the number of tourist arrivals would be about 5 per centage points faster than that achieved in the "most likely" scenario.
- The pessimistic scenario assumed a slower growth and the possibility of more waves of the pandemic in the future.

However, India's tourism prospects have significantly improved now, following the successful completion of the vaccination drive and two additional waves of the pandemic in 2021 and 2022. This report presents the upward revised outlook for the tourism economy.

Some of the public domain data already demonstrate the improved prospects, for a few selected locations. For example, Varanasi recorded a footfall of 40.03 lakh domestic tourists in July 2022, which is ten times the number of domestic tourists (4.61 lakh) that it hosted in the corresponding month in 2021. In the case of foreign tourists, only 72 had arrived in Varanasi 2021, whereas in July 2022, the corresponding number of tourists had risen by 174 times, touching a total of 12,578.⁵ Himachal Pradesh witnessed the arrival of 1.28 crore tourists during the period January-October 2022, posting a growth of 212 per cent over the same period of the previous year.⁶ Goa has almost reached its pre-pandemic level, with an estimated 8.1 million tourists in 2022.⁷ A similar pattern has been observed in many other locations, including the North-eastern States, Rajasthan, and Kerala, among others.

This report continues to present the projections for all the forms of tourism under three scenarios, as follows:

- The **most likely scenario** has been posited using the Forecasting Model, which regresses the number of tourist arrivals with the nominal GDP. This model excludes the shocks occurring during the pandemic years of 2020 and 2021. For the model, the world GDP has been used to make projections for the number of international tourist arrivals; whereas India's GDP has been used to make projections for the number of domestic tourist arrivals.
- The **optimistic scenario** assumes the number of tourists across all forms of tourism to be 5 per cent higher than that suggested for the "Most likely" scenario
- The **pessimistic scenario** assumes the number of tourists across all forms of tourism to be 5 per cent lower than in the "Most likely" scenario.

While the forecasting model has been used to estimate the number of tourist arrivals starting from 2023-24, the data for the year 2022-23 have been estimated using certain assumptions, as the growth in 2022-23 is expected to be significantly high owing to the low base effect. The steps followed to estimate the number of tourist arrivals, based on the assumptions and the forecasting model, across all forms of tourism, for the 'Most likely scenario', are the following:

- 1. The data on Foreign Tourist Arrivals (FTA) are available with the MoT till March 2023, that is, till the year 2022-23.
- 2. The number of NRI arrivals is available till Dec-2021. For Jan-Mar'2022, monthly data are estimated using the similar NRI to FTA ratio as seen in previous 4 years. Hence obtained are the data on NRI for 2021-22. A 25 per cent growth is assumed for 2022-23.
- 3. The sum of FTA and NRI gives the data on ITA till 2022-23. For the years 2023-024 to 2028-29, the forecasting regression model is used.
- 4. For the domestic tourist arrivals (DTA), the annual data till 2021-22 are sourced from the MoT. It may be noted that MoT reports data on Domestic Tourist Visits (DTV), which have been converted to DTA using the structure as observed in

⁵ Source: https://www.freepressjournal.in/india/multifold-rise-in-tourists-footfall-at-varanasi-kashi-vishawanth-corridor-main-attraction.

⁶ Himachal Pradesh witnessed the arrival of 1.28 crore tourists, including 28,232 foreigners, between 1 January and 31 October 2022.

⁷ https://www.livemint.com/news/india/goa-govt-expects-81-lakh-tourists-this-season-on-par-with-pre-pandemic-time-11670920789576.html

2014-15, when the latest survey on Domestic Tourism in India was conducted by National Sample Survey Office (NSSO).

- 5. For 2022-23, given the reports from various regions of the country (as mentioned before) and monthly data provided by the MoT for few months and for few states, we expect the overall number of DTAs to be 3 times the number observed in previous year. Hence, obtained is the number of DTA for 2022-23. For the later years, the forecasting regression model has been used.
- 6. Number of outbound tourists are assumed to grow by 20 per cent each year.

On multiplying the number of tourist arrivals for each year with the estimated per-tourist expenditure for the corresponding year, values of tourism expenditure for all forms of tourism have been estimated. These are presented in Table 1.

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

			Inbound			Domestic			Outbound			Total		
		Optimistic	Most Likely	Pessimistic										
	2018-19	345838	345838	345838	837299	837299	837299	35650	35650	35650	1183136	1183136	1183136	
	2019-20	362623	362623	362623	1096601	1096601	1096601	38452	38452	38452	1459224	1459224	1459224	
Pandemic	2020-21	59220	59220	59220	307113	307113	307113	11094	11094	11094	366333	366333	366333	
	2021-22	153017	153017	153017	360795	360795	360795	13730	13730	13730	513812	513812	513812	
	2022-23	295199	295199	295199	1182741	1126420	1070099	18425	17547	16670	1477940	1421619	1365298	
	2023-24	368808	351245	333683	1476336	1406034	1335732	23547	22426	21304	1845143	1757279	1669415	
	2024-25	448690	427324	405958	1816026	1729548	1643071	30093	28660	27227	2264716	2156873	2049029	
	2025-26	547904	521814	495723	2230216	2124015	2017814	38459	36628	34796	2778120	2645829	2513537	
	2026-27	670688	638751	606813	2729365	2599395	2469425	49150	46810	44469	3400053	3238146	3076239	
	2027-28	821110	782010	742909	3323104	3164861	3006618	62814	59823	56832	4144215	3946871	3749527	
	2028-29	860663	819679	778695	3552485	3383319	3214153	80277	76454	72631	4413149	4202999	3992849	

Figures 17-19 present the findings on future outlook, based on Table 1, pointing to the revival in the tourism economy and reaching pre-pandemic level in 2022-23 itself. The inbound tourism, in terms of expenditure, is expected to reach its pre-pandemic peak (seen in 2019-20) by 2023-24, under Optimistic scenario. Similar outlook is expected under most likely and pessimistic scenarios too but with a slight shortfall.



Figure 17: Outlook for Inbound Tourism Expenditure (Rs lakh crore)

Source: NCAER calculations.



Figure 18: Outlook for Domestic Tourism Expenditure (Rs lakh crore)

Source: NCAER calculations.

The domestic tourism is expected to have reached the pre-pandemic peak already, that is, in 2022-23 (Figure 18). The robust domestic tourism is expected to have reached the pre-pandemic level under "most likely scenario" and close to that level, even under pessimistic scenario. The reports on tourist arrivals coming from various parts of the country, as mentioned before, supports this expectation. The following figure (Figure 19) presents the overall tourism outlook, led predominantly by the domestic tourism and showing revival in 2022-23 itself.



Figure 19: Outlook for Total Internal Tourism Expenditure (Rs lakh crore)

Source: NCAER calculations.

VII. Tourism Situation Across the World

The COVID-19 pandemic had severely hit the tourism sector across the entire world, especially in the calendar year 2020, when travel restrictions were imposed, international borders were sealed, and the tourism-related industries were barely operational, among other measures. This continued through the entire 2020 and 2021. However, recovery was also witnessed in all the countries, owing to the vaccination drives, adoption of safety measures, and growing confidence among the people to travel.

The number of International Tourist Arrivals (ITA) saw an unprecedented fall in most of the countries in the pandemic years of 2020 and 2021, over prepandemic year of 2019, but some of the countries saw a bigger fall in ITAs in 2021 as against in 2020, both over 2019 and some recorded a bigger fall in 2020 which gradually decelerated in 2021.

The following figures present the fall in International tourist arrivals (ITA) across some of the countries of the world in which 2021 was the better year than 2020 in terms of ITAs (Figure 20); and countries in which ITAs fell at a sharper rate in 2021 than in 2020 (Figure 21). As can be seen, India lies in the first category and so does world average. However, most of the other Asia-Pacific countries lie in the second category, such as, Australia, Indonesia, Malaysia, Philippines, Thailand, Vietnam etc.



Figure 20: Countries with Bigger fall in ITAs in 2020 vis-à-vis 2021 (% change over 2019)

Source: UNWTO World Tourism Barometer, January 23; Ministry of Tourism, Government of India.

Figure 21: Countries with Bigger fall in ITAs in 2021 vis-à-vis 2020 (% change over 2019)



Source: UNWTO World Tourism Barometer, January 23; Ministry of Tourism, Government of India.

Almost similar observation can be made with respect to fall in International Tourism Receipts (ITR) in 2020 and 2021, over 2019 (Figures 22 and 23). International Tourism Receipts are the indicator of inbound tourism expenditure and are presented as "Credit" in the Balance of Payment Statements.



Figure 22: Countries with Bigger fall in ITRs in 2020 vis-à-vis 2021

Source: UNWTO World Tourism Barometer, January 23; Ministry of Tourism, Government of India.

Figure 23: Countries with Bigger fall in ITRs in 2021 vis-à-vis 2020 (% change over 2019)



Source: UNWTO World Tourism Barometer, January 23; Ministry of Tourism, Government of India.

These officially available statistics on inbound tourism are in line with the inbound tourism estimates of this study, in the context of India. The estimated Tourism Direct GVA (TDGVA), capturing the impact of only inbound tourism, also shows the biggest drop in the first year of the pandemic, that is, 2020, which started stabilizing in the following year of 2021.

VIII. International Best Practices and Recommendations for India

This concluding section of the study presents some of the best international practices which were adopted by other countries to mitigate the severe impact of the pandemic in order to facilitate revival of the tourism industry.

This section also presents the recommendations proposed for the Indian tourism industry to make it resilient against unforeseen adverse situations such as the pandemic. These are based on the profile of Indian tourists and other countries' experiences. In addition, they take into account the feedback received from stakeholders in the tourism industry 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).

VIII.1. International Best Practices

With the advent of the pandemic and its unprecedented impact on tourism, several countries, especially those which are heavily dependent on tourism, adopted various measures to boost tourism in their countries and to safeguard it against similar future adverse situations. In general, all of them invested hugely on safety and imposed mandates on tourists to follow Standard Operating Procedures (SOPs), and also on giving a boost to domestic tourism, which turned out to be more resilient to abnormal situations like the pandemic.

Some of the key measures included the provision of fiscal support and financial assistance. For example, Thailand allocated USD 700 million to revive domestic tourism and Vanuatu offered financial assistance to its small and medium-sized tourism enterprises. In Australia, the 'Job Keeper' wage subsidy programme, introduced at the end of March 2020, assisted in the preservation of jobs in tourism, and the other affected sectors of the economy. The Austrian Government provided guarantees to tourism for obtaining the necessary liquidity and securing viability. The Denmark Government's Travel Guarantee Fund provided guarantee to support business liquidity. The scope of the fund was expanded to compensate the travel companies which were required to make refund payments for cancellations due to the pandemic.

Particular interventions were made in some countries to support jobs in the tourism sector. France introduced a career guidance platform targeting seasonal tourism workers to support the recovery of employment in the tourism sector.

Vietnam laid a huge focus on the development of natural, peaceful, and less crowded tourism products, such as sea tourism and unexplored islands. The country also developed a strategy to develop local cultural products like local heritage, festivals, cuisine, and lifestyle, among other things. In view of the unique cultural diversity across the length and breadth of India, more and more such products can be developed in the country to meet the demand led by the exponential rise in the popularity of domestic tourism.

Some of the countries invested in strengthening links between tourism and locally produced agriculture and manufacturing goods. For example, Jamaica launched an online platform enabling the hotel industry to directly buy products from local farmers.

In Zimbabwe, the Ministry of Environment, Climate, Tourism, and Hospitality Industry launched a tourism recovery strategy with a biased focus on domestic tourism promotion during the second half of 2020 (Phanos, 2021⁸).

The proposed recommendations for Indian Tourism sector are detailed below.

VIII.2. Promotion of Domestic Tourism

Domestic tourism has been a significant contributor to rebuilding the tourism economy across all the countries of the world, especially in the wake of crisis and postcrisis situation. In the recent past, it was domestic tourism that helped countries survive the economic turmoil resulting from crisis such as global financial crisis of 2008; post-election violence in Kenya in 2008; Asian financial crisis in 1997-98; and even during global pandemics like SARS-CoV in Asia; MERS-CoV in the Middle East, Madcow disease in Europe, and Ebola in West Africa; etc. Under all these pandemics, affected tourism destinations turned to the domestic tourism market for recovery, and survival (Gössling, Scott & Hall, 2020⁹).

During Covid19 pandemic, when the international borders were closed and people were desperate to undertake even short trips, then the local destinations had gained a lot of popularity. Domestic tourism emerged as the form of tourism which was reasonably resilient to the shocks such as pandemic. This is despite the fact that a domestic tourism trip is far less expensive than inbound tourism trip. It is its huge number that makes domestic tourism a significant generator of revenue for the government, private sector and also informal setups. Besides, domestic tourism to regional and local destinations assures sustainability as shorter travel distances may result in a lower environmental impact of tourism.

In the Union Budget 2023, 50 new locations have been proposed to be developed to boost domestic tourism. Besides, there are initiatives like "Dekho Apna Desh," to encourage people to travel domestically and divert from foreign destinations; "Swadesh Darshan Scheme," for the integrated development of theme-based tourist

⁸ Matura, Phanos. (2021). Domestic tourism promotion strategies during and after the Covid-19 pandemic in Zimbabwe.

⁹ Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. Journal of Sustainable Tourism, 0(0), 1–20.

circuits; and "Vibrant Villages Program", to build tourism infrastructure.

Our recommendations to improve domestic tourism are as follows:

• **Making travelling safe and affordable**: This study recommends the promotion of domestic tourism through assuring safety and security of tourists of all kinds. Safety for women, in particular, should be ensured to encourage the women-only tours, which are already becoming popular among the women travellers. Also, assuring safety and security to tourists in the newly developed local destinations which are less crowded, is very important.

With regard to affordability, the government can work with travel agencies and tour operators to offer affordable travel packages that cater to different budgets. Affordable accommodation, like homestays, camping, bed and breakfast (B&B) arrangements, and short-term rentals provide a unique experience to the tourists at affordable prices. 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.

- Offering Tax breaks or subsidies: Government can incentivize people to travel within the country by offering tax breaks or subsidies for travel expenses. This can encourage people to take more vacations and explore different parts of the country, thereby promoting domestic 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.
- **Developing physical and soft infrastructure:** The government can invest in improving the infrastructure and facilities at popular tourist destinations. This can include upgrading transportation services, internet connectivity, trained tourist guides, banking facilities, providing better accommodation options, and improving sanitation and hygiene standards. The increasingly getting popular types of tourism, like rural/village tourism, tourism at off-beat destinations, wellness tourism, etc. should also be encouraged. Among physical infrastructure, focus may be laid more on low capital-incentive infrastructure like development and regular maintenance of public parks, recreational centers, historical monuments, religious places etc. It is a well-acknowledged fact how the exemplary strategies to develop infrastructure have managed in the successful execution of Kumbh Mela, the largest religious celebration in the world.

VIII.3. **Promotion of Digital/Virtual Tours**

The government can collaborate with tour operators and travel agencies to create virtual tours of popular tourist destinations in the country. These tours can be marketed to people who are unable to travel due to financial or health reasons.

The government can create a centralized platform that hosts virtual tours of various destinations in the country. This platform can also include interactive features like live chats with local guides, virtual reality experiences, and access to additional information and resources. Livestreaming of cultural activities, festivals or recreational shows may be added.

Virtual tours can be developed and utilised for the marketing purposes as well. Hotels or Resorts can develop tours to their properties for the prospective clients/tourists to get a sense of the facilities available before they decide to do the booking.

The government can use social media platforms like Instagram and Facebook to promote virtual tours and experiences in India. Influencers and travel bloggers can also be engaged to create content that showcases the beauty and diversity of India's tourist destinations.

VIII.4. Promotion of Sports Tourism

When Mamallapuram or Mahabalipuram, a small town in Tamil Nadu was chosen to host the 44th International Chess Olympiad in July-August 2022, the town attracted thousands of tourists from over 180 countries. The town also scored the first position in terms of number of international tourist arrivals, leaving behind the hitherto most popular town of Agra, particularly because of Taj Mahal. Taking cues from this instance, the government can collaborate with sports federations and organizers to promote and host international sporting events in the country. This can include popular sports like football, cricket, and tennis, as well as traditional sports like, kabaddi and kho-kho. Hosting such events can attract sports enthusiasts from around the world, generating revenue for the tourism industry.

Secondly, the government can promote adventure sports like trekking, mountaineering, and water sports in destinations like the Himalayas, the Western Ghats, and the Andaman and Nicobar Islands. These sports can attract adventure seekers and nature lovers, providing a unique experience of India's diverse landscapes.

Besides, the government can promote sports museums and heritage sites like the National Museum of Indian Sport, the Jawaharlal Nehru Stadium, and the Eden Gardens. These sites can provide a glimpse into India's rich sports history and culture, attracting sports enthusiasts.

VIII.5. Focus on Sustainable Tourism

The focus on sustainable tourism as is as important as development of tourism. Sustainable tourism is defined by the UN Environment Program and UN World Tourism Organization as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities." This is being recognized internationally as more than 300 tourism stakeholders signed up to the Glasgow Declaration on Climate in 2022, recognising the need for a globally consistent plan for climate action in tourism. Our recommendations towards sustainable tourism are the following:

• Evidence-based studies to measure carrying capacities of popular destinations and propose alternative destinations: Several popular destinations in India have far exceeded their tourism carrying capacities, creating a conflict between development and sustainability. The tourism

carrying capacity of vulnerable destinations should be scientifically assessed and actions should be taken to avoid over-tourism and ecological hazards resulting from over-tourism. These actions may include imposition of economic tools such as higher taxes and prohibition of transport vehicles in selected areas. The assessment studies should also be able to propose the alternative less explored destinations to the tourists.

- Develop the statistical framework to Measure the Sustainability of Tourism (MST): The MST framework by UNWTO is meant to measure tourism's role in sustainable development, including economic, social and environmental dimensions. In addition to the economic dimension, which is already being covered through the TSAs and other tourism statistics, the social dimension includes health, education, skills, income, governance, culture, and heritage; and environmental dimension includes water, energy, waste, emissions, ecosystems, and biodiversity. Such framework should be attempted to be prepared so as to meet the SDG goals 8, 12 and 14 under targets 8.9, 12.b and 14.7, which are as follows:
 - Target 8.9 devise and implement policies to promote sustainable tourism which creates jobs, promotes local culture and products
 - Target 12.b develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products
 - Target 14.7 increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

VIII.6. Invest in strengthening of Tourism Statistics

The collection and compilation of tourism statistics, like tourist arrivals, especially domestic, should be streamlined so that the impacts of any types of shocks can be measured in an efficient way, so that the targeted rescue and restoration strategies are made. These statistics may be improved with the digitization of data which can be collected administratively.

Appendix I

TABLE A1: GVA BY INDUSTRIES AT CURRENT PRICE (RS LAKH)

	2019-20	2020-21	2021-22
Agriculture and allied	336847123	369541226	406664928
Mining, other manufacturing, construction, electricity, gas, and water supply	256627412	264042580	326501014
Trade	213142354	175694080	210085876
Transport freight services	54912752	45534839	63155185
All non-tourism specific services	836411225	844993775	986667023
Accommodation services/Hotels	2661252	1241910	1991261
Food and beverage serving services/Restaurants	16829480	7853706	12592527
Railway passenger transport services	2702074	2588955	2926104
Road passenger transport services	22090092	17030957	26176003
Water passenger transport services	1232264	1313240	1697938
Air passenger transport services	2043192	984976	1116571
Transport equipment rental services	250279	170210	209233
Travel agencies and other reservation services/Supporting and auxiliary transport activities	1004013	903229	1115190
Cultural and religious services	481750	327628	402743
Sports and other recreational services	9083635	6177593	7593912
Health and medical related services	32210099	32805385	38883867
Readymade garments	8108097	6380112	8315903
Processed food	22179464	23303471	26261708
Alcohol and tobacco products	6852444	6589999	7622399
Travel related consumer goods	4361777	3527924	4044278
Footwear	7574	5910	6531
Soaps, cosmetics and glycerine	2760775	2942293	3398466
Gems and jewellery	733383	699579	931954
Books, journals, magazines, stationery, etc.	4579222	4224453	5527713
Total GVA	1838111732	1818878028	2143888326

TABLE A1: (CONTD.)

		202	20-21			2021-22				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Agriculture and allied	80196300	71388200	120676600	95106900	87279300	77130300	130892100	109592800		
Mining, other manufacturing, construction, electricity, gas and water supply	43550738	65348661	68437953	81470646	72207468	78072586	78650125	94166285		
Trade	30047864	43360762	48341479	53714373	46426972	50664900	61638963	63370764		
Transport freight services	1180237	7651224	11376260	17904561	2768075	12699817	12887716	21202879		
All non-tourism specific services	196561744	212665500	212984553	232866728	229690317	253481953	245885437	267935455		
Accommodation services/Hotels	377827	545226	607854	675414	583781	637069	775059	796835		
Food and beverage serving services/Restaurants	2389338	3447950	3844005	4271245	3691768	4028758	4901391	5039100		
Railway passenger transport services	-2077	23088	119166	339298	142414	223764	355679	500018		
Road passenger transport services	671736	4326745	6116538	9155044	3137376	5324857	5722740	10494311		
Water passenger transport services	18094	65819	134489	218269	84462	137910	225547	247707		
Air passenger transport services	29744	108196	221080	358804	138843	226705	370767	407194		
Transport equipment rental services	24549	62185	64751	63215	67238	77756	69564	60962		
Travel agencies and other reservation services/Supporting and auxiliary transport activities	14744	85856	143174	238717	-291158	372553	267135	298781		
Cultural and religious services	47254	119697	124636	121680	129423	149668	133900	117342		
Sports and other recreational services	890998	2256939	2350069	2294329	2440334	2822071	2524746	2212540		
Health and medical related services	2681046	6791215	7071446	6903722	7343057	8491718	7597056	6657615		
Readymade garments	862004	1611621	1601827	1877366	1630788	1961635	1919131	2144968		
Processed food	4966153	6507609	6340260	7159820	6674737	7212198	7111866	8009649		
Alcohol and tobacco products	1867916	2447703	2384758	2693019	2510565	2712720	2674982	3012665		
Travel related consumer goods	539342	971432	975231	1139845	992087	1174409	1149886	1288656		
Footwear	867	1622	1612	1889	1641	1974	1931	2158		
Soaps, cosmetics and glycerine	333749	521068	544935	629922	552627	611938	601253	681636		
Gems and jewellery	127363	198846	207954	240386	210890	233524	229446	260121		
Books, journals, magazines, stationery, etc.	569566	889239	929970	1075006	943097	1044316	1026081	1163261		
Total GVA	367947100	431396400	495600600	520520200	469356100	509495100	567612500	599663700		

	TIR		TDGVA	
	2015-16	2019-20	2020-21	2021-22
Agriculture and allied	0.0000	О	0	0
Mining, other manufacturing, construction, electricity, gas and water supply	0.0021	5288	5441	6728
Trade	0.7864	1676152	1381659	1652116
Transport freight services	2.3684	1300527	1078425	1495737
All non-tourism specific services	1.3731	11485066	11602917	13548283
Accommodation services/Hotels	71.3609	1899094	886238	1420983
Food and beverage serving services/Restaurants	54.2109	9123406	4257561	6826517
Railway passenger transport services	69.8046	1886173	1807210	2042556
Road passenger transport services	52.4399	11584024	8931019	13726673
Water passenger transport services	3.7996	46821	49898	64515
Air passenger transport services	81.0964	1656956	798780	905499
Transport equipment rental services	38.0000	95106	64680	79509
Travel agencies and other reservation services/Supporting and auxiliary transport activities	51.2532	514588	462934	571570
Cultural and religious services	20.1000	96832	65853	80951
Sports and other recreational services	5.7156	519182	353085	434036
Health and medical related services	29.5841	9529082	9705192	11503459
Readymade garments	0.0001	9	7	9
Processed food	0.0003	61	65	73
Alcohol and tobacco products	0.0061	419	403	466
Travel related consumer goods	0.0131	572	463	531
Footwear	0.0002	0	0	0
Soaps, cosmetics and glycerine	0.0014	39	42	49
Gems and jewellery	0.0328	241	230	306
Books, journals, magazines, stationery, etc.	0.0009	39	36	47
Total TDGVA		51419679	41452138	54360612

TABLE A2: TIRS AND TDGVA TO ESTIMATE IMPACT DUE TO OVERALL ECONOMIC SLOWDOWN (RS LAKH)

TABLE A2: (CONTD.)

	TIR		202	0-21			2021-22				
	2015-16	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Agriculture and allied	0.0000	0	0	0	0	0	0	0	0		
Mining, other manufacturing, construction, electricity, gas and		0			-		-				
water supply	0.0021	897	1347	1410	1679	1488	1609	1621	1941		
	0.7864	236296	340989	380157	422410	365102	398429	484729	498348		
Transport freight services	2.3684	27952	181208	269430	424043	65558	300776	305226	502159		
All non-tourism specific services	1.3731	2699061	2920187	2924568	3197578	3153961	3480653	3376342	3679119		
Accommodation services/Hotels	71.3609	269621	389078	433770	481981	416591	454618	553089	568629		
Food and beverage serving services/Restaurants	54.2109	1295281	1869163	2083868	2315479	2001339	2184024	2657086	2731739		
Railway passenger transport services	69.8046	-1450	16116	83183	236846	99411	156198	248280	349035		
Road passenger transport services	52.4399	352258	2268941	3207507	4800897	1645237	2792350	3001000	5503207		
Water passenger transport services	3.7996	688	2501	5110	8293	3209	5240	8570	9412		
Air passenger transport services	81.0964	24121	87743	179288	290977	112596	183849	300679	330220		
Transport equipment rental services	38.0000	9329	23630	24605	24022	25550	29547	26434	23165		
Travel agencies and other reservation services/Supporting and											
auxiliary transport activities	51.2532	7557	44004	73381	122350	-149228	190945	136915	153135		
Cultural and religious services	20.1000	9498	24059	25052	24458	26014	30083	26914	23586		
Sports and other recreational services	5.7156	50926	128997	134320	131134	139479	161298	144304	126460		
Health and medical related services	29.5841	793164	2009123	2092027	2042407	2172381	2512202	2247524	1969598		
Readymade garments	0.0001	1	2	2	2	2	2	2	2		
Processed food	0.0003	14	18	18	20	19	20	20	22		
Alcohol and tobacco products	0.0061	114	150	146	165	154	166	164	184		
Travel related consumer goods	0.0131	71	127	128	150	130	154	151	169		
Footwear	0.0002	0	0	0	0	0	0	0	0		
Soaps, cosmetics and glycerine	0.0014	5	7	8	9	8	9	9	10		
Gems and jewellery	0.0328	42	65	68	79	69	77	75	85		
Books, journals, magazines, stationery, etc.	0.0009	5	8	8	9	8	9	9	10		
Total TDGVA		5775451	10307464	11918055	14524987	10079079	12882259	13519143	16470235		

	2020-21							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture and allied	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mining, other manufacturing, construction, electricity, gas and water supply	0.0004	0.0006	0.0008	0.0007	0.0003	0.0006	0.0009	0.0008
Trade	0.0756	0.2005	0.3354	0.2838	0.1072	0.2282	0.4252	0.3696
Transport freight services	0.2794	0.7124	1.2665	0.9360	0.2464	0.7259	1.3971	1.1996
All non-tourism specific services	0.2555	0.3877	0.5660	0.4491	0.2305	0.3832	0.5869	0.5261
Accommodation services/Hotels	4.7197	15.7131	22.1625	27.1195	16.4379	23.3030	41.3667	36.7701
Food and beverage serving services/Restaurants	4.9354	13.9800	22.6645	20.8243	9.0096	17.0121	31.4200	27.4527
Railway passenger transport services	8.1981	20.9213	37.1678	27.5195	7.2891	21.3548	41.0815	35.2793
Road passenger transport services	6.1862	15.7735	28.0436	20.7244	5.4553	16.0736	30.9345	26.5609
Water passenger transport services	0.3718	1.0262	1.7018	1.4858	0.5886	1.2006	2.2366	1.9470
Air passenger transport services	8.8525	23.1269	40.2463	31.3625	9.6583	24.6667	46.9473	40.4986
Transport equipment rental services	3.8106	10.3441	17.4053	14.6958	5.4554	11.7852	22.0871	19.1780
Travel agencies and other reservation services/Supporting and auxiliary transport activities	4.4821	12.4958	20.5412	18.2962	7.5139	14.8487	27.5673	24.0329
Cultural and religious services	1.2308	4.2870	5.8190	7.6541	4.9183	6.6450	11.7018	10.4382
Sports and other recreational services	0.3299	1.1633	1.5628	2.0951	1.3655	1.8236	3.2049	2.8614
Health and medical related services	3.3996	8.7363	15.4253	11.5985	3.2254	9.0377	17.3290	14.9021
Readymade garments	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Processed food	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001
Alcohol and tobacco products	0.0011	0.0017	0.0025	0.0020	0.0010	0.0017	0.0026	0.0023
Travel related consumer goods	0.0024	0.0037	0.0054	0.0043	0.0022	0.0037	0.0056	0.0050
Footwear	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001
Soaps, cosmetics and glycerine	0.0003	0.0004	0.0006	0.0005	0.0002	0.0004	0.0006	0.0005
Gems and jewellery	0.0061	0.0093	0.0135	0.0107	0.0055	0.0092	0.0140	0.0126
Books, journals, magazines, stationery, etc.	0.0002	0.0002	0.0004	0.0003	0.0001	0.0002	0.0004	0.0003

TABLE A3: TOURISM INDUSTRY RATIOS FOR ALL THE POST-PANDEMIC QUARTERS DUE TO FALL IN COMBINED DEMAND

		202	0-21					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture and allied	0	0	0	0	0	0	0	0
Mining, other manufacturing, construction, electricity, gas and water supply	167	380	581	549	250	449	693	743
Trade	22707	86941	162149	152447	49775	115604	262083	234197
Transport freight services	3297	54506	144084	167583	6820	92192	180055	254344
All non-tourism specific services	502252	824509	1205412	1045876	529363	971342	1443035	1409534
Accommodation services/Hotels	17832	85672	134716	183169	95961	148456	320617	292997
Food and beverage serving services/Restaurants	117924	482023	871226	889458	332612	685376	1540017	1383366
Railway passenger transport services	-170	4830	44291	93373	10381	47784	146118	176403
Road passenger transport services	41555	682477	1715296	1897332	171153	855897	1770304	2787381
Water passenger transport services	67	675	2289	3243	497	1656	5045	4823
Air passenger transport services	2633	25022	88977	112530	13410	55921	174065	164908
Transport equipment rental services	935	6432	11270	9290	3668	9164	15365	11691
Travel agencies and other reservation services/Supporting and auxiliary transport activities	661	10728	29410	43676	-21877	55319	73642	71806
Cultural and religious services	582	5131	7253	9313	6365	9945	15669	12248
Sports and other recreational services	2940	26254	36726	48069	33322	51463	80916	63309
Health and medical related services	91144	593302	1090790	800726	236843	767454	1316494	992127
Readymade garments	0	0	1	1	0	1	1	1
Processed food	3	5	7	6	3	6	8	9
Alcohol and tobacco products	21	42	60	54	26	46	70	71
Travel related consumer goods	13	36	53	49	22	43	64	65
Footwear	0	0	0	0	0	0	0	0
Soaps, cosmetics and glycerine	1	2	3	3	1	2	4	4
Gems and jewellery	8	18	28	26	12	21	32	33
Books, journals, magazines, stationery, etc.	1	2	3	3	1	2	4	4
Total TDGVA	804573	2888992	5544626	5456777	1468608	3868145	7344299	7860063

TABLE A4: TDGVA TO ESTIMATE THE TOTAL IMPACT (RS LAKH)

		202	0-21					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture and allied	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mining, other manufacturing, construction, electricity, gas and water supply	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Trade	0.4841	0.5213	0.5379	0.5638	0.5324	0.5519	0.6138	0.5985
Transport freight services	2.1418	2.1747	2.1894	2.2124	2.1846	2.2019	2.2567	2.2432
All non-tourism specific services	0.8709	0.8709	0.8709	0.8709	0.8709	0.8709	0.8709	0.8709
Accommodation services/Hotels	12.7010	21.9801	26.1177	32.5899	24.7441	29.6285	45.0507	41.2426
Food and beverage serving services/Restaurants	28.9268	32.8183	34.5535	37.2679	33.9775	36.0259	42.4938	40.8967
Railway passenger transport services	62.7318	63.7418	64.1921	64.8966	64.0426	64.5743	66.2529	65.8384
Road passenger transport services	47.4227	48.1529	48.4785	48.9878	48.3704	48.7547	49.9683	49.6687
Water passenger transport services	2.3515	2.5806	2.6828	2.8427	2.6489	2.7695	3.1504	3.0563
Air passenger transport services	64.3206	66.6811	67.7337	69.3802	67.3843	68.6268	72.5501	71.5813
Transport equipment rental services	25.2045	27.1428	28.0071	29.3591	27.7202	28.7405	31.9621	31.1666
Travel agencies and other reservation services/Supporting and auxiliary transport	05.5450	aa (a=a	01 0515	041054	01 = 196	00 1000	00 0100	of o=90
	27.5479	30.00/3	31.9/15	34.1054	31.5100	33.1290	30.2139	30.9503
Cultural and religious services	2.1041	4.9727	6.2518	8.2526	5.8271	7.3371	12.1048	10.9276
Sports and other recreational services	0.4740	1.2764	1.6342	2.1938	1.5154	1.9377	3.2714	2.9421
Health and medical related services	25.6256	26.1885	26.4394	26.8321	26.3561	26.6524	27.5880	27.3570
Readymade garments	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Processed food	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Alcohol and tobacco products	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039
Travel related consumer goods	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083
Footwear	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Soaps, cosmetics and glycerine	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
Gems and jewellery	0.0208	0.0208	0.0208	0.0208	0.0208	0.0208	0.0208	0.0208
Books, journals, magazines, stationery, etc.	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005

TABLE A5: TOURISM INDUSTRY RATIOS DUE TO FALL IN INBOUND TOURISM DEMAND

		2020-21 2021-22					2021-22			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Agriculture and allied	0	0	0	0	0	0	0	0		
Mining, other manufacturing, construction, electricity, gas and water supply	569	854	895	1065	944	1020	1028	1231		
Trade	145460	226033	260014	302847	247160	279640	378312	379269		
Transport freight services	25278	166394	249077	396128	60470	279640	290841	475621		
All non-tourism specific services	1711921	1852174	1854952	2028113	2000448	2207657	2141497	2333538		
Accommodation services/Hotels	47988	119841	158757	220116	144451	188754	349170	328635		
Food and beverage serving services/Restaurants	691158	1131559	1328240	1591803	1254370	1451397	2082788	2060826		
Railway passenger transport services	-1303	14717	76495	220193	91205	144494	235648	329204		
Road passenger transport services	318556	2083453	2965205	4484853	1517561	2596120	2859557	5212383		
Water passenger transport services	425	1699	3608	6205	2237	3819	7106	7571		
Air passenger transport services	19132	72147	149746	248938	93558	155580	268992	291475		
Transport equipment rental services	6188	16879	18135	18559	18639	22347	22234	19000		
Travel agencies and other reservation services/Supporting and auxiliary transport activities	4062	26278	45775	81415	-91769	123423	102083	110424		
Cultural and religious services	994	5952	7792	10042	7542	10981	16208	12823		
Sports and other recreational services	4223	28807	38404	50334	36980	54685	82594	65095		
Health and medical related services	687033	1778514	1869651	1852411	1935345	2263248	2095874	1821321		
Readymade garments	1	1	1	1	1	1	1	1		
Processed food	9	11	11	13	12	13	13	14		
Alcohol and tobacco products	72	95	92	104	97	105	104	117		
Travel related consumer goods	45	81	81	95	83	98	96	107		
Footwear	0	0	0	0	0	0	0	0		
Soaps, cosmetics and glycerine	3	5	5	6	5	6	5	6		
Gems and jewellery	27	41	43	50	44	49	48	54		
Books, journals, magazines, stationery, etc.	3	5	5	6	5	6	6	6		
Total TDGVA	3661843	7525539	9026984	11513298	7319389	9783084	10934202	13448721		

TABLE A6: TDGVA TO ESTIMATE THE IMPACT OF INBOUND TOURISM (RS LAKH)

		202	0-21					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture and allied	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mining, other manufacturing, construction, electricity, gas and water supply	0.0009	0.0006	0.0008	0.0007	0.0003	0.0006	0.0009	0.0008
Trade	0.4252	0.3933	0.5116	0.4340	0.2889	0.3903	0.5255	0.4851
Transport freight services	1.3971	0.8833	1.4227	1.0692	0.4075	0.8697	1.4860	1.3020
All non-tourism specific services	0.5869	0.3877	0.5660	0.4491	0.2305	0.3832	0.5869	0.5261
Accommodation services/Hotels	41.3667	63.8025	66.1144	64.5992	61.7633	63.7441	66.3856	65.5970
Food and beverage serving services/Restaurants	31.4200	34.1481	41.0974	36.5428	28.0184	33.9725	41.9125	39.5423
Railway passenger transport services	41.0815	26.1556	41.9518	31.5990	12.2227	25.7567	43.8048	38.4170
Road passenger transport services	30.9345	19.5576	31.5021	23.6737	9.0219	19.2559	32.9033	28.8293
Water passenger transport services	2.2366	2.2138	2.7872	2.4114	1.7080	2.1993	2.8545	2.6589
Air passenger transport services	46.9473	35.3603	51.4272	40.8970	21.1886	34.9545	53.3119	47.8318
Transport equipment rental services	22.0871	20.3895	26.5864	22.5249	14.9235	20.2329	27.3133	25.1997
Travel agencies and other reservation services/Supporting and auxiliary transport		<u> </u>		aa (- a(aa (- 0a	<u></u>		
	27.5073	28.3513	35.0325	30.0530	22.4582	28.1825	35.8102	33.5374
Cultural and religious services	11.7018	19.1536	19.4065	19.2408	18.9305	19.1472	19.4362	19.3499
Sports and other recreational services	3.2049	5.3218	5.3635	5.3362	5.2850	5.3207	5.3684	5.3542
Health and medical related services	17.3290	11.6535	18.0915	13.8721	5.9749	11.4909	18.8467	16.6509
Readymade garments	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Processed food	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001
Alcohol and tobacco products	0.0026	0.0017	0.0025	0.0020	0.0010	0.0017	0.0026	0.0023
Travel related consumer goods	0.0056	0.0037	0.0054	0.0043	0.0022	0.0037	0.0056	0.0050
Footwear	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001
Soaps, cosmetics and glycerine	0.0006	0.0004	0.0006	0.0005	0.0002	0.0004	0.0006	0.0005
Gems and jewellery	0.0140	0.0093	0.0135	0.0107	0.0055	0.0092	0.0140	0.0126
Books, journals, magazines, stationery, etc.	0.0004	0.0002	0.0004	0.0003	0.0001	0.0002	0.0004	0.0003

TABLE A7: TOURISM INDUSTRY RATIOS DUE TO FALL IN DOMESTIC TOURISM DEMAND

	2020-21 2021-22							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture and allied	0	0	0	0	0	0	0	0
Mining, other manufacturing, construction, electricity, gas and water supply	384	380	581	549	250	449	693	743
Trade	127761	170519	247309	233138	134119	197728	323894	307417
Transport freight services	16489	67582	161854	191432	11279	110445	191513	276066
All non-tourism specific services	1153568	824509	1205412	1045876	529363	971342	1443035	1409534
Accommodation services/Hotels	156295	347868	401879	436312	360562	406094	514527	522700
Food and beverage serving services/Restaurants	750730	1177408	1579785	1560832	1034375	1368671	2054297	1992575
Railway passenger transport services	-853	6039	49992	107215	17407	57634	155804	192092
Road passenger transport services	207799	846207	1926840	2167338	283052	1025349	1882968	3025432
Water passenger transport services	405	1457	3748	5263	1443	3033	6438	6586
Air passenger transport services	13964	38259	113695	146740	29419	79244	197663	194768
Transport equipment rental services	5422	12679	17215	14239	10034	15732	19000	15362
Travel agencies and other reservation services/Supporting and auxiliary transport activities	4065	24341	50157	73175	-65389	104995	95678	100203
Cultural and religious services	5530	22926	24187	23412	24500	28657	26025	22706
Sports and other recreational services	28556	120109	126046	122429	128971	150155	135538	118463
Health and medical related services	464598	791417	1279331	957689	438744	975777	1431794	1108550
Readymade garments	0	0	1	1	0	1	1	1
Processed food	6	5	7	6	3	6	8	9
Alcohol and tobacco products	49	42	60	54	26	46	70	71
Travel related consumer goods	30	36	53	49	22	43	64	65
Footwear	0	0	0	0	0	0	0	0
Soaps, cosmetics and glycerine	2	2	3	3	1	2	4	4
Gems and jewellery	18	18	28	26	12	21	32	33
Books, journals, magazines, stationery, etc.	2	2	3	3	1	2	4	4
Total TDGVA	2934818	4451805	7188189	7085782	2938194	5495427	8479052	9293384

TABLE A8: TDGVA TO ESTIMATE THE IMPACT OF DOMESTIC TOURISM (RS LAKH)

TABLE A9: GVA AND TDGV	A FOR CALENDAR YEARS
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		Total GVA		TDGV tot	/A (cove al impac	ring t)	Total	GVA	TDG	VA
	Rs '00000 lakh		Rs 'o	00000 la	lkh	y-0-y growth 201	7 % 1 over 19	y-o-y % g over 2	growth 2019	
	2019	2020	2021	2019	2020	2021	2020	2021	2020	2021
Agriculture and allied	3252.9	3618.3	3904.1	0.0	0.0	0.0	11.2	20.0	-	-
Mining, other manufacturing, construction, electricity, gas and water supply	2601.2	2455.7	3104.0	0.1	0.0	0.0	-5.6	19.3	-52.7	-63.8
Trade	2085.7	1797.0	2124.5	16.4	7.3	5.8	-13.8	1.9	-55.6	-64.6
Transport freight services	537.8	351.5	462.6	12.7	5.6	4.5	-34.6	-14.0	-56.4	-64.9
All non-tourism specific services	8216.8	8238.6	9619.2	112.8	53.0	39.9	0.3	17.1	-53.0	-64.6
Accommodation services/Hotels	26.2	22.6	26.7	18.7	7.6	7.5	-13.8	1.9	-59.5	-60.0
Food and beverage serving services/Restaurants	165.9	142.9	168.9	89.9	39.7	34.5	-13.8	1.9	-55.9	-61.7
Railway passenger transport services	26.5	8.8	10.6	18.5	5.6	3.0	-66.9	-59.9	-69.6	-83.9
Road passenger transport services	216.4	171.3	233.4	113.5	55.9	46.9	-20.9	7.8	-50.7	-58.6
Water passenger transport services	12.2	5.6	6.7	0.5	0.2	0.1	-54.3	-45.3	-65.7	-77.4
Air passenger transport services	20.0	9.2	11.0	16.2	5.7	3.6	-54.3	-45.3	-65.0	-78.1
Transport equipment rental services	2.7	2.1	2.8	1.0	0.4	0.4	-20.3	3.2	-58.3	-63.3
Travel agencies and other reservation services	9.8	5.2	5.9	5.0	1.8	1.5	-47.4	-40.1	-64.1	-70.0
Cultural and religious services	5.2	4.1	5.3	1.0	0.4	0.4	-20.3	3.2	-64.1	-60.3
Sports and other recreational services	97.7	77.9	100.8	5.6	2.0	2.1	-20.3	3.2	-64.8	-61.7
Health and medical related services	293.9	234.3	303.4	87.0	38.1	31.2	-20.3	3.2	-56.2	-64.1
Readymade garments	66.1	57.8	73.9	0.0	0.0	0.0	-12.6	11.7	-55.0	-65.9
Processed food	244.2	241.0	281.6	0.0	0.0	0.0	-1.3	15.3	-52.2	-65.1
Alcohol and tobacco products	91.9	90.7	105.9	0.0	0.0	0.0	-1.3	15.3	-52.2	-65.1
Travel related consumer goods	39.3	35.0	44.6	0.0	0.0	0.0	-11.1	13.3	-54.5	-65.5
Footwear	0.1	0.1	0.1	0.0	0.0	0.0	-12.6	11.7	-55.0	-65.9
Soaps, cosmetics and glycerine	19.9	19.1	24.0	0.0	0.0	0.0	-4.0	20.2	-52.5	-63.6
Gems and jewellery	7.6	7.3	9.1	0.0	0.0	0.0	-4.0	20.2	-52.5	-63.6
Books, journals, magazines, stationery, etc.	34.0	32.6	40.9	0.0	0.0	0.0	-4.0	20.2	-52.5	-63.6
Total	18074.1	17628.5	20669.8	499.0	223.2	181.4	-2.5	14.4	-55.3	-63.7

		2017-18			2018-19	
	Self employed	Employees	Total	Self employed	Employees	Total
Accommodation services/Hotels	72842	534336	607178	104122	548550	652672
Food and beverage serving services/Restaurants	3917510	2441511	6359021	3521827	2638683	6160510
Transport passenger services	7636762	9300288	16937049	7635938	9223774	16859712
Travel agencies and other reservation services/						
Supporting and auxiliary transport activities	107131	129607	236738	97542	128507	226049
Cultural, religious, sports and recreational services	418182	555736	973918	455029	696490	1151519
Health and medical related services	668846	2984331	3653177	571723	3415497	3987220
Total in tourism industries	12821273	15945809	28767081	12386181	16651501	29037682
Rest of the industries	164491515	157988497	322480013	166943983	159850149	326794132
Total in the economy	177312788	173934306	351247094	179330164	176501650	355831814
		2019-20			2020-21	
Accommodation services/Hotels	139471	523612	663083	89302	480278	569580
Food and beverage serving services/Restaurants	3264898	2969891	6234789	3757252	2455695	6212947
Transport passenger services	8025249	9547503	17572752	8744889	8329514	17074404
Travel agencies and other reservation services/						
Supporting and auxiliary transport activities	145582	195753	341335	120171	114083	234254
Cultural, religious, sports and recreational services	412241	712755	1124996	403115	378870	781985
Health and medical related services	608905	3429300	4038205	689788	4297325	4987113
Total in tourism industries	12596346	17378814	29975160	13804518	16055765	29860283
Rest of the industries	186690010	174183579	360873589	200398558	168122512	368521069
Total in the economy	199286356	191562393	390848749	214203075	184178277	398381352
		2021-22				
Accommodation services/Hotels	114460	628636	743096			
Food and beverage serving services/Restaurants	4234064	2648571	6882635			
Transport passenger services	9164022	8476334	17640356			
Travel agencies and other reservation services/						
Supporting and auxiliary transport activities	92870	200832	293702			
Cultural, religious, sports and recreational services	527125	417625	944750			
Health and medical related services	795106	4363534	5158640			
Total in tourism industries	14927647	16735532	31663179			
Rest of the industries	212019114	174937901	386957015			
Total in the economy	226946761	191673433	418620194			

TABLE A10: EMPLOYMENT (NUMBER OF JOBS) IN TOURISM INDUSTRIES IN CURRENT WEEKLY STATUS (2017-18 TO 2021-22)

Source: NCAER compilation using PLFS–2021-22.

TABLE A11: QUARTERLY EMPLOYMENT (NUMBER OF JOBS) IN TOURISM INDUSTRIES IN CURRENT WEEKLY STATUS(2018-19 TO 2021-22)

	2018-19											
		Jul-Sep (Q2)			Oct-Dec (Q3)			Jan-Mar (Q4)				
	Self employed	Employees	Total	Self employed	Employees	Total	Self employed	Employees	Total			
Accommodation services/Hotels	123396	1001308	1124704	163515	751751	915266	206309	606979	813287			
Food and beverage serving services/Restaurants	4016620	3620704	8546414	5196118	3338126	8534244	5032720	3637844	8670563			
Transport passenger services	9917661	12505059	22422720	10822531	12728814	23551345	12138361	13585470	25723832			
Travel agencies and other reservation services/ Supporting and auxiliary transport												
activities	48401	126689	175090	212357	241340	453696	143903	175439	319342			
Cultural, religious, sports and recreational		00.0							(0.0			
services	539816	884819	1424635	626378	1120214	1746592	929479	751321	1680800			
related services	1012107	4400069	5412176	755952	4588360	5344312	734682	4882529	5617211			
Total	16558000	22547738	39105739	17776851	22768605	40545456	19185454	23639582	42825035			

	2010-20													
	A	pr-Jun (Q1))		Jul-Sep (Q2))	2019 20	Oct-Dec (Q3)	J	an-Mar (Q4)				
	Self			Self			Self			Self				
	employed	Employees	Total	employed	Employees	Total	employed	Employees	Total	employed	Employees	Total		
Accommodation														
services/Hotels	107087	786748	893835	225131	610351	835482	215977	639236	855213	256860	1009357	1266217		
Food and beverage														
serving														
services/Restaurants	5101645	4557471	9659116	4078167	3118999	7197166	5031768	4270435	9302203	5315825	4133830	9449656		
Transport passenger														
services	10082472	14074883	25057355	11837757	11536405	23374162	12505037	11514330	24020275	10518733	11587864	22106598		
Travel agencies and	10 90 - 47 -	140/4003	-000/000	1100//0/	11000400	-33/ +- *=				10010/00				
other reservation														
services/Supporting														
and auxiliary transport														
activities	151367	194290	345658	168338	298813	467151	270785	152985	423770	288946	268029	556975		
Cultural, religious,														
sports and recreational														
services	526786	1242651	1769438	536026	1098878	1634905	783346	876474	1659820	654779	942784	1597563		
Health and medical														
related services	758968	5723558	6482526	963468	4255935	5219403	639570	4127878	4767448	928504	4833518	5762021		
Total	17628325	26579602	44207927	17808888	20919381	38728269	19447382	21581347	41028729	17963648	22775383	40739031		

TABLE A11: (CONTD.)

TABLE A11: (CONTD.)

		2020-21												
	ŀ	Apr-Jun (Q1)	l.		Jul-Sep (Q2)			Oct-Dec (Q3)			Jan-Mar (Q4)		
	Self employed	Employees	Total	Self employed	Employees	Total	Self employed	Employees	Total	Self employed	Employees	Total		
Accommodation services/Hotels	20642	487137	507779	101465	511633	613098	199141	574076	773217	140302	606941	747242		
Food and beverage serving services/Restaurants	2539943	4126707	6666650	5071941	2965202	8037144	4780017	2978097	7758114	5855563	3541845	9397408		
Transport passenger services	6692281	16014727	22707008	10272926	9294673	19567599	11269462	10851862	22121325	13018992	11381812	24400803		
Travel agencies and other reservation services/ Supporting and auxiliary transport activities	21640	322555	344195	179974	195987	375960	201543	136710	338252	186265	146553	332818		
Cultural, religious, sports and recreational services	156125	829963	986088	452668	458134	910802	545048	434972	980020	733499	643216	1376715		
Health and medical related services	674209	4921830	5596040	777216	5305991	6083207	949439	5164593	6114032	1259546	5620752	6880298		
Total	10104840	26702920	36807760	16856189	18731620	35587810	17944649	20140311	38084961	21194167	21941118	43135285		

		2021-22											
	_	Apr-Jun (Q1			Jul-Sep (Q2))	(Oct-Dec (Q3))	Jan-Mar (Q4)			
	Self employed	Employees	Total	Self employed	Employees	Total	Self employed	Employees	Total	Self employed	Employees	Total	
Accommodation services/Hotels	27363	864594	891957	170034	1064611	1234645	103631	722652	826283	126130	830565	956695	
Food and beverage serving services/Restaurants	4154470	3546307	7700777	6018088	2817202	8835289	5677834	4242890	9920724	5196319	2927169	8123488	
Transport passenger services	11568424	12596251	24164674	10200395	9986243	20186638	12595406	12308381	24903787	12386676	11147047	23533723	
Travel agencies and other reservation services/ Supporting and auxiliary transport activities	63354	117985	181339	203312	402409	605722	132185	231313	363498	57986	240113	298099	
Cultural, religious, sports and recreational services	395700	451996	847696	529012	531236	1060248	700672	639661	1340333	1090057	511367	1601425	
Health and medical related services	651919	6704872	7356791	987387	5926899	6914286	854161	5677106	6531267	1218487	5571267	6789754	
Total	16861230	24282004	41143235	18108228	20728600	38836827	20063889	23822004	43885893	20075656	21227528	41303184	

Source: NCAER compilation using PLFS-2021-22.

		2022-23	
	Ap	or-Jun (Q1)	
	Self employed	Employees	Total
Accommodation services/Hotels	206173	707006	913179
Food and beverage serving services/Restaurants	5495788	4012229	9508017
Transport passenger services	13252627	11355660	24608287
Travel agencies and other reservation services/ Supporting and auxiliary transport activities	98248	188733	286980
Cultural, religious, sports and recreational services	461954	525005	986959
Health and medical related services	1143488	5896397	7039885
Total	20658279	22685029	43343308

Source: NCAER compilation using PLFS-2021-22.

		Wage in	icome			Non-wage	e Income	
	2018-19	2019-20	2020-21	2021-22	2018-19	2019-20	2020-21	2021-22
Agriculture and allied	45303935	49966365	54491209	59973072	260251811	288911634	316043550	350170441
Mining, other manufacturing, construction,								
electricity, gas and water supply	67596126	71208219	69709666	80325375	178962782	168129576	172249456	213123885
Trade	28823500	30869164	26403903	31510971	161993809	176961713	144019768	174184024
Transport freight services	17929533	18935835	17158866	20697396	31312990	32946074	26769129	39953188
All non-tourism specific services	382562966	420545606	428250037	512082795	316317161	343224259	343380904	395437930
Accommodation services/Hotels	797528	885179	465387	668246	1623045	1724740	725749	1252090
Food and beverage serving services/Restaurants	5043480	5597778	2943060	4225915	10263965	10907072	4589558	7918082
Railway passenger transport services	1928595	2134488	2073219	2257557	22265	21262	10797	18000
Road passenger transport services	4333821	4605881	3858010	5301929	16577251	17543515	13671217	21368434
Water passenger transport services	331767	313198	309392	343722	781519	797337	853126	1174667
Air passenger transport services	1051123	1277546	865157	918472	128116	660695	110126	182783
Transport equipment rental services	160225	177585	174920	204953	96015	112311	88881	109083
Travel agencies and other reservation services	355394	326968	292211	350294	570873	579059	573831	694963
Cultural and religious services	308408	341825	336694	394504	184814	216182	171083	209969
Sports and other recreational services	5815191	6445285	6348532	7438563	3484766	4076222	3225850	3959070
Health and medical related services	17498127	19394103	19102970	22382915	10485792	12265503	9706704	11912989
Readymade garments	1660853	1777602	1750710	2035965	4804956	4515806	4633501	5722681
Processed food	5308452	5681606	5595655	6507392	15357696	14433511	14809689	18290947
Alcohol and tobacco products	1996665	2137019	2104690	2447622	5776481	5428868	5570360	6879763
Travel related consumer goods	993417	1063249	1047164	1217786	2874021	2701070	2771468	3422946
Footwear	1671	1789	1762	2049	4835	4544	4663	5759
Soaps, cosmetics and glycerine	515554	551795	543447	631995	1491532	1401776	1438310	1776408
Gems and jewellery	196742	210572	207387	241178	569188	534936	548878	677901
Books, journals, magazines, stationery, etc.	879830	941678	927432	1078544	2545406	2392231	2454579	3031568
Total – all	591392904	645390334	644961480	763239208	1026481088	1090489898	1068421176	1261477570
Total – tourism characteristic	37623658	41499835	36769552	44487069	44218419	48903899	33726922	48800129

TABLE A12: ANNUAL WAGE AND NON-WAGE INCOME BY INDUSTRIES (RS LAKH)

Source: NCAER compilation using NAS, MoSPI.

		201	8-19			2019-20				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Agriculture and allied	10219086	8816244	14248485	11816037	10927085	9500454	16102138	13286761		
Mining, other manufacturing, construction, electricity,										
gas and water supply	16476623	16700651	16697279	18522266	18268766	17493206	17367326	19226436		
Trade	7003101	6810141	7116468	7897454	7563027	7272969	7631582	8398065		
Transport freight services	4356248	4236219	4426768	4749819	4639330	4461401	4681383	5151561		
All non-tourism specific services	95644544	102050103	92166652	93545403	108394943	111952420	98651035	101388327		
Accommodation services/Hotels	193771	188432	196908	216027	216871	208554	218837	240816		
Food and beverage serving services/Restaurants	1225389	1191625	1245226	1366135	1371471	1318872	1383902	1522895		
Railway passenger transport services	468581	455670	476166	531097	522955	502899	527695	580695		
Road passenger transport services	1052967	1023954	1070012	1147695	1128453	1085174	1138682	1253046		
Water passenger transport services	80608	78387	81913	84492	76734	73791	77430	85207		
Air passenger transport services	255386	248349	259520	467006	313002	300998	315839	347561		
Transport equipment rental services	45358	49716	41519	42004	50803	54324	44531	44738		
Travel agencies and other reservation services	86348	83969	87746	89560	80108	77036	80834	88953		
Cultural and religious services	87308	95697	79918	80851	97788	104566	85716	86113		
Sports and other recreational services	1646229	1804409	1506891	1524490	1843843	1971642	1616217	1623703		
Health and medical related services	4223269	4629068	3865810	3910959	4708111	5034437	4126885	4146000		
Readymade garments	350078	364668	354734	388424	355815	352216	340782	370745		
Processed food	1177917	1227009	1193582	1169834	1353666	1339970	1296471	1410462		
Alcohol and tobacco products	607773	633103	615855	603602	619857	613586	593667	645865		
Travel related consumer goods	217948	227032	220847	242395	236612	234219	226615	246540		
Footwear	349	363	353	387	386	382	369	402		
Soaps, cosmetics and glycerine	97441	101502	98736	109505	100639	99620	96386	104861		
Gems and jewellery	56804	59171	57559	63837	55171	54613	52840	57486		
Books, journals, magazines, stationery, etc.	157206	163758	159297	176672	176707	174919	169241	184121		
Total – all	145730331	151239241	146268245	148745952	163102143	164282267	156826405	160491358		
Total – tourism characteristic	9365214	9849276	8911629	9460317	10410139	10732293	9616568	10019725		

TABLE A13: QUARTERLY WAGE INCOME BY INDUSTRIES (RS LAKH)

Table A13: (Contd.)

	2020-21 2021-22							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Agriculture and allied	11825456	10526645	17794534	14024119	12871550	11374822	19303365	16162242
Mining, other manufacturing, construction,								
electricity, gas and water supply	11719417	17539653	18348790	21824099	18046310	19505346	19643081	23497951
Trade	4518232	6520724	7269994	8078442	6969407	7603571	9251224	9512090
Transport freight services	444643	2882410	4285859	6745402	903693	4163058	4223504	6947185
All non-tourism specific services	99620302	107782120	107944134	118020697	119211567	131559570	127617195	139061315
Accommodation services/Hotels	140669	203014	226341	251511	194695	212411	258439	265727
Food and beverage serving								
services/Restaurants	889576	1283838	1431359	1590531	1231232	1343264	1634343	1680428
Railway passenger transport services	-1662	18473	95346	271475	109781	172491	274179	385444
Road passenger transport services	152076	979543	1384739	2072634	635090	1077895	1158437	2124332
Water passenger transport services	4224	15364	31393	50949	16940	27661	45238	49682
Air passenger transport services	26109	94973	194061	314953	114136	186363	304790	334734
Transport equipment rental services	25226	63899	66533	64955	65856	76157	68131	59706
Travel agencies and other reservation services	4782	27848	46440	77431	-91695	117329	84129	94095
Cultural and religious services	48556	122996	128066	125029	126762	146591	131141	114925
Sports and other recreational services	915556	2319151	2414742	2357475	2390159	2764054	2472734	2166965
Health and medical related services	1561040	3954196	4117182	4019540	4226474	4887624	4372488	3831804
Readymade garments	234489	439342	436517	511949	395366	476915	466588	521393
Processed food	1042405	1368877	1333201	1506547	1444167	1564847	1543099	1737557
Alcohol and tobacco products	521490	684817	666969	753690	703920	762742	752142	846925
Travel related consumer goods	159991	288022	289058	337964	297737	352984	345644	387315
Footwear	256	480	477	560	510	615	602	672
Soaps, cosmetics and glycerine	63343	98324	102700	118635	105074	116136	114144	129397
Gems and jewellery	38797	60222	62902	72662	55799	61674	60616	68716
Books, journals, magazines, stationery, etc.	128488	199446	208322	240645	188140	207947	204381	231691
Total – all	134083462	157474377	168879660	183431894	170212669	188762068	194329633	210212291
Total – tourism characteristic	3766153	9083295	10136201	11196482	9019429	11011840	10804048	11107842

	2018-19				2019-20				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Agriculture and allied	58704297	50645568	81851477	67878100	63181744	54932790	93104531	76825677	
Mining, other manufacturing, construction,									
electricity, gas and water supply	43622356	44215478	44206550	49038257	43134344	41303171	41005958	45395498	
Trade	39358819	38274346	39995968	44385266	43356091	41693289	43749092	48143061	
Transport freight services	7607959	7398333	7731119	8295309	8071876	7762302	8145043	8963096	
All non-tourism specific services	79082434	84378787	76206785	77346787	88465492	91368893	80513095	82747110	
Accommodation services/Hotels	394343	383478	400727	439637	422566	406359	426396	469222	
Food and beverage serving									
services/Restaurants	2493784	2425071	2534154	2780215	2672262	2569774	2696484	2967307	
Railway passenger transport services	5410	5261	5497	6131	5209	5010	5257	5784	
Road passenger transport services	4027691	3916714	4092892	4390036	4298208	4133362	4337169	4772775	
Water passenger transport services	189882	184650	192955	199031	195350	187858	197121	216918	
Air passenger transport services	31128	30270	31632	56921	161872	155664	163339	179745	
Transport equipment rental services	27181	29793	24880	25171	32130	34357	28163	28294	
Travel agencies and other reservation									
services	138702	134880	140947	143861	141871	136430	143157	157535	
Cultural and religious services	52319	57346	47891	48450	61845	66131	54210	54461	
Sports and other recreational services	986506	1081296	903008	913554	1166110	1246935	1022151	1026886	
Health and medical related services	2530804	2773979	2316595	2343651	2977573	3183953	2609985	2622074	
Readymade garments	1012799	1055009	1026268	1123735	903911	894766	865719	941837	
Processed food	3407790	3549817	3453109	3384407	3438842	3404051	3293546	3583128	
Alcohol and tobacco products	1758326	1831608	1781709	1746260	1574680	1558749	1508148	1640750	
Travel related consumer goods	630539	656818	638924	701264	601089	595007	575692	626309	
Footwear	1008	1050	1022	1119	980	970	938	1021	
Soaps, cosmetics and glycerine	281902	293651	285651	316807	255662	253075	244860	266389	
Gems and jewellery	164337	171186	166522	184685	140156	138738	134234	146037	
Books, journals, magazines, stationery, etc.	454809	473764	460857	511122	448904	444363	429937	467739	
Total – all	246965124	243968153	268497140	266259776	265708765	256475996	285254226	282248654	
Total – tourism characteristic	10877749	11022738	10691178	11346658	12134995	12125833	11683432	12501001	

TABLE A14: QUARTERLY NON-WAGE INCOME BY INDUSTRIES (RS LAKH)

	2020-21				2021-22				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Agriculture and allied	68586457	61053486	103206512	81338482	74644066	65964315	111943137	93727290	
Mining, other manufacturing, construction,									
electricity, gas and water supply	28958154	43339696	45339037	53926369	47852438	51721287	52086512	62308264	
Trade	24644639	35567211	39654095	44063763	38088675	41554462	50559091	51984757	
Transport freight services	693676	4496777	6686264	10523338	1621081	7467861	7576290	12462140	
All non-tourism specific services	79877890	86422226	86552133	94631758	93340787	103009079	99922261	108882827	
Accommodation services/Hotels	219366	316590	352968	392219	339034	369884	450036	462726	
Food and beverage serving services/Restaurants	1387250	2002083	2232134	2480355	2144016	2339106	2845977	2926228	
Railway passenger transport services	-9	96	497	1414	593	932	1482	2084	
Road passenger transport services	538896	3471101	4906951	7344572	2516938	4271830	4591029	8418989	
Water passenger transport services	11646	42364	86563	140488	54363	88765	145173	159435	
Air passenger transport services	3323	12089	24702	40091	15513	25331	41427	45497	
Transport equipment rental services	12818	32469	33807	33005	35107	40599	36320	31829	
Travel agencies and other reservation services	9392	54687	91197	152055	-185458	237304	170156	190314	
Cultural and religious services	24673	62497	65073	63530	67576	78147	69910	61265	
Sports and other recreational services	465217	1178419	1226992	1197893	1274173	1473492	1318192	1155190	
Health and medical related services	793204	2009228	2092045	2042431	2172489	2512333	2247543	1969621	
Readymade garments	620609	1162782	1155305	1354946	1172788	1414690	1384056	1546625	
Processed food	2758871	3622926	3528504	3987290	3703895	4013408	3957630	4456361	
Alcohol and tobacco products	1380198	1812464	1765227	1994747	1852971	2007813	1979908	2229412	
Travel related consumer goods	423439	762291	765034	894469	776773	920907	901758	1010474	
Footwear	678	1271	1263	1481	1282	1546	1513	1691	
Soaps, cosmetics and glycerine	167647	260229	271811	313984	276205	305283	300048	340141	
Gems and jewellery	102681	159386	166480	192311	169171	186981	183775	208331	
Books, journals, magazines, stationery, etc.	340063	527861	551354	636901	560267	619252	608631	689959	
Total – all	212020779	248370230	300755947	307747891	272494744	290624607	343321855	355271450	
Total – tourism characteristic	3465777	9181624	11112929	13888052	8434345	11437723	11917246	15423178	

Table A14: (Contd.)





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