

Socio-Economic Impact of COVID 19 Pandemic on Kerala

A Comparative Analysis



Submitted to
**Finance Department
Government of Kerala**

January 2022



An Autonomous Institution of Government of Kerala
GIFT Campus, Thiruvananthapuram-17, Kerala, India

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PREFACE

It was in Kerala that the COVID-19 pandemic made its first appearance in India on 30 January 2020. Within 40 days of that the World Health Organisation declared the COVID-19 as a Global Pandemic. Kerala was also the first among the Indian states to come up with a COVID-19 package worth Rs.20,000 crore towards saving lives and ensuring the livelihood for the people when national approach was characterised by the highest level of lockdown strictness coupled with meagre fiscal support. Further, the government of Kerala appointed a few of committees to look into the various dimensions of the economic fallout of once-in-a-century health crisis. Kerala State Planning Board also came up with a highly comprehensive analysis of the impact of the pandemic during the first wave. At that time GIFT was entrusted with the task of examining the fiscal shock of COVID-19 on the economy. Predictions of GIFT study with respect to the growth performance of the economy in general and the fiscal impact of the pandemic, in particular, are in sync with our actual experience.

While Kerala's management of the first wave of the pandemic received much global acclaim that it deserved, the second wave of the pandemic turned out to be much more intense than everyone's expectations. The level of resilience and unconditional commitment of the health personnel braving their own lives demonstrated in saving lives and its outcome was exemplary even compared to advanced countries. This was achievable on account of the vibrant health system built overtime and the collective action which is an offshoot of our institutional thickness including the decentralized democratic institutions in the state. In the event of the second COVID-19 wave, the government of Kerala entrusted GIFT with the task of undertaking a comprehensive analysis of the socio-economic impact of COVID-19 and coming up with appropriate policy measures. The directive of the government was to undertake an analysis of the socio-economic fallout of the pandemic in the state against the background of the global, national and sub-national experiences towards addressing the adverse economic and social consequences.

This report, submitted to the government of Kerala, has been prepared under the overall direction of the undersigned with the active involvement of every faculty member at GIFT. While everyone contributed to every chapter, the prime responsibility of each Chapter was assigned to one of the faculty members. Accordingly, the lead role in the preparation of the chapters has been assigned as indicated below; Introduction (undersigned); Chapter 2 (undersigned and Dr N Vijayamohanan Pillai); Chapter 3 (Dr Kiran Kumar Kakarlapudi); Chapter 4 (Dr Santhosh Kumar Dash); Chapter 5 (Dr Zakaria Siddiqui and Dr Anoop S Kumar); Chapter 6 (Dr Renjith P S); Chapter 7 (Dr Parma Chakravarti and Ms Anitha Kumary L); Chapter 8 (Dr Thomas

JosephThoomkuzhy, Dr N Ramalingam, Ms Shency Mathew and Mr George Joseph and Chapter 9 (undersigned, Ms Anithakumary L, Dr Zakaria Siddiqui and Dr Kiran Kumar Kakarlapudi with substantial input from Dr N Ramalingam). My data-savvy colleagues derived much confidence in handling the Consumer Pyramids Household Survey (CPHS) data set with the leadership given by Dr Zakaria Siddiqui. Ms Anitha Kumary's involvement in the primary survey added to its substance.

Drawing from the global experience, this report highlights the relevance of activist role of the state through countercyclical fiscal policies and belied the commonly held notions about the role of borrowing and public debt in crisis conditions. Based on a detailed analysis of the world's largest longitudinal household survey data covering 1.75 lakh households in India (7000 in Kerala) we explored the impact of COVID-19 on employment, income, consumption, borrowing/debt and immigration and emigration in comparison with other states and India in general. This analysis was supplemented by data gathered through our own primary survey. Considering the relevance of migration and remittances a special primary survey was implemented among the Non-Resident Keralites.

This voluminous report, running into nine chapters, also examined how has the pandemic affected the fiscal health of the state. With the revenue deficit and the fiscal deficit hitting the roof mainly on account of the countercyclical policies of the state, the current fiscal position is rather precarious and unsustainable. The fiscal position is likely to hit the hilt in business-as-usual scenario. Yet we firmly believe that the state is capable of coming up with extraordinary interventions as demanded by the extraordinary times by harnessing our own under-utilised potential. Hence, we propose the New Deal for a Resurgent Kerala (NDRK) which, if implemented in letter and spirit, will enable the state to make a major turnaround not only in the growth performance of the state but also in its fiscal health.

While preparing the first of its kind report in the country, we developed a strong string of indebtedness to a number of individuals and institutions. What follows is the most urgent payoffs. Shri K N Balagopal, our chairman and honourable Finance Minister of Kerala, was very prompt in providing the necessary sanctions for obtaining the database. Further in all our meetings, he raised highly pertinent, provoking and insightful questions that formed the starting point of our enquiry. Prof V K Ramachandran, Vice Chairman, Kerala State Planning Board and Shri R K Singh IAS, Additional Chief Secretary (Finance) were a source of encouragement, inspiration and ideas. We benefitted immensely from the members of the Research Advisory team of this study; The preliminary results were presented in two workshops. During these workshops, the Research Advisory team offered highly critical yet constructive and helpful comments. Prof T M Thomas Isaac, former Chairman and presently Distinguished Honorary Fellow

of GIFT, apart from offering very valuable feedback during the workshop, read through different parts of the report more than once. Without his comments, the report would have been lost in the forest of data. Prof Oommen put his pen into some of the chapters where you will definitely feel the difference. The positive criticism and unconditional patronage of Dr A V Jose and Prof D. Narayana helped immensely in improving the draft report. We cannot think of a better sounding board than Prof K N Harilal, who offered clear directions at crucial junctures. Dr Ravi Raman's demand for more with every new question made us work harder. Shri P C Mohanan provided us with necessary inputs to cautiously use the CPHS data. We have been the beneficiaries of the opportunities for open – ended discussions that our Honorary Fellows Shri G Vijayaraghavan, Prof Irudaya Rajan and Shri R Mohan IRS provided us liberally. Dr. Shyjan Davis has been very helpful in providing data and information from office of the Minister.

There are many more to be acknowledged. Officials from Cooperative Department, different cooperative societies, leaders of civil society organizations, officials of NORKA, Department of Economics and Statistics, among others and more importantly the respondents of our primary survey. While undertaking the survey the reach out to the respondents was significantly enhanced because of the active support we received from our close associates such as MLM trainees, Tax Consultants, Building & Contractors Association and the PGD-GST Students of GIFT among others. We also benefitted from NORKA and Welfare Boards for Shops & Establishment and Traders among other Welfare Fund Boards for collecting the data. Efforts taken by all of them are hereby duly acknowledged and appreciated. We also thank Shri Pankaj Gujjar and Dr Kaushik Krishnan of CMIE who promptly and patiently responded to all our queries regarding CPHS data during the meetings that we organised.

GIFT administration led by Shri Raja Gopal offered all the necessary support. We are especially thankful to Aswathy R and Letha Kumary A. Once again Dr U P Anilkumar surprised us with his design skills. All our Ph D scholars were forthcoming whenever their assistance was needed.

We are aware that we have seen only the tip of the iceberg and we are committed to dive deeper. Yet it is our hope that the policymakers will find it useful.

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The countries across the world during the COVID-19 pandemic are seen to be in two distinct blocs. First, those who managed to put their economies back to pre-pandemic position while others continue in their southward trend in GDP growth triggered by the pandemic, and their recovery to the pre-pandemic position is far from sight. The critical difference between these two sets of countries seems to be the quantum of public spending. On account of the actions taken by the first set of countries, the public debt burden globally is at an all-time high (\$226 trillion), leaving the debt-GDP ratio the highest in the past 50 years. Concern for debt burden did not deter them from borrowing during crisis. The COVID induced crisis thus, once again, reinforced the paramount role of the state in a world which has persistently pushed the state to a back seat.

India also demonstrated a highly proactive response inter alia by social distancing and credited with one of the strictest lockdowns in the world. As a result, the country was fairly successful in managing the spread of infection during the first wave. However, the downside of such a strict lockdown had a devastating impact on the livelihoods at an unprecedented scale. India lost about 234 million jobs during the lockdown. India radically differed in its COVID response strategy as it chose to depend on monetary policy instruments to pump adequate liquidity to grease the wheels of the economy instead of fiscal instruments. As a result, India's fiscal spending remained muted at 4.2% of GDP vis-à-vis developed country average of 13.7%. Unfortunately, financial institutions failed to pump liquidity in the envisaged quantum.

Sub-national governments also participated actively in combating the pandemic's adverse effects, particularly in garnering additional resources in ensuring food entitlements and other basic necessities for vulnerable sections of the society. States also actively tapped centrally funded MGNREGA as elicited by higher-than-expected expenditure under this head for 2020-21.

Kerala stood head and shoulders above all the states in providing social protection to its people during the pandemic. The extent and depth of coverage were exemplary as it covered almost every citizen through various targeted schemes in addition to overarching universal coverage for food entitlement, popularly known as Food-Kit, for almost a year, while in other states such measures faded away after the relaxation of the lockdown. This resulted in the unprecedented growth of social welfare expenditure in Kerala-- 163% in 2020-21 (RE) compared to 2019-20 (actual).

While the proactive state is a necessary condition, the collective action *inter alia* based on Kerala's pre-existing institutional thickness achieved through years of democratic decentralisation was a sufficient condition for the state to demonstrate exemplary success in protecting the lives and livelihoods during once-in-a-century crisis. The vibrant health system and the unconditional commitment of the health workers, even braving their own lives, made our mortality rate one of the lowest in the world. Most respondents in the GIFT primary survey highly rated the support from the health system, local bodies and NGOs in providing benefits/reliefs/support services during both waves, namely ambulance facility, medical help, community kitchen, direct financial help, food provision, loan moratorium, and quarantine facility.

Against this background, and considering the mandate given by the Government, this report explored socio-economic impact of COVID-19 on different sectors of the economy and sections of the society in Kerala. This has been accomplished by a detailed analysis of employment, income, consumption, borrowing/indebtedness, immigration and emigration in comparison with other states. For the empirical analysis we made use of the data provided by the CMIE-CPHS. This is perhaps the largest longitudinal household data in the world that covered 1.75 lakh households in India (7000 in Kerala) with a quarterly coverage. GIFT also conducted a specific primary survey focusing on qualitative aspects of socio-economic and psychological well-being, emphasizing on returned migrants to complement the analysis.

Employment in Kerala during the pandemic

The immediate impact of the lockdown was on employment. It plummeted to unprecedented levels. The loss of jobs in Kerala during the COVID first wave was 23 per cent (almost four times higher) than 6 per cent at the national level (see Chapter 3: section 3.4). The magnitude of employment loss is considerably lower in the second wave of the pandemic than in the first wave. However, Kerala lost 7% jobs in the second wave compared to 1% at the national level.

Such aggregate experiences would be far from uniform, given the nature of the crisis. The impact of the pandemic differed across various socio-economic and demographic classifications such as industry of economic activity, occupation, educational attainment, gender, age groups, rural-urban areas, and social category.

Among the sectors of economic activity, the employment in construction and manufacturing sectors were most severely hit during the first wave. The construction sector has almost reached the pre-pandemic levels in terms of recovery. However, the manufacturing sector in Kerala continued to deteriorate with no signs of recovery.

At the national level, women, youth, informal workers, and scheduled communities were the worst affected groups, in terms of loss of employment. Further, their recovery is far

from sight. In Kerala also, these groups experienced the same fate as far as intensity of impact is concerned. However, in terms of their employment recovery, these groups in Kerala were the fastest to reach the pre-pandemic levels.

In general, employment in urban areas was disproportionately affected, with Kerala losing 30% of jobs in urban areas vis-à-vis all India average of 10% during the first wave. During the second wave, one outstanding feature of Kerala is that rural areas lost more jobs than urban areas.

Income

The collapse of employment is intimately linked to loss of income. The severe impact Kerala endured vis-à-vis the rest of India in employment also manifested in income losses. Since Kerala is a high wage and labour-income driven economy, the incremental impact of employment loss on income was proportionately more in Kerala. The average wage of casual workers in Kerala (Rs 608) is more than double the national average (Rs 275). Additionally, a larger proportion of income in the state is generated through wages - 80% compared to 70% at the national level. As a result, the median household in Kerala lost 54% of income during the first wave, while the corresponding loss for the rest of India was 34%. Further, income recovery in Kerala reflects the stunted V-shaped recovery in employment. In the second wave, the income loss of median households was 22% for Kerala, while the rest of India lost about 4%.

As is the case of employment, the impact on income was also different across socio-economic and demographic indicators. In the first wave, loss of income for the median household engaged in sectors such as construction and travel, tourism, hotel and restaurants were highest in relative terms in Kerala and at the national level. Households depending on elementary occupations, mostly unskilled and semi-skilled, experienced the largest dip in their income. They lost 62% of their income in the case of Kerala as against 44% at the national level. The GIFT survey also corroborated these findings.

The marginalised castes such as SC and ST suffered the most in the first wave of the pandemic. The income loss of SC-ST households in Kerala was 60.8% against 40% at the national level. One distinctive feature of Kerala during the pandemic has been that the households belonging to marginalised markers have bounced back faster. This is evident both in employment and income recovery.

Notably, the GIFT survey corroborated that Kerala initiated targeted cash transfers to workers who lost jobs through the occupation-based Welfare Boards. As per CPHS data, the growth in the transfer of income by the Kerala government was the highest among the Indian states.

Consumption

During times of pandemic, it is understandable that employment and income may deteriorate at a colossal scale. However, a society's resilience in withstanding the shock could be judged by its ability to sustain its consumption level. Hence, the analysis of changes in consumption of different socio-economic and demographic groups during the pandemic assumes paramount significance. Since societies significantly differ in their level of resilience, the extent of transmission of adverse effects of loss in employment and income will also be different. A society can differ in their resilience because of their saving behaviour or the supportive role of the state and other civil society organisations.

Kerala emerged as one of the highest per-capita consumption expenditures among Indian states from the early 1990s. Kerala's pre-pandemic average MPCE was to the tune of Rs 5000 compared to the national average of around Rs 3500, which almost halved during the peak of the nationwide lockdown. The corresponding fall for all India was about 37%. Further, recovery is not back to the pre-pandemic levels; at best, it is a stunted V-shape recovery (MPCE of around Rs 4000 in post lockdown period). Despite these massive shocks, Kerala remains one of the states with the highest level of MPCE in India. During the second wave, Kerala witnessed a further shock on its consumption, largely absent for the rest of India.

During the pandemic, it is essential to examine the consumption of basic necessities, particularly food. It must be noted that Kerala's expenditure on food remains at a much higher scale than the rest of India, despite a significant reported decline in food consumption expenditure across the rest of India. Results indicate that while Kerala's out of pocket expenditure on cereals and pulses reduced drastically, the decline in consumption of other food items such as meat, fish, egg, fruits and vegetables were moderate. However the trend at all Indian level is just the opposite (Figure 5.3). This counterintuitive observation can be attributed to the Kerala government's generous PDS grant to nearly 82 lakh households popularly known as Food-Kit, mainly consisting of cereals and pulses. As the CPHS data exclusively captures out of pocket cash expenditures by households; it fails in capturing in-kind transfers to households from any source including self-production. As per the GIFT survey, more than 70% of respondents rated food-kit as a major source of help in meeting the basic food requirements.

The recovery of non-food consumption has also been disproportionately slow in Kerala, which got further affected by the second wave. However, recovery is comparatively better for the rest of India and was not affected by the second wave (Figure 5.2). Such a trend in Kerala's non-food consumption implies uncertainty for the recovery of employment in the manufacturing sector. Further, it has implications for state finances as GST revenue collections largely depend on non-food consumption in the state.

The disaggregated analysis of impacts on consumption shows very divergent patterns in terms of magnitude and recovery across socio-economic and demographic markers. For instance, in Kerala, the decline in consumption was the highest for fisher folks, construction workers, trade, travel and tourism-based households, and they continue to remain much below the pre-pandemic levels. Trends in consumption patterns of social categories correspond closely with employment and income analysis results. In the post-lockdown period, scheduled communities in Kerala recovered to a greater extent, while the case of the opposite for the rest of India (Figure 5.4).

Borrowing and debt

As households lost their livelihood during the pandemic, sustaining consumption for a significantly large number of households would have become extremely challenging. They may have been compelled to seek external sources such as borrowing from friends and relatives or formal financial institutions. In addition, the government of India also envisaged a greater role of financial institutions in combating the adverse impacts.

Contrary to these expectations, a reverse trend was observed. Kerala, known for its heavy reliance on bank finance (about 68%), the dependence declined by about 25% during the pandemic. Similar is the case for the rest of India. However, in the case of Kerala SHGs, the cooperatives came forward mostly through interest-free lending to fill this void (Table 6.2). During the pandemic, the cooperative sector of Kerala alone, lent over Rs one lakh crore with provision for interest-free lending at the behest of the state government initiatives announced for countering the adverse effects. Lower middle-income households, scheduled communities and small traders and wage earners were the main beneficiaries of this lending. The responses from the GIFT survey also reaffirms such findings.

Ironically, people felt an obligation to refinance their debts to the PSBs by borrowing from SHGs and cooperatives, implying the failure of PSBs in coming forward to provide relief as envisaged by the Union Government's policies. Instead, during the last quarter of 2020-21, the PSBs in the country recorded a profit of Rs 33,000 crores.

Immigration and Emigration

One of Kerala's distinguishing features is high out-migration and associated remittance income. During the COVID, many migrants returned as expected. Given the global economic scenario, growth of out-migration in the subsequent periods has remained subdued in Kerala. Growth in out-migration reduced by 93% against a reduction of 44% for all other Indian states. The GIFT survey of Non-resident Keralites (NRKs) also corroborates this trend. As it is well documented, Kerala has emerged as an attractive destination for migrant workers from low-income states. This trend has further pushed during the pandemic as the in-migrants per thousand population peaked in Kerala after

the lockdown period. Therefore, there is a net decline in out-migration which led to a 13% decline in remittance income accruing to the state.

About 70% of the migrants who returned to the state after losing their jobs remain unemployed. The high unemployment rates and financial stress among the returnees have caused severe psychological challenges. The GIFT survey of NRKs indicates that such individuals expect supportive mechanisms from the state in the form of financial assistance for re-migrating, provision of loans at a lower interest rate and/or direct cash transfers.

Insights from GIFT-COVID Primary Survey

Since the CPHS survey is not specifically designed to capture the idiosyncrasies of a once-in-a-century pandemic, it was necessary to complement the analysis through an online GIFT COVID survey. The survey had two components where 4,200 respondents were regular residents of Kerala and 1,151 were returned migrants.

The survey provided much-needed grassroots-level accounts of hardships experienced by different sections of the society, particularly the socio-psychological and health-related traumas. Largely, the results from the analysis of the survey data reaffirm the results derived from the nationally representative dataset. For instance, it reconfirmed that the loss of jobs and incomes were disproportionately more for the construction sector, services sector, and the industry sector. Further, individuals working in the private sector appears to be disproportionately affected than those in the government and the cooperative sector.

The additional insights from the survey were: (a) Most respondents were worried about ‘mental struggle’, indebtedness, educational attainment of their children (b) A significant number of respondents resorted to selling their valuable assets to sustain their consumption levels as a result of loss of their jobs and income (c) Most respondents highlighted the relieving effect of state government measures of ‘Food Kit’ and free vaccination (d) Respondents in general were highly appreciative of the role played by the local institutions such as Panchayats, SHGs and NGOs.

Fiscal Implications and the New Deal for a Resurgent Kerala (NDRK)

Kerala had to pay a high price for saving the lives and livelihood of people during the pandemic. The unprecedented growth in revenue expenditure to counter the adverse impact of the pandemic is estimated to have pushed the revenue deficit to 6% of GSDP and fiscal deficit to 7.4% in 2021-22. This is undoubtedly unsustainable, precarious and much beyond the limit set by the FRBM. Going by the projections for the next few years, the business-as-usual scenario is bound to manifest in the state’s fiscal position crumbling further.

Extraordinary times warrants extraordinary interventions. Considering the imperative of a strategy to get the state out of the present precarious fiscal position, we propose, drawing insights from our study and taking cognisance of state's underutilized potential, a **New Deal for a Resurgent Kerala (NDRK)**. NDRK stands on three pillars.

The central pillar is the synergy between pre-existing decentralised democratic institutions coupled with the 'collective action' based on the institutional thickness of the state as manifested in civil society organisations, SHGs, cooperatives socio-religious organisations among others and the innovative institutional interventions introduced in the recent past such as Knowledge Economy at the instance of K-DISC, re-build Kerala, KIIFB, Start-up Mission, Loka Kerala Sabha among others.

The challenge for the state is to make effective use of the first pillar to build the second pillar that involves mobilization of the latent financial and others resources for an ambitious investment strategy, led by the cooperatives with the active involvement of NRKs, private sector and others, in the coming three years, to the tune of Rs 1.5 lakh crore to 1.75 lakh Crore.

For a state wherein the people are perceived to be rich and the government poor, while the tax-GSDP ratio is at African level and social provisioning at that of Scandinavia, the third pillar dwells on raising the own tax to GSDP ratio to 9.5% within three years coupled with expenditure rationalisation.

Chapter 1

Introduction

Abstract

That the pandemic has ravaged almost all sectors of the economies and sections of societies across the world, regardless of their level of development and social transformation, is now widely accepted. In India, COVID has turned out to be the third shock over the double whammy of demonetisation and GST, thus setting in motion a major setback to the already sliding economy. For Kerala, the COVID crisis has become the fourth shock as the state had to confront two unprecedented floods and a Nipah virus outbreak during the two-years preceding the pandemic.

Against this backdrop of global, national and sub-national experience we present the findings of our enquiry into the socio-economic impact of COVID with respect to employment, income, consumption, and borrowing of the people in Kerala in comparison with the rest of the country. Also highlighted is the pandemic impact on the emigrants and immigrants of the State. The study makes use of two data sources: (i) the Consumption Pyramid Household Survey (CPHS) Data of the Centre for Monitoring Indian Economy (CMIE), perhaps, the largest available longitudinal household level database in the world, covering 0.175 million households in India thrice a year; and (ii) a primary sample survey (GIFT COVID Primary Survey – 21: GCPS-21), undertaken by the GIFT using a specifically designed questionnaire, accessing over 4200 responses from individuals representing households engaged in different sectors of the economy and sections of society in Kerala; as well as a special primary survey of Non-resident Keralites (1151 respondents), including focus-group discussions with concerned individuals/groups.

1.1 The context of COVID-19

The novel coronavirus disease 2019 (COVID-19), with its origin during December 2019 in Wuhan, China, was first reported in India within a month in Kerala itself (30 January 2020) and the WHO declared it as a public health emergency of international concern on the same day. Since then, morbidity and mortality with the emergence of new variants of the virus increased in leaps and bounds. As of 14 January 2022, there have been 31,86,48,834 confirmed cases of COVID-19, with 55,18,343 deaths in the world, reported to WHO, giving a case fatality ratio (CFR: proportion of deaths among identified confirmed cases) of 1.73%.¹ Even though the WHO set out a target to vaccinate 40% of the population of every country by the end-2021 and 70% by mid-2022, many countries have missed the 40% target at the end of 2021; as of 15 January 2022, 59.9% of the world population received at least one dose of a COVID-19 vaccine. However, only 9.5% of people in low-income countries have so far received at least one dose.² While the UAE stands first with 99% of the population having received at least one dose of vaccine, followed by Portugal (93.72%), Cuba (92.92%), Chile (90.95%), Singapore (88.41%), and China (87.5%), as of 15 January 2022, India ranks 19th with 65.16% of the population vaccinated.³

India

The total number of cases in India had remained more or less under control during the first wave with total cases being in the range of only 11 million in March 2021. But by late April 2021, with the onset of the second wave resulting from the new delta variant of the virus, the situation became rather worse and India led the world in new and active cases. On 30 April 2021, India became the first country to report over 400,000 new cases in a 24-hour period and by July 2021 the total reported number of cases increased three-fold to reach over 30 million. As of the morning of 17 January 2022, there have been 37,380,253 confirmed cases of COVID-19, including 4,86,451 deaths, giving a case fatality ratio of 1.301%.⁴ Active cases in India now stand at 4.43% of total cases (against 0.22% of 28 December 2021, the lowest since March 2020), with a daily positivity rate of 19.65% (against 0.61% of 28 December 2021) and a recovery rate of 94.27%⁵ (against 98.40% of 28 December 2021, the highest since March 2020).⁶ Spread of the Omicron variant of the virus is becoming a major concern in India as well with 8209 cases so far as of 17 January 2022 (Maharashtra accounting for 1738 cases, West Bengal for 1672,

¹ <https://covid19.who.int/>. Accessed on 17.01.2022.

² https://ourworldindata.org/covid-vaccinations?country=~OWID_WRL. Accessed on 17.01.2022.

³ <https://ourworldindata.org/covid-vaccinations>. Accessed on 17.01.2022.

⁴ <https://www.mohfw.gov.in/>. Accessed on 17.01.2022.

⁵ <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1790402>. Accessed on 17.01.2022.

⁶ <https://pib.gov.in/PressReleasePage.aspx?PRID=1785860>. Accessed on 29.12.2021

Rajasthan for 1276, Delhi for 549, Karnataka for 548 and Kerala for 536.⁷ India started her vaccination drive on 16 January 2021, and after a year her cumulative vaccination coverage has exceeded 157.2 crore.⁸

Kerala

While Kerala had displayed remarkable success in controlling the pandemic during the first wave (Isaac and Sadanandan, 2020 among others), the worst befell during the second wave, especially from October 2021 onwards. Thus, the largest single-day spike of 11,755 cases in Kerala was reported on 10 October, and on 26 October 2021, India's Ministry of Health and Family Welfare posted that Kerala contributed the maximum in the last 24 hours to the new confirmed cases in India with 6843 cases, followed by Maharashtra with 6059 and Karnataka with 4439 cases.⁹ At its peak Kerala accounted for over 60% of the daily cases reported in the country. However, thanks to a host of factors, especially the resilient health sector, Kerala has had the lowest case fatality rate among the Indian states. As on 6 November 2020, the rate was 0.346% (with 466,466 cases and 1,613 deaths) against the national rate of 1.486% (with 8,411,724 cases and 124,985 deaths), and Punjab's 3.152%, Maharashtra's 2.63%, Gujarat's 2.11%, Tamil Nadu's 1.5299%, Karnataka's 1.348% and Andhra Pradesh's 0.808%.¹⁰ As of 16 January 2022, Kerala reported a CFR of only 0.945%, with 5,378,831 confirmed cases and 50,832 deaths.¹¹ However, it should be noted that, as elsewhere, Kerala also is now under the grip of a new wave, with the test positivity rate (TPR) rising continuously (from a low of 5% on 1 January 2022) to a record high of 30.5% on 16 January 2022¹² (the earlier record high TPR in Kerala was 29.75% on 12 May 2021, with 43529 cases).¹³ As of 14 January 2022, 4.94 crore dose vaccinations were done in Kerala.¹⁴

Undercounting of cases and deaths

It is unfortunate to note that many instances of undercounting of total cases and death figures were reported during both the first and second waves in many states in India (as elsewhere globally). The official death counts released by the governments were found to differ substantially from the number of deaths reported in obituaries, at crematoria and burial grounds, etc. It is reported that many states, contrary to the WHO guidelines, have

⁷ <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1790402>. Accessed on 17.01.2022.

⁸ <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1790402>. Accessed on 17.01.2022.

⁹ <https://pib.gov.in/PressReleasePage.aspx?PRID=1667546>. Accessed on 29.12.2021.

¹⁰ <https://pib.gov.in/PressReleasePage.aspx?PRID=1670715>. Accessed on 29.12.2021.

¹¹ <https://dashboard.kerala.gov.in/covid/index.php>. Accessed on 17.01.2022.

¹² <https://dashboard.kerala.gov.in/covid/testing-view-public.php>. Accessed on 17.01. 2022

¹³ <https://dashboard.kerala.gov.in/covid/daily.php#>. Accessed on 17.01. 2022.

¹⁴ <https://dashboard.kerala.gov.in/covid/vaccination.php>. Accessed on 17.01. 2022.

not added suspected (probable) COVID-19 deaths¹⁵ in the final count; and some of the states have tended to attribute the COVID-19 deaths to the patients' underlying conditions or co-morbidities. In this respect, two states, Gujarat and Telangana, were found to have under-counted very heavily.¹⁶ Several countries have now recognised that counting suspected deaths is crucial for getting the true picture of the impact of COVID-19. Thus, in April 2020, the US Centres for Disease Control and Prevention asked the American states to report “probable deaths” apart from confirmed deaths as well.¹⁷ However, in India, it is still not clear if suspected deaths are also to be counted.

The Hindu daily (11 September 2021) sought to estimate the 'excess mortality' (the number of additional deaths during the pandemic) in 11 Indian States/Union Territories using their Civil Registration System (CRS) data and found it to be was 5.78 times the official COVID-19 death toll (See Appendix Table A.1.1), the highest among nations with the most recorded fatalities due to the pandemic. *The Hindu* estimated the excess deaths as the difference between the registered deaths (in the pandemic period) during the period between April 2020 and May 2021, and the average number of deaths registered during the period between April 2018 and May 2019. It was also found that the share of registered deaths in India was about 92%, and only 20.7% were medically certified in 2019, making this undercount estimate itself a conservative one. Note that Madhya Pradesh topped the list with an undercount estimate of 23.8 (times), followed by Andhra Pradesh (17.88 times) and west Bengal (11.15 times). Though Kerala appears to have a reverse case in this list, an earlier exercise by *The Hindu* (25 June 2021) reported an estimated undercount factor of 1.6 for Kerala, still the lowest among the states studied. It must be noted that in response to the criticism about the under-reporting of COVID-19 deaths in Kerala, the State government introduced on 15 June 2021 an online, real time COVID-19 death reporting system, wherein all deaths are entered directly by doctors onto the WHO's reporting format, from which the data on deaths are compiled and the count released by districts.¹⁸

¹⁵ Suspected (probable) deaths are deaths among patients with COVID-19 symptoms, who lived in or travelled to an area with community transmission, and who did not have positive results from nucleic-acid tests.

¹⁶ <https://www.bbc.com/news/world-asia-india-53773070>. Accessed 6 January 2022.

¹⁷ <https://science.thewire.in/health/india-mccd-comorbidities-covid-19-deaths-undercounting/>. Accessed 6 January 2022.

¹⁸ Similarly, a study by the Centre for Global Development reports excess mortality estimates for India from three different data sources from the pandemic's start through June 2021: (i) extrapolation of state-level civil registration from seven states suggests 3.4 million excess deaths; (ii) applying international estimates of age-specific infection fatality rates (IFR) to Indian seroprevalence data implies a higher toll of around 4 million, and (iii) an analysis of the Consumer Pyramid Household Survey, a longitudinal panel of over 800,000 individuals across all states, yields an estimate of 4.9 million excess deaths in India (Anand, Sandefur and Subramanian 2021). This report also shows Kerala with the lowest excess deaths among the Indian states, with (near) zero during the second wave (Anand, Sandefur and Subramanian 2021: 21 Appendix Table 1.1).

Looking back at the context

COVID-19 pandemic has, undoubtedly, been an unprecedented catastrophe that has hardly left untouched any sectors of the economy and sections of society, regardless of the stage of social transformation and level of development. Its impact has been pervasive in its true sense – social, economic, psychological and ecological. It has taught the human beings many lessons that would have been impossible or rather difficult to teach otherwise. As the social distancing became the globally proclaimed procedure to prevent the spread of the pandemic, people in general, otherwise content with their atomistic behaviour, have started feeling wrung under the pain of isolation from society and thus appreciating the worth of the fellow beings. The pandemic has taken away the lives of millions *albeit* the health workers have exercised their unfailing and unconditional commitment to profession even risking their own lives. At the same time, many more millions have lost their lifeline livelihood, resulting in untold hardships and dreadful miseries in the aftermath of the COVID-induced lockdown. The trauma, with the surging suicide under the excruciating pain of loneliness and the debilitating anxiety for future inter alia due to debt burden, is yet to be fully fathomed even by the psychologists, let alone the hapless survivors. On the other hand, the unprecedented disaster has given rise to some novel opportunities at least for a self-select few who, more often than not, have resorted to unscrupulous profiteering (Rikap and Lundvall 2020). The southward trend in the growth curve, however, seems to have given some respite for mother nature in terms of some cleaner air, water and environment.

With the pandemic-induced supply chain disruptions in the global production networks, the faith in comparative advantage has faded beyond imagination and given rise to the essential relevance of standing on one's own feet. Many of the less developed countries have found themselves unarmed against the pandemic harms and have frantically resorted to abject begging for vaccines, but in vain, leaving millions of lives at heightened risk. The developed countries apparently remained unconcerned with the basic economic logic of global public goods and externalities that products such as vaccines entail in an interconnected world. Hence the help cries have fallen into the deaf ears of the developed countries, bent on 'beggar-thy-neighbour policies'. The poor countries have realised the folly of the promises of market-driven development, engagingly enforced on them by the so-called international development funds agencies. Thus, the greatest shock, perhaps, has been on the foundations of the unconditional faith in the magic of market in resolving various socio-economic problems to the extent of denouncing the role of the State.

While the scholars of eminence have been reinforcing the state over the crumbling edifice of liberalism (Mazzucato), the pandemic seems to have changed the failing faith in the State. There is hardly any country in the world at present wherein the State has not stepped in and initiated various measures to help address the pandemic-induced socio-

economic crisis. It is significant that notwithstanding considerable variations in the approaches and the outcomes, people across the world, both the privileged and the less privileged, have once again felt the inevitable relevance of an activist State in times of crisis. In fact, such variations in the nature and extent of State intervention and their outcomes leave much scope for learning from the experience of each other.

1.2 Specific objectives

The resolution by the Government of Kerala, entrusting Gulati Institute of Finance and Taxation (GIFT) with the present study, reads;

“The economic crisis and the health care issues triggered by COVID 19 pandemic have pushed the State finance to an unprecedented crisis. The impact of COVID 19 induced to lockdown and containment restrictions have adversely affect economic and social well-being of all sectors of the society, especially employees in the informal sector, tourism, agriculture, hospitality. MSMEs etc. It is therefore imperative to conduct a study to assess the socio-economic fall out of COVID 19 pandemic on various sectors of States economy and formulate effective measures to address the challenges faced by State with focus on critical review of measures initiated by other State Governments and countries in addressing the challenges posed by the COVID 19. The Government after having examine the matter are pleased to entrust Gulati Institute of Finance and Taxation (GIFT) to conduct a study to assess the socio- economic fallout of COVID 19 pandemic on various sectors of State’s economy especially in the wake of the second wave of the pandemic and suggest effective measures to address the challenges being faced by the State so as to drive the State’s economy out of this crisis. GIFT shall also undertake a critical review of measures initiated by other State Governments and countries in addressing the challenges posed by the COVID 19 pandemic”.

In this context, the broad objective of the present study is to explore the socio-economic impacts of COVID-19 in Kerala and the response of the State to those impacts. It also aims at drawing lessons from the experience elsewhere - other countries and other States in India - for its continued fight for reviving the economy by protecting the lives and livelihood of people. More specifically, the study intends to analyse how the pandemic has impacted on the employment, income, consumption, borrowing and migration behaviour in Kerala, the role that the State has played and to highlight the policy pointers for the future course of action by the State Government to place the economy back to rails.

1.3 Approach, database and method

Considering the objectives for the study we approach the problem in a comparative perspective of global, national and regional planes, on one hand and other states in India and the national trend on the other. The study makes use of two data sources. First one is the Consumption Pyramid Household Survey (CPHS) Data provided by the Centre for Monitoring Indian Economy (CMIE). This database, drawn from a survey of 0.175 Million households in India thrice a year is, perhaps, the largest available longitudinal household level database in the world. Secondly, keeping the broad objective in mind the GIFT has undertaken a primary survey, called GIFT-COVID Primary Survey, using a specifically designed questionnaire. This google survey received over 4200 responses from individuals representing households engaged in different sectors of the economy and sections of society in Kerala. Thirdly, considering the importance of emigration and immigration in Kerala and the challenges being faced by those remaining in the host country and those who returned, a special primary survey was designed and implemented for those concerned. Finally, much insights have been gathered through the focus-group discussions and personal interviews of those hit hard by the pandemic and those who managed to overcome rather successfully the adverse impact of COVID-19.

With its coverage of all the States in the country, CPHS has proved itself an eminently useful data source for a comparative analysis of the socio-economic fallout of the pandemic in other states of the country as compared to Kerala. While the data set is amenable for intensive econometric modelling, the present study at this stage makes use of only descriptive statistics and graphics with a view to conveying the message effectively to as wider a cross section as possible. Analysis using CPHS data has been supplemented by a detailed analysis of the information gathered through the two primary surveys and insights with respect to the experiences of specific cases.

1.4 Readers' guide

The remainder of the study is organised in the following Chapters. Chapter 2 presents a detailed account of the response of different countries and States in India as manifested in the policy initiatives and action programmes. Using CPHS data Chapters 3 to 7 present an analysis of the impact of COVID 19 in Kerala in a comparative perspective with other states in terms of employment, income, consumption, borrowing and implications on migration and contrasted with the pre-pandemic situation. Thus, Chapter 3 takes up an analysis of the impact of COVID on employment with due focus on and across different socio- economic and occupational categories and sectors in the economy. While chapter 4 takes up the fall out on income, the focus of chapter 5 is on the changing pattern of consumption during the pandemic period. Since the people's ability to withstand any crisis in the short run is determined by the access to credit, chapter 6 takes a close look at the borrowing behaviour of the households in Kerala *vis a vis* the rest of India. The

bearing of migration and remittance on the development of Kerala has long been recognised. The new trend, however, is the inevitable dependence of Kerala economy on labour from other States - the guest workers. Hence chapter 7 takes up an analysis of emigration on one hand and immigration on the other. Perhaps, a distinctive feature of the study is our attempt to gather the feel of the people through an innovative google survey covering different sectors of the economy and sections of the society, more specifically the immigrants and emigrants. The readers are directed to chapter 8 for the insights from the field survey undertaken in a very short time. The question of paramount policy relevance is the bearing of the adverse economic impact of the pandemic on the fiscal health of the economy. Chapter 9 takes up this issue and highlights the stressed fiscal scenario in the state. Extra-ordinary times call for extraordinary interventions; the study comes up with a **New Deal for a Resurgent Kerala** (NDRK) by building on the initiatives already made and by effectively harnessing the institutional thickness led collective action in the State and along with its other endowments.

Appendix

State	Excess deaths	COVID-19 deaths	Multiple
Andhra Pradesh	195422	10930	17.88
Delhi	44748	24237	1.85
Haryana	60397	8303	7.27
Himachal Pradesh	6081	3127	1.94
Karnataka	125732	29090	4.32
Kerala	4178	9954	0.42
Madhya Pradesh	192004	8068	23.80
Maharashtra	310727	75877	4.10
Punjab	51316	14450	3.55
Tamil Nadu	154965	24232	6.40
West Bengal	120227	10787	11.15
Total	1265797	219055	5.78

Source: <https://www.thehindu.com/data/excess-deaths-during-the-pandemic-in-india-was-58-times-the-official-COVID-19-death-toll/article36405310.ece>. Accessed 6 January 2022.

Chapter 2

State and the COVID-19 Pandemic: Kerala in the Context of Global, National and Subnational Experiences

Abstract

The COVID-19 pandemic has caused unparalleled disruption worldwide through its devastating impact on life and livelihood, and awakened all the nation states against the common enemy, the virus. Thus, the crisis has quite ironically once again reinforced the paramount role of the state in a world that was persistently bent on pushing the state to a back seat. The nature and the extent of state intervention, however, have varied in line with the initial conditions and the development philosophy pursued, creating in its wake, as usual, a divide between two blocks of countries reinforcing the pre-existing divides within and between countries that we inherited from the 40 years of neoliberal reforms. The countries across the world today are in two blocs: while a few have managed successful economic recovery thanks to substantial public spending, for many countries, the road to recovery still remains rather rocky. As a result of countercyclical fiscal policy measures, the debt burden at the global level has risen to an all-time high of \$226 trillion, taking the debt-GDP ratio to the highest point after the second world war, mostly driven by the public debt in the developed countries. Evidently, the concern for debt has not deterred the developed countries from borrowing to save the lives and livelihoods of their people and to gear up their GDP growth.

Although the Indian government has been proactive in addressing the COVID pandemic and fairly successful in managing it during the first wave, the sudden lockdown imposed and the social distancing that followed had a devastating consequence on the livelihoods of the people at large. Sure, India was at its best when it came to lockdown strictness, but with only around 4.2 % of the GDP as fiscal support, India compares poorly with countries like the US (25%), Germany (15%) and even many developing countries, which by and large had fiscal policy stimulus beyond 10 per cent. Even though India has tried to focus more on monetary policy measures, that itself (6.2 % of GDP) fares poorly on a global comparative plane.

Since the state Governments in India are much closer to the people than the Union Government, the study undertook careful examination of the state level initiatives for different target groups. The study observes hardly any state in the country has reneged from their responsibility in the face of the pandemic. However, in terms of the initiatives with respect to social protection during the crisis, Kerala has stood head and shoulders above all other states; hardly any section of the society has been left out or kept out of the caring hand of the State. The State has managed to harness the strong institutional architecture built up as part of its democratic decentralisation coupled with SHGs including Kudumbasree and cooperatives in saving lives and livelihoods that in turn has received international attention that it deserves. True, there is a price that Kerala has paid for, in terms of the mounting public debt, as elsewhere, which has attracted much attention of the journalists.

2.1 Introduction

With the COVID attack, the ongoing war of the world with the virus - multilaterally, unilaterally, nationally, sub-nationally and individually - started. Given the profoundly unequal world, characterized by unacceptable divides between and within countries, in the aftermath of over thirty years of Neo-liberal liberalization, there has been considerable variation in the ability to fight the virus. The nature and extent of the war have also been governed by the underlying economic and political philosophy followed by the countries concerned. Thus, when the WHO declared a ‘Public Health Emergency of International Concern’ on 30 January 2020, many of the world’s nation-states have obliged to take measures to contain and eliminate the pandemic, but some have not.¹

Thus, no country has stayed safe while the virus has ravaged in global circulation,² but its impact has been very uneven. While some countries have miserably fallen crippled, some others have seen some luck for a quick reversion to almost normalcy. “In August 2020, a video was repeatedly shared through global social media that showed young revellers in Wuhan, China, the initial ground zero for the outbreak, enjoying a pool party. In the United States, in the same month, cases were still rising by an order of magnitude in the tens of thousands every day.... China’s strict quarantine had succeeded while America and the rest of the world faced tumult and chaos.” (Cooper 2021:77). Such significant differential impact owes a lot to the critical variances in the political will of the concerned governments to pursue policies and in their institutional capacity to execute them, as well as in their unwavering collective commitment and dedication to the people at large. In short, it may be safely concluded that the way the different nation-states have exercised their sovereignty has determined the path of the global diffusion of the virus. An exemplar instance in this case is the experience of the ten countries³ in the island archipelagos of Oceania (counting only countries that are full UN members, and excluding North Korea and Turkmenistan) that had not recorded a single case of COVID-19 even by August 2020 (Amos, 2020), thanks to their governments’ determination to pursue a policy of isolation from the outside world for the protection of their citizens from the virus, even at an enormous economic cost of depression at home.

¹ For one instance, the British Prime Minister Boris Johnson minced no words in expressing his reluctance to pursue a life-saving lockdown policy, and tweeted “we live in a land of liberty ... we don't intend to pose... restrictions on people...” (BBC News 2020), echoing the natural ruling ethos of the neo-liberalists to uphold the unhindered operation of the market forces as sacrosanct, whatever the costs to human life. In fact, his disastrous initial policy of ‘herd immunity’, the ruthless primitive idea that a 60% infection rate would provide sufficient immunity in the population as a whole to the virus, was an equally organic manifestation of the inherent brutalities of neoliberal motto of the ‘survival of the fittest’ at the ethical cost of the weak.

² “... the pandemic is not over *anywhere* until it is over *everywhere*” (IMF 2021: xiv)

³ Palau, Micronesia, Marshall Islands, Nauru, Kiribati, Solomon Islands, Tuvalu, Samoa, Vanuatu, and Tonga.

In this chapter, we shall explore the strategies followed by countries at the various levels of development, with a special focus on India and Kerala. In undertaking such an exercise, we liberally draw from various documents published by multilateral organisations like the IMF, the World Bank, ILO, WHO, UNCTAD and others. We also make use of policy documents of the Central Government, different state governments and the Government of Kerala.

The remainder of this chapter is organized in five sections. The second section begins with an overview of the global trends of the crisis and response and goes into locating the factors behind the diverging performance in terms of the Great Vaccine Divide and differences in fiscal support; also discussed in this section are the issues of rising public debt as the price of saving lives as well as livelihood and inflationary pressures amid the pandemic crisis. The next section presents an overview of the trends of the crisis and response in India, discussing the measures taken to prevent the spread of the virus in terms of a series of lockdowns and unlocks, with a note on the hasty lockdown imposed with too little support; following a discussion on the fiscal and monetary policy measures taken to meet the crisis, the section also presents the GDP growth scenario under the crisis. The fourth section is an overview of the trends of the crisis and response in Indian States with a discussion on a comparative analysis of the spending on labour welfare and social security undertaken by the states to face the pandemic crisis; also considered is a note on the reported undercounting of COVID cases and deaths in different states. The fifth section of this Chapter deals with an overview of the trends of the crisis and response in Kerala, with a detailed discussion on the factors behind the success of Kerala in terms of her economic response to the COVID-19 crisis, followed by a note on the pressures of inflation and public debt. The final section concludes the Chapter with a few observations on the inevitable importance of government interventions in a deadly crisis such as the present one, whatever the costs.

2.2 The crisis and the response: Global trends

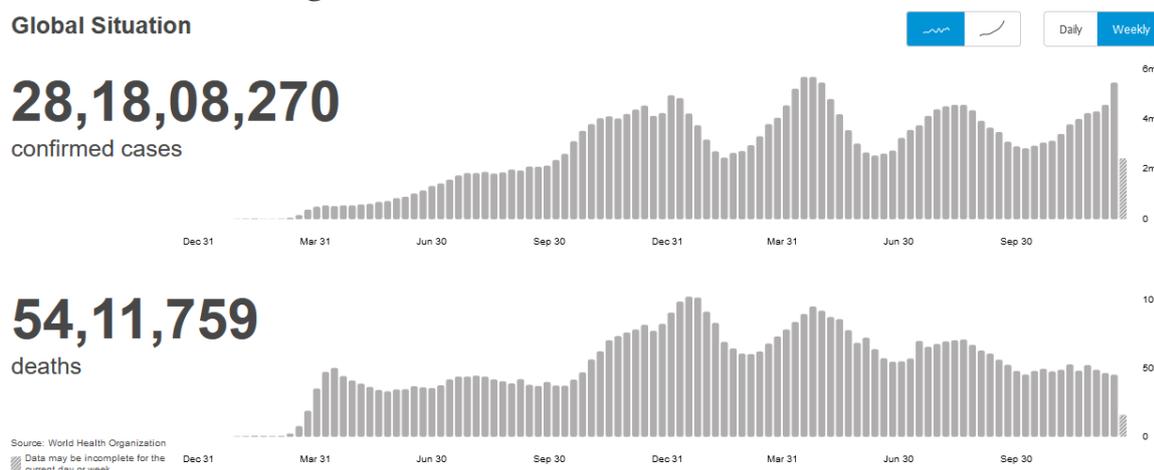
Battled and battered by new and new virus mutants in successive infection waves, coupled with the great vaccine divide over the globe in the face of visceral vaccine protectionism, the global economy still remains overcast with extreme uncertainty (see box 2.1). As already indicated, COVID 19 has hit an already unequal world and readily reinforced the inequalities of class, race, ethnic origin and gender (Ghosh 2021), giving rise to new trends. According to the Institute for Policy Studies, drawing on data from *Forbes*, the world's 2,690 global billionaires saw their combined wealth rise from \$8 trillion on 18 March 2020 to \$13.5 trillion as of 31 July 2021, a gain of over 68 per cent.⁴ The Oxfam report on *the inequality virus* categorically states it took just nine months for the top 1,000 billionaires' fortunes to return to their pre-pandemic highs (Oxfam 2021b: 4), but for the world's poorest people recovery could take 14 times longer; more than a decade (World Bank 2020).

⁴ <https://ips-dc.org/global-billionaires-see-5-5-trillion-pandemic-wealth-surge/>. Accessed 1 January 2022.

Box 2.1: Trend in global COVID-19 infection

As of 29 December 2021, there were 28,18,08,270 confirmed cases of COVID-19, including 54,11,759 deaths, reported to WHO, with 1.92% case fatality rate. As of 27 December 2021, a total of 8,68,72,01,202 vaccine doses were administered, number of persons fully vaccinated per 100 population being 46.53.⁵ That the virus mutates as long as it lives with humans and that *nobody* is safe until *everyone* is safe must be an unescapable pointer towards the essential necessity for speedy and universal vaccination on a war footing.

Fig. 2.1: COVID-19 infection: Global situation



Source: <https://covid19.who.int/>. Accessed 3 January 2022.

Table 2.1: COVID-19 Situation by select regions and countries

Name	Cases - cumulative total	Cases - newly reported in last 7 days	Deaths - cumulative total	Deaths - newly reported in last 7 days	Total vaccine doses administered per 100 population	Persons fully vaccinated per 100 population
Global	28,18,08,270	59,46,330	54,11,759	43,887	111.45	46.53
High-income	13,14,33,801	47,68,207	19,87,236	23,701	159.48	66.45
Upper middle-income	9,35,37,276	7,48,704	24,61,129	12,892	148.13	62.27
Lower middle-income	5,47,90,170	3,36,512	9,18,174	6,947	78.57	32.41
Lower Income	15,50,170	77,700	39,088	314	11.65	4.93
United States of America	5,25,43,602	16,46,613	8,12,577	10,913	146.61	60.36
India	3,48,08,886	50,405	4,80,592	2,267	100.65	40.52
Brazil	2,22,46,276	30,420	6,18,534	661	148.28	66.11
The United Kingdom	1,23,38,680	6,15,425	1,48,021	585	187.9	69.13
Russian Federation	1,04,58,271	1,65,288	3,07,022	6,753	96	43.58
Turkey	93,64,508	1,54,768	81,917	1,139	147.1	61.53

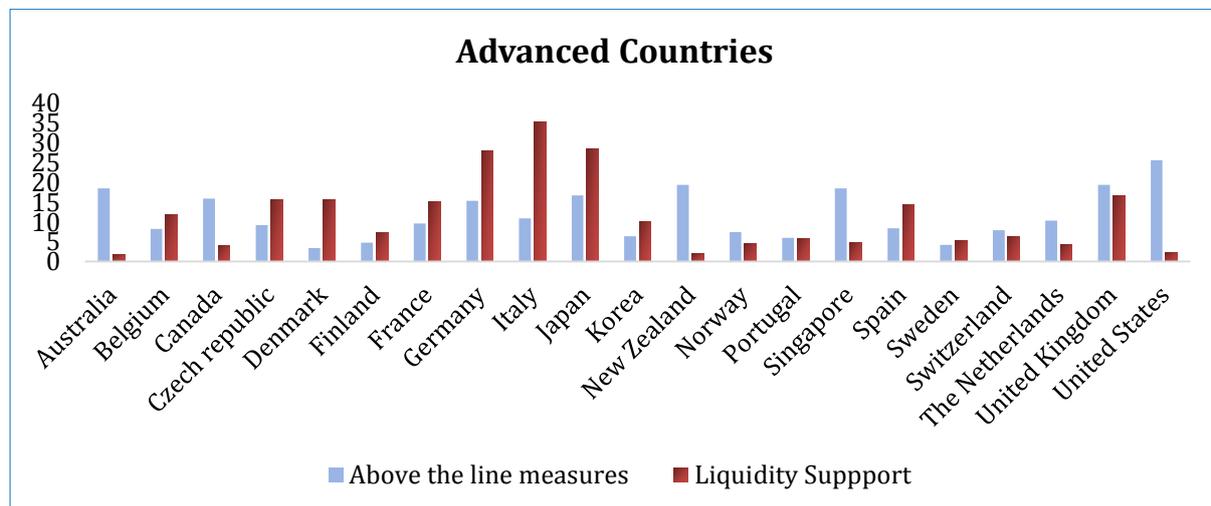
Source: <https://covid19.who.int/table>. Accessed 3 January 2022.

⁵ <https://covid19.who.int/table>. Accessed 3 January 2022.

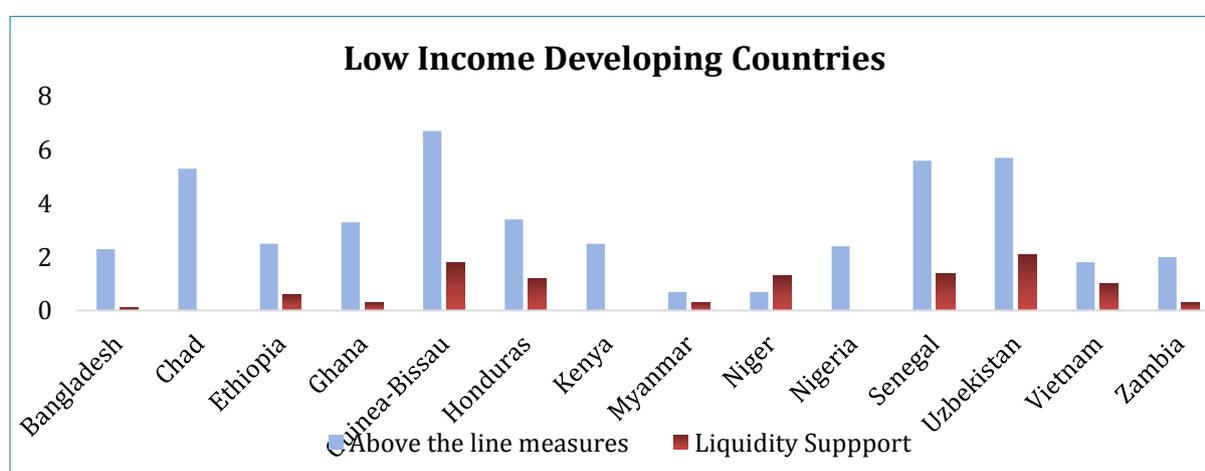
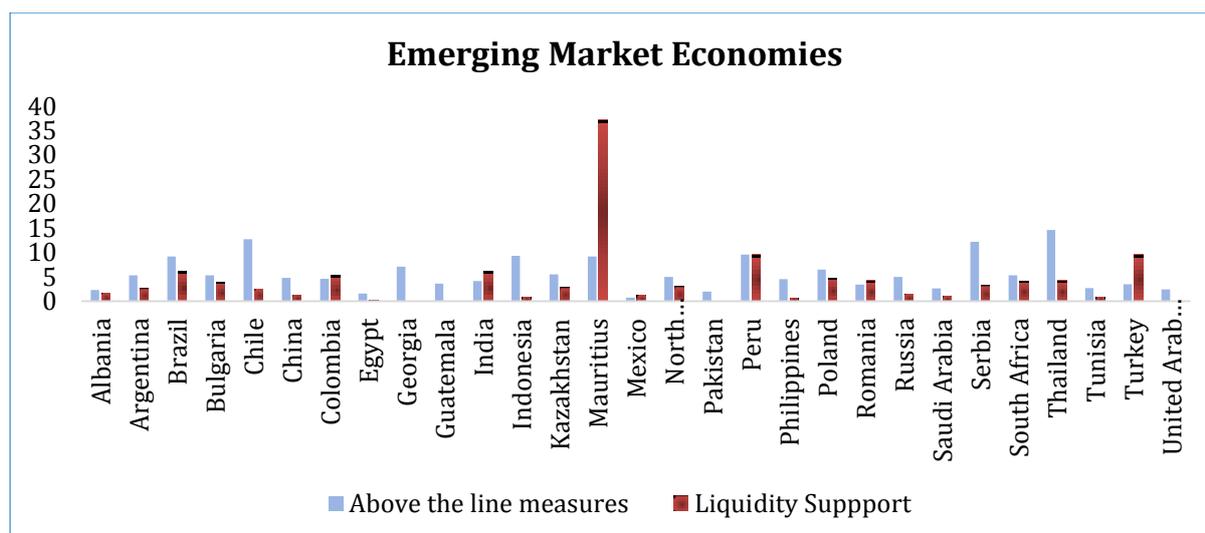
It is significant to note that the global equality advocates have called on all the nation-states to levy a one-time 99% tax on these billionaire windfall gains during the pandemic, enough to pay for COVID-19 vaccine for everyone across the globe and to provide a \$20,000 cash grant to all unemployed workers,⁶ but no country has so far dared or cared to raise a finger. It is also significant to highlight the finding that women are globally overrepresented in the sectors of the economy that are hardest hit by the pandemic (International Labour Organisation. 2020: 3) such that if women were represented at the same rate as men in those sectors, 112 million women would no longer be at high risk of losing their incomes or jobs (Oxfam 2021b: 13). The response to the crisis was greatly influenced, as indicated earlier, by the development strategy pursued by the countries concerned and is a subject of reflection at present in research and policy agenda. National governments and their central banks over the globe pursued policies and measures in the form of additional fiscal spending, foregone revenues, capital and debt injections, contingent liabilities, and liquidity/funding for lending adding up to US\$ 16 trillion or 15.3 per cent of world GDP (IMF 2021c: 1).

The latest World Economic Outlook (IMF 2021b) tends to suggest that the prospects for advanced economies are looking better as a result of solid fiscal spending and monetary support to generate new employment and compensate for the loss of aggregate demand.

Fig. 2.2: Fiscal and monetary stimulus by advanced, emerging and low-income countries



⁶ <https://ips-dc.org/global-billionaires-see-5-5-trillion-pandemic-wealth-surge/> Accessed 1 January 2022.



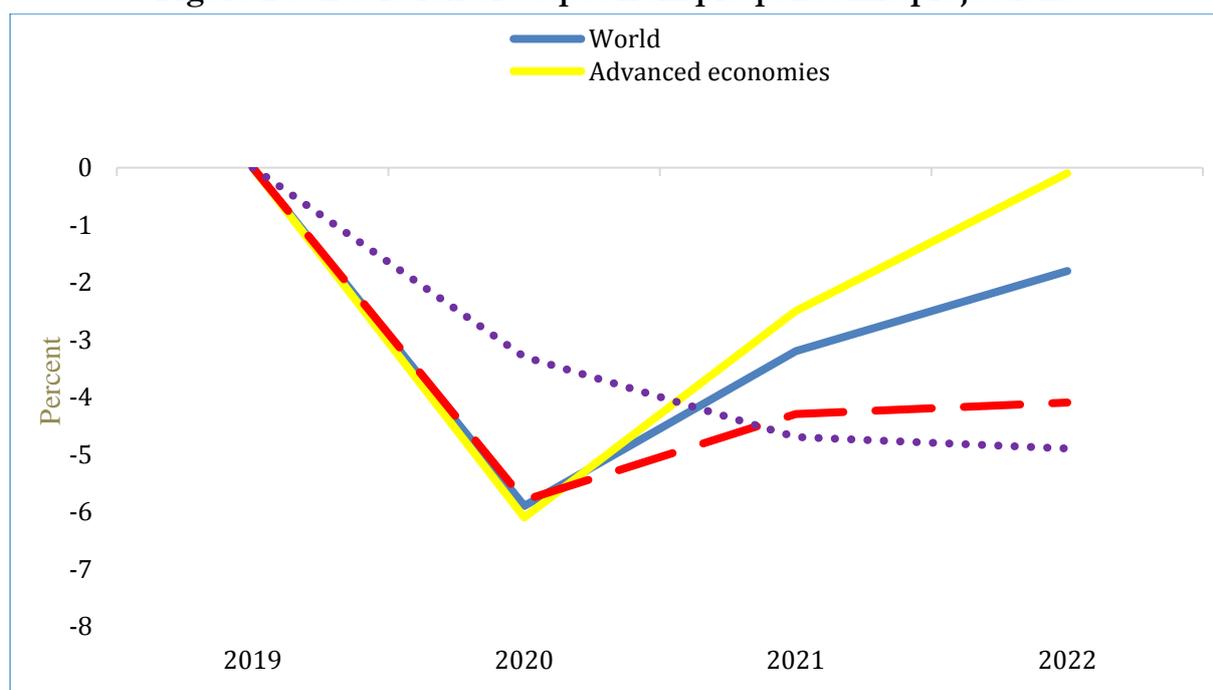
Source: IMF (2021)

Developing countries in general, on the other hand, are struggling to recover as they could not muster the courage to raise the limits of their fiscal deficit to support demand in the economy under the influence of the conservative fiscal policy. From Fig. 2.2 it is evident that the revival strategy in most of the economies centred around fiscal measures instead of monetary measures. The developed countries like the US (25%), the UK (19.3%), Japan (16.7%), Australia (18.4%), Canada (15.9%), Germany (15.3%) invested substantially in fiscal measures. The corresponding investment by the emerging market economist has been at a lower level. Here we find Thailand leading being on the top with 14.6%, followed by Chile (12.7%) and Brazil (9.2%). When it comes to low-income developing countries, fiscal spending has been rather abysmal. Especially notable is the case of India, among the emerging market economies, with only 4.2% fiscal spending. Note that in India, the GDP growth was in the southward direction even before the outbreak of the pandemic *inter alia* on account of demonetization in 2016 and the hasty

and unscientific introduction of the GST reform in 2017. It is unfortunate that Indian fiscal spending initiatives look less impressive than those in a number of countries (other than Chile, Serbia and Thailand, mentioned above) such as Brazil, Indonesia, Mauritius, Peru, Serbia, etc. Even her monetary support was much less than that of Peru and Turkey and stands dwarfed by that of Mauritius.

As the global growth is expected to accelerate to 5.9% this year, according to IMF (2021b: 1) (5.6% according to the WB), the countries may be broadly divided into two groups (see Figure 2.3). The first group includes the advanced economies and the emerging market and developing economies that managed to accomplish a V-shaped recovery and the other group includes all the low-income countries, devoid of any momentum for such a recovery. The annual GDP of the first group countries in 2021-22 is estimated to be at par with the pre-pandemic level and their growth rates by 2024 are expected to be one per cent higher than the pre-pandemic level.

Figure 2.3. Deviation of output from pre-pandemic projections



Source: World Bank (2021)

Note: EMDEs = emerging market and developing economies; LICs = low-income countries. The figure shows per cent deviation between the levels of June 2021 and January 2020 baseline World Bank projections.

The U.S. economy, for example, backed by massive fiscal support and widespread vaccination, is expected to record a growth rate of 6.8% this year, the fastest pace since 1984. Similarly, the growth of the emerging market and developing economies is expected to accelerate to 6% this year, thanks to increased external demand and higher

commodity prices. On the other hand, in the case of the second group of laggards, the growth rate even in 2024 is expected to be 5.5 per cent below the pre-COVID level. However, there are strong limits to recovery of many countries on account of the resurgences and recurring waves of COVID-19, uneven vaccination, vaccine hesitancy and higher infectiousness, coupled with a partial withdrawal of government economic support measures. This has serious implications for the resilience of recovery, which is already in uncharted, uncertain, territory. Excluding China, growth of the first group countries is likely to be only at a more modest 4.4% – indicating a larger setback to improvements in their living standards. In the case of the low-income economies, starved of vaccines, growth is projected only at 2.9% – the slowest pace of expansion in two decades. The group’s output level in 2022 is projected to be 4.9% lower than pre-pandemic level. Fragile and conflict-affected low-income economies have been the hardest hit by the pandemic.

On the employment front, the International Labour Organization (ILO 2021) indicates that the labour market’s recovery is also likely to be highly uneven, *albeit* the labour markets are recovering from the catastrophic hit in 2020 when 255 million full-time jobs are estimated to have been lost. While the employment around the world still remains below the pre-pandemic levels owing to a mix of factors such as negative output gaps, worker fears of on-the-job infection in contact-intensive occupations, expansion of automation in some sectors with the potential of cutting into labour demand, less or little scope for remote working options in many sectors and so on. Those in the informal and the unorganized sectors and without options for remote work were the hardest hit. Similarly, women’s employment in emerging markets and developing economies appears to have been more adversely affected than men’s, while the earlier gender differences in advanced economies appear to have largely subsided.

Despite the encouraging signals of recovery, the IMF (2021b) expects the employment recovery to lag behind output for a large number of economies. Even though all the advanced economies and a large share of emerging market and developing economies are projected to regain pre-COVID-19 output levels by the end of 2022, only two-thirds are expected to return to their earlier employment level. And the IMF fears that this “differential between projected output and employment recoveries suggests that COVID-19–related structural shifts may cause an increase in inequality and social tension” (IMF 2021b: 8).

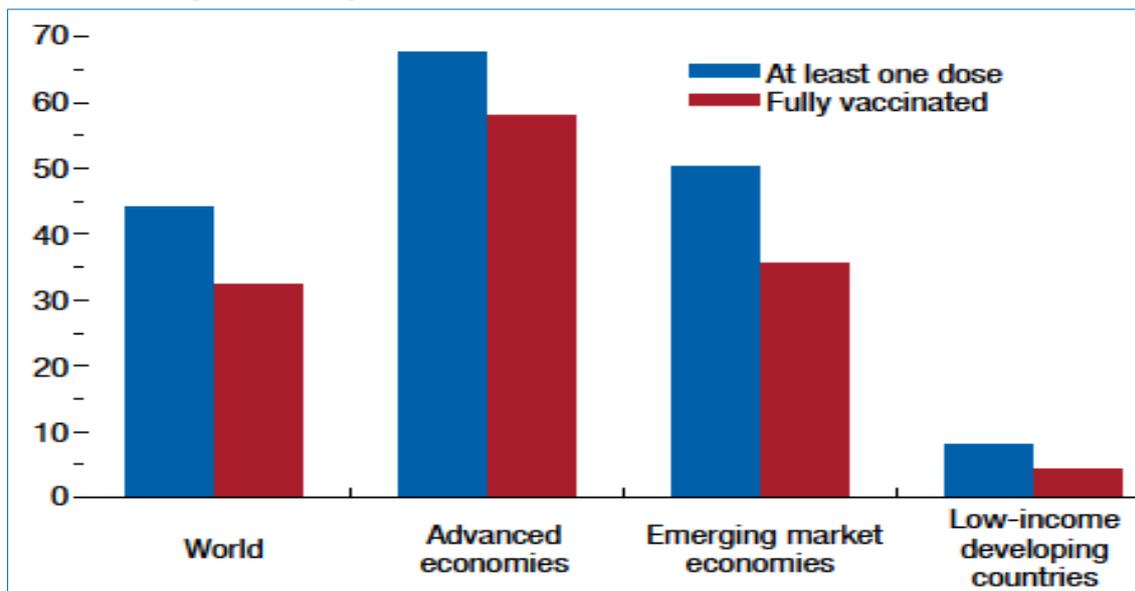
Behind the diverging performance

The Great Vaccine Divide

The diverging performance across countries could be attributed to a great extent to the great vaccine divide (see Fig 2.4). While the developed countries have managed to

provide their citizens with adequate inoculation, the developing countries in general and the least developed ones, especially from Africa, were deprived of protection from the virus through vaccination. In advanced economies, about 58 per cent of the population has been fully vaccinated against COVID-19, whereas the rest of the world has lagged much behind, with fully vaccinated population shares of about 36 per cent in emerging market economies and less than 5 per cent in low-income developing countries, both constrained primarily by vaccine supply and distribution.

Fig 2.4. The great vaccine divide (Per cent of population)



Source: IMF (2021: Figure 1.4)

Note: Data as of September 22, 2021. “Fully vaccinated” are people who received all the doses prescribed for a full vaccination cycle (typically two, but one for Johnson & Johnson and Can Sino). In a few cases, the recorded one-dose numbers are smaller than “fully vaccinated” numbers because of reporting lags.

As long as this vast vaccine divide persists, increasing inequalities in health and economic outcomes, without fail, will remain to further driving divergences between the two blocs of countries. While the advanced economies look forward to further normalization, the rest of the world, especially the less developed, will have to survive with the uncertain world bearing, the adverse health and economic impacts from resurgent virus mutants.

Differences in Fiscal Support

From a policy point of view, the common feature of the countries that managed to record an almost V -shape recovery has been the prompt and strong fiscal policy measures with COVID packages, exceeding even 45 % of the GDP to address the fallout of the economic downturn. IMF 2021 argues that “without direct fiscal actions and liquidity support policies implemented across Group of Twenty economies in 2020, the contraction in Global economy could have been at least three times worse than the actual outcome” (IMF 2021b: 19). In addition to the fiscal backing, many emerging market economies came up with extraordinary monetary policy actions, including, for the first time, asset purchases by their central banks and regulatory efforts to support credit. In general, the fiscal actions proposed and implemented by countries that managed V-shaped recovery included but not limited to:

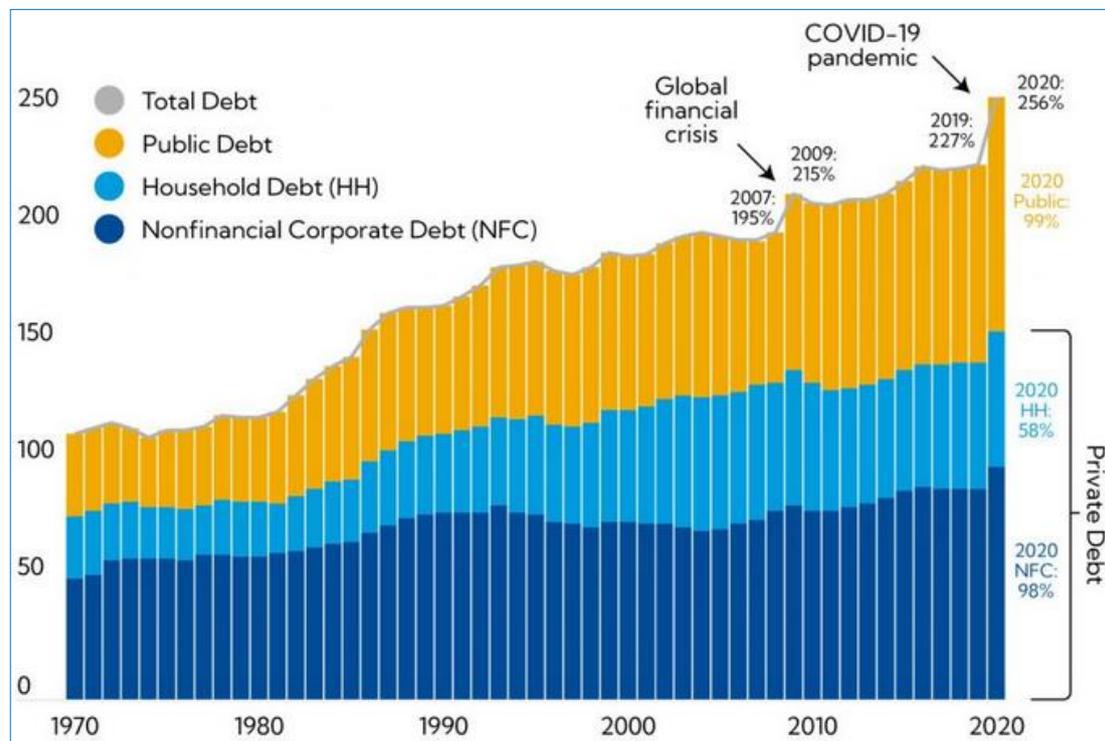
- substantial spending, towards meeting the goal of containing and eliminating the pandemic, on vaccine production and distribution infrastructure: storage and dispensing facilities, upgrading the health infrastructure and dispensing health care services for those affected by the pandemic;
- livelihood support measures like targeted transfers, and short-time work programmes, work-reallocation from shrinking to growing sectors along with skilling and hiring subsidies, job search-march assistance along with critical income support for displaced workers;
- facilitating new growth opportunities through bridging the digital divide that involves building and strengthening IT infrastructure like broadband, re-skilling and up-skilling *inter alia* through training for enhanced IT utilization;
- greening the economy and undertaking measures to mitigate the adverse effect of global warming and climate change; and
- heightened investment in research and innovation, especially basic research in health and new technology, including Industry 4.0 and low carbon technologies.

While the advanced economies continue with substantial fiscal support, many emerging market economies have started fiscal tightening, shifting to less and less accommodative stance mainly on account of financial constraints, which unfortunately may not augur well in the current fluid situation. That virus *here* easily becomes virus *everywhere* must be a clear lesson for the inward-looking advanced economies against this common enemy.

Rising public debt – the price of saving lives and livelihood

As virus diffusion went up, so did the debt everywhere, both private and public. Going by the evidence from the *Global Debt Database* published by IMF (2020), the stock of Global debt scaled a new peak of \$226 trillion, the largest one-year debt surge since World War II, when the pandemic hit the world, and a deep recession followed. The global debt rose by 28 percentage points to 256 per cent of GDP in 2020, and the global public-debt-GDP ratio reached a new peak of 99% in 2020 (see Fig 2.5), which is the highest increase since the second world war. It has been shown that much of this increase was driven by Government borrowing that accounted for more than half of the increase (Gasper et al. 2021). With the unprecedented increase, the public debt now accounts for almost 40 per cent of total global debt, the highest share since the mid-1960s.

Fig 2.5: Global debt (as a per cent of GDP)



Source: https://blogs.imf.org/2021/12/15/global-debt-reaches-a-record-226-trillion/?utm_medium=email&utm_source=govdelivery Accessed 1 January 2022

As an offshoot of the substantial public spending by developed counties in the aftermath of COVID-19, gross public debt as a percentage of GDP, especially in advanced economies, increased from about 71.06% in 2007 to 122.69% in 2020.⁷ Most developing economies have been on the opposite side of the financing divide, facing limited access

⁷https://www.imf.org/external/datamapper/G_XWDG_G01_GDP_PT@FM/ADVEC/FM_EMG/FM_LIDC. Accessed 2 January 2022.

to funding and often higher borrowing rates. The private debt recorded only a moderate increase from 164 to 178 per cent of GDP in the same period.

The emerging markets and low-income developing countries faced much tighter financing constraints, along with large disparities across countries. China alone accounted for 26 % of the global debt surge. Hence the emerging markets (excluding China) and low-income countries accounted for small shares of the rise in global debt, around \$1-\$1.2 trillion each, mainly due to higher public debt.

Inflationary pressures

Another factor of burden that rose with the virus is that the inflation rate has got rapid momentum in the United States and in some emerging markets, and developing economies. In general, the rising inflation has reflected “pandemic-related supply-demand mismatches” (IMF 2021b: xv); following the relaxation of restrictions, demand has surged much faster than the slow-responding supply. “Commodity prices have also risen significantly from their low levels of last year” (ibid), on the back of cost-push pressures. Thus, by March 2021, the World Bank energy price index was 2.7 times its April 2020 low, while non-energy prices rose by 38.4%; ‘metals and minerals’ and agriculture commodity price indices also went up by 68.1% and 26.6%, respectively. “Commodity prices have rallied on the back of the slush of global liquidity” (RBI 2021: 39).

These price rises below pre-pandemic employment levels are posing difficult choices to policymakers, particularly in the emerging market and developing economies. With the loss of employment and loss of income against rising prices of essential commodities, poor households stand hapless and helpless already under the psychological pressure from anguishing anxiety in the face of a ravaging virus. It is estimated that 95 million additional people were forced into extreme poverty during 2020, with 80 million more left undernourished than before, mostly in low-income countries (IMF 2021a: xiii). Again, about 65–75 million additional people are estimated to be in extreme poverty in 2021 (IMF 2021b: 7).

However, European inflation, in general, has weakened much, reaching negative rates and all-time lows. Behind this price fall (in parallel with a fall in economic activity) lie the demand-side disinflationary forces that have outweighed the reduction in supply, and the cut in VAT affected by some countries such as Germany, Belgium and Austria in their fiscal stimulus packages to address the economic crisis caused by the pandemic.⁸

⁸ <https://www.caixabankresearch.com/en/economics-markets/inflation/covid-19-and-inflation-statistically-significant-impact>. Accessed 2 January 2022.

2.3 The crisis and the response: Indian trends

The first case of COVID-19 in India was reported on January 30, 2020, in its most outward-oriented state of Kerala. Within two weeks of the World Health Organisation (WHO) declaring COVID-19 a pandemic, India imposed a strict lockdown on 25 March 2020. On 10 June 2020, India heaved a sigh of relief as recoveries exceeded active cases for the first time.⁹ Though infection rates started to drop in September 2020, there appeared a second wave beginning in March 2021, much more devastating than the first, with shortages of vaccines, hospital beds, oxygen cylinders and other medical supplies in parts of the country.¹⁰ By late April 2021, India started to lead the world, though for a few days, in new and active cases; on 30 April 2021, it became the first country to report over 400,000 new cases in 24 hours.¹¹ Experts now started to express their fear that the COVID-19 virus, just like influenza, will subsequently "reach its endemic stage" in India rather than completely disappear.¹² The lockdown process in India continued in different phases: Lockdown Phase 1 (25 March – 14 April), Phase 2 (15 April – 3 May), Phase 3 (4–17 May) and Phase 4 (18–31 May). And then started a series of unlocking processes from 1 June 2021 onwards.

Now, in India, as of 29 December 2021, there were 3.5 crore confirmed cases of COVID-19 (the second-highest caseload in the world) with 4.8 lakh deaths, reported to WHO, with a case fatality rate of 1.38%. As of 20 December 2021, a total of 138.9 crore vaccine doses were administered, number of persons fully vaccinated per 100 population being 40.52.¹³

⁹ <https://www.hindustantimes.com/india-news/covid-19-number-of-recoveries-exceed-active-cases-for-first-time/story-uA0C6zESJTdkl9UQ2lHc2M.html>. Accessed 3 January 2022.

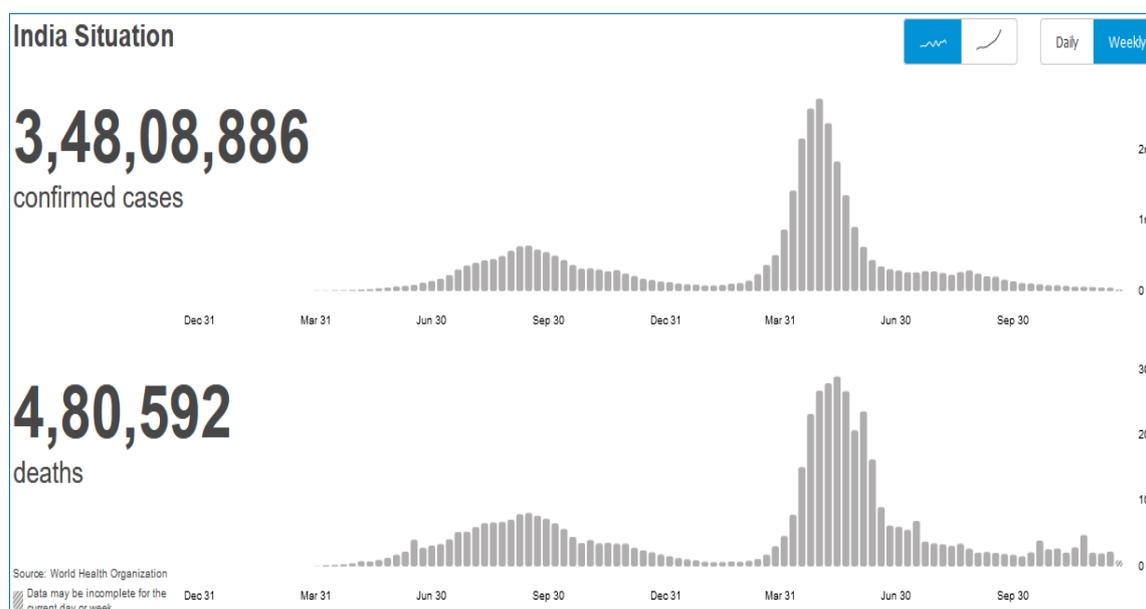
¹⁰ <https://www.theguardian.com/world/2021/apr/21/india-shocking-surge-in-covid-cases-follows-baffling-decline>. Accessed 3 January 2022.

¹¹ <https://www.thehindu.com/news/national/coronavirus-india-becomes-first-country-in-the-world-to-report-over-400000-new-cases-on-april-30-2021/article34453081.ece>. Accessed 3 January 2022.

¹² <https://www.hindustantimes.com/india-news/when-will-india-be-free-of-covid-19-virus-may-become-endemic-says-top-icmr-official-101625833444281.html>. Accessed 3 January 2022.

¹³ <https://covid19.who.int/table>. Accessed 3 January 2022.

Fig. 2.6. COVID-19 infection: India situation



Source: <https://covid19.who.int/region/searo/country/in>. Accessed 3 January 2022.

Measures to prevent the spread of the virus.

Lockdowns/Unlocks

In sync with the Global practice, India cautiously and carefully resorted to lockdown and social distancing manifested in a series of measures, as, evident from Appendix 2. A to this Chapter.

In March 2020, India's strategy was focused on cluster containment, similar to how India contained previous epidemics, as well as "breaking the chain of transmission". Thus, the country started its fight against the virus by observing a 14-hour *Janata Curfew* (people's curfew) on 22 March. On 24 March, with 519 confirmed cases and 9 deaths in the country, the government announced India to be under a total lockdown for at least three weeks, ordering all non-critical businesses and services to remain closed except hospitals, grocery stores, and pharmacies, imposing a total ban on leaving home for non-essential purposes and suspending all public transport. The policy tools also included school closure, social distancing norms and mandatory use of masks.

The government divided the districts into zones on 16 April, using a colour-coded three-tier system based on incidence rates, as "Red" (hotspots), "Orange" (medium rate of incidence), and "Green" (no incidence) zone. All the major cities of India fell into Red zones. However, the government allowed, beginning 20 April, agricultural businesses and stores selling farming supplies to resume operation, as well as public works programmes,

cargo transport, and banks and government centres distributing benefits. A series of four lockdown phases followed until 31 May 2020, with incremental relaxations and changes. The country began a phased lifting of restrictions on 8 June, continuing in a series of six "unlocks" till 30 November 2020.

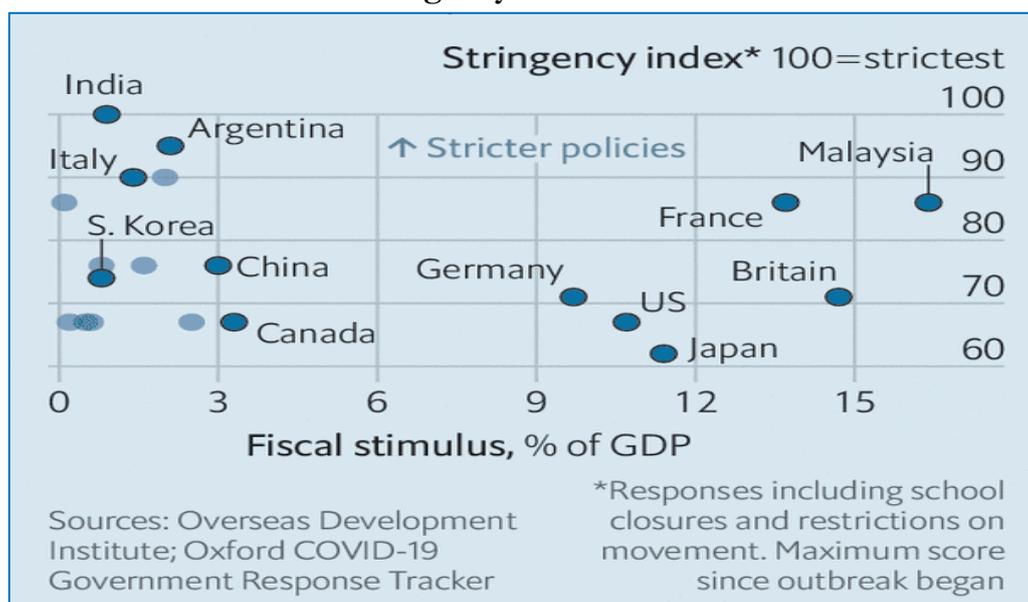
India began its vaccination programme, the world's largest one, on 16 January 2021, nearly a year after the first reported case in the country, operating 3,006 vaccination centres at the outset, with AstraZeneca vaccine (Covishield) and the indigenous Covaxin. Later on, a few other vaccines were also approved (such as Russia's Sputnik V on April 13, 2021). The government expanded the inoculation coverage by allowing all Indians above the age of 18 to become eligible for vaccination from May 1, 2021, and the vaccination drive for children aged 15 to 18 years commenced from 3 January 2022. As of 4 January 2022, India administered over 147 crores (1,468,697,080) doses overall, including first and second doses of the currently-approved vaccines; about 84% of the eligible population received at least one shot, and 60% were fully vaccinated.¹⁴

Hasty lockdown with too little support?

India's immediate response in the form of an abrupt announcement of lockdown of the entire country with zero preparation, within just four hours of notice, has invited a barrage of criticisms. Ray et al. (2021) argued that in the context of a large developing country like India, where poverty and inequality are ingrained structural features of the economy and society, there might be a case for a relaxed version of the stringent universal lockdown approach. *The Economist* 2020 argued that while India topped in the lock-down stringency index, it bottomed in providing fiscal support to its citizens during the lockdown (See Fig 2.7). Elderly, Children and women turned out to be the worst sufferers of this pandemic. The Elderly paid through their lives and isolation. Women were the first ones to exit the workforce but the last to join back. They assumed a greater burden of reproductive activities and unpaid care work; several suffered domestic violence in isolation. Children lost their schooling and suffered prolonged isolation. India had to silently witness the mass exodus of migrant workers from cities to their villages in multiples of biblical scales, some on bicycles and many on bare feet, without enough food, water and rest, always haunted by the fear of the virus and the anxiety for future, and attacked by the police for violation of the lockdown rules. No doubt, "2020-21 will go down in history as the year of the COVID-19 pandemic break in the life and ethos of humanity", as the RBI (2021: 10) remarks, though in another sense.

¹⁴ <https://dashboard.cowin.gov.in/>. Accessed 5 January 2022.

**Fig 2.7. Government response to COVID 19:
Lockdown stringency vis-à-vis fiscal stimulus**



Source: *The Economist*, April 2020, Issue 4 Edition?

The governments seem to have forgotten that “the ‘hunger hotspots’ require much the same political vigilance and concern as ‘COVID hotspots’”. “Corona *maare ne maare, bhukmari se mar jayenge*’ (we may or may not die of coronavirus, but we will certainly die of hunger),” ...¹⁵ The unplanned, hasty lockdown has, in fact put the onus of receiving food and cash, their rights, on the shoulders of the poor helpless themselves!

Fiscal Measures

According to the Reserve Bank of India (2021), a concerted and determined policy stimulus to counter the pandemic impact started with direct assistance in cash and kind to the poor and then progressively culminated into a comprehensive package called *Aatma Nirbhar Bharat*, a composite package with welfare measures to address the short-term distress of individuals and firms; in 2020-21, it cumulated to 15.7 per cent of GDP.¹⁶

The Government’s fiscal policy response to the pandemic included one of the world’s largest food grains distribution programme, direct cash transfers to 42 crore individuals, more than 20 crore Women Jan Dhan accounts, cash support to building and construction workers, 30,000 crores additional emergency working capital funding for farmers through NABARD, additional pension payments, provision for free gas

¹⁵ <https://thewire.in/rights/hasty-lockdown-crawling-relief-from-duty-to-charity>. Accessed 3 January 2022.

¹⁶ <https://www.rbi.org.in/Scripts/AnnualReportPublications.aspx?Id=1314> Accessed 3 January 2022.

cylinders, additional allocation under MGNREGS, government guarantees for credit, postponement of financial deadlines etc. (Government of India 2021: Chapter 1). Moreover, in order to boost employment and livelihood opportunities for migrant workers who had returned to their villages and for the similarly affected citizens in rural areas under the pandemic crisis, the government launched *Garib Kalyan Rojgar Abhiyaan* (GKRA) on 20 June 2020 for 125 days in 116 districts of 6 States. Also launched was an Emergency Credit Line Guarantee Scheme (ECLGS 1.0) to provide the required relief to sectors under stress by helping them sustain employment and meet liabilities; this was followed by its second version (ECLGS 2.0) to offer necessary credit guarantee for loans by banks and NBFCs to identified sectors under stress. The focus of the stimulus measures shifted, with the gradual unlocking of the economy, towards investment inducing and consumption reviving measures (like Production Linked Incentives) by expanding capital expenditure and investments in the infrastructure sector. For more details, see Appendix 2. B to this Chapter.

Monetary Policy Measures

As the fiscal policy interventions appeared inadequately countercyclical, the Central Bank (RBI) has come forward more proactively with various conventional and unconventional liquidity enhancing monetary policy measures such as

- Open Market Operation (OMO) purchases between 6 February to 4 December 2020 to inject durable liquidity of more than Rs2.7 lakh crore into the economy,
- Rs20,000 crore through two purchase auction OMOs in State Development Loans (SDLs),
- Rs1 lakh crore via Targeted Long Term Repo Operations (TLTROs) of up to three years' tenor,
- Rs1.25 lakh crore through Long Term Repo Operations (LTROs) during February-March 2020,
- reduction in the Cash Reserve Ratio (CRR) requirement of banks from 4 per cent of net demand and time liabilities (NDTL) to 3 per cent with effect from 28 March 2020, in order to augment primary liquidity in the banking system by about Rs1.37 lakh crore,
- raising banks' limit for borrowing overnight under the Marginal Standing Facility (MSF), (vii) Rs50,000 crore Special Liquidity Facility for mutual funds and refinance facility worth Rs75,000 crore for all India financial institutions, i.e., NABARD, NHB, SIDBI and EXIM Bank.

- setting up a Special Purpose Vehicle (SPV) to purchase short-term papers from eligible NBFCs/HFCs, which could then utilise the proceeds to extinguish their existing liabilities and ameliorate the liquidity constraints.

For more details, see Appendix 2. B to this Chapter.

COVID and GDP growth

The economic impact of COVID-19 in India was devastating under the combined forces of demand compression and supply disruption. The Indian economy had already been in a prolonged slowdown (see table 2.2) and was marked by a number of legacy problems such as a slow rate of job creation and lack of political commitment to improving working conditions along with a fierce neoliberal state agenda for free markets. As the virus hit an already frail and fragile system, the real growth rate of GDP plunged to -8% and that of the total consumption expenditure to -7.1% in 2020-21 (RBI 2021: 20).

The pandemic crisis has had a significant impact, especially on the poor and vulnerable households in India, as elsewhere. In an already worse humanitarian crisis situation coupled with government apathy and neglect, the pandemic has inescapably exposed and exacerbated the existing inequalities in the Indian economy. The World Bank projections of GDP per capita growth in India under the pandemic shows that the poverty rates in 2020 have likely reverted to the estimated levels in 2016.¹⁷ According to a survey on the *Impact of Corona Virus on Indian Businesses* by the FICCI in March 2020, up to 53% of businesses in India have specified a certain amount of impact of shutdowns due to coronavirus on operations.¹⁸ The Centre for Monitoring the Indian Economy reported that by April 2020, the unemployment rate in India shot up to 23% to 24% from 7% to 8% in the previous year, labour force participation rate dropped to 35.5% from 43%. Over 45% households reported a reduction in income compared to a year ago.¹⁹ Various businesses such as hotels and airlines, and manufacturing enterprises resorted to salary cuts and layoffs, notwithstanding the mass exodus of migrant workers.

¹⁷ <https://www.worldbank.org/en/country/india/overview#1>. Accessed 5 January 2022.

¹⁸ <https://ficci.in/study-page.asp?spid=23194§orid=130>. Accessed 3 January 2022.

¹⁹ <https://scroll.in/article/959756/podcast-how-has-indias-lockdown-impacted-unemployment-rates-and-income-levels>. Accessed 3 January 2022.

Component	2016-17	2017-18	2018-19	2019-20	2020-2021
1	2	3	4	5	6
I. Total	7.8	7.1	7.4	5.9	-7.1
Consumption Expenditure					
Private	8.1	6.2	7.6	5.5	-9.0
Government	6.1	11.9	6.3	7.9	2.9
II. Gross Capital Formation	3.7	10.8	9.7	2.3	-12.9
Fixed Investment	8.5	7.8	9.9	5.4	-12.4
Change in Stocks	-48.8	68.3	27.2	-39.7	-3.5
Valuables	-18.6	40.2	-9.7	-14.2	-38.0
III. Net Exports					
Exports	5.0	4.6	12.3	-3.3	-8.1
Imports	4.4	17.4	8.6	-0.8	-17.6
IV. GDP	8.3	6.8	6.5	4.0	-8.0

Source: RBI 2021: 20, Table II.1.1)

With the gradual lifting of restrictions and reopening of the economy, signs of recovery appeared in moderation in the pace of contraction and a promising GDP return to positive terrain by the third quarter of 2020-21. Upon the good news, the equity markets became buoyant, with the BSE Sensex staging a V-shaped recovery and rising over 91 per cent by end-March 2021 from the lows of March 2020 (RBI 2021: 19). The RBI hopes that the prospects for the Indian economy, despite the second wave crisis, “remain resilient backed by the prospects of another bumper *rabi* crop, the gathering momentum of activity in several sectors of the economy till March, especially housing, road construction and services activity in construction, freight transportation and information technology (IT)”, favourably supported by “the activation of the production-linked incentive (PLI) scheme, spectrum auctions and considerable easing of financial conditions” for a good turnaround (ibid).

2.4 The crisis and the response: Indian states

Even before 24 March 2020, when the Central government ordered a nationwide lockdown from midnight of the same day, many of the Indian state governments had started to respond to the pandemic situation in the respective states with various declarations of emergency, closure of institutions and public meeting places, and other restrictions helpful to contain the spread of the virus. Lockdown had been in force in many of the states and UTs, schools had remained closed except in a few UTs and Arunachal Pradesh, Assam and Goa; so had been cinemas/malls; in some of the states

and UTs, both the public and private transport also had remained closed (see for details Appendix 2. E).

A number of states came up with immediate relief measures, Kerala being the first one: thus, rising to the occasion, the Kerala government announced on 19 March 2020 a stimulus package of Rs 20,000 crore (US\$2.7 billion) in order to counter both the COVID-19 epidemic and the consequent economic hardship. Uttar Pradesh came upon 21 March 2020 with a relief package of Rs1,000 (US\$13) to all daily wage labourers, and the next day, Punjab announced Rs3,000 (US\$40) to all registered construction workers. A number of states and union territories offered free and increased rations for ration card holders, some states to all and some others only to the BPL families. Karnataka's relief measures amounted to Rs1,610 crore (US\$210 million) for unorganised sectors, including flower growers, washer-men and women, barbers, construction workers, auto and cab drivers, MSMEs, and weavers. The Delhi government offered compensation of Rs10 million (US\$130,000) to the family of every health care or frontline worker (doctor, nurse, hygiene worker, etc.) in the event of death during treatment, for state-wise details, see Appendix 2. F.

Spending on labour welfare and social security

Informal workers, mainly migrant and platform workers, were affected badly by the advent of COVID-19 and the lockdowns. Although the central government announced many policies (One nation One Ration card, extension of social security benefits, etc.) to address these issues, the allocations have, in fact, lagged the announcements. As labor, employment and social security come under the concurrent list, orders of the union as well state governments have a crucial role. As the reverse migration of the labourers affected the states with a huge population working outside its territories, the respective State governments announced a lot of interventions along with union government's.

Here we analyze the states' spending pattern in the labour and labour welfare of the selected states (see Table: 2.3). The COVID-19 induced lockdown affected the labour force, which has welfare implications. The budget estimates of 2020-21 over the realized spending of 2019-20 show that all the selected states' allocations have considerable increase, with Andhra Pradesh, Maharashtra and Punjab standing out. But these increases are not completely absorbed in the growth of actual expenditure over the budgeted figures of 2020-21. While comparing the growth of revised estimates of 2020-21 over the realized spending of 2019-20 (column 3 of Table 2.3), except Andhra Pradesh, all states show an increase in the growth rate. Maharashtra and Odisha spent around 60 per cent more, while Bihar, Kerala, and Karnataka around 30 per cent more. Spending by Gujarat and UP shows an increase below 10 per cent, and Punjab, Rajasthan, Tamil Nadu, Telangana and West Bengal have a growth rate between 10 to 30 per cent.

Sl. No	State	GR 2020-21 (BE) over 2019-20(A)	GR 2020-21 (RE) over 2020-21 (BE)	GR 2020-21 (RE) over 2019-20(A)	GR 2021-22 (BE) over 2021-22(BE)
1	Andhra Pradesh	83.46	-57.14	-21.37	28.67
2	Bihar	32.58	0.00	32.58	-7.30
3	Gujarat	24.60	-15.89	4.80	9.56
4	Karnataka	46.46	-4.59	39.75	14.96
5	Kerala	33.11	0.10	33.24	16.01
6	Maharashtra	86.18	-14.65	58.92	18.94
7	Odisha	62.66	2.44	66.63	-2.88
8	Punjab	94.30	-35.82	24.69	9.56
9	Rajasthan	46.25	-15.98	22.88	25.19
10	Tamil Nadu	24.77	-8.92	13.64	11.85
11	Telangana	18.96	0.00	18.96	-15.10
12	Uttar Pradesh	42.28	-23.69	8.57	12.13
13	West Bengal	40.09	-14.72	19.47	18.46
14	All States and UTs	43.96	-10.44	28.93	15.09

Source: State Finance: A study of state budgets 2021-22, RBI

Table 2.4 shows the governments' spending on social security and welfare, which is like a lifeline for the distressed population, as they are badly affected by the pandemic and the lockdown imposed to prevent the spread of COVID-19. A number of welfare schemes and relief packages were announced by both the Union and State governments. The effective intervention of the governments through this kind of activities may have had an impact and could help in the V-shaped recovery of the economy.

Sl. No	State	GR 2020-21 (BE) over 2019-20(A)	GR 2020-21 (RE) over 2020-21 (BE)	GR 2020-21 (RE) over 2019-20(A)	GR 2021-22 (BE) over 2021-22(BE)
1	Andhra Pradesh	-8.06	-0.12	-8.17	-2.04
2	Bihar	14.71	24.33	42.62	3.96
3	Gujarat	9.68	46.19	60.34	15.86
4	Karnataka	2.79	0.03	2.82	2.46
5	Kerala	97.97	32.52	162.35	41.52
6	Maharashtra	12.53	35.92	52.96	11.72
7	Odisha	-13.48	-16.91	-28.11	-7.27
8	Punjab	17.77	-2.44	14.89	46.29
9	Rajasthan	-5.93	26.98	19.45	42.43
10	Tamil Nadu	15.92	1.74	17.94	17.15
11	Telangana	39.07	0.00	39.07	10.15
12	Uttar Pradesh	41.27	-11.88	24.49	5.87
13	West Bengal	-17.38	11.27	-8.07	122.70
14	All States and UTs	13.69	5.47	19.91	23.00

Source: State Finance: A study of state budgets 2021-22, RBI

The first column of Table 2.4 represents the growth of budgeted figures for 2020-21 over the actualized spending on 2019-20. Except for Andhra Pradesh, Rajasthan and West Bengal, all other states showed an increase. The growth of what is budgeted and what is realized (second column), Bihar, Gujarat, Kerala, Maharashtra, and Rajasthan showed an increase of more than 20 per cent. In contrast, Andhra Pradesh, Odisha, Punjab, and UP showed negative growth in spending. Notably, Kerala's spending on social security is exceptionally high, while comparing the growth of actual spending from 2019-20 to 2020-21, showing the much-acclaimed welfare orientation of the State. Gujarat and Maharashtra attained a growth of around 50 per cent. Except for Andhra Pradesh, Odisha and West Bengal, which showed negative growth, all other states showed increased spending. In general, it is evident that Kerala's expenditure on labour and labour welfare and, more importantly, the general welfare was much higher not only in comparison to the national level but also with respect to other states.

Having said this, it needs to be noted as per the statement made by the Union Finance Minister as on November 2021, the states in India combined had an unspent amount of

Rs 3.08 lakhs! Except for two states (one being Kerala), all others had a surplus in their ways and means account. It is rather strange that while the pandemic has been throwing millions to extreme poverty, states have been holding on to unspent money presumably to adhere to the FRBM Act.

2.5 The crisis and the response: Kerala

Kerala reported the first-ever COVID case in the country on 30 January 2020, and her success in containing the pandemic was widely praised both nationally and internationally.²⁰ The state effort was remarkably successful in containing COVID-19 during the first wave in achieving a low rate of spread, high recovery, and low fatality, reducing the rate of increase of new cases by 30 April 2020 to less than 0.25% per day. However, in mid-May, a ‘second wave’ of new cases appeared, following the return of Keralites from other countries and other Indian states. The surge continued unabatedly following the Onam festival in late August (third wave) and then the state elections to all local bodies in December (fourth wave) and to the State Legislature on 6 April 2021 (fifth wave). Thus, the active cases in Kerala increased from 31,493 on 7 April to 4.32 lakh on 12 May 2021, with 43,529 new cases, the highest single-day record in the state since the outbreak of the pandemic,²¹ with a less-than-one (0.793) recovery-cases ratio. July 2021 saw Kerala accounting for more than 50% of daily new cases in India. However, the state has continued to register a very low case fatality rate in India (0.3% against 1.51% of all-India, 3.1% of Punjab and 2.6% of Maharashtra as of 23 October 2020).²²

The state-wide lock-down was replaced after 16 June 2021 with a four-tier system of local self-government bodies based on test positivity rate (TPR). Some relaxations were announced for public transport, offices, examinations and hotels. The TPR-based four-tier system of local self-government bodies was replaced on 4 August with a ward-level case-density-based system. Shops were allowed to function from 7 am to 9 pm, with Sundays coming under the lockdown. Subsequently, the Sunday lock-down and night-time restrictions were withdrawn on 7 September in view of the decline in the test positivity rate and the increase in the vaccination rate (about 75% of adults getting at least one dose of the vaccination). Though the adult vaccination crossed 95% by late November, it was found that many government employees, including school teachers, had refused vaccinations. The government took a serious note of this and, considering

²⁰ <https://www.bbc.com/news/world-asia-india-52283748.amp>.

<https://www.technologyreview.com/2020/04/13/999313/kerala-fight-covid-19-india-coronavirus/amp/>.

<https://lfpres.com/news/world/the-kerala-model-how-a-small-indian-states-treatment-of-the-countrys-covid-19-patient-zero-helped-flatten-the-curve/wcm/fa331dd2-1233-4fbd-a141-7086c7edaa95/>.

All accessed 7 January 2022.

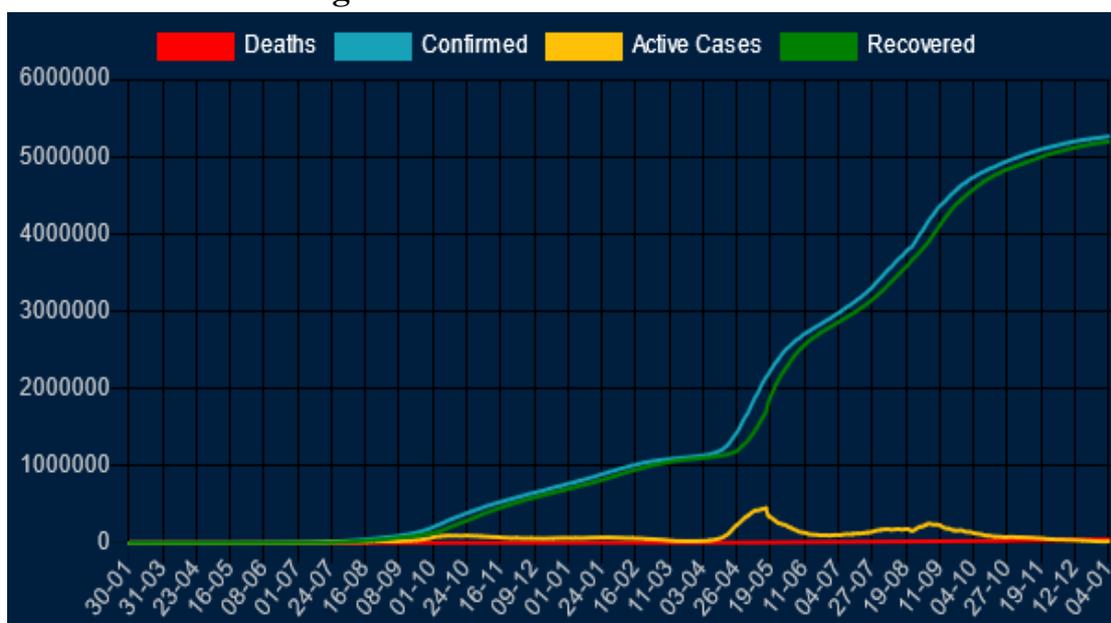
²¹ https://www.business-standard.com/article/current-affairs/kerala-sees-biggest-single-day-spike-of-43-529-new-coronavirus-cases-121051201053_1.html. Accessed 7 January 2022.

²² <https://pib.gov.in/PressReleasePage.aspx?PRID=1667085>. Accessed 7 January 2022

students' safety and the general public, asked the unvaccinated school staff to produce either a medical exemption certificate or weekly negative RT-PCR test results at their own expense. Those who refused vaccinations for non-medical reasons were also excluded from free medical care in case of COVID-19 infection.

As of 7 January 2021, Kerala reported 5263415 total confirmed cases, with a recovery rate of 98.62% (against 97.57% all-India), active cases of 0.44% (against 1.05% all-India), case fatality rate of 0.93% (against 1.37% all-India),²³ and a seven-day average test positivity rate of 5.27.²⁴ About 73.44% of the total population remain vaccinated, with 98% in the age group above 18 and 2% in the age group of 15-17 years.

Fig 2.8. COVID-19 situation in Kerala



Source: <https://dashboard.kerala.gov.in/covid/index.php>. Accessed 7 January 2022.

Kerala was one of the initial states to set up a comprehensive programme for genomic surveillance of SARS-CoV-2, the data from which is also incorporated in the national surveillance dashboard. The programme has been instrumental in inputting information on the spread and emergence of SARS-CoV-2 variants in the state; a pilot study under the programme suggested that the major clusters in Kerala had come from inter-state rather than international introductions.

Behind the Success

A number of studies (for instance, Isaac and Sadanandan 2020) have highlighted the role of various factors, including the public health system, social capital and the active involvement of the people through local governments. The WHO has attributed the

²³ <https://www.mohfw.gov.in/>. Accessed 7 January 2022.

²⁴ <https://dashboard.kerala.gov.in/covid/index.php>. Accessed 7 January 2022.

success to the state's experience and investment in emergency preparedness and outbreak response earned during the Kerala floods in 2018 and especially the NIPAH outbreak in 2019. "Active surveillance, setting up of district control rooms for monitoring, capacity-building of frontline health workers, risk communication and strong community engagement, and addressing the psychosocial needs of the vulnerable population are some of the key strategic interventions implemented by the state government that kept the disease in control".²⁵

The 'Kerala model of controlling the epidemic' had its roots in the strong and vibrant health care system that was consistently built over a century. This enabling environment, along with the high literacy rate in the state and the high-level political and administrative commitment, stood in good stead for the much-needed impetus in the fight against the virus. The system in no time swung into action under the leadership of the CM and the Health Minister that facilitated inter-sectoral coordination among the State Emergency Operations Centre (SEOC), the office of Kerala State Disaster Management Authority and the Health Department as well as community participation. The strategy was "trace, test and contain", in line with the WHO's guidance of tracing, testing and isolating, with extensive measures of screening and quarantine of all the incoming travellers. The State and the District Control Rooms played a key role in partnership with the WHO officials, in the early formulation and release of technical advisories and guidelines for timely life-saving interventions, such as contact tracing, quarantine, isolation, hospitalization, infection prevention and control, and extensive capacity-building for all cadres of health and other interlinked departments. The state government also set-up at least two COVID-19 dedicated hospitals with well-trained staff and teams from all specialities in each district to treat the positive cases. State and District Medical Boards were constituted to bring out treatment and discharge protocols and assess each positive case. True NAAT and CB NAAT (*Xpert-SARS-CoV testing*) have also been initiated in eight government institutions and nine private institutions to test samples for patients undergoing an emergency surgery, symptomatic health workers, sick patients, or COVID-19 suspected death.

The government initially instituted a longer quarantine period of 28 days, and thousands of shelters were built for migrant workers stranded by the nationwide shutdown. Further, COVID Care Centers were established in all districts to accommodate non-residents such as tourists, people in transit etc. Adequate infrastructure was provided at designated isolation facilities to accommodate residents returning from other states. That 180,617 people were under surveillance, out of which, 177,955 were under home and institutional quarantine, and 2,662 were in designated isolation facilities as of 29 June 2020 speaks volumes about the extent of this health care network. Besides, regular monitoring, a mix of phone calls and home visits, was also instituted to ensure strict adherence.

²⁵ <https://www.who.int/india/news/feature-stories/detail/responding-to-covid-19---learnings-from-kerala>. Accessed 7 January 2022.

Another feature of this health care mechanism has been the provision of psychosocial support through the Telemedicine portal, *e-sanjeevani*, for teleconsultation across the state and the *Ottakalla oppamundu* ('You are not alone, we are with you'), a psychosocial support programme to address the mental health needs of the people during the pandemic. As of 23 June 2020, 1143 mental health professionals, including psychiatrists, psychiatric social workers, clinical psychologists and counsellors, were deployed to provide support to people in quarantine or isolation, numbering 480,504.²⁶ Counselling service is also provided to frontline workers working in corona outbreak control activities. The government has adopted an inclusive approach and addressed the special needs of mentally-ill patients, children with special needs, migrant labourers and elderly people living alone. As of 23 June 2020, the psychosocial services have reached out to 1,142,701 people in the state by providing them with an enabling environment to deal with stress related to the novel coronavirus outbreak (*ibid*).

An awareness campaign, 'Break the Chain,' successfully promoted the importance of hand hygiene, physical distancing and cough etiquette. Handwashing stations were installed in strategic locations, including exit and entry points of railway stations etc, to instil and institute a behaviour change. The Kerala *Arogyam* portal, COVID *Jagratha* portal and Directorate of Health Services website were launched by the Department of Health and Family Welfare with comprehensive information on COVID-19.

It must be emphasised that the empowered women self-help groups, *Kudumbashree*, helped the cause in a big way. *Kudumbashree* formed close to 1.9 lakh WhatsApp groups with 22.5 lakh neighbourhood group members to educate on key safety measures as advocated by the government during the lockdown.²⁷ According to the WHO (on 2 July 2020), the Community Kitchen initiative through the Local Self Government Department (LSGD), with the support of *Kudumbashree*, has provided more than 865.2 lakh meals free meals to workers, those in quarantine/ isolation, destitute and other needy persons.²⁸ Such mechanisms of distribution of cooked meals and provision of free ration under the Public Distribution Scheme to those in need are reflect a well-thought-out and caring response and relief strategy.

²⁶ <https://dhs.kerala.gov.in/wp-content/uploads/2020/06/Bulletin-HFWD-English-June-23.pdf>. Accessed 7 January 2022.

²⁷ <https://kudumbashree.org/pages/828>. Accessed 7 January 2022.

²⁸ <https://www.who.int/india/news/feature-stories/detail/responding-to-covid-19---learnings-from-kerala>. Accessed 7 January 2022.

Kerala's Economic Response to COVID-19

Kerala's response to the COVID-19 has been multidimensional in that it has aimed at providing healthcare and other facilities and measures to ensure food security and stimulate the economy.

Kerala was the first state to announce a substantial relief programme in the form of a Rs 20,000 crore package, much ahead of the Central Government and the other States in India, in view of the anticipated economic impact of the pandemic. Out of the Rs 20,000 crore economic package, Rs1,320 crore was disburse welfare pensions in advance for 2 months in March. Another tranche of Rs100 crore was to assist Rs1,000 each for families not eligible for welfare pensions. Rs 2,000 crore was set aside to provide jobs under the employment guarantee scheme.

In order to meet the additional expenses of the COVID-19 public health care facilities, the Government allocated Rs 500 crore. Another allocation of Rs 100 crore was set aside to provide food grain through the public distribution system. Besides, as a part of the Hunger-Free Kerala project, Rs50 crore was allocated to provide meals at just Rs 20 through 1,000 food stalls across the state set up in April 2020 by the government. Further, the State Government allocated Rs 14,000 crore to clear all pending payments of the State Government to institutions and individuals.

Throughout the lockdown period and after, Kerala gave priority to ensuring that the people had enough food materials and no one was going hungry. A kit with 17 items was provided to all ration card-holding households in the State. A total of 84.5 lakh ration cards were provided with such an *Athjeevana* kit. Migrant labourers were also provided food and other provisions during the lockdown period. Camps were set up to ensure better facilities for the migrant workers.

Over and above the economic package, the Government of Kerala provided relaxations in norms and bill payments to ensure that people have additional cash at their disposal. Fitness fee for auto-rickshaws and taxis was relaxed. Relaxation of one month was provided in the quarterly taxes of stage carriages and contract carriages. These concessions amount to ₹23.60 crores. The Government also allowed delayed payment of electricity and water bills for one month without any fines. Entertainment tax on movie theatres was waived. Online facilities were set up to ensure the delivery of essential articles, including vegetables and pulses, to families during the lockdown. Voluntary services of organisations were ensured to assist people in need.

Pressures of inflation and public debt

As we have already found, consumer price inflation started to increase in many parts of the world, especially in emerging markets and developing economies, along with the pandemic, despite the dampening demand and subdued supply under the lockdown

restrictions, adding fuel to the fire in the lives of millions left in the lurch with no job and income. It is in such situations that the helping hands of the state are expected to come forward with full fiscal support, whatever its cost.

India, closely integrated with the world economy, also fell under the inflationary pressures, such that the headline inflation²⁹ went above the upper tolerance band of the inflation target during June-November 2020, taking fuels from a sharp spike in both food inflation and core inflation (excluding food and fuel) in conjunction with a number of adverse developments such as “excess rains and supply disruptions; safe haven impelled increase in the prices of gold; and several rounds of hikes in pump prices of petrol and diesel on the back of firming crude oil prices and higher excise duties” (RBI 2021: 39). Thus, the headline inflation started picking up in the second half of 2019-20 and reached a multi-year peak of 7.6% in October 2020 (highest in 77 months). Subsequently, food inflation started easing from November 2020, reached 2.7% in January 2021 from 10.1% in October 2020, and increased to 5.2% in March 2021. Even though fuel prices remained subdued during 2020-21 due to a fall in prices of liquefied petroleum gas (LPG) and non-PDS kerosene, LPG prices started increasing from December 2020 onwards. The core inflation, excluding food and fuel, peaked 6% in February 2021 from the historic low of 3.4% in October 2019. “This elevation was driven by near double-digit inflation in prices of transport and communication, personal care and effects, and pan, tobacco and intoxicants” (RBI 2021: 42). On the other hand, the wholesale price-based inflation peaked to a new high of 14.23% in November 2021 from 12.54% in October 2021, led by a surge in primary food inflation that hit a 13-month high and a continued uptick in mineral, fuel and power, as well as oil and gas prices.³⁰

Inflation in Kerala, highly dependent on neighbouring states for most of her essential commodities, cannot but toe the Indian trend in general. Thus, the CPI-based inflation in Kerala increased to 6.51% in October 2020 compared to 5.17% in June and 6.21% in September 2020. Contrary to the national trend, inflation in urban Kerala was higher (6.76% in October 2020) than in rural areas (6.45% in October 2020).³¹ However, it should be noted that the helping hand of a willing state did come forward in Kerala with all the possible fiscal support to the people in need, as we have already seen above. And this, as such, has resulted in an unavoidable increase in public debt in Kerala, as elsewhere across the globe. According to the Comptroller and Auditor General (CAG) report tabled in the State Assembly on 11 November 2021, the state’s public debt increased to Rs 2.74lakh crore, growing by 1.02% to 32.07%, in 2019-20. The Debt-GSDP ratio of Kerala rose from 25.12% in 2012-13 to 30.46% in 2019-20 (Government

²⁹ Headline inflation is measured by year-on-year changes in the all-India CPI-Combined (Rural + Urban) with base year 2012 = 100 released by the National Statistical Office (NSO), Government of India.

³⁰ <https://www.thehindu.com/business/Economy/wholesale-price-inflation-reaches-new-high-of-1423-in-november/article37955052.ece>. Accessed 8 January 2022.

³¹ <https://spb.kerala.gov.in/economic-review/ER2020/>. Accessed 8 January 2022.

of Kerala 2021: 44). As per the budget for 2021-22, the outstanding debt³² of Kerala is expected to touch Rs 3.27 lakh crore by the end of this fiscal year; with the Gross State Domestic Product (GSDP) of Kerala for 2021-22 is projected to be Rs 8.76 lakh crore; the Debt-GSDP ratio is expected to be 37.33%. These figures may present an enjoyable feast to the so-called critics, bent on reaping political mileages, but at the cost of the reality of the devastating impact of the pandemic on the people at large.

2.6 Concluding observations

As the pandemic ravaged almost all the sectors of the economies and the sections of the societies over the globe, nation states, regardless of their level of development and social transformation, proactively intervened to save the life and livelihood of people. This, in fact, was a historical turning point that reinforced the paramount role of the state once again in a world that often tends to push the state to the back seat, albeit the nature and the extent of state intervention vary. This in turn has been governed by the initial conditions and the development philosophy, among other factors. It was also shown that, globally, the extent to which the economy managed to revert pre-pandemic position was crucially dependent on how the state responded. It was further revealed that with the pandemic, the growing inequalities as exclusion within and between countries, the notorious offshoot of 40 years of neoliberal reform got further accentuated. As a result, the countries could be divided into:

- a) those that managed to put the economy back to pre-pandemic position, and
- b) those wherein the southward trend in GDP continues, and a return to the pre-pandemic position is far from sight.

What differentiates the first category from the second is mainly the substantial public spending, even more than 10% of GDP. The spending, conceived and implemented, took mostly in the form of creating and strengthening all kinds of infrastructure, especially health infrastructure to fight the pandemic, including vaccine research, infrastructure for harnessing IT and knowledge for development, investment for greening the ecology and low carbon innovations, investment for transitioning to industry 4.0, investment in R & D especially basic research and wage subsidy, to list a few. In a context where the power of investment multiplier got subdued on account of the lockdown to secure social distancing, government spending has been substantially flown towards ensuring a steady flow of income of the workers.

For those countries that followed the conservative fiscal policies on account of various reasons, the road to recovery remains rather rocky. We also observed that as a result of countercyclical fiscal policy measures, the debt burden at the global level is at an all-time high of \$226 trillion, leaving the debt GDP ratio as the highest in the past 50 years. This

³² Outstanding debt is the accumulation of borrowings taken by the state government over the years.

growing debt was mostly driven by public debt in developed countries. Thus viewed, the concern for the debt has not deterred the developed countries from borrowing to save the life and livelihood of their people on the one hand and investment for future development on the other.

When it comes to the Indian experience, it was evident that the central government has been highly proactive in addressing the COVID pandemic and fairly successful in managing it during the first wave. However, the lockdown was imposed to ensure social distancing to prevent the spread of the pandemic has had its adverse effect. As we travelled in time with the pandemic, evidence suggested that there was much more room for fiscal stimulus. India was at its best when it came to lockdown strictness. Heavy dependence has been on monetary policy measures to induce the banks to come forward to provide adequate liquidity to grease the wheels of the economy. But how have the banks responded? We shall provide some empirical evidence in chapter 6 of this Report. The evidence further suggests that the pandemic has accelerated the southward movement of the economy, which has already started even before the pandemic.

Since India's state governments are much closer to the people than the Union Government, the study undertook a careful examination of the state-level initiatives for different target groups. The study observed hardly any state in the country reneged from its responsibility in times of pandemic. Almost all the States initiated schemes to protect especially the weaker section from the pandemic that included, but was not limited to, the ration card holders, MNREGA workers, women, school children, workers in general, health professionals, among others.

However, the study notes that in terms of the initiatives with respect to social protection during the time of the pandemic, Kerala stood head and shoulders above all the states. It was evident that hardly any section of the society remained out of the caring hand of the State. Keeping in mind the dampening effect on investment multiplier of lockdown induced social distancing, the Government of Kerala ensured the provision of essential goods to all the citizens for almost a year. In contrast, such provision was limited to one or two months and select groups in other states. This is further evident from the fact that the expenditure on social welfare in Kerala recorded a growth of 165% in 2020-21 (RE) compared to 2019-20 (actual), which is remarkably higher when compared to other states.

True, Kerala paid a price for that care in terms of an inevitably increasing public debt; we have already seen that the state's public debt increased by 1.02% to 32.07%, in 2019-20, which has become a fascinating subject for the journalists. On this question, we shall turn to Chapter 9, where we examine the fiscal impact of COVID 19. In between, the key issue is how the State initiatives have impacted the employment, income, consumption, and borrowing of the people. Equally important to see is how the pandemic has impacted the emigrants and immigrants in the State. The chapters that follow, these issues are up for scrutiny.

Appendices

Appendix 2.A: Evolution of lockdown/unlock measures by government of India	
Period/Date	Lockdown/unlock Strategies
March 24, 2020	The government of India declared a nationwide lockdown for 21 days to ensure social distancing to prevent to prevent the spread of the coronavirus (Ray D 2021 for its impact).
25 April	Small retail shops were allowed to open with half the staff. Social distancing norms were to be followed.
April 29, 2020	Government permitted inter-state movement of stranded people, including migrant workers, managed by the nodal authorities designated by the states.
Phase 3 (4–17 May)	Normal movement was permitted in green zones with buses limited to 50 per cent capacity. Orange zones were to allow only private and hired vehicles but no public transportation. The red zones were to remain under lockdown.
Phase 4 (18–31 May)	The local bodies were given the authority to demarcate containment and buffer zones.
Unlock 1.0 (1–30 June)	Permitted shopping malls, religious places, hotels, and restaurants to reopen from 8 June. Large gatherings were still banned, but no restrictions on interstate travel. Night curfews were still in effect.
Unlock 2.0 (1–31 July)	Lockdown measures were imposed only in containment zones. In all other areas, most activities were permitted. Night curfews were in effect. in all areas. Inter- and intrastate travel was permitted and also limited international travel. Shops were permitted to allow more than five persons at a time. Educational institutions, metros, recreational activities remained closed.
Unlock 3.0 (1–31 August)	Removed night curfews and permitted gymnasiums and yoga centres to reopen from 5 August. Educational institutions were to remain closed. All inter-and intrastate travel and transportation were permitted.
Unlock 4.0 (1–30 September)	Outside the containment zone many activities were given permission. Metro was allowed to be reopened in a graded manner from 7 September. Marriage functions with gatherings of up to 50 people and funereal/last rites ceremonies with up to 20 people were permitted. Religious, entertainment, political, sports, academic functions and gatherings of up to 100 people were allowed. Face masks were made compulsory in public places, workplaces and during transport.
Unlock 5.0 (1–31 October)	Allowed state/union territory governments to decide on reopening schools and coaching institutions after October 15 in a graded manner. Swimming pools for training of sportsperson were allowed to open. Cinema halls, to be

	opened from 15 October 2020, with a 50% of their seating capacity.
Unlock 6.0 (1–30 November)	A few states allowed opening up of more activities outside containment zones and announced partial reopening of schools. The government of India extended the ban on scheduled international flights till January 31. On 3 November the Kerala Government opened its tourism sector (hill stations, beaches, national park, and inter-state public transport movement).
January 3, 2021	India's Central Drugs Standard Control Organization (CDSCO) provided emergency use authorization (EUA) to the locally produced AstraZeneca vaccine and the Covaxin (developed by local firm Bharat Biotech).
January 11, 2021	Prime Minister announced the start of the world's biggest vaccination campaign from January 16th aiming to vaccinate about 300 million people in the coming months.
May 1, 2021	All persons above 18 are eligible for vaccinations; vaccine manufacturers are now permitted to sell 50 per cent in the open market
15 June 2021	Many States started lifting lockdowns and restrictions and moved in Unlock phase.
September 2021	India vaccinated 1 crore persons.
Source: Compiled from different sources.	

Appendix 2.B: India's fiscal support measures (two broad categories)

Above-the-line measures	Below-the-line measures
(i) government spending (about 3.5 per cent of GDP, of which about 2.2 per cent of GDP is estimated to have been utilized in the last fiscal year), (ii) foregone or deferred revenues (about 0.3 per cent of GDP falling due within the past fiscal year), and (iii) expedited spending (about 0.3 per cent of GDP falling due within the past fiscal year);	designed to support businesses and shore up credit provision to several sectors (about 5.3 per cent of GDP) – mostly credit support.

Below we give a brief timeline of these support measures:

Period/Date	Measures
Early stages of the pandemic	Above-the-line measures focused primarily on social protection and healthcare, such as a) in-kind (food; cooking gas) and cash transfers to lower-income households (1.2 per cent of GDP); b) wage support and employment provision to low-wage workers (0.5 per cent of GDP); c) insurance coverage for workers in the healthcare sector; and d) healthcare infrastructure (0.1 per cent of GDP). e) extended last dates for filing GST returns and income tax returns.
28 March 2020	Launched a new fund called PM CARES fund for combating coronavirus-like situations.
12 May 2020	Announced an economic package of ₹20 trillion (US\$270 billion) for <i>Aatma Nirbhar Bharat</i> (self-reliant India), nearly 10% of the GDP.
13 – 17 May 2020	The finance minister elaborated on the financial package: a) The definition of MSMEs was revised, which allows more companies to avail the benefits of MSME schemes; collateral free loans and bank guarantees that would allow resumption of work for many MSMEs. b) Migrants, farmers, street vendors among others were covered in the package and the "One Nation One Ration Card" scheme was emphasized. c) Operation Greens was extended from tomatoes, onion and potatoes (TOP) to all fruits and vegetables. Cereals, edible oils, oil seeds, potato and onion were deregulated (except in exceptional circumstances) and no stock limit shall apply for storage as was proposed Amendment in Essential Commodities Act (1958). d) <i>Matsya Sampada Yojana</i> for fisheries e) animal husbandry infrastructure fund. f) Agri-infrastructure fund, agricultural marketing reforms for farmers and fair price legal framework support for farmers; g) A fund for farm-gate infrastructure <u>farm-gate infrastructure</u> h) amendments to the Essential Commodities Act, as well as a) i) the opening up of the defence sector, power sector and space sector for privatization.
20 June 2020	The <i>Garib Kalyan Rojgar Abhiyan</i> was launched to tackle the COVID-19 impact on migrant workers, a rural public works scheme with an initial funding of Rs500 billion (US\$7.0 billion) covering 116 districts in 6 states

12 October 2020	announced a Rs73,000 crore (US\$9.7 billion) worth economic stimulus package, labelled as <i>Atmanirbhar Bharat Abhiyan 2.0</i> .
October – November 2020	<ul style="list-style-type: none"> a) Additional public investment (higher capital expenditure by the central government and interest-free loans to states, of about 0.2 per cent of GDP); and b) Support schemes targeting certain sectors including <ul style="list-style-type: none"> a) Production Linked Incentive scheme targeting 13 priority sectors with an expected cost of about 0.8 per cent of GDP over 5 years, b) a higher fertilizer subsidy allocation benefiting the agriculture sector (0.3 per cent of GDP); and c) (iii) support for urban housing construction (0.1 per cent of GDP).
12 November 2020	announced a Rs2.65 lakh crore (US\$35 billion) worth economic stimulus package, labelled as <i>Atmanirbhar Bharat Abhiyan 3.0</i>
1 February 2021	The central government budget for FY2021-22 expanded expenditure on health and wellbeing, including a provision for the country's COVID-19 vaccination program (Rs350 billion).
2 April 2021	The World Bank approved US\$1 billion emergency financing for India to tackle coronavirus labelled 'India COVID-19 Emergency Response and Health Systems Preparedness Project'.
28 April 2021	The Asian Development Bank (ADB) approved a Rs10,500 crore (US\$1.4 billion) loan to India to combat the pandemic.
April 2021	<ul style="list-style-type: none"> a) The central government announced free food grains to be provided to 800 million individuals in May and June (with a cost of about Rs260 billion), similar to the additional food rations provided in 2020 (which had expired in November 2020). b) Also extended a scheme for providing interest-free loans to states for capital expenditure to FY2021-22 (Rs150 billion) and c) expedited the release of Disaster Response Fund to state governments (from June to May). Finally, customs duties and other taxes on vaccines, oxygen and oxygen-related equipment were waived to boost their availability.
April – May 2021	<ul style="list-style-type: none"> a) Several measures to ease the tax compliance burden across a range of sectors, including postponing some tax-filing and other compliance deadlines, and a reduction in the penalty interest rate for overdue GST filings. b) Measures without an immediate direct bearing on the government's deficit position aimed at

	<p>(i) providing credit support to businesses (1.9 per cent of GDP), poor households, especially migrants and farmers (1.6 per cent of GDP), distressed electricity distribution companies (0.4 per cent of GDP), and</p> <p>(ii) targeted support for the agricultural sector (0.7 per cent of GDP), as well as</p> <p>c) (iii) some miscellaneous support measures (about 0.3 per cent of GDP).</p>
Source: Compiled from different sources.	

In addition to the fiscal measures many of the existing social protection measures with changes in sync with the COVID context have been undertaken which included the following:

Programme	Features
Pradhan Mantri Garib Kalyan Yojana, with Rs. 1.70 lakh crores fund	<p>a) Insurance cover of Rs 50 lakh for every health care worker fighting COVID-19.</p> <p>b) 80 crore individuals (about 2/3rd of India's population) to get 5 kg food grains (rice and wheat) and 1 kg of pulses (according to regional preferences) free of cost every month for a limited period.</p> <p>c) 8 crore poor families (that are beneficiaries under the <i>Ujjwala</i> scheme) to get one gas cylinder free of cost during April-June 2020.</p> <p>d) 20.40 crore women who are account holders under <i>Pradhan Mantri Jan Dhan Yojana</i> to get an ex-gratia amount of Rs 500 per month for April-June 2020.</p> <p>e) Increase in wages under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) to Rs 202 a day from Rs 182 a day to benefit 13.62 crore families</p> <p>f) An extra one-time support payment of Rs 1000 to 3 crore poor senior citizen, poor widows and poor disabled</p> <p>g) For farmers, the first instalment of payment (Rs 2000) under the <i>Pradhan Mantri Garib Kalyan Yojana</i> due in 2020-21 will be front-loaded and paid in April 2020 itself under the <i>PM Kisan Yojana</i>.</p> <p>h) Limit of collateral free loans extended to Rs 20 lakh from Rs 10 lakh for women organised through 63 lakh self-help groups (SHGs).</p> <p>i) Employees Provident Fund regulations to be amended to include Pandemic as the reason to allow non-refundable advance of 75% of the amount, or three month of the wages, whichever is lower, from their accounts.</p> <p>j) Low wage earners in organised sectors who earn less than Rs 15,000 per month and working in business with less than 100 workers are to</p>

	be provided 24% of their monthly wages into their Provident Fund account for April-June 2020.
PM CARES Fund	A public charitable trust under the name of Prime Minister's Citizens Assistance and Relief in Emergency Situations (PM CARES) Fund, used for dealing with any kind of emergency or distress situation, like that posed by the COVID-19 pandemic and will provide relief to those affected.
State Disaster Relief Fund (SDRF)	A special dispensation in the utilisation of SDRF allows this fund to be used for setting up quarantine facilities, sample collection and screening, setting up additional testing laboratories, purchase of personal protection equipment for healthcare, police, municipal and fire authorities, purchase of thermal scanners, ventilators, air purifiers, consumables for government hospitals.
Building and Construction Workers Welfare Fund (BCWWF)	The Central Government has directed State Governments to use BCWWF fund to provide relief to construction workers and support 3.5 crore registered workers.
Source: Compiled from different sources.	

Appendix 2.C: India's monetary policy measures

Reduction in Repo and Reverse Repo Rates.	In order to encourage banks to deploy surplus funds in investment and loans to productive sectors of economy, the Repo rate, the rate at which banks borrow from the RBI, was reduced by 75 basis points (bps) to 4.40% on 27 March 2020, bringing down the policy rate by 210 bps since February 2019. Also effected was a reduction in the reverse repo rate (the rate at which banks can place overnight funds with RBI) by 90 bps to 4%, which was further reduced by 25 bps to 3.75% on 17 April 2020.
Rescheduling of Payments of Term Loans and Working Capital Facilities	Permitted to grant a moratorium of three months on payment of all term loan instalments falling due between 1 March 2020 and 31 May 2020. Interest shall continue to accrue on the outstanding portion of the term loans during the moratorium period. Also permitted lending institutions to defer the recovery of interest applied in respect of all working capital facilities sanctioned in the form of cash credit/overdraft during the period from March 1, 2020 up to May 31, 2020, with the provision that interest accrued be recovered immediately after this period.
Long Term Repo Operations	In order to help ease the funding conditions in the market and to bring down the elevated term premiums, the RBI conducted LTROs

<p>(LTROs): Targeted Long Term Repos Operations (TLTROs) and TLTRO 2.0</p>	<p>for one-year and three-year tenors for a total amount of ₹ 1.25 lakh crore (or ₹ 1.25 trillion) at the policy repo rate and also conducted Targeted Long-Term Repo Operations (TLTROs) of three years tenor for a total amount of ₹ 1 lakh crore at a floating rate linked to the policy repo rate.</p> <p>On 17 April 2020, RBI announced TLTRO 2.0 for an aggregate amount of ₹ 50,000 crore. The banks are required to invest the funds under TLTRO 2.0 in investment grade bonds, commercial paper, and non-convertible debentures of NBFCs, with at least 50 per cent of the total amount availed going to small and mid-sized NBFCs and MFIs.</p>
<p>Refinancing Facilities for All India Financial Institutions (AIFIs)</p>	<p>AIFIs, such as the National Bank for Agriculture and Rural Development (NABARD), the Small Industries Development Bank of India (SIDBI) and the National Housing Bank (NHB), have been provided special refinance facilities at policy repo rate for a total amount of ₹ 50,000 crore to enable them to meet sectoral credit needs, with ₹ 25,000 crore going to NABARD for refinancing regional rural banks (RRBs), cooperative banks and micro finance institutions (MFIs); ₹ 15,000 crore to SIDBI for on-lending/refinancing; and ₹ 10,000 crore to NHB for supporting housing finance companies (HFCs).</p>
<p>Reduction in Cash reserve ratio (CRR)</p>	<p>The RBI has reduced the CRR of all banks by 100 basis points to 3.0 per cent of net demand and time liabilities with effect from March 28, 2020 for a period of one year. This reduction in the CRR would release primary liquidity of about ₹ 1,37,000 crore or ₹1.37 trillion uniformly across the banking system. Further, the requirement of minimum daily CRR balance maintenance from 90% has been reduced to 80% effective from 28 March 2020 up to 26 June 2020.</p>
<p>Easier borrowings under Marginal Standing Facility (MSF)</p>	<p>Under MSF, banks can borrow overnight at their discretion by dipping up to 2% into the Statutory Liquidity Ratio (SLR). In view of the exceptionally high volatility in domestic financial markets which bring in phases of liquidity stress and to provide comfort to the banking system, RBI decided to increase the limit of 2% to 3% with immediate effect, applicable up to 30 June 2020. This is intended to provide comfort to the banking system by allowing it to avail an additional ₹ 1.37 trillion of liquidity under the LAF window.</p>
<p>Special Liquidity Facility for Mutual Funds (MFs)</p>	<p>In the wake of capital market volatility in reaction to COVID-19 and consequent redemption pressures on mutual funds, the RBI on 27 April 2020 announced a special liquidity facility for mutual funds of ₹ 50,000 crore. Support extended to MFs under the SLF-MF is also</p>

	exempted from banks' capital market exposure limits. Liquidity infusion measures, taken by the RBI through an array of instruments including term repos, LTRO, TLTRO, TLTRO 2.0, refinancing facilities, CRR and MSF add up to aggregate liquidity to the system of over ₹ 7.9 trillion (or 3.8 per cent of India's GDP).
Extension of Fixed Rate Reverse Repo and Marginal Standing Facility window	In view of the rapidly evolving financial conditions and taking into account the impact of disruptions caused by COVID-19, the RBI decided as an interim measure to extend the window timings of Fixed Rate Reverse Repo and MSF operations (MSF is the rate at which the banks are able to borrow overnight funds from RBI against eligible collateral), effective from 31 March 2020 till 30 April 2020 in order to provide eligible market participants with greater flexibility in their liquidity management.
OMO Purchase of Government of India Dated Securities	With the heightening of COVID-19 pandemic risks, financial conditions tightened leading to hardening of yields and widening of spreads in certain financial market segments. Therefore, the Reserve Bank decided to conduct open market operations (OMO) in the form of purchase of dated government securities for an aggregate amount of ₹ 40,000 crores.
USD/INR Sell Buy Swaps	Keeping in view the mismatches in US dollar liquidity and the requirement of US Dollars in the market, the RBI undertook 6-month US Dollar sell/buy swaps for USD 4 billion to provide USD liquidity to the foreign exchange market.
Offshore Non-Deliverable Rupee Derivative Markets	The RBI has decided to permit banks in India which operate International Financial Services Centre (IFSC) Banking Units (IBUs) to participate in the Non-Deliverable Forward (NDF) market with effect from June 1, 2020. Banks may participate through their branches in India, their foreign branches or through their IBUs.
Review of Limits of Ways and Means Advances (WMA) of Central Government and of States/UTs	Reserve Bank, in consultation with Government of India, on 20 April 2020 decided to revise the limit for Ways and Means Advances for the remaining part of first half of the financial year 2020-21 (April 2020 to September 2020) to ₹ 2,00,000 crore. The RBI decided on 17 April 2020 to increase the WMA limit by 60 per cent over the level of March 31, 2020 for all States/UTs to enable the State Governments to tide over the pandemic situation. The revised limits are effective from 17 April 2020 till 30 September 2020. It will provide comfort to the States to undertake COVID-19 containment and mitigation efforts and enable them to better plan their market borrowings.
Implementation of counter-	The framework on CCyB was put in place by the RBI in terms of guidelines of 5 February 2015, which advise that the CCyB would be

cyclical capital buffer (CCyB)	activated as and when the circumstances warranted, and that the decision would normally be pre-announced. The framework, applicable till 30 April 2020, envisages the credit-to-GDP gap as the main indicator, used in conjunction with other supplementary indicators.
Deferment of Implementation of Net Stable Funding Ratio (NSFR)	As part of the reforms undertaken in the years following the global financial crisis, the Basel Committee on Banking Supervision (BCBS) had introduced the Net Stable Funding Ratio (NSFR) which reduces funding risk by requiring banks to fund their activities with sufficiently stable sources of funding over a time horizon of a year, such that banks in India had been required to maintain NSFR of 100 per cent from 1 April 2020. In the face of the COVID-19 situation, the RBI decided to defer the implementation of NSFR by six months from 1 April 2020 to October 1, 2020.
Deferment of Last Tranche of Capital Conservation Buffer	The capital conservation buffer (CCB) is designed to ensure that banks build up capital buffers during normal times, which can be drawn down as losses are incurred during a stressed period. As per Basel standards, the CCB was to be implemented in tranches of 0.625 per cent and the transition to full CCB of 2.5 per cent was set to be completed by 31 March 2019. It was subsequently decided to defer the implementation of the last tranche of 0.625 per cent of the CCB from 31 March 2019 to 31 March 2020. In view of the COVID-19 situation, the RBI decided to further defer the implementation of the last tranche of 0.625 per cent of the CCB from 31 March 2020 to 30 September 2020.
Bringing Down Liquidity Coverage Requirement (LCR)	In order to accommodate the burden on banks' cash flows, banks were permitted on 17 April 2020 to maintain LCR as under: (i) From 17 April 2020 to 30 September 2020 - 80 per cent (ii) 1 Oct 2020 to 31 March 2021 - 90 per cent (iii) 1 April 2021 onwards - 100 per cent.
Restriction on Distribution of Dividend	For ensuring that banks conserve capital to retain their capacity to support the economy and absorb losses in an environment of heightened uncertainty, it has been decided that all commercial banks and cooperative banks shall not make any further dividend pay-outs from profits pertaining to the financial year ended March 31, 2020 until further instructions.

Source: Compiled from different sources.

Appendix 2.D: COVID-19 relief measures

1. Central government announcements

Beneficiaries	Benefits
Ration Card Holders	<p><i>Food Grains</i></p> <p>Each family to get an extra 5 kg food grains (rice/wheat) per person per month for three months (April to June 2020), free of cost, in addition to regular ration which they will continue to get.</p> <p><i>Pulses</i></p> <p>1 kg of dal to each poor household (covered under the Targeted Public Distribution System (TPDS) i.e., Antyodaya Anna Yojana (AAY) and Priority Households) for three months (April to June 2020), free of cost. Card holders can take the additional rations from the shops in two instalments.</p>
Farmers	<p><i>PM KISAN</i></p> <p>First instalment of scheme which amounts to Rs. 2000 to be paid during 1st week of April. Registered account holders under the PM KISAN Yojana. Farmers will get time until May 31 to repay their short-term crop loans. Farmers will continue to get these loans at subsidised interest rate of 7%, and those who repay promptly will get it at 4% till May 31.</p> <p><i>Short-Term Crop Loans</i></p> <p>All farmers who have taken short term crop loans of up to Rs. 3 lakhs from banks which need to be repaid between 1st March and 31st May, are eligible.</p>
MGNREGA Workers	<p><i>Fund release for Pending Wages</i></p> <p>Rs. 4431 crores released for pending MGNREGA wages. If pending wages are not cleared, a written complaint can be filed with the Panchayat Mukhia/Rojgar Sewak/Block Programme Officer. Those seeking work can ask the Rojgar Sewak about social distancing norms to follow. Job-card holders under the Mahatma Gandhi National Rural Employment Guarantee Act will get the benefit.</p>
Workers	<p>No termination of employment or salary reduction State/Union Territory Governments are to ensure that employers do not fire workers or give them less salary because of the lockdown. All workers including contractual and casual working in the public or private sector. Covers all establishments including Plantations, Factories, Industries, Malls, Shops.</p>
BPL Households	<p><i>PM Ujjwala Yojana</i></p> <p>Three gas cylinders to be provided free of cost between April and June 2020. Households with an LPG connection under the Pradhan Mantri Ujjwala Yojana.</p>

Health Professionals	<p><i>Accident Insurance</i></p> <p>Health professionals who meet with an accident while treating COVID-19 patients will receive Rs.50 lakh as compensation. This covers safai karamcharis, ASHA workers, ward-boys, nurses, paramedics, technicians, doctors and specialists working in Central as well as State government health centres, wellness centres and hospitals.</p>
Women	<p><i>Jan Dhan Yojana</i></p> <p>Rs. 500 per month will be deposited in bank accounts of women for the next three months (April to June 2020). Women with bank accounts under the Pradhan Mantri Jan Dhan Yojana (PMJDY).</p> <p><i>Credit to Self Help Groups</i></p> <p>Self Help Groups can borrow loans up to J20 lakhs without any security or asset offered as collateral. The earlier limit on such loans was Rs.10 Lakh. Women self-help groups under the Deen Dayal Upadhyay Yojana.</p> <p><i>Pensioners, Divyang and Widows</i></p> <p><i>Additional Cash Transfer</i></p> <p>Each beneficiary shall receive Rs.1000 from the Central Government. This will be given in two instalments over the next three months (April - June 2020). Three month's pensions in advance which will be distributed in April.</p> <p><i>Advance in Social Assistance</i></p> <p>Pensioners, Widows and Divyang persons receiving assistance from the National Social Assistance Program (NSAP).</p>
Construction Workers	<p><i>Financial Aid</i></p> <p>State Governments are directed to use the Building and other Construction Workers (BoCW) cess funds to aid workers in the construction sector. Construction Workers registered with the BoCW.</p>
Workers in the Organised Sector	<p><i>EPF Contributions</i></p> <p>The Government will pay for both the employer and employee contribution to EPF accounts (total 24%) for the next three months (April-June 2020). Employees' Provident Fund Organisation (EPFO) subscribers from establishments with: (i) up to 100 employees, and (ii) 90% employees earning less than Rs 15,000 per month.</p> <p><i>EPF Advance</i></p> <p>EPF holders are allowed to take a non-refundable advance which can be up to: (a) 75 % of their EPF balance OR (b) three months of wages, whichever is lower, from their EPF accounts. EPFO subscribers will get benefit.</p>
Migrant Workers	<p><i>Relief Camps</i></p> <p>More than 21,000 relief camps to be set up by various State Governments</p>

	<p>and UTs. Migrant workers stranded as a result of the lockdown</p> <p><i>Rent Relief</i></p> <p>Landlords instructed not to demand rent for one month. Migrant workers living in rented accommodation.</p>
Urban Homeless	<p><i>Meals under DAY-NULM (Deendayal Antyodaya Yojana-National Urban Livelihoods Mission)</i></p> <p>All States/UTs to provide three meals a day, free of cost, in the DAY-NULM shelters. All the urban homeless in DAY-NULM shelters.</p>

Appendix 2. E: State level regulations (before 24 March)

States/ UTs	Section 144 declared	Lockdown	Services shutdown			
			Schools	Cinemas/ Malls	Public Transport	Private Transport
Andhra Pradesh	23-Mar	Yes	Yes	Yes	Yes	No
Arunachal Pradesh	No	Yes	No	No	Yes	Yes
Assam	No	Yes	No	No	No	No
Bihar	No	Yes	Yes	No	No	No
Chandigarh	No	Partial	Yes	No	No	No
Chattisgarh	No	Partial	Yes	No	No	No
Delhi	23-Mar	Yes	Yes	Yes	Yes	Yes
Goa	No	Partial	No	No	No	No
Gujarat	22-Mar	Yes	Yes	Yes	Yes	No
Haryana	No	Yes	Yes	Yes	Yes	No
HP	No	Yes	Yes	Yes	No	No
J and K	No	Partial	Yes	Yes	No	No
Jharkhand	No	Yes	Yes	Yes	No	No
Karnataka	24-Mar	Yes	Yes	Yes	No	No
Kerala	No	Yes	Yes	Yes	Yes	Yes
Ladakh	No	Yes	Yes	Yes	No	No
MP	No	Partial	Yes	Yes	No	No
Maharashtra	23-Mar	Yes	Yes	Yes	No	No
Manipur	No	Yes	Yes	No	No	No
Meghalaya	No	Yes	Yes	Yes	No	No
Mizoram	No	Yes	Yes	No	No	No
Nagaland	No	Yes	Yes	Yes	No	No
Odisha	No	Yes	Yes	Yes	No	Yes
Puducherry	No	Yes	Yes	Yes	No	No
Punjab	No	Yes	Yes	Yes	Yes	Yes
Rajasthan	19-Mar	Yes	Yes	Yes	Yes	Yes
Sikkim	No	Yes	Yes	Yes	No	No
TN	24-Mar	Yes	Yes	Yes	Yes	Yes
Telangana	23-Mar	Yes	Yes	Yes	Yes	No
Tripura	No	Yes	Yes	No	No	No
UP	No	Partial	Yes	Yes	No	Yes
Uttarakhand	No	Yes	Yes	Yes	No	No
West Bengal	No	Yes	Yes	Yes	Yes	No

Gulati Institute of Finance and Taxation

Appendix 3: State-level policy measures for different targeted measures during COVID-19 first wave																									
	UG	KL	AP	AR	AS	BR	CG	DL	GJ	GA	HR	HP	JK	JH	KA	MP	MH	UP	TN	TG	RJ	PB	WB	OD	
Ration Card Holders	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	√	√		√	√	
Farmers	√				√				√		√								√	√	√				
MGNREGA Workers	√	√													√			√	√						√
BPL Households	√								√																
Health Professionals	√					√		√			√														
Women	√																								
Construction Workers	√	√			√			√		√	√	√	√		√	√		√	√		√	√			√
Workers in the Organised Sector	√																								
Migrant Workers	√		√			√	√		√						√				√	√		√	√	√	√
Urban Homeless	√																								
Workers			√	√	√						√			√	√		√		√	√		√	√		
Pensioners			√																		√				
NGOs running Old Age Homes and Child Care Institutions			√																						
Cash Benefit for all BPL card holding families				√																					
Non NFS Families					√																				
Construction Workers in Unorganized Sector					√																				
Adivasis					√																				
School children and students		√			√	√	√			√	√		√	√	√	√						√	√	√	
General						√	√				√														
Pensioners, Divyang and Widows						√		√	√			√	√		√	√									
Destitute, Needy, Beggars							√																		
Private Sector Workers								√	√																
Transport Service Providers								√			√														
Elderly									√																
Economically Weaker Sections (EWS) families											√														
Poor Families (not covered under any Government Scheme)											√														
BPL families not registered under MMPY											√														
Daily Wage Earners											√		√												√
Migrant Workers and Homeless											√														

Appendix 3: State-level policy measures for different targeted measures during COVID-19 first wave																								
	UG	KL	AP	AR	AS	BR	CG	DL	GJ	GA	HR	HP	JK	JH	KA	MP	MH	UP	TN	TG	RJ	PB	WB	OD
Contractual Workers employed by the Government																								
Employees' State Insurance Corporation (ESIC) registered workers													√											
Slum Dwellers, other urban poor and destitute													√											
Ration Card Applications are Pending														√										
Poor and vulnerable persons														√										
Street Vendors and Small Traders															√									
Relief Camps		√																						
Destitute, homeless and needy		√																						
Mental Health		√																						
Transgender Community		√																	√					
Households not having social welfare pensions		√																						
Toddy Workers		√																						
Head Load Workers		√																						
Shops & Commercial Establishment Workers		√																						
Agricultural Workers		√																						
Handloom Workers		√																						
Fishermen		√																						
General Public																	√			√		√		
Pregnant women, new mothers, and children (7 months-6 years)																	√							
Provision of Egg and Banana Cooked Food																	√				√			
Autorickshaw Drivers																					√			
Platform vendors																					√			
Deferred payment of rent																					√			
Ration Kit																					√			
Elderly																					√			

Appendix 3: State-level policy measures for different targeted measures during COVID-19 first wave																									
	UG	KL	AP	AR	AS	BR	CG	DL	GJ	GA	HR	HP	JK	JH	KA	MP	MH	UP	TN	TG	RJ	PB	WB	OD	
Workers involved in COVID-19 relief works																				√					
Delivery of Dry Rations																						√			
Property Owners																						√			
Transport personnel																							√		
Mental Health																							√		
Cash Benefit																									√
Registered Street Vendors																									√
Urban Local Bodies (ULBs)																									√
Sick, Indigent and Destitute																									√
Doctors, medical and paramedical staff																									√
Auto rickshaw, taxi, and other motor-transport drivers		√																							
Beedi Worker		√																							
Lottery Sellers		√																							
Document Writers, Scribes and Stamp Vendors		√																							
Estate Workers		√																							
Cashew Workers		√																							
Artists		√																							
Abkari Workers		√																							
Advocate Clerks		√																							

Source: GIFT based on Azim Premi University. Accessed from <https://covid19socialsecurity.wordpress.com/relief-measures/>

Chapter 3

Employment Impact: Is There a V-shaped Recovery?

Abstract

Kerala is known for its very high unemployment rates. The unemployment rate in Kerala was four times higher than the national average in the 1990s. However, the ratio showed a declining trend from 2011-12, and in 2019-20 the unemployment rate in Kerala was twice that of the national average. In this context, COVID has impacted jobs in Kerala with greater intensity. India accounts for one in seven people who lost jobs in the world. The highest employment decline was witnessed in Kerala in both waves. Thus, one out of eight people who lost jobs during the pandemic are from Kerala. Regarding recovery to pre-pandemic employment levels, Kerala (91.6%) lags behind the all-India average (98 %). The magnitude of the crisis is highly uneven across different sections of the society, with the impact being higher for vulnerable sections of the society. The highest decline in employment in Kerala during the first wave of the pandemic was in urban areas. The employment loss in urban Kerala was about 30 per cent when compared to 10 per cent at the national average.

The highest loss of employment in Kerala during the COVID first wave could be attributed to the massive loss of jobs in the construction and manufacturing sector. Almost 50 per cent of jobs were lost in the construction sector in the first wave though it almost recovered in the second half of 2020. Similarly, Kerala lost three times more jobs in manufacturing than all of India, and the recovery of manufacturing jobs has been the lowest.

Globally and nationally, females and youth have lost more jobs during the pandemic. Consistent with the national trends, females and youth lost more employment in Kerala during the first wave. However, their employment recovery in Kerala is faster than the national trends. By May-2021, the number of females employed in Kerala during the pandemic increased as compared to the pre-pandemic period. This unique trend in Kerala could be partially attributed to the active role of women-led SHGs and the greater female participation in NREGA. In the second wave, youth in Kerala showed no decline in employment while non-youth lost close to 8 per cent of employment.

During the first wave, the marginalised communities employment lost the highest employment (25%) in Kerala. A similar trend was observed at all India levels. However, their employment showed recovery is faster as compared to others. During the first wave, the employment decline was the highest among people with below primary education (50 % for Kerala 35% for all India), daily wage workers (35 % for Kerala and 17 % for all India), temporary workers and self-employed. The analysis indicates increased informalisation in the labour market as the employment of daily-wage casual labour and temporary jobs increased faster than others.

3.1 Introduction

When COVID struck, India's economy was already in a crisis like the situation with a decline in GDP for eight consecutive quarters from Q1 of 2017-18. The employment growth has been decelerating and resulted in an unprecedented increase in the unemployment rate (CMIE, 2019; Kannan and Raveendran, 2019). In addition, the Periodic Labour Force Survey (PLFS) showed a fall in the absolute number of workers compared to the previous Employment and Unemployment Survey (EUS) in 2011–12.¹

In this context, the most stringent lockdown measures in the form of nationwide lockdown during April-May 2020 witnessed a standstill in economic activity in most sectors. These restrictive measures have a direct bearing on the employment and livelihoods of the millions who are living at the margins. The most prominent outcome of lockdown has been the loss of jobs, millions of people unemployed for a sustained period to save lives from the COVID, thus leading to loss of incomes. This is especially alarming for people in developing countries like India, where 77.1% of employment in India is non-regular, and 13.7 % of the jobs are regular but unprotected, which could mean that between 364 and 473 million workers are at risk of being adversely affected by the lockdown (Walter, 2020).

The severity of the lockdowns showed an unprecedented rise in unemployment in the last week of March 2020 and April and May 2020. The week ended 29 March 2020, and the unemployment rate was 23.8%, which was much higher than the first two weeks (7.6 %). But it was volatile—ranging from 6.7% to 8.4%. It continued at 23.5 % in April and May 2020 and declined after that as the country relaxed the lockdown measures from mid-June 2020 (Vyas, 2020). The gradual unlocking of the economy, beginning in late May, resulted in a slow economic activity pick up. The unemployment rate fell to 10.2 per cent in June and further to 7.4 per cent in July. After that, it rose slightly to 8.35 per cent in August and subsequently fell (Abraham et al., 2021). As per CMIE CPHS, the average monthly employment in 2019–2020 was 403.7 million. The estimates published by the CMIE (2020) showed that 121.5 million people lost work in April 2020 due to the first lockdown indicating close to 30 per cent have lost their jobs. Small traders, hawkers, and daily wage labourers accounted for the major share among the people who lost jobs. The self-employed accounted for 75 per cent of the jobs lost during the lockdown (Vyas, 2020). In addition, around 18.2 million business persons and another 17.7 million salaried persons lost jobs during the month. The available evidence indicates the magnitude and recovery of the COVID-19 crisis have been uneven across sectors and sections of the economy.

¹ Abraham (2017) also showed stagnation in employment growth from 2004-05 onwards, but the total employment in absolute number declined from 2014-15 onwards.

From the available evidence, it is clear that the employment effect of COVID-19 is highly disproportionate. Much of the nationally-representative CPHS data analysis is confined to study at the aggregate level. However, the experience of states with COVID is very diverse. With some states like Maharashtra and Kerala having accounted for more than 60 per cent of daily cases reported for months, the effect of COVID on employment is likely to be very different. Understanding the nature of the impact at the state level is critical to introducing policies that can mitigate the negative effects of employment loss and income loss. In this context, this chapter analyses the impact of COVID on employment in Kerala from a comparative perspective. The chapter is organised as follows. Section 3.2 discusses the data used in the analysis and approach. Section 3.3 starts with the pre-COVID trends in Labour Force Participation Rate (LFPR), Worker Population Ratio, and Kerala unemployment rate compared to all India trends. Section 3.4 presents the impact of COVID on employment across the region, gender, social category, sector and occupation, followed by concluding remarks in section 3.5.

3.2 Data and approach

The analysis is carried out by making use of nationally representative CPHS data.² The data is collected in waves. One wave represents four months (e.g. January to April), and each sample household is visited thrice in a year. The employment question is different from NSS EUS or PLFS surveys. Estimates of employment provided by CMIE from CPHS are systematically lower than those derived usually from the Periodic Labour Force Survey or Employment / Unemployment Survey of the NSSO because of differences in definitions. CPHS estimates of employment are based on status as of the day of the survey and not during the seven days preceding the date of the survey as is done in PLFS or EUS. Hence, the CPHS definitions are far more stringent in considering a person employed. Based on this survey, CMIE releases monthly estimates of absolute values related to the labour markets in India along with their distribution by region, gender, age, occupation, etc. These give us insights into the total job losses, recovery, and distribution. The employment status in CPHS data has four responses. 1) Employed, 2) Unemployed: not willing and not looking for work, 3) Unemployed: willing and but not looking for work and 4) Unemployed: willing and looking for work. Category two is considered as out of labour force, and Categories 3 and 4 are taken as unemployment indicators.

Since the focus is on understanding the crisis's employment impact and the recovery's nature, the analysis considers data from January 2019 to August 2021 representing eight waves (from waves 16 to 23) for estimating employment growth during the COVID period.³ To analyse impact and recovery, September-December 2019 is considered as a reference period against which employment trends are analysed. The analysis focuses

² The details on sample size and coverage of the data are provided in Chapter 1 of the report.

³ This chapter does not include any growth estimates due to space constraints. Estimates are available on request.

mainly on Kerala, but for comparison purposes, 16 states are grouped into high-income states and low-income states based on the per capita income. States with higher per capita income than the national average are classified as high-income states (Andhra Pradesh (AP), Gujarat (GJ), Haryana (HR), Karnataka (KA), Maharashtra (MH), Punjab (PB), Tamil Nadu (TN) and Telangana (TS)) and lower than the national average as low-income states (Assam (AS), Bihar (BH), Chhattisgarh (CH), Jharkhand (JH), Madhya Pradesh (MP), Odisha (OD), Rajasthan (RJ), Uttar Pradesh (UP) and West Bengal (WB)).

3.3 Pre-pandemic employment trends in Kerala

Kerala's labour market has been discussed for various challenges, such as the high unemployment rate, especially among females, even before the pandemic. Kerala's labour force participation is not systematically different from all India trends from 1993-94. Kerala's total LFPR is higher than all India except in 2017-18 and 2019-20, where it is lower than all India trends (Table 3.1). The LFPR showed hardly any increase from 1993-94 to 2019-20. While there is hardly any difference in LFPR of males between Kerala and All India in all the rounds, female LFPR in Kerala is consistently higher than all India average across the period under consideration.

	All India			Kerala		
	Male	Female	Total	Male	Female	Total
1993-94	55.2	24.75	40.6	56.8	26.4	40.9
2004-05	56.05	25.55	41.4	58.6	31.1	44.4
2011-12	55.6	22.5	39.5	57.9	24.8	40.3
2017-18	55.5	17.5	36.9	53.9	21.3	36.6
2018-19	55.6	18.6	37.5	56.6	24.6	39.5
2019-20	56.8	22.8	40.1	56.4	26.3	40.5

Source: NSSO Employment & Unemployment Survey Reports, NITI Aayog, and Periodic Labour Force Survey (PLFS), NSO.

Despite relatively higher LFPR in Kerala, the WPR is consistently lower than all India except in 2018-19 (Table 3.2). The difference emanates from the lower WPR of females in Kerala until 2017-18. It is indeed shown in the literature that the WPR of females is one of the lowest in India (Abraham, 2012) despite the highest urbanisation in the country. In developed countries, more increased urbanisation is associated with increasing female participation in the labour market. The declining WPR trend in India has drawn considerable scholarly attention in the recent past. However, it is encouraging to note that WPR shows an increasing trend in Kerala from 2017-18. The trend suggests that female WPR in Kerala is higher than the national average in 2018-19 and 2019-20 (Table 3.2).

**Table 3.2: Worker population ratio (WPR) (in per cent)
according to usual status (ps+ss)_all age groups**

	All India			Kerala		
	Male	Female	Total	Male	Female	Total
1993-94	53.7	24.15	39.55	54.8	22.05	37.9
2004-05	54.75	24.65	40.2	55.3	22.8	38.55
2011-12	54.4	21.9	38.6	56.2	21.3	37.7
2017-18	52.1	16.5	34.7	50.5	16.4	32.4
2018-19	52.3	17.6	35.3	53.8	20.4	35.9
2019-20	53.9	21.8	38.2	52.2	22.4	36.5

Source: NSSO Employment & Unemployment Survey Reports, NITI Aayog, and Periodic Labour Force Survey (PLFS), NSO.

The third indicator of the labour market situation is the unemployment rate. Kerala is known for recording one of the highest unemployment rates in the country. The unemployment rate in Kerala is many folds more elevated than the national average from 1993-94 onwards. The unemployment rate in Kerala increased significantly from 9.85 per cent in 2011-12 to 16.6 p-per cent in 2017-18 though it declined to 13.25 per cent in 2018-19 (Table 3.3). A similar trend could be observed for all India during the same 2011-12 to 2017-18 wherein unemployment increased from 2.55 per cent to 6.55 per cent. The very high unemployment rate in Kerala is mainly due to the highest unemployment among females. As of 2018-19, the unemployment rate of females is 25 per cent, while that of all India is 6.7 per cent.

Table 3.3: The unemployment rate in Kerala and all India (per cent) usual

	Male		Female		Total	
	Kerala	All India	Kerala	All India	Kerala	All India
1993-94	8.8	2.7	19.05	3.5	12.05	2.85
1999-00	8.5	3.1	23	3.35	13.3	3.1
2004-05	8.2	2.7	36.8	4.35	18.5	3.1
2009-10	4.65	2.2	24.5	3.65	11.15	2.5
2011-12	4.45	2.35	21.15	3.45	9.85	2.55
2017-18	9.2	6.45	33.35	7.3	16.6	6.55
2018-19	7.3	6.35	25	6.7	13.25	6.35

Notes: Employment figures are the sum of principal status and subsidiary status.

Source: NSSO Employment & Unemployment Survey Reports, NITI Aayog, and Periodic Labour Force Survey (PLFS), NSO.

From Table 3.3, it is evident that the difference in unemployment rates between Kerala and All India started declining, especially after 2011-12. In 1993-94 the total unemployment rate was four times higher than in Kerala. This trend continued till 2011-12, and the magnitude of difference declined in 2017-18 and 2018-19. In 2018-19, the unemployment rate between Kerala was two times higher than the national average. It is in this context; the COVID-19 pandemic has hit the state. Therefore, it is important to understand the labour market impacts of the COVID-19 pandemic.

3.4 Employment impact of COVID in Kerala

This section draws data from CPHS to analyse the impact on employment and recovery. To provide an overview of the employment scenarios across major states in the country before and after the COVID pandemic, the projected number of people employed is presented in Table 3.4. Consistent with the evidence shown by other studies (e.g., Vyas, 2020), the number of people employed in Kerala declined from 1.04 crore during September-December 2019 to 0.81 crore in Jan-April 2020, indicating an employment loss of close to 22 per cent, which is the highest among all other Indian states though it recovered in May-August 2020. During this period number of people employed in all India declined from 43.15 crores to 40.57 crores and it further declined to 39.41 crores.

Table 3.4: Number of people employed (in Cr)

	1 (Jan-April) 2019	2 (May-Aug) 2019	3 (Sep-Dec) 2019	1 (Jan-April) 2020	2 (May-Aug) 2020	3 (Sep-Dec) 2020	1 (Jan-April) 2021	2 (May-Aug) 2021
Andhra Pradesh	1.72	1.71	1.76	1.57	1.65	1.70	1.70	1.67
Assam	1.21	1.26	1.27	1.25	1.13	1.31	1.34	1.40
Bihar	3.10	3.15	3.15	2.96	2.69	3.15	3.23	3.21
Chhattisgarh	0.98	1.01	1.04	1.00	0.95	1.02	1.04	1.07
Gujarat	2.67	2.65	2.65	2.54	2.29	2.59	2.62	2.70
Haryana	0.80	0.82	0.82	0.80	0.74	0.76	0.79	0.75
Jharkhand	1.09	1.10	1.14	1.13	0.92	1.17	1.17	1.20
Karnataka	2.42	2.41	2.38	2.41	2.40	2.37	2.37	2.48
Kerala	1.04	1.05	1.04	0.81	1.00	1.00	1.02	0.95
Madhya Pradesh	2.59	2.67	2.73	2.60	2.64	2.75	2.74	2.79
Maharashtra	4.74	4.57	4.59	4.32	4.20	4.52	4.69	4.64
Odisha	1.45	1.46	1.48	1.29	1.36	1.48	1.49	1.42
Punjab	1.04	1.05	1.06	1.01	0.97	1.02	1.03	1.03
Rajasthan	2.33	2.35	2.41	2.30	2.33	2.33	2.37	2.32
Tamil Nadu	2.91	3.15	3.06	2.50	2.41	2.62	2.69	2.48
Telangana	1.68	1.75	1.77	1.70	1.67	1.68	1.66	1.74
Uttar Pradesh	6.32	6.40	6.46	6.34	6.20	6.38	6.43	6.51
West Bengal	3.69	3.74	3.75	3.50	3.30	3.66	3.76	3.42
Total	42.33	42.86	43.15	40.57	39.41	42.05	42.68	42.32

Source: GIFT calculations based on CMIE-CPHS

Since international organisations aim at the nature of recovery, whether it is V-shaped recovery or K shaped recovery and the timeline for getting back to the pre-pandemic levels of GDP, employment and other macro indicators, the analysis focuses on the impact of the crisis and the extent of recovery. The effect of the COVID pandemic and the recovery is analysed by considering September-December 2019 as the base period that is completely free from the COVID pandemic. The index value of employment in Kerala declined from 100 to 77.5 per cent in Jan-April 2020, while that of all India decreased to 94.03 per cent. The fall in employment during this period is higher in high-income states (90.92 per cent) as compared to low-income states (95.50 per cent) (Table 3.5).

Kerala experienced the highest decline in employment both in the first and second wave of COVID and lagging behind other states in terms of employment recovery

Kerala showed a quick recovery in employment during May-August 2020 to 96.5 per cent. It declined to 91.3 per cent for all India, 91.82 per cent in low-income states, and 89.15 per cent in high-income states. The quick recovery could be attributed to the exemplary performance showed by Kerala in effectively containing the spread of the virus in the first wave while many high-income states were reeling from the COVID crisis. By Jan-April 2021, the employment recovery in Kerala is almost 98 per cent at par with the national level (Table 3.5). The employment recovery of high-income states together is lagging behind all India average during Jan-April 2021 while low-income states showed 100 per cent recovery. The slow recovery of employment could be attributed to the severe impact of COVID on manufacturing, especially SMEs, which are mostly concentrated in high-income states like Maharashtra, Gujarat and Tamil Nadu. Another plausible reason could be a relatively lower share of the agricultural sector in high-income states which has remained insulated from the COVID crisis.

Wave	Kerala	Low-Income States	High-Income States	All India
Sep-Dec 2019	100	100	100	100
Jan-April 2020	77.51	95.50	90.92	94.03
May-Aug 2020	96.50	91.82	89.15	91.34
Sep-Dec 2020	95.98	99.22	94.79	97.44
Jan-April 2021	98.06	100.60	96.67	98.92
May-Aug 2021	91.60	99.58	95.29	98.09

Source: GIFT calculations based on CMIE-CPHS

In the second wave of COVID, which broadly corresponds to May-August 2021, the employment index value in Kerala fell to 91.6 per cent, while there is no significant decline in employment at all India levels as well as low-income high-income states. This clearly shows the devastating second wave Kerala experienced. Kerala is perhaps the only state to have continued partial lockdowns for months in the second wave, which could have played a role in employment loss. Overall, it is clear that Kerala is still lagging in employment recovery while other states almost showed a V-shaped recovery in employment by May-August 2021.

3.4.1 Employment impact across gender category

Studies using the CPHS data have already shown that the employment impact of the COVID crisis is disproportionate across the gender category, with females bearing the brunt of the crisis while male employment recovered quickly (Deshpande and Srivastava, 2020; Abraham et al., 2021; APU, 2021). The trends of the severity of the employment decline at all Indian levels correspond to the arguments of the previous studies. At the

national level, employment of males in the first two waves of 2020 (Jan-April 2020 and May-August 2020) declined to 95.5 per cent and 91 per cent subsequently, while that of females declined to 89.5 per cent and 86.5 per cent (Table 3.6). The trends remain the same for low-income and high-income states though the fall of female employment is for low-income states than high-income states. On the contrary, Kerala shows the opposite trend. The employment of males declined to 75.93 per cent in Jan-April 2020 while that of females declined hardly by four percentage points (96.7 per cent). The fall in employment of males in Kerala is significantly higher than in both low income and high-income states.

Contrary to the national trend, employment loss in Kerala is greater for males, while females suffered a marginal loss and showed complete recovery.

Table 3.6: Employment impact across gender				
Wave	Kerala	Low-Income States	High-Income States	All India
Panel A: Male				
Sep-Dec 2019	100	100	100	100
Jan-April 2020	75.93	96.27	90.71	94.55
May-Aug 2020	93.74	92.98	89.78	91.90
Sep-Dec 2020	95.83	99.90	96.06	98.22
Jan-April 2021	97.54	101.54	97.23	99.46
May-Aug 2021	90.44	100.54	96.64	98.73
Panel B: Female				
Sep-Dec 2019	100	100	100	100
Jan-April 2020	96.73	84.18	91.93	89.58
May-Aug 2020	130.03	74.79	86.09	86.51
Sep-Dec 2020	97.84	89.28	88.57	90.80
Jan-April 2021	104.27	86.72	93.93	94.25
May-Aug 2021	105.70	85.47	88.76	92.62

Source: GIFT calculations based on CMIE-CPHS

In the subsequent months, Kerala showed a better recovery than the national average both in males and females. The employment recovery is more than 100 per cent for females during May-August 2020, but at the national level, employment recovery of females is found to be lagged behind males. By May-August 2021, low-income states show 100 per cent recovery in the employment of males, and high-income states show 96 per cent recovery. Kerala's employment recovery of males during this time showed a

significant fall to 90 per cent indicating poor recovery. At the same time, the second wave showed no impact on female employment in Kerala. This trend is completely different from other states where female employment fell marginally during May-August 2021 compared to Jan-April 2021. In addition, the rate of recovery is lowest in low-income states as compared to others.

The observed patterns of divergent employment recovery across gender categories and an opposite trend could be broadly attributed to the nature of employment and type of occupations females engaged in in these states. A definite conclusion warrants a more nuanced analysis. However, Kerala's resilience in women employment shows that they may be mostly involved in more resilient service sectors. Given their relatively better education status in Kerala compared to other states, females in Kerala would be working on socially acceptable occupations like teachers, nurses, banking and financial services, and other business services where COVID impact has been relatively low. This argument could be further substantiated by the severe effect on female employment in low-income states compared to high-income states. This may be due to women working in the informal sector, severely impacted than the formal sector.

3.4.2 Employment impact across the region

Going by the number of COVID cases reported, rural areas have been relatively more resilient than urban areas. Similarly, South Indian states like Kerala, Tamil Nadu, Andhra Pradesh, with relatively high urbanisation, showed a much higher spread of COVID than north Indian regions. Therefore, the employment impact of COVID is significantly higher in urban areas than in rural areas.

Rural Kerala and Urban Kerala suffered much greater employment losses than the national average. Still, Urban Kerala experienced the most significant hit than low-income and high-income states in the first wave. But in the second wave, employment in rural Kerala was hit hard compared to its urban counterpart.

Rural employment declined to 84.37 per cent during Jan-April 2020 compared to the base period. This decline is much more intense as compared to all India average (95.3 per cent) as well as low-income (96.55 per cent) and high-income states (92.5 per cent). In the next period (May-August 2020), Kerala's rural employment recovered (94.9 per cent) while that of low-income and high-income states further declined to 92.5 per cent and 89.3 per cent, respectively. The impact of COVID on rural employment is relatively low in low-income states and showed a complete recovery by September-December 2020.

This could be attributed to the high dependence on agriculture and allied sectors in low-income states. Kerala showed a full recovery by Jan-April 2021, but it declined drastically (more than the first wave) to 89 per cent in May-August 2021 (Table 3.7).

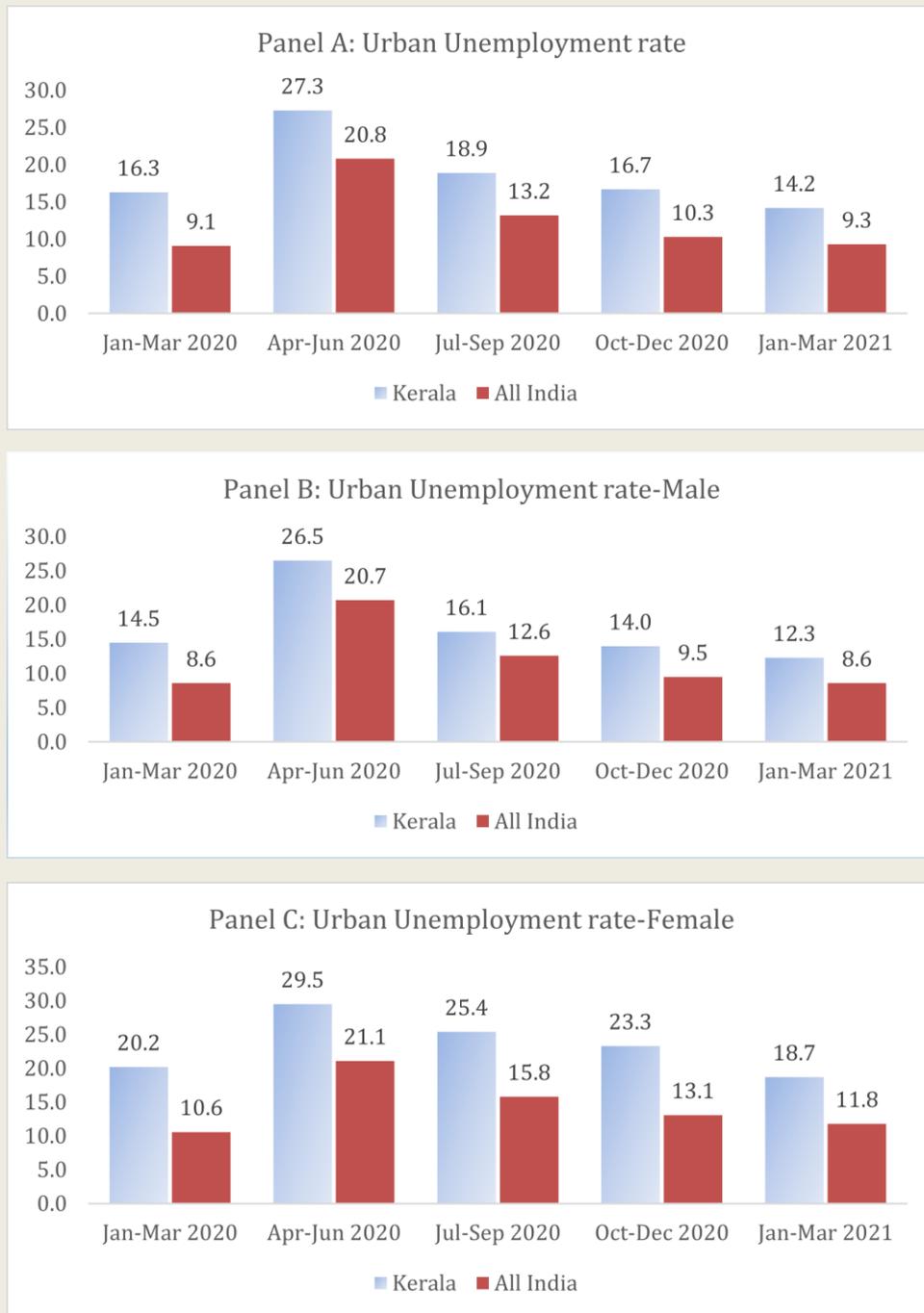
Table 3.7: Employment impact across the region				
Wave	Kerala	Low-Income States	High-Income States	All India
Panel A: Rural				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	84.37	96.55	92.55	95.30
May-Aug 2020	94.92	92.50	89.38	91.77
Sep-Dec 2020	97.74	100.14	94.17	97.91
Jan-April 2021	100.09	101.53	96.23	99.54
May-Aug 2021	89.92	100.41	95.08	98.82
Panel B: Urban				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	69.38	91.88	88.30	91.01
May-Aug 2020	98.38	89.49	88.78	90.30
Sep-Dec 2020	93.89	96.07	95.78	96.32
Jan-April 2021	95.64	97.39	97.37	97.45
May-Aug 2021	93.59	96.72	95.64	96.36
Source: GIFT calculations based on CMIE-CPHS				

In the first wave (Jan-April 2020), employment in urban areas in Kerala was hit the hardest as the value declined to 69.38 per cent, which is manifold higher than the national average (91 per cent). However, it recovered to almost 98.38 per cent in May-August 2020, while the low-income and high-income states experienced a further decline in employment (Table 3.7).

Box 3.1: Urban employment during COVID: Evidence from PLFS data

The Periodic Labour Force Surveys (PLFS) since their inception from 2017 have been publishing quarterly bulletins giving estimates of labour force indicators, viz., Labour Force Participation Rate (LFPR), Worker Population Ratio (WPR), Unemployment Rate (UR), distribution of workers by broad status in employment and industry of work in the Current Weekly Status (CWS) for the urban areas. The government recently published 10th quarterly bulletin covering period up to March 2021. The data provided in the bulletin covers one year of COVID pandemic.

Figure 3.1: Urban unemployment rate during COVID pandemic



Box 3.1: Urban employment during COVID: Evidence from PLFS data

This bulletin presents indicators of employment and unemployment in current weekly status (CWS) are presented for the urban areas separately for the periods. As evident from Panel A of Figure 3.1, urban unemployment rate in Kerala increased significantly from 16.3 percent in Jan-March 2020 to 27.3 percent in April-June 2020 which represents the nation-wide lockdown period of COVID first wave. During the same time unemployment rate for all India doubled from 9.1 percent to 20.8 percent. There is eleven percentage points increase in unemployment in Kerala while it increased by 12 percentage points. In the subsequent quarters, unemployment rate showed a gradual decline in Kerala as well as all India. It is important to note that the unemployment rate in Kerala during Jan-March 2021 is lower (14.2 percent) than Jan march 2020. During the same period, the overall unemployment rate is slightly higher than (9.3 percent) the Jan-March of 2020 which was at 9.1 percent. This shows Kerala showed better employment recovery than all India.

Similar trends could be observed for male and female unemployment rates in Kerala wherein in both the unemployment rate in Jan-March 2021 is lower than Jan-March 2020 indicating a proportionate recovery. However, at the national level, male unemployment rate in Jan-March 2021 declined to pre-pandemic level, female unemployment rate did not decline to pre-pandemic levels indicating a disproportionate recovery.

It is interesting to note that the employment recovery in urban Kerala is quicker than in rural Kerala. This may be attributed to the unique Ayyankali urban employment guarantee scheme implemented by the state. During the second wave, urban employment in Kerala marginally declined from 95.64 per cent to 93.59 per cent in May-August 2021. As observed at the aggregate level, low-income states showed better recovery in urban employment than high-income states, while Kerala is lagging behind both.

3.4.3 Employment impact across the social category

In India, caste hierarchy manifests in an occupational hierarchy, with the under-privileged occupations taking up much of the low paying informal sector. NCEUS (2005) finds that about 98 per cent of people living below poverty among SC/ST categories are engaged in the informal sector. Since the available evidence indicates that the informal sector has taken the hardest hit, the employment impact of the COVID crisis across the social categories is likely to be disproportional. Abraham et al. (2021) show that vulnerable sections like people belonging to SC-ST communities are harder. However, Kerala shows a very different trend from the rest of the country. At all India levels and in low-income and high-income states, SC-STs have been hit the hardest, followed by the OBC and general category, while in Kerala, SC-STs were hit affected hard in the first wave, and OBCs took a major hit in employment in the second wave followed by the SC-STs. Compared to the base period, the employment index value for all India in Jan-April 2020 declined to 98.41 per cent, 95 per cent and 88 per cent, respectively for general category, OBCs and SC-STs, Kerala shows a similar trend during this period with effect on OBCs

(78.4 per cent) and SC-STs (75.5 per cent) is much higher in Kerala as compared to the national average as well as high-income and low-income states (Table 3.8).

In terms of the magnitude of the crisis, the employment loss of SC-STs is the highest, followed by the OBCs and General Category in Kerala and other states. In Kerala, SC-ST employment showed better recovery than other groups, while the employment recovery of SC-STs is lagging behind OBCs and the general category in other states.

Table 3.8: Employment impact across the social category				
Wave	Kerala	Low-Income States	High-Income States	All India
Panel A: General Category				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	96.69	98.39	98.39	98.41
May-Aug 2020	82.65	98.94	88.52	94.16
Sep-Dec 2020	95.45	98.63	96.76	97.53
Jan-April 2021	101.49	99.18	97.41	98.56
May-Aug 2021	95.73	100.66	97.20	99.21
Panel B: OBC				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	78.42	97.62	91.63	95.32
May-Aug 2020	79.69	90.75	90.35	92.14
Sep-Dec 2020	94.54	97.69	96.51	97.33
Jan-April 2021	92.89	100.57	97.38	99.11
May-Aug 2021	89.18	100.96	94.56	98.56
Panel C: SC-ST				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	75.56	90.42	84.30	88.93
May-Aug 2020	149.65	87.22	88.52	88.09
Sep-Dec 2020	99.33	101.79	90.89	97.75
Jan-April 2021	110.38	101.91	94.75	98.97
May-Aug 2021	96.39	96.99	94.55	96.53
Source: GIFT calculations based on CMIE-CPHS				

During May-Aug 2020, employment of the general category in Kerala showed a significant decline to 82.6 per cent, while the same for OBC shows a marginal increase to 79.6 per cent. The employment recovery for SC-STs during this period is more than 100 per cent. Neither India nor high-income and low-income states showed such a fast recovery. If any, there was a further decline in employment (Table 3.8, Panel C). The employment recovery is almost 100 per cent for the general category by May-Aug 2021, followed by OBCs (98.5 per cent) and SC-STs (96.93). Both low-income and high-income states show a similar trend indicating slow employment recovery among the

OBCs and SC-STs. On the contrary, Kerala shows very different trends in employment recovery. By May-Aug 2021, employment recovery for SC-STs is 96 per cent, followed by the general category (95 per cent) and the OBCs (89 per cent). Though the SC-STs showed a better recovery in the second wave (May-Aug 2021), the magnitude of the impact is the highest among other categories as the employment declined from 110.3 per cent to 96, which is almost 14 percentage points decline. Kerala's better employment recovery among the SC-STs needs further exploration.

3.4.4 Employment impact across age groups

Even before the onset of the COVID crisis, youth employment has been a challenge across the developing world. During the pandemic, youth have lost more jobs than other age groups in the Asia Pacific (ILO, 2020). Nearly half of young workers in the region are employed in the four sectors hit hardest by the crisis. India is no exception to this trend as the study by APU (2021) shows that youth have been impacted severely compared to the non-youth population and that 33% of workers in the 15-24 years age group failed to recover employment even by Dec 2020. Following the national youth policy document, this study categorises the youth population as people aged between 15-29 years, and the rest are classified as non-youth.

Table 3.9: Employment impact across youth and non-youth				
	Kerala	Low-Income States	High-Income States	All India
Panel A: Youth				
Sep-Dec 2019	100	100	100	100
Jan-April 2020	76.06	92.28	92.93	92.26
May-Aug 2020	91.51	79.35	86.74	82.35
Sep-Dec 2020	100.10	87.48	88.45	87.94
Jan-April 2021	109.66	89.77	88.61	89.57
May-Aug 2021	109.49	82.75	88.19	85.16
Panel B: Non-youth				
Sep-Dec 2019	100	100	100	100
Jan-April 2020	77.82	96.68	93.03	94.59
May-Aug 2020	97.55	96.41	91.23	94.21
Sep-Dec 2020	95.11	103.54	97.22	100.47
Jan-April 2021	95.60	104.58	99.20	101.90
May-Aug 2021	87.81	105.77	98.93	102.21
Source: GIFT calculations based on CMIE-CPHS				

In the first wave of the COVID crisis, youth employment in Kerala declined by 24 per cent during Jan-April 2020 compared to close to 8 per cent decline at all India levels indicating the three times more job loss of youth population in Kerala. However, it is interesting to note that youth employment in Kerala recovered in Kerala in the subsequent months while both high-income and low-income states showed a decline of

close to 14 per cent and 20 per cent, respectively, in May-Aug 2020 (Table 3.9 Panel A). In the second wave (May-Aug 2021), Kerala did not show any decline in youth employment, and the number of youths employed is higher than the pre-pandemic level. On the contrary, at all Indian levels, the employment recovery by May-Aug 2021 is found to be 85 per cent for all India, 88 per cent for high-income states and 82.7 per cent for low-income states (Table 3.9 Panel A). The low-income states are bearing a greater impact of youth employment loss than high-income states could be attributed to the nature of the labour market.

During the first COVID pandemic, youth lost more jobs than the non-youth. The magnitude of youth employment loss is three times higher than the Indian average. In the second wave, youth lost more jobs than non-youth at the national level, but in Kerala, youth gained employment while non-youth lost jobs.

In the case of non-youth, the employment loss of non-youth in Kerala was significantly higher (23%) than 6 per cent at all India levels, 7 per cent in high-income states and 3.5 per cent in low-income states Jan-April 2020. The non-youth employment showed a considerable improvement after that. By Sep-Dec 2020, there was 100 per cent employment recovery in both low income and high-income states, but Kerala's recovery was lower at 95 per cent. In the second wave (May-Aug 2021), the employment of non-youth declined to 87 per cent from 95 per cent during Jan-April 2021, while there was no significant decline at all India level (rather, the number marginally increased) (Table 3.9 Panel B). In Kerala, youth lost more employment in the first wave, but in the second wave, non-youth lost more jobs. The trends at the national level are in contrast to the trends in Kerala. The youth suffered more job loss in both the waves during the pandemic, and their employment recovery is poor while non-youth showed a 100 per cent recovery.

3.4.5 Employment impact across industry category

The quarterly estimates of GDP published by NAS clearly showed the differential impact of COVID on different sectors. The sectoral effect on employment is almost by the sectoral impact of GDP (Table 3.9). Agriculture seems to be the most resilient sector during the COVID crisis. Though Kerala experienced a relatively large impact (86.8 per cent) in Jan-April 2020 compared to the base period, it recovered most significantly in the subsequent waves (Table 3.9, Panel A). In the next wave (May-August 2020), the employment recovery has been 186 per cent though it gradually declined in the subsequent waves. By May-August 2021, Kerala's agricultural employment recovery is 153.8 per cent, while that of all India was 107.6 per cent (Table 3.10, Panel A). The low-income states showed no decline in agricultural employment during the COVID period compared to the pre-COVID base period. Kerala's substantial increase in agricultural

employment indicates people moving to agricultural and allied jobs due to the loss of jobs in the non-agricultural sector like manufacturing and services. Secondly, this could also mean that the influx of return migration that Kerala experienced would have found agriculture the temporary source of livelihoods in the absence of employment opportunities in the non-agricultural sector.

People engaged in Agriculture and allied activities have been more resilient. Kerala increased agricultural and allied employment during the pandemic as people lost jobs in the non-agricultural sector.

People employed in the industrial sector have been most affected compared to other sectors. This trend is consistent across high-income and low-income states. However, the magnitude of industrial employment in Kerala is manifold higher than the national average (Table 3.10, Panel B), and the states show no signs of recovery in the subsequent waves. In Jan-April 2020, industrial employment in Kerala declined to 73.9 per cent compared to the base period. This is the highest decline in comparison with low-income states (88.7 per cent), high-income states (90.85) and the national average (89.8 per cent). It further declined to 32 per cent in Kerala, 80 per cent in low-income states, 56.7 per cent in high-income states and 68.2 per cent in all India. Though other states showed a gradual recovery in industrial employment in the subsequent waves, Kerala's industrial employment declined. However, there was a marginal improvement (29 per cent from 25.8 per cent in Jan-April 2021) in the second wave (May-August 2021). Low-income states have experienced a relatively low decline in industrial employment in the first wave. Still, in the second wave, the fall in industrial employment is higher than in the high-income states. In terms of recovery, high-income states have shown better recovery than low-income states.

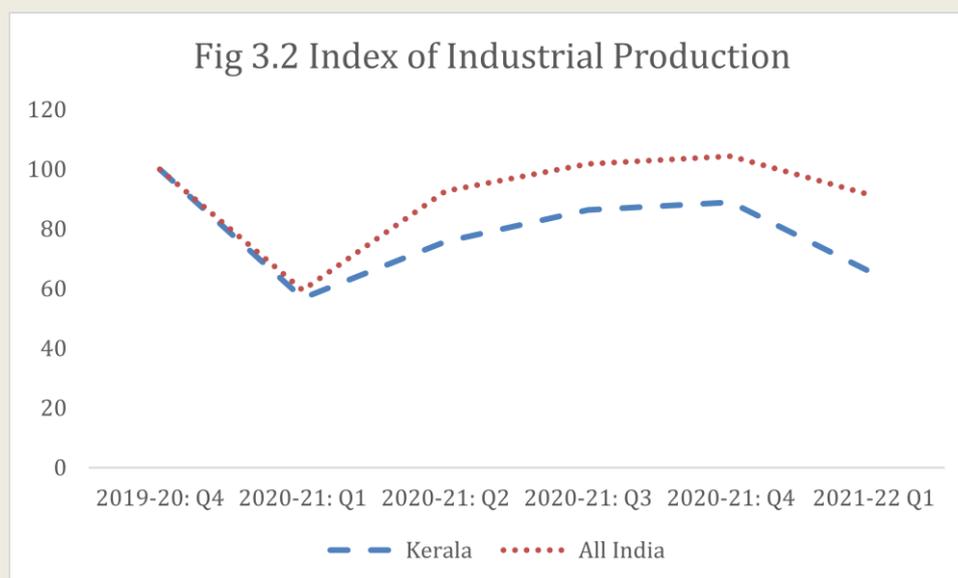
Industrial employment is most severely affected as compared to other sectors. The magnitude of fall in industrial jobs in Kerala is manifold higher than all India average and both low-income and high-income states. It shows no signs of recovery while other states have recovered.

Table 3.10: Employment impact across industry category				
Wave	Kerala	Low-Income States	High-Income States	All India
Panel A: Agriculture and allied				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	86.88	100.60	92.18	97.12
May-Aug 2020	186.11	109.85	99.00	105.30
Sep-Dec 2020	178.67	110.61	93.07	102.73
Jan-April 2021	152.98	107.98	96.58	103.37
May-Aug 2021	153.85	112.82	99.23	107.62
Panel B: Industry				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	73.93	88.71	90.85	89.86
May-Aug 2020	32.05	80.14	56.75	68.27
Sep-Dec 2020	36.56	75.90	65.80	72.18
Jan-April 2021	25.87	73.83	75.35	77.06
May-Aug 2021	29.57	67.88	72.39	73.05
Panel C: Construction				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	53.94	92.79	76.74	88.19
May-Aug 2020	107.28	67.65	103.88	77.31
Sep-Dec 2020	89.90	98.88	124.30	105.70
Jan-April 2021	99.82	109.76	126.91	113.72
May-Aug 2021	94.39	98.67	118.97	103.64
Panel D: Services				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	90.94	93.21	93.41	94.42
May-Aug 2020	91.06	88.94	87.08	89.12
Sep-Dec 2020	100.37	92.74	100.12	95.70
Jan-April 2021	102.25	93.85	97.03	94.40
May-Aug 2021	93.05	93.41	93.68	93.02
Source: GIFT Estimation based on CMIE-CPHS				

Box 3.2: Kerala's industrial production during the pandemic

Kerala is one of the states with a low share of industry to GDP ratio, and it has been showing a declining trend for more than a decade. The CPHS estimates show that employment loss is the highest in the industrial sector as compared to the other sectors. The index of industrial production data published by the Department of Economics and Statistics published by the Government of Kerala corroborates with the findings from CPHS data.

To analyse the extent of COVID impact on industrial production and its recovery, 2019-20 Q4 is used as a base period. The IIP during 2020-21 Q1 (this period corresponds to the lockdown period during the first wave) declined to 56 per cent in Kerala and 59 per cent in all India. In the subsequent quarters, the IIP recovered but it is slower in Kerala. At all India level, the IIP recovery is 100 per cent while that of Kerala is 86 per cent (Fig 3.2). During the second wave of the pandemic (2021-22 Q1) the IIP of Kerala declined to 65 percent from 88 percent during the previous quarter indicating a fall of 22 per cent. At the all India, it declined from 104 per cent in 2020-21 Q4 to 91 per cent 2021-22 Q1. The higher magnitude of decline in industrial production and slow recovery broadly corresponds with the fall of industrial employment.



Source: Author's own calculations from DES, Kerala and NSO.

The construction sector's share in Kerala's GDP is almost double that of all Indian levels. Hence, construction sector revival is crucial for employment generation in Kerala. In the first wave (Jan-April 2020), Kerala's construction employment fell to 54 per cent compared to the base period. The fall in construction employment during the period is less severe in low-income states (92.7 per cent) than in high-income states (76.7 per cent). In the next period (May-August 2020), Kerala's and high-income states construction employment increased more than the base period (107 per cent and 103 per cent respectively), low-income states experienced a major decline (67.6 per cent from 92.7 in the previous period). In the second wave (May-August 2021), construction employment

fell from 99.8 per cent in the previous wave to 94.3 per cent in Kerala, 109.7 per cent to 98.6 per cent in low-income states, 126 per cent to 118 per cent in high-income states and 113.7 per cent to 103 per cent for All India (Table 10, Panel C). In terms of the magnitude of the decline in the COVID second wave, low-income states experienced a much higher decline (11 percentage points decline). Kerala is still lagging in recovery as high-income states showed increased construction employment compared to the base period.

Compared to other sectors and other states, Kerala experienced the most significant decline in construction employment in the COVID first wave. The employment recovery in Kerala is lagging as the national average depicts more people engaged in construction than the base period.

Service sector employment is relatively less affected than manufacturing and construction, but the recovery is slower than the construction sector. In the first wave of the COVID crisis (Jan-April 2020), Kerala experienced a relatively higher decline in service sector unemployment (90.9 per cent) compared to 93 per cent in both high-income and low-income states and 94 per cent at all Indian levels. By Jan April 2021, the service sector employment is higher (102.2 per cent) as compared to the base period indicating a complete recovery which is better than all India average (94 per cent), high-income states (97.03 per cent) and low-income states (93.4 per cent). Kerala experienced the most significant fall in the second wave (employment in May-Aug 2021 declined almost by ten percentage points compared to the previous period) while all India average hardly showed any major decline (Table 3.10, Panel D).

Though service sector employment in Kerala experienced less decline than manufacturing and construction, the impact is the highest in COVID first and the second wave compared to the national average and the other states.

3.4.6 Employment impact across education category

The employment impact of people with different levels of education also the sections of the society which are more resilient from the COVID impact. The sample is divided into four categories of education. Primary education represents people with less than six years of schooling. Secondary education means people whose education is more than the 5th standard to the 10th standard. Higher secondary represents people class 11 and 12 education or diploma holders. All the graduates and above are classified as the fourth category. It appears that people with primary education and graduate degree have been severely affected. In contrast, people with secondary and higher secondary employment increased significantly compared to the base period (Table 3.11).

The employment of people with primary education witnessed the highest decline during the pandemic. The magnitude of the slide is highest in Kerala in both the first and second waves, and the state is lagging in recovery compared to other states.

People with primary education experienced the largest employment decline in Kerala and other states. In the first wave of the COVID crisis (Jan-April 2020), the employment of people with primary education declined to 66.3 per cent in Kerala, while the magnitude of the decline is considerably less in all India (86.24 per cent) and low-income states (89.3 per cent) and high-income states (81.3) per cent. The employment further declined to 35.58 per cent in Kerala during May-August 2020. The decline during this period is more than 100 per cent for all India (from 86 per cent to 43 per cent). Both low-income and high-income states showed a similar magnitude of decline during May-August 2020, followed by a gradual recovery after that. In the second wave corresponding to May-Aug 2021, employment of people with primary education declined from 51.3 per cent to 40.6 per cent recording the highest decline compared to all India or low-income and high-income states where the drop is negligible (Table 3.11 Panel A).

In Kerala, the employment decline for people with secondary education and higher education was 73.4 and 79.8 per cent in Jan-April 2020. In the next period, i.e. May-August 2020, the work of people with secondary education increased to 123 per cent, higher than the base period and continued after that though the index value declined marginally. In the employment of people with higher secondary education, though 85 per cent of work is recovered, it is lower than the employment recovery of people with secondary education (Table 3.11, Panel B&C). In both cases, employment increase is higher in low-income states than in high-income states. In the second pandemic wave (May-August 2021), Kerala experienced the highest decline in employment in both education categories compared to the national average and other states. During the pandemic, better employment recovery of people with secondary and higher-secondary education could be attributed to the rise of the gig economy and online delivery services where the qualification required is secondary or higher secondary.

The employment of people with secondary and higher secondary education increased during the pandemic, albeit a major decline in the first wave. The magnitude reduction is highest in Kerala in both the first and second waves, and the state is lagging in recovery compared to other states.

Table 3.11: Employment impact across Education category				
Wave	Kerala	Low-Income States	High-Income States	All India
Panel A: Primary				
Sep-Dec 2019	100	100	100	100
Jan-April 2020	66.33	89.31	81.13	86.24
May-Aug 2020	35.58	43.10	43.69	42.98
Sep-Dec 2020	43.51	44.92	49.15	46.31
Jan-April 2021	51.35	59.97	61.79	60.81
May-Aug 2021	40.68	57.61	61.68	59.21
Panel B: Secondary				
Sep-Dec 2019	100	100	100	100
Jan-April 2020	73.47	99.72	93.10	96.97
May-Aug 2020	123.67	128.50	116.83	123.98
Sep-Dec 2020	115.66	143.38	124.64	135.42
Jan-April 2021	114.52	138.01	124.09	131.24
May-Aug 2021	107.45	136.73	120.83	129.70
Panel C: Higher Secondary				
Sep-Dec 2019	100	100	100	100
Jan-April 2020	79.89	101.07	94.02	98.09
May-Aug 2020	85.31	103.07	94.44	100.06
Sep-Dec 2020	106.49	106.63	103.94	105.25
Jan-April 2021	110.30	114.35	106.46	110.05
May-Aug 2021	101.99	116.89	106.38	111.95
Panel D: Graduate and above				
Sep-Dec 2019	100	100	100	100
Jan-April 2020	96.45	94.04	97.71	97.85
May-Aug 2020	74.10	78.24	75.23	80.65
Sep-Dec 2020	69.53	80.59	84.33	83.29
Jan-April 2021	75.06	84.10	86.52	86.69
May-Aug 2021	75.84	87.10	86.99	89.11

Source: GIFT calculations based on CMIE-CPHS

The employment of people with a graduate degree and above shows a gradual decline in Kerala and other states. It declined to 96.4 per cent in Jan-April 2020 and further to 74 per cent and 69.5 per cent respectively in subsequent two periods, followed by an increase in Jan-April 2021. This is the only category wherein the second wave (May-Aug 2021) did not show any decline in employment in Kerala while the employment increased in low-income and high-income states and all India. As of May-Aug 2021, employment recovery for people with a graduate degree and above in Kerala is only 75.8 per cent, which is much lower than the national average of 89.11 per cent. (Table 3.11, Panel D)

The employment of people with a graduate degree also witnessed a major decline in Kerala and India in the first wave of the COVID crisis. Like other categories, Kerala significantly lags behind the national average in employment recovery.

3.4.7 Employment impact by type of employment

It is evident by now that the employment impact of the COVID crisis is disproportional across different sections of society. Another major source of the disproportionate impact is a type of employment contract. Using the employment nature provided in the CPHS, the analysis explored the differential impact of the COVID crisis on employment. In the first wave (Jan-April 2020), the fall of daily wage or casual labour in Kerala has been the highest (64 per cent) compared to other types of employment and the other states. However, employment of daily wage workers in Kerala during May-Aug 2020 increased 122.9 per cent, which is higher than the base period. The low-income states during this period witnessed a significant fall in employment (68.55 per cent), while high-income states showed a marginal decline (77.3 per cent). In the second wave (May-Aug 2021), the employment of daily wage labour fell from 115.9 per cent to 102 per cent, while that of all India declined from 99.4 per cent to 94.6 per cent, indicating a much higher impact of the second wave in Kerala (Table 3.12, Panel A).

Kerala witnessed a much more severe fall in employment of daily wage workers compared to the national average and other states. Employment of daily wage labour increased in Kerala during the pandemic, indicating increased informalisation in the labour market.

The employment of permanent salaried workers in Kerala declined significantly in the first wave. It fell to 92.32 per cent in Jan-April 2020 and further to 64 per cent in May-Aug 2020, followed by an increase after that (Table 3.12, Panel B). Although with less intensity than Kerala, both low-income and high-income countries show the same trend during this period. But there has been an almost 93 per cent recovery in the employment of permanent salaried workers at all India levels, and high-income states showed 100 per cent recovery by May-Aug 2021. Kerala's recovery in the same is only about 74.6 per cent indicating poor employment recovery (Table 3.12, Panel B). One limitation of the CPHS data is that it does not allow provide data on permanent employment in the government sector and private sector. GIFT study shows that while government employees hardly lost any employment, private sector employees lost jobs. Hence, the loss of permanent jobs in Kerala could be attributed to loss of regular jobs in the private sector.

The employment trends of temporary salaried workers in Kerala and other states are the same as those in Jan-April 2020 and May-August 2020. However, the intensity of employment loss is lower in temporary salaried workers (Table 3.12, Panel C). However, the employment recovered in the subsequent quarters, and the work of temporary salaried workers in May-Aug 2021 is higher than the pre-pandemic base period. The recovery for all India during this period is 87 per cent. Poor recovery in permanent salaried workers and increases in the employment of daily wage and temporary workers depict the nature of changes in the labour market during the pandemic. Not only informalisation is increasing, but people who lost jobs are also joining temporary contractual jobs, increasing the job insecurities in the labour market.

Both temporary and permanent salaried workers in Kerala lost more jobs than the national average in the first wave of COVID. The employment recovery of permanent salaried workers is lagging, but the employment of temporary workers increased, indicating the poor-quality engagement created during the pandemic.

Table 3.12: Employment impact by type of employment				
Wave	Kerala	Low-Income States	High-Income States	All India
Panel A: Daily wage/Casual labour				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	64.07	86.57	78.39	83.00
May-Aug 2020	122.90	68.55	77.82	73.45
Sep-Dec 2020	107.90	93.09	93.91	94.26
Jan-April 2021	115.92	99.98	97.82	99.44
May-Aug 2021	102.02	93.30	95.14	94.69
Panel B: Salaried-Permanent				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	92.32	92.95	97.02	96.82
May-Aug 2020	64.61	70.54	75.06	75.43
Sep-Dec 2020	72.66	70.57	90.62	81.18
Jan-April 2021	77.26	81.77	101.78	92.83
May-Aug 2021	74.60	84.16	100.50	93.74
Panel C: Salaried-Temporary				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	92.31	97.58	92.07	94.87
May-Aug 2020	77.49	81.21	82.92	82.34
Sep-Dec 2020	96.43	90.30	80.23	85.55
Jan-April 2021	102.65	97.13	90.24	94.92
May-Aug 2021	105.97	90.30	83.37	87.63
Panel D: Self-employed				
Sep-Dec 2019	100.00	100.00	100.00	100.00

Jan-April 2020	82.78	100.45	98.14	99.78
May-Aug 2020	84.57	109.65	103.21	106.77
Sep-Dec 2020	92.15	108.48	100.61	105.02
Jan-April 2021	84.65	104.40	96.14	100.72
May-Aug 2021	82.69	106.94	97.21	103.08
Source: GIFT calculations based on CMIE-CPHS				

Similarly, self-employed in Kerala have been hit hard compared to the national average and low-income and high-income states. At the national level, the employment of self-employed hardly showed any decline in the pandemic. Low-income states also offer a very similar trend. The employment of self-employed declined to 82.7 per cent in Jan-April 2020 though it showed a marginal in the subsequent periods (Table 3.11, Panel D). In May-Aug 2021, employment recovery of self-employed is 82 per cent which is much below high-income states and the national average.

Self-employed in Kerala lost employment in the pandemic, and the recovery lagged.

3.4.8 Employment impact by type of occupation

The COVID induced lockdowns in India affected different occupations differently. People working in the formal services sector who could continue to work from home have been least affected, while people working in the factory production lanes have been severely affected. Using the nature of occupation in CPHS data, broadly, five occupation groups have arrived.⁴ They are white-collar, blue-collar, self-employed, and people engaged in farming and related activities.

⁴ The details of the occupation classification are provided in the annexure to this chapter.

Table 3.13: Employment impact by type of occupation				
Wave	Kerala	The Low-Income States	High-Income States	All India
Panel A: White-collar workers				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	88.76	95.21	98.46	98.33
May-Aug 2020	68.79	80.31	80.24	82.48
Sep-Dec 2020	79.18	81.54	89.78	86.02
Jan-April 2021	89.86	89.92	95.92	93.23
May-Aug 2021	82.37	92.89	96.01	95.29
Panel B: Blue Collar workers				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	68.76	88.77	81.77	85.54
May-Aug 2020	119.52	70.62	78.79	75.56
Sep-Dec 2020	107.48	90.37	90.96	91.56
Jan-April 2021	112.91	96.39	97.38	97.65
May-Aug 2021	102.50	88.80	93.07	91.55
Panel C: Self-employed				
Sep-Dec 2019	100	100	100	100
Jan-April 2020	79.64	97.33	97.26	96.64
May-Aug 2020	78.16	102.64	94.76	97.99
Sep-Dec 2020	88.47	107.41	103.21	104.53
Jan-April 2021	82.37	102.93	91.38	96.64
May-Aug 2021	81.01	100.78	91.14	95.37
Panel D: Farming				
Sep-Dec 2019	100.00	100.00	100.00	100.00
Jan-April 2020	114.72	102.39	102.49	102.29
May-Aug 2020	114.72	102.39	102.49	102.29
Sep-Dec 2020	153.25	110.13	97.55	104.89
Jan-April 2021	112.79	107.39	98.68	104.41
May-Aug 2021	124.20	113.59	102.22	110.12
Source: GIFT calculations based on CMIE-CPHS				

Consistent with the aggregate trends, Kerala suffered greater employment loss in almost all occupational categories in the first wave. In the first pandemic wave, the highest employment loss was observed in blue-collar workers and self-employed types while farming remained insulated from the effects of the COVID crisis. The employment loss of blue-collar workers in Kerala during Jan-April 2020 was almost 31 per cent (15% for all India), followed by 20 per cent (4% for all India) loss in self-employed and 18 per cent in white-collar workers (2% for all India). During May-Aug 2020, white-collar workers have lost more jobs in Kerala and high-income states. The employment loss of white-

collar workers in Kerala during May-Aug 2020 was 32 per cent and 20 per cent in both low and high-income states. It increased after that in the subsequent months. Still, the employment recovery of white-collar workers in Kerala is slower (82%) as compared to low-income states (92%), high-income states (96%) and all of India (95%) (Table 3.13, Panel A).

Among the occupations, blue-collar workers lost significantly more jobs during the first wave, followed by the self-employed and white-collar workers. However, there was a quick employment recovery of blue-collar workers in Kerala than low-income and high-income states. On the contrary, Kerala was lagging behind other states in the employment recovery of white-collar jobs and self-employed.

After a drastic fall in employment of blue-collar workers in Kerala during Jan-April 2020, there was more than 100 per cent recovery in the subsequent months. On the contrary, employment of blue-collar workers further declined by 25 per cent in all India, 30 per cent in low-income states and 22 per cent in high-income states in May-Aug 2020. It appears that low-income states suffered greater employment loss during the first wave of the COVID crisis, and the recovery is slower than high-income and all India (Table 13 Panel B).

Self-employed in Kerala suffered a higher loss than low-income and high-income states and the national average. The employment loss was close to 21 per cent and 22 per cent in Kerala during Jan-April 2020 and May-Aug 2020 compared to 4 and 3 per cent in all India. The low-income states show a higher number of people in the self-employed category from May-Aug 2020 as compared to the pre-pandemic levels. By May-Aug 2021, the recovery of employment among the self-employed in Kerala was 81 per cent compared to 95 per cent at all India levels and 91 per cent in high-income states.

3.5 Conclusion and policy suggestions

The analysis of the employment impact of COVID in Kerala in a comparative perspective shows that the state has witnessed the highest employment decline in the first and second waves of COVID and lagging behind other states in terms of employment recovery. One out of eight people who lost jobs during the pandemic is Kerala. The magnitude of the crisis is highly uneven across different sections of the society, with the impact being higher for vulnerable areas of the community.

Much of the employment loss during the pandemic was found in urban Kerala, while rural Kerala showed a better resilience than all India and other states. The highest loss of employment in Kerala during the COVID first wave could be attributed to the massive loss of jobs in construction and manufacturing. Almost 50 per cent of jobs were lost in the construction sector in the first wave though it recovered in the second half of 2020. Similarly, Kerala lost three times more jobs in manufacturing than all of India, and the recovery of manufacturing jobs has been the lowest.

The loss of employment is significantly higher for people with a primary level of education. In contrast, people with secondary and higher secondary education recovered the lost jobs during the pandemic suggesting that people at the bottom suffered more, and the magnitude is higher in Kerala. The study also shows an increase in the informalisation in the labour market in Kerala as more people joined the workforce as daily wage workers and casual labourers after the initial loss of employment during the lockdown period. Similarly, the pandemic has also led to the changing nature of employment contracts, with more temporary jobs created than permanent ones.

However, Kerala showed some unique trends, in contrast with the trends observed at the national level.

First, studies have shown that the employment impact of the pandemic is high among females and youth. On the contrary, the number of females employed in Kerala during the pandemic increased compared to the pre-pandemic period. This unique trend in Kerala could be partially attributed to the active role of women-led SHGs and the greater female participation in NREGA. Similarly, the impact on youth employment in Kerala is significantly lower than the national average, though Kerala suffered a drastic decline in the first wave of COVID. Further, their employment recovery is better in Kerala. Less impact on youth in Kerala during the pandemic could be attributed to a massive increase in the gig economy. However, the international evidence on the gig economy during the pandemic is alarming. The quality of employment and working conditions are precarious.

Second, the SC-STs suffered the highest decline in employment, followed by the OBCs and general category during the pandemic. The employment recovery of SC-STs is slower than others. However, SC-ST employment in Kerala showed better healing than other groups.

Action points

1. **Direct income support for the unemployed:** Considering that Kerala's employment recovery is still far from restoring the pre-pandemic levels, a direct income transfer policy to support those who lost jobs during the pandemic is essential for consumption smoothing and helps people at the margins to stay afloat from falling into the poverty trap.
2. **Scaling up public employment programs:** Public employment produces public goods and services that enhance the productivity of private investment and enable job creation in the private sector. Increase the number of working days under the Ayyankali urban employment guarantee scheme to 150 at least two fiscal years.
3. **Re-invigorating the state's manufacturing policy:** The state has witnessed the highest employment loss in the manufacturing sector. A planning strategy for manufacturing sector development focusing on employment could restore the lost jobs and absorb youth in the labour market. *Promoting micro-enterprises is key to generating employment.*
4. **Focus on creating quality employment, not just jobs:** Pandemic has led to increased informalisation and changing nature of employment contracts. Those who lost jobs are joining the labour force but low-quality employment. Additionally, work created in the gig economy is of low quality. Hence, strengthen the institutional foundations of inclusive, sustainable and resilient economic growth and development by enhancing social protection systems, promoting formalisation, and ensuring that all workers, irrespective of their contractual arrangements, have the right to freedom of association and collective bargaining, enjoy safe and healthy working conditions and receive adequate minimum wages.
5. **Program for skilling and re-skilling:** Skill creation and up-gradation have been at the forefront of employment policy for several years. The pandemic has pushed many out of the labour force. Hence, skill development programs tailored to specific demographic groups and social groups who witnessed the greater loss of employment.

Chapter 4

The Income Dynamics: Elusive V-Shaped Recovery

Abstract

Kerala could be considered a labour-income-driven economy as it accounts for 80% of the total income, about 10% higher than the national average. The nature of employment is predominantly informal, termed in the CPHS as "Elementary occupation", which consists of agricultural workers, street vendors, casual and daily wage labourers, and others in the unorganized enterprises. As employment in unorganized enterprises is highly vulnerable, income loss has become much more intense than employment loss.

Among the states, Kerala was the worst affected as her monthly median household income dropped by 54.5% in the first wave (April-June 2020) from the pre-pandemic level of Rs 22000 (the highest among the Indian States), against 34.7% of the high-income states and 38% of the national average. Kerala's recovery has been much slower as the economy started unlocking itself. In the second wave (April-June 2021), Kerala's monthly median household total income declined by 22% compared to January-March 2021, whereas that of all states almost remained intact.

Much of such decline has been on account of labour income. Even though the mobility restrictions eased with the unlocking of the economy, labour income has not seen any steady recovery in Kerala, in contrast to the high-income states and the national average, both registering higher recovery. The overall income decline cast its shadow almost uniformly across the rural-urban continuum of Kerala. Both rural and urban households in Kerala experienced a drastic decline in income during both waves, the worst compared with the national averages. The gender groups also suffered income decline almost equally, with the male marginally bearing a little more burden. Across the social categories, it is found that marginalized castes such as SC and ST suffer the most in both waves, followed by OBC. The monthly median household income of SC-ST families plummeted by 60.8% in April-June 2020 compared to April-June 2019, against the national average of 40%. The income of marginalized castes is 44.2% below the pre-COVID level of income (October – December 2019); OBC and General castes trail by 32% and 20.6%, respectively. In contrast, high-income states and All States fall short of 0 to 5%.

Considering the occupation categories, most of the sectors of Kerala witnessed a much higher income decline during both waves than other States. Households working in Agriculture & Allied sector lost about 39% in the first wave in Kerala, a little higher than the national average of 37%. On the other hand, families working in the construction sector suffered an income loss of 64% in the first wave in Kerala compared to April-June 2019, against the

national average of 45%. A similar magnitude of income loss is observed for employees in Kerala's tourism, hospitality, travel, and restaurant sector. In the first wave, the households' income dipped 60% compared to the national average of 39%.

Except for Agriculture & Allied sector, the recovery of household income in those sectors was very slow. In contrast, both high-income states and all states recorded a quicker recovery of household income. Further, Kerala was the only major state that was severely affected by the second wave of the pandemic. The income of households employed in the construction sector and tourism, hospitality, travel, and restaurant sector in Kerala witnessed a record decline of 31.4% and 26.5%, respectively, in April-June 2021 compared to January-March 2021. Compared to the pre-COVID level (October – December 2019), as of June 2021, household income in Kerala in the construction sector is below 38.6% (national average: 11%) and 35.8% in the tourism, hospitality, travel, and restaurant sector (national average: 9.5%).

4.1 Introduction

As the coronavirus pandemic hit the Indian states, the Indian government imposed stringent lockdowns in the form of nationwide lockdown during April-May 2020. Except for the necessary and lifesaving activities, these drastic measures froze economic activity in most sectors, resulting in massive deterioration of income-earning opportunities, particularly for informally employed or self-employed workers. One of the big economic fallouts from the COVID-19 has been people being laid off from their jobs. The previous chapter showed that Kerala experienced the highest decline in employment both in the first and second waves of COVID-19. It finds that Kerala's employment declined from 1.04 crore during September-December 2019 to 0.81 crore in Jan-April 2020 that translates into 22.5% job loss. This is the highest among all other Indian states though it recovered in May-August 2020 while there was no significant decline in employment at all India levels and low-income and high-income states.

Further, during the second wave of COVID-19 (May-Aug 2021), Kerala's job loss increased compared to other states. As of May-Aug 2021, employment in Kerala is 8.4% below the pre-pandemic level (Sep-Dec 2019). Overall, the previous chapter concludes that the recovery in employment has been lagging, whereas other states almost showed a V-shaped recovery in employment by May-August 2021.

Thus, it is pertinent to understand the impact of COVID-19 on income, given that states in general and Kerala, in particular, witnessed severe employment loss. Against this backdrop, this chapter analyses how COVID-19 has impacted income in the last two years and the recovery after that. Kerala is a high-wage economy where labour wage approximately contributes 80% to the total income. Thus, the incremental impact of employment losses on income in proportionate terms is expected to be much higher in Kerala compared to other states. For example, in 2019-20, the average wage rate of a casual worker in Kerala was Rs 608 against all India average of Rs 275 as per the third wave of Periodic Labour Force Survey (PLFS).

Further, since Kerala's labour composition comprises mainly informal labour, and Kerala imposed one of the severest lockdowns in the country in the form of triple-lockdowns, the income of households had been severely hit during these periods. On the other hand, an economy more dependent on non-labour income is expected to tide over the COVID-19 shock and coronavirus-induced recession better compared to a wage economy—the findings from the analysis support this argument.

The remainder of this chapter is organized as follows. The methodology used in the analysis is discussed in Section 4.2. First, Section 4.3 presents the results and discussion of the analysis of aggregate income and its composition. Then the analysis of aggregate income by region (rural/urban) is presented in Section 4.4, by gender groups in Section

4.5, by occupation in Section 4.6, by social category in Section 4.7, by industrial activity in Section 4.8, and finally, concluding remarks with policy suggestions in Section 4.9.

4.2 Data and study approach

This study utilizes the Consumer Pyramids Household Survey (CPHS) of the Center for Indian Economy to analyze the impact of the COVID shock on income. The CPHS collects data on self-reported monthly household income for various categories. This survey is India's first-ever nationally representative, longitudinal household data on income available at household and individual levels. Table A4.1 in Appendix 4A presents a description of income variables. Briefly, it collects data on the total income of households which is the sum of the income earned by every earning member of the household from all sources and other incomes that accrue to the household collectively but cannot be attributed to any particular member of the household. Member income generally consists of income received from wages, overtime earnings, bonus payments, pension, dividend payout on equity shares, and interest income from all sources. The household income includes income received from rent, private transfers (remittance, gifts, and donations), government transfers, business profit, sale of assets, lotteries, gambling, etc.

This chapter focuses on four major income variables: total income, labor income, non-labor income, and private income. Labor income is defined as the sum of wage income and self-production income. Non-labor income is calculated after subtracting labour income and private income from total income. In other words, it is the household's income excluding labor income and private income. Table A4.1 in Appendix 4A provides a description of income variables.

Income data on households can be noisy, and a summary figure such as mean or average can be misleading – concealing more than it reveals. Thus, a choice has to be made between mean and median regarding the appropriate summary statistic. While the arithmetic mean considers all the values in distribution and thus can be seen as the center of gravity of the data, the median value only considers a subset of values, eliminating all other observations except for the most central values. Thus, it can be seen as the center of the probability of the data. As the skewness in the income data increases mean tends to lose its attractiveness as a measure of central tendency because extreme high values in the data tend to unduly pull the mean towards itself. Since the study uses the household dataset, it might contain extreme values. If this is so, the use of the median or center of probability represents the data better. Otherwise, the mean value would be dominated by the extreme values in the data rather than the *typical values*. The famous Stiglitz-Sen-Fitoussi Commission on the Measurement of Economic Performance and Social Progress also argued on the same line justifying the use of median instead of the mean for assessing the general experience of the population (Stiglitz et al. 2009). Thus, this

analysis did not remove any *seeming* outliers or extreme observations. Rather, it is decided to use the median. However, mean figures are reported when it is found that the distribution is heavily right-skewed, which results in zero median income.

The quarterly median of monthly income is reported in tables to gauge the impact of the COVID-19 on household income. Like the previous chapter, this chapter also focuses on 18 major states and divides them into high-income states (HIS) and low-income states (LIS) based on a weighted average per capita income in 2018-19. Although Kerala belongs to the HIS, Kerala is not included in this group. This makes it compare itself with the rest of the HIS. Thus, HIS is the rest of the high-income states. The distribution of observations across states groups for the whole period is reported in Table A4.2 in Appendix 4A. It shows that each state group has sufficient observations for estimating the population means from the sample means. This study's data period is from 2019 April to 2021 June. The pre-pandemic period 2019-20 is the reference or benchmark period in this analysis.

Highlights

- Kerala was affected the worst among the states, and recovery has been slow.
- The median total income of Kerala dropped by 54.5% in 2020Q2 compared to 2019Q2.
- As of 2021Q2, the median total income of Kerala is 34% below the pre-covid level of 2019Q4. The corresponding figures for high-income states are 3% and about 11% for All-States.
- A similar picture is observed in the case of labor income, non-labor income and private income.
- Labor income in 2021Q2 is 47.5% behind 2019Q4 (the pre-pandemic period), non-labor income is about 43% behind, and private income is about 20% behind.

4.3 Analysis of income dynamics

(a) Total income

As described earlier, the household's total income captures total earnings from all sources during a month. The monthly median income for each quarter is reported in Table 4.1 starting from 2019Q2 to 2021Q2. Kerala's median income was Rs 22000 in 2019Q2 compared to Rs 15280 in the HIS, Rs 13000 in the LIS, and Rs 14500 in all states.

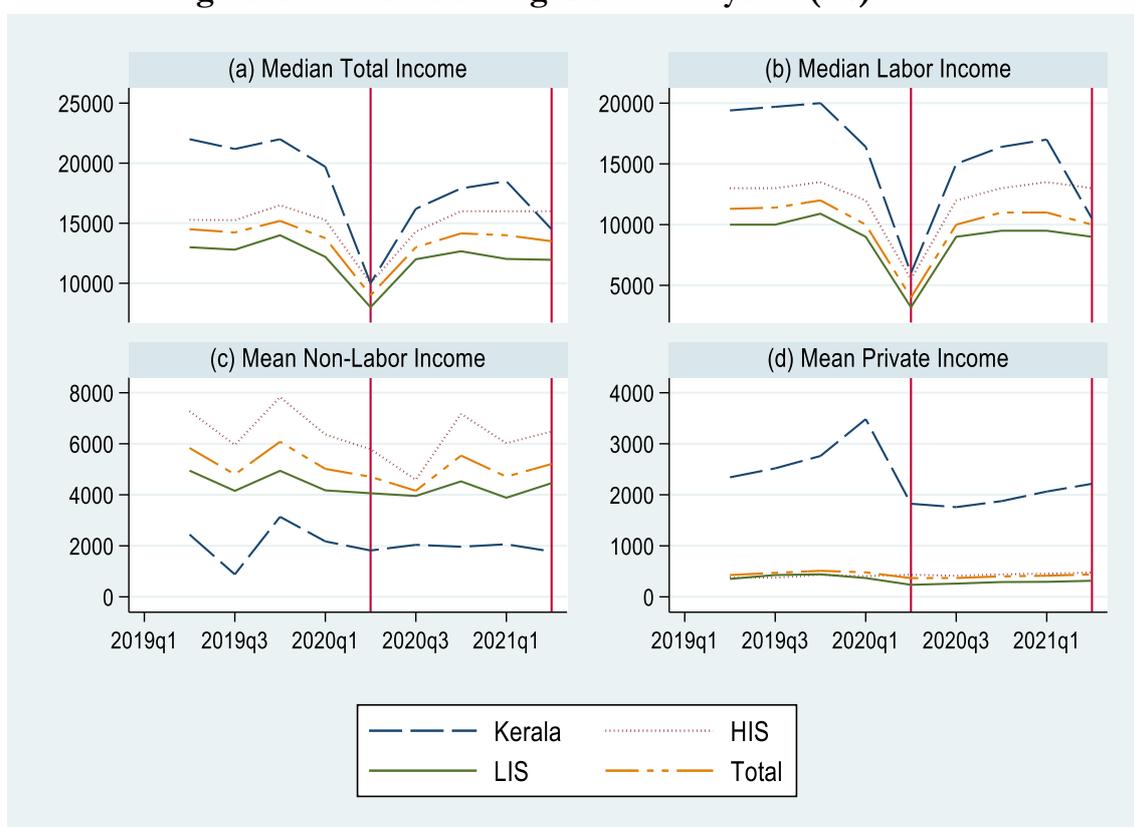
As the pandemic hit the states in 2020Q2 (April – June), states' median income declined sharply. Kerala's median income slipped from Rs 22000 in 2019Q2 to Rs 10000 in 2020Q2, a fall of 54.5% (see Table 4.2), whereas HIS, LIS, and All-States suffered a decline of 34 to 38%. Kerala's income loss was the highest across states.

Quarter	Kerala	High Income States	Low Income States	All States
2019Q2	22000	15280	13000	14500
2019Q3	21178	15250	12800	14230
2019Q4	22000	16500	14000	15196
2020Q1	19700	15270	12200	13752
2020Q2	10000	10000	8005	9000
2020Q3	16200	14300	12000	13000
2020Q4	17900	16000	12664	14155
2021Q1	18500	16000	12026	14000
2021Q2	14500	16000	11955	13500

Notes: High Income States excluding Kerala

Although Figure (a) of Figure 4.1 suggests a V-shaped recovery for state groups until the second wave of COVID-19 hit the state, it is observed that Kerala's revival since 2020Q2 has been tardy and slow. On the other hand, the recovery of LIS, HIS, and All-States has been faster. By 2021Q1, HIS was close to its pre-COVID level median household income. Table 4.2 reveals that the median income of HIS and All-States increased by 4.8% and 1.8%, respectively, between 2020Q1 and 2021Q1. In contrast, Kerala recorded a drop of about 6%.

Figure 4.1: Income during COVID-19 years (Rs)



Notes: The two red vertical bars represent the two waves of pandemic (Apr-Jun 2020 and Apr-Jun 2021)

Table 4.2: Percentage change in median total income (Y-o-Y)

Quarter	Kerala	High Income States	Low Income States	All States
2020Q2	-54.5	-34.6	-38.4	-37.9
2020Q3	-23.5	-6.2	-6.3	-8.6
2020Q4	-18.6	-3.0	-9.5	-6.9
2021Q1	-6.1	4.8	-1.4	1.8
2021Q2	45.0	60.0	49.3	50.0

As the COVID-19 resurfaced in 2021Q2, most of the states went back to imposing lockdowns. Like the first wave of the pandemic, Kerala was again knocked down very hard by the second wave. This frozen state of economic activity in the event of the severity of the pandemic in Kerala accounting for over 60% of the cases in the country got manifested in the quantum of decline in the median income in 2021Q2. While Kerala's median income declined from Rs 18500 in 2021Q1 to Rs 14500 in 2021Q2 (22% fall), HIS and LIS were hardly affected. Thus, Kerala registered a rise of median income by 45% in 2021Q2 compared to 2020Q2, whereas LIS and All States saw an increase of about 50%, and the HIS witnessed a surge of 60%.

Have the households recovered from the income slump? To answer this, 2021Q2's median income is compared with the pre-pandemic period of 2019Q4 (Oct-Dec 2019). The total income of Kerala in 2021Q2 is still around 34% below its pre-pandemic level. In contrast, HIS was 3% behind and All-States was about 11% behind.

(b) Labor income

The share of labor income in total income was about 79% for Kerala throughout the period - a little more than 10% of the categories considered. The share of HIS, LIS, and All States (total) being 67.8%, 70.8%, and 69.6%, respectively. Thus, Kerala draws its income mainly from labor income-related jobs.

Figure (b) of Figure 4.1 suggests that median labor income in Kerala was much higher in 2019Q2 (Rs 19400), whereas other state groups had labor income between Rs 10000 to Rs 13000. In the first wave, Kerala witnessed a record decline of about 69% (See Table 4.3) from Rs 19400 to Rs 6000 in 2020Q2, which, as observed in the previous chapter, needs to be seen in the context of almost 2.3 million job loss reported during the first quarter on 2020. Except for the HIS, LIS was equally affected. During the same period, all states, on average lost 64.6%, resulting from a loss of almost 2.58 crore jobs.

Quarter	Kerala	High Income States	Low Income States	All States
2020Q2	-69.1	-57.7	-68.0	-64.6
2020Q3	-23.9	-7.7	-10.0	-12.3
2020Q4	-18.0	-3.7	-12.8	-8.3
2021Q1	3.7	12.5	5.6	10.0
2021Q2	75.0	136.4	181.3	150.0

The revival in labor income was faster for all state groups¹. In 2020Q3, median income increased to Rs 15000 for Kerala, LIS from Rs 3200 to Rs 9000 for LIS, HIS from Rs 5500 to Rs 12000, and from Rs 4000 to Rs 10000 for All-States. Table 4.3 shows that median labor income in the HIS was 12.5% higher in 2021Q1 than 2020Q1. It was 3.7% for Kerala and 10% for All States. The recovery from the recession in the case of Kerala was slower compared to HIS and All-States.

In the second wave in 2021Q2, households' median labor income in Kerala declined by about 38%, from Rs 17000 in 2021Q1 to Rs 10500 in 2021Q2. During the same period, both HIS and LIS saw income decline by about 5%, whereas states on average registered a 10% decline. However, labour income in Kerala rose 75% in 2021Q2 against 2020Q2, while it was much higher for HIS (136.4%), LIS (181.3%), and All States (150%).

Thus viewed, the labour income in Kerala is yet to return to the pre-COVID level of 2019Q4. Kerala's median labour income in 2021Q2 is about 47% below the 2019Q4 level. In contrast, HIS is trailing by about 4%, and LIS and All-State by about 17% during the same period.

(c) Non-labor income

Non-labor income contributes approximately 10% to the total household income in Kerala. The corresponding figures are about 30% for the HIS, 27% for the LIS, and 28% for All States. The non-labor income is represented by mean since many households report zero income under this head. Figure (c) of Figure 4.1 shows that the mean income was Rs 2,444 in 2019Q2 for Kerala, Rs 7276 for the HIS, Rs 4,948 for LIS, Rs 5834 for All States. Despite the small share, Kerala was the worst hit among states, a decline of 25.6% in 2020Q2 compared to 2019Q2; other state groups lost around 18-20% (see Table 4.4). One interesting dimension of non-labor income is that it did not experience an extreme drop as it happened for labor income at the onset of the lockdown.

It is observed that mean non-labor income for all state groups had revived by 2020Q4 except for Kerala. In the second wave, only Kerala witnessed a decline of about 14% in 2021Q2 compared to 2021Q1. In contrast, both HIS and All-States saw income rise by 7.6% and 10.6%, respectively. The non-labor income is still far from the pre-pandemic

¹ State groups refer to HIS, LIS, Kerala, and All-States.

level (2019Q4) for all state groups. The non-labor income of Kerala in 2021Q2 is about 43% lower than the pre-pandemic level, while it was about 17% and about 14% for HIS and All-States, respectively.

Quarter	Kerala	High Income States	Low Income States	All States
2020Q2	-25.6	-20.5	-17.9	-19.4
2020Q3	132.0	-23.0	-4.8	-13.4
2020Q4	-37.4	-8.4	-8.3	-8.9
2021Q1	-5.1	-5.3	-6.9	-6.1
2021Q2	-2.3	12.0	9.7	10.7

(d) Private income

This is the income a household receives from a family member as a remittance or a gift or donation from any non-government agency. For assessing this income component, the mean has been used because a large proportion of households report zero income under this head. Its share in total household income is about 9% in Kerala against the all-state average of 2.1% during the study period. The households in Kerala collect an average income of Rs 2343 in 2019Q2 from private transfers against the national average of Rs 427.

Figure 4.1 (panel d) reveals that Kerala recorded a 22% decline in mean private income, from Rs 2343 in 2019Q2 to Rs 1824 in 2020Q2 (the first wave). It fell about 14% for all states (see Table 4.5). Given its importance for Kerala's household income, this sharp fall in private income is a huge loss of income for the households. Kerala's revival has been slower. The second wave did not impact the private transfers or remittance income for households in the state. Rather, the transfers increased in 2021Q2 by about 7.4%. In contrast, the recovery of remittance income in the high-income states was quicker.

As of 2021Q2, the mean income of households in Kerala is 20.7% below the pre-COVID level (2019Q4). However, the mean remittance income of households in the HIS and all states had surpassed the pre-COVID level by 10.5% and 3%, respectively.

To sum up, the overarching conclusion from the analysis of income measures (total income, labor income, non-labor income, and private income) is that although Kerala was better positioned in 2019Q2 and had higher median household income across states, it was very badly hit by the two waves of the pandemic vis-à-vis other state groups. With regard to recovery, it has been behind both HIS and LIS. As of 2021Q2, it sits behind both HIS and LIS, and its faster revival is much desired. This is because the lion's share of Kerala's income is mainly from labor income. Even the high share of Kerala's

remittance is derived from migrant workers' labor income. The nature of the pandemic was such that it disproportionately affected labor income as entrepreneurs and businesses began to adopt salary cuts and layoffs after they saw demand nosediving to rock bottom.

States with higher non-labor income share in total household income tended to have lower dips in their median income but recovered faster than states with a higher share of labor income.

Quarter	Kerala	High Income States	Low Income States	All States
2020Q2	-22.1	13.4	-33.1	-14.1
2020Q3	-30.2	11.0	-39.3	-21.4
2020Q4	-32.0	1.9	-34.2	-21.3
2021Q1	-40.8	12.0	-20.2	-13.7
2021Q2	21.5	9.9	33.7	20.0

4.4 Income by rural/urban

In the previous section, the impact of COVID-19 on income was analyzed for all households across state groups. However, COVID-19 might have imposed a disproportionate impact on urban households instead of rural households. This may be on account of several reasons. For example, the agriculture sector did not experience as strict a lockdown as other sectors, as was discussed in Chapter 2. In fact, the agriculture sector was one of the sectors where restrictions were removed early on. The government allowed agricultural businesses and stores selling farming supplies to resume operation starting from 20th April 2020 along with sectors like public works programmes, cargo transport, and banks and government centers distributing benefits. Secondly, the level of monitoring lockdown by police remained less strict in rural areas, which may mean that economic activities within rural communities may have continued. This section discusses how COVID-19 has affected the household income of rural vis-à-vis urban areas. Table 4.6 presents the distribution of households, showing that the weighted urban share of households in Kerala is 47.6% compared to the All-State average of 32%.

Highlights

- The pandemic affected both rural and urban regions more or less equally.
- While the urban income in Kerala is 1.05 times that of rural households, the numbers are 1.37 for HIS, 1.44 for HIS, and 1.47 for All-States, indicating a lower rural-urban divide.
- Kerala was affected the worst among the states, and recovery has been slow.
- Irrespective of rural or urban regions, Kerala remains in the economic pit while others are faring better than the pre-pandemic period of 2019Q4.
- While households in rural Kerala in 2021Q2 trail about 32% and urban Kerala lag about 35% behind 2019Q4, urban and rural households in high-income states are only about 6% below 2019Q4.

Table 4.6: Distribution of households

	Kerala	HIS	LIS	Total
RURAL	52.40	56.30	77.64	68.04
URBAN	47.60	43.70	22.36	31.96
Total	100	100	100	100

Comparing the median income of rural households with urban counterparts across the state groups throws stark differences. First, in general, the income of urban households is higher than rural households, which are well known. Second, the rural-urban differential of household income in the case of Kerala is much lower than in other regions of India. The urban-rural median household income ratio is 1.05 (during the nine quarters between 2019Q2 and 2021Q2), whereas the corresponding numbers are 1.37 for HIS, 1.44 for LIS, and 1.47 for All-States. It reconfirms the well-perceived notion about Kerala's unique feature that there is not much difference among rural and urban regions within Kerala. However, this notion should not be taken too liberally as the employment chapter already showed that urban areas were much more severely affected.

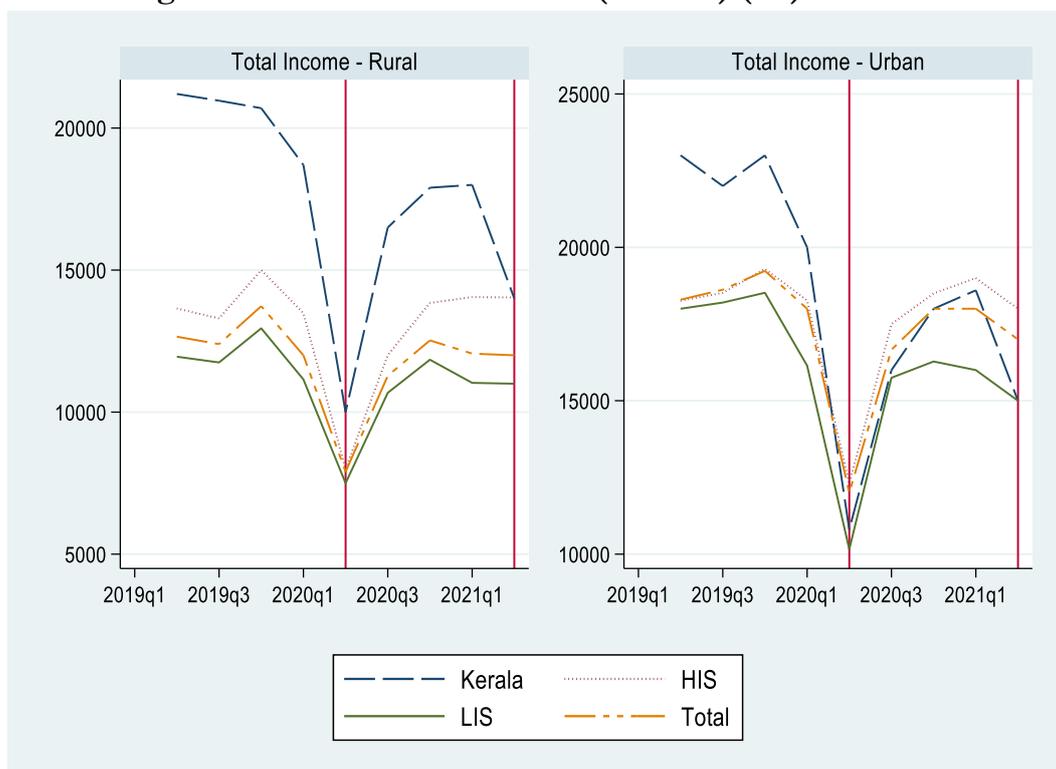
(a) Rural region

Figure 4.2 shows that Kerala's median household total income in 2019Q2 in the rural area was Rs 21200, much higher than HIS, LIS, and All-States, where households earned between Rs 12000 and Rs 13650. In the first wave of COVID-19 (Apr-Jun 2020), Kerala's median income declined by 53%, 41.4% in the HIS, and 37.6% across states compared to 2019Q2. This higher decline in Kerala could be due to severe lockdown and the resulting decline in labor income. Recall that close to 80% of income for the median household in Kerala comes from labor wages. In contrast, the share of non-labor income is very high for other states, which may have cushioned the decline in income. For example, the share of non-labor income for a median household in Madhya Pradesh is around 23%, a low-income state as per GSDP per capita ranking. States with higher non-labor income shares tended to show a lower dip during the second quarter of 2020-21

and demonstrated faster recovery. All the states in the HIS have a larger share of non-labor income than Kerala. Hence, HIS states saw milder shock than Kerala and experienced faster and fuller income recovery for the median household.

Rural Kerala's revival of median income has been slow compared to other states (see left panel of Table 4.7). The median income continued falling until 2021Q1, whereas HIS and All-States had registered positive growth. Further, as the second wave of COVID-19 unfolded in 2021Q2, Kerala's median rural income declined 22% compared to 2021Q1, while the income of other state groups hardly declined. The median income of urban households in Kerala is still about 32% lower than 2019Q4 (pre-pandemic period). In contrast, the HIS and All-States are just 6.4% and 12.6% below the pre-pandemic level.

Figure 4.2. Total income - rural (median) (Rs)



Quarter	Rural				Urban			
	Kerala	HIS	LIS	Total	Kerala	HIS	LIS	Total
2020Q2	-52.8	-41.4	-37.2	-37.6	-53.0	-32.6	-43.6	-34.4
2020Q3	-21.3	-9.8	-9.1	-9.0	-27.3	-5.5	-13.5	-10.5
2020Q4	-13.5	-7.7	-8.5	-8.8	-21.7	-4.1	-12.1	-6.4
2021Q1	-3.7	4.2	-1.1	0.5	-7.0	4.0	-0.9	0.0
2021Q2	40.0	75.5	46.7	51.9	38.9	46.3	47.6	41.7

(b) Urban region

The median household total income for urban areas shows a similar trend, albeit the magnitude (see Figure 4.2). Urban Kerala's median household income was about Rs 1800 higher than rural Kerala, *i.e.*, Rs 23000 in 2019Q2, and that of HIS, LIS, and all states; it was around Rs 18000. The urban median income fell 53% in 2020Q2 for Kerala compared to 2019Q2 (See right panel of Table 4.7), same as rural Kerala. But the fall in subsequent quarters was worse than rural households in Kerala, implying the recovery of income was much slower. In 2021Q2, while Kerala's median household income grew about 39%, HIS and All-States saw record growth of about 46% and about 42% compared with the corresponding period last year.

Table 4.7 shows that Kerala's urban households were relatively more affected than rural households. The impact on income in both HIS and All-States has been more or less similar. Rural India's relative resilience could be due to MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act), the resumption of agricultural activities in the rural area, and lower surveillance of rural areas by the police during the lockdown.

In the second wave, median urban income declined by about 19% in 2021Q2 compared to 2021Q1. The comparable figure for other state groups is about 6%. As of 2021Q2, the median income of urban households in Kerala lags 35% behind its pre-COVID level (2019Q4). The comparable number for HIS and All-States is about 7% and 11.6%, respectively.

4.5 Income by gender

While the aggregate income analysis reveals one story, it masks variations within a group. Women are more vulnerable to economic crises than men. COVID-19 is no different. As discussed earlier, CPHS decides the appropriate gender category of a household based on the number of males and females. The CPHS classifies gender into seven groups that is condensed into five groups in this analysis. They are Balanced, Female Dominated, Male-Dominated, Female Majority, and Male Majority. The weighted share and definition of each group is given in Table A4.4 in Appendix 4A.

Highlights

- There seems to be a minor gender impact of the pandemic on median total income.
- In the first wave of the pandemic, male gender groups *marginally* lost more income than female gender groups.
- The pace of recovery has been slow for Kerala across all gender groups.
- Across all gender groups, Kerala lost more income than HIS and All-States and the revival in income has been slow.
- Households in the HIS are trailing about 5% behind the pre-covid level of median total income; households across gender groups are about 36% below the 2019Q4 level in Kerala.

Table 4.8 presents median total income across genders along with the year-on-year quarterly change. Irrespective of the gender of the household, Kerala is at the top of the table with respect to median total income followed by HIS. The second observation is that males (both Male-Dominated and Male Majority) earn more than female counterparts across the state groups. Third, Kerala's loss of income is the maximum irrespective of gender groups.

Table 4.8: Median total income (Rs) by gender									
Quarter	Median Income (Rs)				Percentage Change (Y-o-Y)				
	Kerala	HIS	LIS	All States	Kerala	HIS	LIS	All States	
Gender: Balanced									
2019Q2	20000	14725	12280	13785					
2019Q3	19000	14350	12220	13500					
2019Q4	19500	15130	13353	14725					
2020Q1	18000	14560	11675	13000					
2020Q2	10000	9150	8000	8574	-50.0	-37.9	-34.9	-37.8	
2020Q3	15000	13000	11200	12120	-21.1	-9.4	-8.3	-10.2	
2020Q4	16300	15000	12055	13500	-16.4	-0.9	-9.7	-8.3	
2021Q1	16800	15000	11650	13050	-6.7	3.0	-0.2	0.4	
2021Q2	12200	15000	11085	12680	22.0	63.9	38.6	47.9	
Gender: Female Dominated									
2019Q2	19000	12200	10315	11500					
2019Q3	18500	12220	10710	11835					
2019Q4	18450	13000	11800	12250					
2020Q1	15000	12016	10000	10900					
2020Q2	8800	7500	6523	7250	-53.7	-38.5	-36.8	-37.0	
2020Q3	13800	11000	9605	10178	-25.4	-10.0	-10.3	-14.0	
2020Q4	15100	12150	10030	11250	-18.2	-6.5	-15.0	-8.2	
2021Q1	16000	13000	10000	11371	6.7	8.2	0.0	4.3	
2021Q2	11600	12200	9985	11000	31.8	62.7	53.1	51.7	

	Gender: Female Majority								
2019Q2	22675	15620	12315	14000					
2019Q3	23000	16000	12380	14000					
2019Q4	23660	17600	13720	15210					
2020Q1	21000	16170	12000	13645					
2020Q2	11500	10264	8000	9000		-49.3	-34.3	-35.0	-35.7
2020Q3	16900	15000	11668	13000		-26.5	-6.3	-5.8	-7.1
2020Q4	18400	16500	12190	14133		-22.2	-6.3	-11.2	-7.1
2021Q1	19500	17000	12000	14018		-7.1	5.1	0.0	2.7
2021Q2	15500	17000	11500	13600		34.8	65.6	43.8	51.1
	Gender: Male-Dominated								
2019Q2	26710	17750	14120	15500					
2019Q3	27000	17400	13663	15200					
2019Q4	26500	19000	14642	16480					
2020Q1	23925	18150	13200	15000					
2020Q2	10700	11000	8640	9600		-59.9	-38.0	-38.8	-38.1
2020Q3	18000	15500	12947	14000		-33.3	-10.9	-5.2	-7.9
2020Q4	19500	17500	13500	15000		-26.4	-7.9	-7.8	-9.0
2021Q1	21000	18000	13000	15000		-12.2	-0.8	-1.5	0.0
2021Q2	16500	17500	12668	14500		54.2	59.1	46.6	51.0
	Gender: Male Majority								
2019Q2	25000	18000	14300	15880					
2019Q3	25000	18000	14170	15720					
2019Q4	25000	19000	15150	17000					
2020Q1	23351	18000	13310	15000					
2020Q2	12000	11300	8500	9600		-52.0	-37.2	-40.6	-39.5
2020Q3	18400	16000	12945	14300		-26.4	-11.1	-8.6	-9.0
2020Q4	20000	18000	13930	15680		-20.0	-5.3	-8.1	-7.8
2021Q1	21000	18150	13176	15200		-10.1	0.8	-1.0	1.3
2021Q2	16800	18000	12720	15000		40.0	59.3	49.6	56.3

In the first wave of the pandemic, male genders marginally lost more income than female ones. In Kerala, Male-Dominated and Male Majority lost about 60% and 52% respectively in 2020Q2 versus 2019Q2, whereas Female Dominated and Female Majority saw median total income decline by 53.7% and 49.3%, respectively. Households with equal gender representation saw income eroded by 50%. In comparison, income fell about 38% for both Female Dominated and Male-Dominated in HIS, the income reduced by 37.2% for Male Majority and 34.3% for Female Majority.

The median total income of all gender groups in HIS and All-States has bounced back by 2021Q1. In contrast, the pace of recovery has been slow for Kerala across all gender groups. Except for Female Dominated in Kerala, other gender groups continued to slide down. It is observed from Table 4.8 that revival in income for Female Majority, Male-Dominated and Male Majority households has been slow for Kerala. Compared to

2020Q2, the median income of males in 2021Q2 rose strongly as opposed to female and balanced gender households. In contrast, this pattern is observed among other state groups. In addition, Kerala's revival growth was very much less compared to HIS and All-States.

As the second wave hit the state economies, all gender groups in Kerala lost approximately 22% in 2021Q2 compared to 2021Q1. In contrast, the income of five gender groups of other state groups marginally declined, around 3%. The second wave wiped out 27.5% income of Female Dominated households in Kerala during the same period. Between 2020Q2 and 2021Q2, the income recovery of males has been *marginally* better than female households and balanced gender households.

Are households across gender groups out of the woods of the economic slump in 2021Q2 compared to the 2019Q4 (the pre-pandemic period)? Households' income in the HIS and All States trail about 5% and 12%, respectively, below the pre-COVID level of median total income. In contrast, households across gender groups are about 36% lower than what they used to earn in 2019Q4 in Kerala.

4.6 Income by occupation

The pandemic has a varied effect on income levels across occupation categories across state groups. CPHS gives information on 19 occupation categories that have been re-grouped into nine categories. Table A4.3 reports the description of occupation categories and the weighted shares.

Highlights

- Occupations with higher median income are Technicians and Higher Academicians, and Clerks across all state groups.
- Households with occupations such as Elementary (about 62%), Teaching and Skilled Professionals (about 42%), and Home Makers & Retired (about 41%) were the worst hit in the first wave of the pandemic in Kerala.
- Income from occupations such as Technicians and Higher Academicians, Home Makers & Retired, and Clerks continued for a prolonged period in Kerala, whereas high-income states recovered rather quickly.
- The income of all occupations in Kerala was about 27% below the pre-covid level of 2019Q4 compared to 2021Q2. The high-income states have, however, recovered.

Table A4.3 in Appendix 4A gives information on the distribution of observations across categories for all states and Kerala. It can be seen that the major occupation categories in Kerala are Clerks (5.55%), Elementary (30%), Home-based Workers & Retired (19%), Teaching and Skilled Professionals (5.84%), and Technicians and Higher Academicians (4.4%).

Table 4.9 reveals some stylized facts. First, occupations with higher median income are Technicians and Higher Academicians, and Clerks across all state groups. Second, Kerala's median income is higher across occupations than LIS, HIS, and All-States. Third, regardless of occupation, households in Kerala suffered the worst compared to HIS and All-States.

In the first wave of the pandemic, occupations that suffered the maximum in Kerala were Elementary, Teaching and Skilled Professionals, and Home-based Workers & Retired. The median total income of households having Elementary occupations (Agricultural workers, porters, garbage collectors, messengers, street vendors, and mining workers) witnessed the biggest drop (62.4%) in 2020Q2 compared to 2019Q2. During the same period, the income of households with Home-based Workers & Retired and Teaching and Skilled Professionals shrank approximately 42%. On the other hand, households having occupations such as Clerks (8.6%) and Technicians and Higher Academicians (about 23%) suffered less during the same period.

The recovery of households with occupations such as Technicians and Higher Academicians, Home-based Workers & Retired, and Clerks continued for a long period in Kerala (see Figure A4.2 in Appendix 4B). Among the three, by 2021Q1 only Clerks have managed to earn what they earned before the pandemic. However, the median income of households with Teaching and Skilled Professionals and Elementary occupations have witnessed a stronger recovery, and by 2021Q1, they were close to the income level of 2019Q2. It is observed that HIS and All-States recorded quick revival.

Quarter	Median Income (Rs)				Percentage Change (Y-o-Y)				
	Kerala	HIS	LIS	All States	Kerala	HIS	LIS	All States	
	Occupation: Clerks								
2019Q2	35000	30230	31260	31250					
2019Q3	37000	30050	30164	30220					
2019Q4	38200	32500	32000	32640					
2020Q1	36000	33000	30356	32180					
2020Q2	32000	30150	28230	30060	-8.6	-0.3	-9.7	-3.8	
2020Q3	32000	30000	28070	30000	-13.5	-0.2	-6.9	-0.7	
2020Q4	32800	32000	30020	31400	-14.1	-1.5	-6.2	-3.8	
2021Q1	34500	35000	30500	32560	-4.2	6.1	0.5	1.2	
2021Q2	35000	35000	32000	33555	9.4	16.1	13.4	11.6	

	Occupation: Elementary								
2019Q2	18600	12250	9800	11000					
2019Q3	18400	12280	10255	11708					
2019Q4	19000	13300	10870	12195					
2020Q1	17600	12630	10000	11200					
2020Q2	7000	7650	4600	6130		-62.4	-37.6	-53.1	-44.3
2020Q3	15500	12000	9584	11000		-15.8	-2.3	-6.5	-6.0
2020Q4	17000	13040	9890	12000		-10.5	-2.0	-9.0	-1.6
2021Q1	17600	14000	10000	12000		0.0	10.8	0.0	7.1
2021Q2	12000	13536	9600	11080		71.4	76.9	108.7	80.8
	Occupation: Home-based Workers & Retired								
2019Q2	17000	11300	13320	12650					
2019Q3	16100	11500	13091	12630					
2019Q4	16500	11620	13930	13000					
2020Q1	15000	9016	12750	11000					
2020Q2	10000	7250	9040	8000		-41.2	-35.8	-32.1	-36.8
2020Q3	11400	9516	11200	10056		-29.2	-17.3	-14.4	-20.4
2020Q4	12000	10000	12898	11040		-27.3	-13.9	-7.4	-15.1
2021Q1	12000	9569	12000	10200		-20.0	6.1	-5.9	-7.3
2021Q2	10600	9000	11000	9900		6.0	24.1	21.7	23.8
	Occupation: Teaching and Skilled Professionals								
2019Q2	24550	17000	14700	15333					
2019Q3	22000	17000	15180	16000					
2019Q4	24000	17110	15209	16000					
2020Q1	21500	18000	13670	15164					
2020Q2	14148	13000	8000	9310		-42.4	-23.5	-45.6	-39.3
2020Q3	21300	16400	13250	15000		-3.2	-3.5	-12.7	-6.3
2020Q4	22400	16500	14500	15500		-6.7	-3.6	-4.7	-3.1
2021Q1	24000	18000	13915	15116		11.6	0.0	1.8	-0.3
2021Q2	18000	18000	12500	14555		27.2	38.5	56.3	56.3
	Occupation: Technicians and Higher Academicians								
2019Q2	45500	35200	38500	36289					
2019Q3	45000	35250	39000	37500					
2019Q4	46000	38150	38270	38615					
2020Q1	48500	40000	35360	38250					
2020Q2	35000	32500	36170	35000		-23.1	-7.7	-6.1	-3.6
2020Q3	34500	36150	37250	36200		-23.3	2.6	-4.5	-3.5
2020Q4	38000	40000	37000	38400		-17.4	4.8	-3.3	-0.6
2021Q1	36000	40050	35130	39000		-25.8	0.1	-0.7	2.0
2021Q2	32000	39500	38000	38020		-8.6	21.5	5.1	8.6

As the pandemic hit the states again in the second quarter of 2021, households in Kerala had to bear the maximum burden compared to HIS and All-States. Elementary (about 32%) and Teaching and Skilled Professionals (about 25%) occupations saw the highest decline in the median income between 2021Q1 and 2021Q2. On the other hand, the

median household total income of occupations such as Home-based Workers & Retired and Technicians and Higher Academicians fell about 11%. In contrast, the income of Clerks *hardly* fell.

Has households' median income across occupations bounced back to the pre-pandemic level (i.e., 2019Q4)? Except for Home-based Workers & Retired, high-income states' median total household income is above its pre-COVID level. Households in Kerala, in contrast, are approximately 27% below their pre-COVID level. Elementary (about 36%), Home-based Workers & Retired (about 37%), Technicians and Higher Academicians (about 30%), Teaching and Skilled Professionals (about 25%), and Clerks (about 8.5%) still trail behind the median income level of 2019Q4.

Highlights

- The marginalized castes such as SC and ST suffer the most in the first wave of the pandemic compared to the same period in the previous year, followed by OBC.
- The median household total income of SC-ST families in Kerala plummeted by 60.8% in Apr-Jun 2020 compared to Apr-Jun 2019. The high-income states average and national average lost about 40% each.
- However, when it comes to recovery of income, it is observed that the revival of income of marginalized castes is better than OBC, which is better than the general caste.
- In the second wave, marginalized castes in Kerala lost 38% between 2021Q1 and 2021Q2, whereas high-income states and All States lost mildly (0 to 5%).
- As of 2021Q2, the income of marginalized castes is 44.2% below the pre-covid level of income, OBC and General castes trail by 32% and 20.6%, respectively. In contrast, both the high-income states and All States fall short of 0 to 5%.

4.7 Income by social category

The COVID pandemic is expected to have varied impacts on the income of households belonging to different caste groups. The monthly median household income is calculated for each caste. While the CPHS survey collects information on four castes, namely, Upper Caste, OBC, SC, and ST, the SC and ST castes have been merged in this analysis. The weighted share of observations is reported in Table A4.5 in Appendix 4A for both Kerala and all states. The table shows that while the share of OBC households is 42% at the All-India level, the share is 70.4% for Kerala. Kerala's share of SC-ST households is 19.6% against the national average of 29.7%, and finally, the General caste (Upper Caste) share is 10% for Kerala and 28% for all states.

The monthly median household total income is reported in Table 4.10. It shows that the marginalized castes such as SC and ST suffer the most in the first wave of the pandemic compared to the same period in the previous year, followed by OBC. This pattern is

salient across states. In particular, the median household total income of SC-ST families plummeted by 60.8% in Apr-Jun 2020 compared to Apr-Jun 2019. In contrast, the median income of households in the high-income states and national lost about 40% each. The loss of income of OBC households are a little lower; 52.2% for Kerala, 36.5% for high-income states, and 40% for All States.

Table 4.10: Median total income (Rs) by social category									
Quarter	Median Income (Rs)					Percentage Change (Y-o-Y)			
	Kerala	HIS	LIS	All States		Kerala	HIS	LIS	All States
Caste: OBC									
2019Q2	23000	15150	12700	14300					
2019Q3	22000	15000	12285	14000					
2019Q4	22000	16000	13560	15000					
2020Q1	20000	15245	11710	13485					
2020Q2	11000	9620	7500	8500		-52.2	-36.5	-40.9	-40.6
2020Q3	16500	14000	11500	12873		-25.0	-6.7	-6.4	-8.1
2020Q4	18000	15150	12065	14000		-18.2	-5.3	-11.0	-6.7
2021Q1	18500	16000	11600	14000		-7.5	5.0	-0.9	3.8
2021Q2	15000	15540	11402	13155		36.4	61.5	52.0	54.8
Caste: SC/ST									
2019Q2	19000	14750	11745	13000					
2019Q3	18600	14725	12080	13010					
2019Q4	19900	15260	12777	14000					
2020Q1	18000	15000	11275	12610					
2020Q2	7450	9000	7000	7750		-60.8	-39.0	-40.4	-40.4
2020Q3	15500	13400	10780	12000		-16.7	-9.0	-10.8	-7.8
2020Q4	17400	15000	12000	13030		-12.6	-1.7	-6.1	-6.9
2021Q1	18000	15000	11260	13000		0.0	0.0	-0.1	3.1
2021Q2	11100	15000	10596	12350		49.0	66.7	51.4	59.4
Caste: General Caste									
2019Q2	23500	17720	15250	16220					
2019Q3	22980	17800	15110	16000					
2019Q4	23700	18800	16520	17800					
2020Q1	22632	16700	14600	15250					
2020Q2	15000	12000	10700	11275		-36.2	-32.3	-29.8	-30.5
2020Q3	18000	15310	14000	15000		-21.7	-14.0	-7.3	-6.3
2020Q4	18500	18000	14850	16000		-21.9	-4.3	-10.1	-10.1
2021Q1	18900	18000	14000	15250		-16.5	7.8	-4.1	0.0
2021Q2	15000	17050	14000	15040		0.0	42.1	30.8	33.4

However, when it comes to recovery of income, it is observed that the revival of income of marginalized castes is better than OBC households (see Figure A4.1 in Appendix 4B).

The households belonging to the general caste saw a protracted recovery in the median income.

As the pandemic hit the states for the second time in Apr-Jun 2021, the worst-hit families belong to marginalized castes in Kerala. Kerala's SC-ST households income tanked 38% between 2021Q1 and 2021Q2, whereas the household income of OBC and general castes declined by about 20%. However, high-income states and All States lost mildly (0 to 5%).

Finally, the revival of income to the pre-pandemic level (2019Q4) is still continuing for Kerala households compared to high-income states and All States. The median household income of marginalized castes is 44.2% below the pre-COVID level, whereas OBC and General castes trail by 32% and 20.6%, respectively. In contrast, both the high-income states and All States fall short of 0 to 5%.

Highlights

- The worst affected sectors in the first wave were Construction (64%), Travel, Tourism, Hotel and Restaurants (60.5%), and Personal Services (50.4%) Kerala is whereas at the national level, Construction (45%), Travel, Tourism, Hotel and Restaurants (38.7%), and Personal Services (48%).
- Other sectors have lagged high-income states and national averages, except for Agriculture and Allied activities.
- Up until now, on average, Kerala's median income is 34% below its pre-pandemic level, the highest being the Trade sector. In contrast, high-income states lag the pre-covid income level by 2.3%, while the national average is 11.2%.

4.8 Income by industry category

The quarterly estimates of GDP published by the National Accounts Statistics showed that the COVID-19 pandemic had a differential impact on different sectors of the economy. The weighted share of the sample presented in Table A4.6 in Appendix 4A shows that sectors with the highest share in Kerala are Construction (22%), Travel, Tourism, Hotel and Restaurant (9.4%), Trade (8.8%), and Agriculture & Allied (2.9%). The weighted share of the Construction sector of Kerala is double that of the national level. Hence, the revival of this sector holds importance for the revival of employment growth in Kerala and, thus, recovery of household income.

Table 4.11 reveals that the impact of the COVID-19 pandemic on household median income was equally felt (39% drop) across state groups for households having Agriculture & Allied activities in the first wave (Apr-Jun 2020) compared to Apr-Jun 2019. This sector displayed some resilience during the pandemic. This sector provided employment to the return migrants and people who had shifted to agricultural activities due to the loss of jobs in the non-agricultural sector. The worst affected sectors in Kerala

are Construction (64%), Personal Services (50.4%), and Travel, Tourism, Hotel and Restaurants (60.5%), while at the national level, Construction (45%), Personal Services (48%), and Travel, Tourism, Hotel and Restaurants (38.7%) are key sectors.

Table 4.11: Median total income (Rs) by industry category

Quarter	Median Income (Rs)				Percentage Change (Y-o-Y)			
	Kerala	HIS	LIS	All States	Kerala	HIS	LIS	All States
Industry: Agriculture & Allied								
2019Q2	19800	13000	12534	12760				
2019Q3	19440	12500	11680	12100				
2019Q4	20000	14250	13650	13950				
2020Q1	18941	13000	11468	12000				
2020Q2	12000	7950	8000	8000	-39.4	-38.8	-36.2	-37.3
2020Q3	18000	11000	10300	10625	-7.4	-12.0	-11.8	-12.2
2020Q4	17500	13200	12000	12500	-12.5	-7.4	-12.1	-10.4
2021Q1	18200	13300	10580	12000	-3.9	2.3	-7.7	0.0
2021Q2	14500	13700	11075	12000	20.8	72.3	38.4	50.0
Industry: Construction								
2019Q2	20800	14180	10089	11850				
2019Q3	19300	14100	10500	12000				
2019Q4	20700	15000	11000	12350				
2020Q1	19000	15210	10250	12000				
2020Q2	7500	9000	5200	6500	-63.9	-36.5	-48.5	-45.1
2020Q3	16000	13250	9877	11510	-17.1	-6.0	-5.9	-4.1
2020Q4	17600	14500	10076	12000	-15.0	-3.3	-8.4	-2.8
2021Q1	18500	15000	10500	12000	-2.6	-1.4	2.4	0.0
2021Q2	12700	14050	9900	11000	69.3	56.1	90.4	69.2
Industry: Industry								
2019Q2	25200	18160	13500	16450				
2019Q3	22400	18200	14350	17000				
2019Q4	23500	18750	15200	18000				
2020Q1	22500	18000	12820	15570				
2020Q2	12500	11500	8250	10122	-50.4	-36.7	-38.9	-38.5
2020Q3	17500	16500	13000	15140	-21.9	-9.3	-9.4	-10.9
2020Q4	18000	18000	13780	16142	-23.4	-4.0	-9.3	-10.3
2021Q1	20000	18000	14025	16715	-11.1	0.0	9.4	7.4
2021Q2	15800	17040	13500	16000	26.4	48.2	63.6	58.1
Industry: Personal Services								
2019Q2	21500	15000	12000	13500				
2019Q3	19948	15016	12645	14000				
2019Q4	20000	15244	13687	14940				
2020Q1	19191	15000	12000	13190				
2020Q2	8500	8400	5500	7000	-60.5	-44.0	-54.2	-48.1

2020Q3	17500	15000	12000	13000		-12.3	-0.1	-5.1	-7.1
2020Q4	18000	15000	12725	14000		-10.0	-1.6	-7.0	-6.3
2021Q1	18500	16000	12597	14100		-3.6	6.7	5.0	6.9
2021Q2	13600	16000	12000	13900		60.0	90.5	118.2	98.6
	Industry: Trade								
2019Q2	27400	17000	15220	16104					
2019Q3	26000	17545	15325	16500					
2019Q4	26000	18280	16120	17695					
2020Q1	25000	18260	14660	16160					
2020Q2	14641	13000	10150	11700		-46.6	-23.5	-33.3	-27.3
2020Q3	18500	17000	14500	15520		-28.8	-3.1	-5.4	-5.9
2020Q4	20000	18000	14875	16250		-23.1	-1.5	-7.7	-8.2
2021Q1	21000	18500	14000	16027		-16.0	1.3	-4.5	-0.8
2021Q2	16100	18000	13500	15150		10.0	38.5	33.0	29.5
	Industry: Travel, Tourism, Hotel and Restaurants								
2019Q2	21500	15280	12534	15000					
2019Q3	21100	16000	13180	15200					
2019Q4	21200	17100	14000	16140					
2020Q1	20000	16700	12675	15000					
2020Q2	8640	10500	8000	9200		-59.8	-31.3	-36.2	-38.7
2020Q3	16000	15180	12540	14500		-24.2	-5.1	-4.9	-4.6
2020Q4	17900	17500	13130	15500		-15.6	2.3	-6.2	-4.0
2021Q1	18500	18000	12550	15540		-7.5	7.8	-1.0	3.6
2021Q2	13600	17500	11855	14600		57.4	66.7	48.2	58.7

In terms of recovery, it is observed that except for Agriculture and Allied activities, other sectors have lagged high-income states and national averages (see Figure A4.3 in Appendix 4B). High-income states started recovering quickly.

In the second wave of the pandemic (Apr-Jun 2021), the median total income of households in Kerala shrank by 25% compared to Jan-Mar 2021. In contrast, high-income states (3%) and all states (4.3%) suffered marginally. In particular, while households working in the industry and agriculture and allied sectors witnessed around a 20% decline, the median income of households in the construction sector fell 31.4%, Travel, Tourism, Hotel, and Restaurants shrank by 26.5%. It can be seen that at all India level, the income of agricultural households hardly reduced, and that of Construction sector it was down by 8.3% during the same period.

The estimates indicate that the revival of income to the pre-COVID level (2019Q4) for households in Kerala will take a long time. Up until now, on average, Kerala's median income is 34% below its pre-pandemic level across the sectors, the highest being the Trade sector. In contrast, high-income states lag the pre-COVID income level by 2.3%,

while the national average is 11.2%. The construction sector is 38.6% below the income level of 2019Q4, whereas the high-income states average is 6.3% and that of all states, it is 11%. The income of households working in the industry sector in Kerala is still one-quarter less than the pre-pandemic level; the national average is 11%. Similarly, the income of households employed in the trade sector, and Travel, Tourism, Hotels, and Restaurants is 38% and 37%, respectively, beneath the pre-COVID level. In contrast, the corresponding figures at the national level are 14.4% and 9.5%.

4.9 Conclusion

The overall picture has been remarkably benign for LIS, HIS, and All-States, but not Kerala. At the aggregate level, the monthly median household total income is still about 34% below its pre-COVID level of 2019Q4. After the aggregate analysis, a disaggregated analysis is undertaken to ascertain how the pandemic has affected income of households based on region, gender, occupation, social category, and industry activities.

The study finds that urban households in Kerala have marginally suffered more than rural households in Kerala. Looking at the impact of the pandemic through the gender dimension suggests that households with male gender groups relatively saw more income decline in 2020Q2 compared to a year earlier. Among the occupations, it is found that households with occupations such as Elementary (about 62%), Teaching and Skilled Professionals (about 42%), and Home-based Workers & Retired (about 41%) were the worst hit in the first wave of the pandemic in Kerala. The income analysis by social category suggests that marginalized communities have been very badly affected in both the waves of the pandemic. It is estimated that the median household total income of SC-ST families in Kerala plummeted by 60.8% in Apr-Jun 2020 compared to Apr-Jun 2019. The high-income states average and national average lost about 40% each. Finally, this chapter looks into the impact of the pandemic across industry sectors. The study finds that the median total income of households working in Construction; personal services; travel, tourism, hotel and restaurants have plunged by 60%.

The revival of household income has been slow and dragging for Kerala across region, gender, and occupation. This is not evident in the case of high-income states and All-States. Whereas both high-income states and All-States had recovered in most cases, the income of households in Kerala continued to slide down.

As the coronavirus struck states again, Kerala suffered the most again. Households in high-income states and All-States relatively had a lesser impact. This is observed across all categories of income (total income, labor income, non-labor income, and private income), gender, social category, region, occupations, and industry activities.

Comparing the recovery of household income in 2021Q2 with the pre-pandemic period (2019Q4) shows that total household income is still 34% below the pre-COVID level in

Kerala. In the case of high-income states and All-States, the figures are about 7% and 11%. Kerala has a long way to go before it recovers from the onslaught of the pandemic. The disaggregated analysis with respect to region, gender, and occupation reinforces this conclusion.

Further, the spread of the Omicron variant is likely to curtail growth in 2022. Nevertheless, the economic recovery is still likely to continue over the year. Going by the findings, it can be said that households in Kerala are likely to bear the maximum brunt again compared to other states. The uneven effects of the pandemic, in other words, will endure. The pace of revival depends on the rate of double-dose vaccination, mobility restrictions, and shutting down of the economy.

Above all, the government should provide financial support to the concerned sections at the appropriate time. Since SC-ST households have received a bigger income shock, the government should undertake some financial measures. Kerala has large informal employment. This analysis finds that elementary occupations comprising agricultural workers, porters, garbage collectors, messengers, street vendors, and mining workers have seen maximum income loss. These households need special financial assistance from the state. Finally, families in the construction sector and tourism, hospitality, travel, and restaurant sectors saw maximum income decline. These sectors need a revival package from the state.

However, the fiscal space of the governments across the states have already been exhausted, and there is a significant debt overhang that the states are desperately trying to shed by limiting expenditure and raising taxes, both tax revenue and non-tax revenue. In the interest of society, this may not be a wise policy decision. In other words, the government needs to worry less about the debt and fiscal deficit and instead spend more on projects which will put money where the mouth is. Stated otherwise, governments across the states need to raise both the *quality* of spending and *quantity* of spending.

Annexure 4A

Table A4.1: Income variables and description		
Sl. No	Name	Description
1 (2+8)	Total income	It is the summation of the total income of every earning member and the income of the household collectively, which cannot be attributed to any individual member. This includes income received from all sources such as rent, income earned from self-production, private transfers, wages, overtime, bonus, etc.
2 (3 to 7)	All members income	This is the total income received by all the members of the household from all sources during a month. This includes income received from wages, overtime earnings, bonus payments by all the employed members, income received as pension by members, income earned through dividend payout on equity shares held by members and income earned in the form of interest from all sources.
3	Wage income	This is the total income received by all the working members of the household in the form of wages during a month. Wages includes over-time payments received.
4	Pension income	This is the total income received by all retired members of the household in the form of pension.
5	Dividend income	This is the total income received by all the members of the household through dividend earned from shares held in a business.
6	Interest income	This is the total income received by all the members through interest earned on bank deposits, bonds, and individual money lending business.
7	Provident fund and insurance income	Income earned by all members of the household after withdrawing monies from a fixed deposit account, public provident fund and insurance is given here.
8 (9 to 15)	Household income	This is the total household income received from sources such as rent, imputed income, private transfers, government transfers, business profit, sale of assets, lotteries, gambling, etc. These are sources of income that are not attributed to any specific member of the household.
9	Rent income	This is the total income earned by the household from rent during a month.
10	Self-production income	This is the total household income received from the production of agricultural goods for self-consumption during a month.
11	Private income	This is the total income received by the household from private transfers during a month. A private transfer is the income a household receives from a family member as a remittance, or as a gift or donation from any non-government agency. Private transfers are mostly the money sent to families by individuals working in other cities or even foreign countries.
12	Government transfers income	This is the total income received by the household from government transfers. Government transfer income includes Direct Benefit Transfer (DBT). It excludes pensions and salaries of government employees, payment under Mahatma Gandhi National Rural Employment Guarantee (MGNREGA) scheme.
13	Business profit income	This is the total income received by the household in the form of profits or transfer of money from business operations owned by the household.
14	Sale of assets income	This is the total income received by the household from the sale of assets. Assets include property, land, jewellery, financial assets, etc.
15	Gambling income	This is the total income received by the household through lotteries, gambling, prizes or even money lost and subsequently found. This

		include legal forms of gambling like horse racing, state-run lottery, and online games of skill as well as income from gambling that may not be legal.
16 = 3 + 10	Labor income	This is the total household income received from wages and self-production income.
17 = 4 + 5 + 6 + 7 + 8 + 9 + 12 + 13 + 14 + 15	Non-labor income	This is the total household income received from sources other than wages, income from self-production activities, and income from remittance. This is basically the non-labor income accruing to the household.

Table A4.2: Distribution of observations across regions

State	Freq.	Percent	Cum.
HIS	1,393,629	45.92	45.92
KL	93,144	3.07	48.99
LIS	1,547,824	51.01	100
Total	3,034,597	100	

Table A4.3: Distribution of observations across occupations

Occupation Code	All States			Kerala		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.
Agriculture and Fishery	839,577	27.67	27.67	1,726	1.85	1.85
Clerks	80,405	2.65	30.32	4,520	4.85	6.71
Crafts and Semi-skilled	122,158	4.03	34.34	624	0.67	7.38
Elementary	721,988	23.79	58.13	29,281	31.44	38.81
Home Makers & Retired	235,290	7.75	65.89	17,034	18.29	57.1
Others	802,069	26.43	92.32	31,026	33.31	90.41
Senior Officials	5,363	0.18	92.5	548	0.59	91
Teaching and skilled professionals	119,109	3.93	96.42	5,017	5.39	96.38
Technicians and higher academicians	108,638	3.58	100	3,367	3.62	100
Total	3,034,597	100		93,144	100	

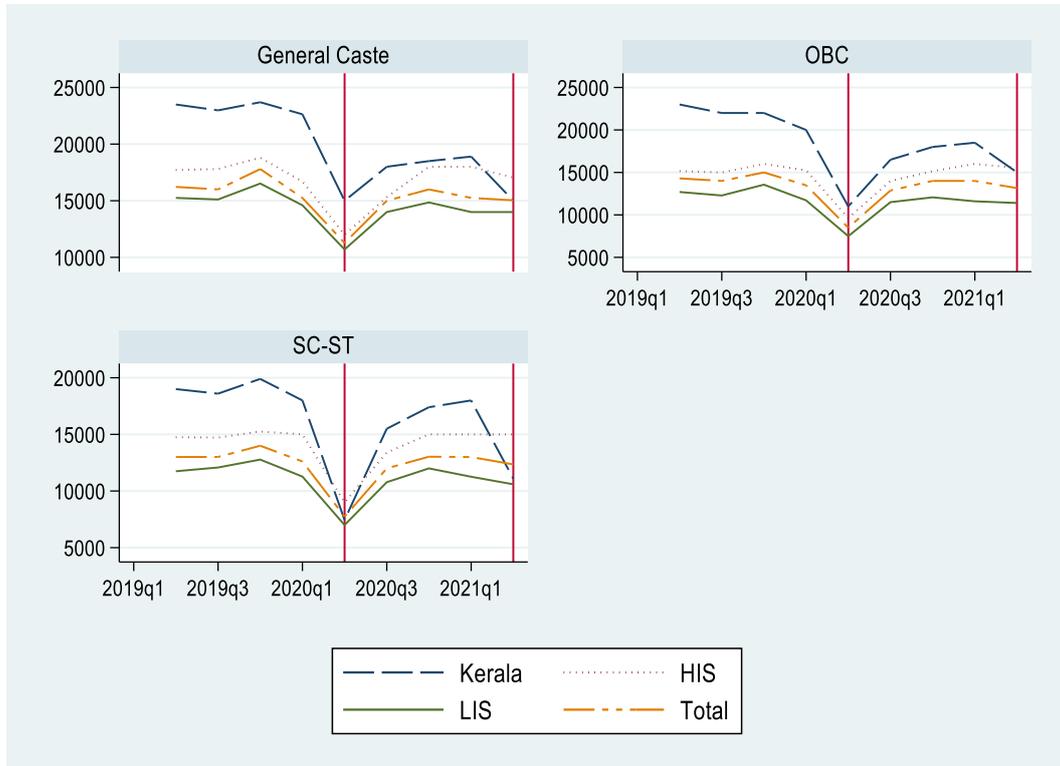
Gender Group	Definition	Freq.	Percent	Cum.
Balanced	This is a household in which the number of female members is the same as male members.	1,040,677	34.29	34.29
Female Dominated	A household in which females are more than twice males	256,184	8.44	42.74
Female Majority	A household in which females outnumber males but are not twice as many as males	494,437	16.29	59.03
Male-Dominated	A household in which males are more than twice females.	453,312	14.94	73.97
Male Majority	This is a household in which males outnumber females but are not twice as many as females.	789,987	26.03	100
Total		3,034,597	100	

Caste	All States			Kerala		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.
OBC	1,247,571	42.0	42.0	57,388	70.4	70.4
SC-ST	880,550	29.7	71.7	16,001	19.6	90.0
Upper Caste	840,776	28.3	100.0	8,149	10.0	100.0
Total	2,968,896	100.0		81,538	100.0	

Industry	All States			Kerala		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.
Agriculture & Allied	1,064,237	35.9	35.9	3,761	4.6	4.6
Communication services	10,728	0.4	36.2	162	0.2	4.8
Construction	344,593	11.6	47.8	19,668	24.1	28.9
Financial Services	22,642	0.8	48.6	1,632	2.0	30.9
Fishing	4,798	0.2	48.7	481	0.6	31.5
Industry	201,186	6.8	55.5	1,759	2.2	33.7
Not Applicable	692,577	23.3	78.8	34,299	42.1	75.8
Other services	44,891	1.5	80.4	1,026	1.3	77.0
Personal Services	138,830	4.7	85.0	2,228	2.7	79.7
Edu & Health	73,141	2.5	87.5	1,354	1.7	81.4
Trade	276,395	9.3	96.8	6,771	8.3	89.7
Travel, Tourism, Hotel & Restaurant	94,877	3.2	100.0	8,397	10.3	100.0
Total	2,968,896	100.0		81,538	100.0	

Appendix 4B

Figure A4.1: Median total income by social category (Rs)

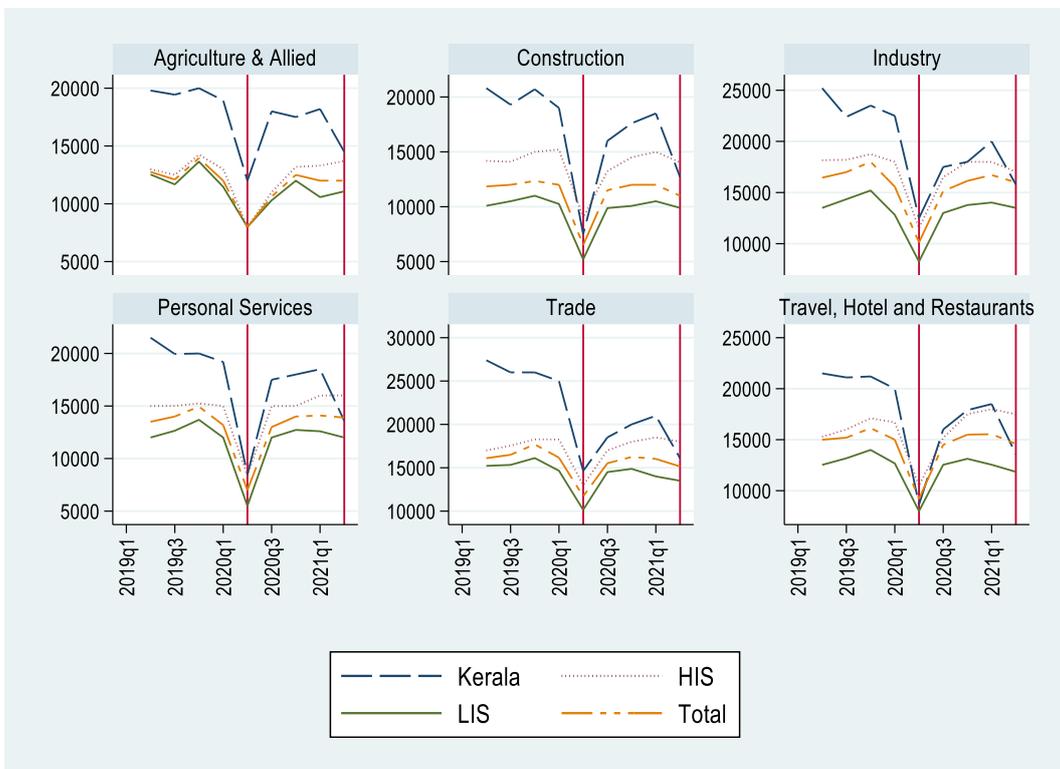


Notes: The two red vertical bars represent the two waves of pandemic (Apr-Jun 2020 and Apr-Jun 2021)

Figure A4.2: Median total income by occupation (Rs)



Figure A4.3: Median total income by industry category (Rs)



Chapter 5

Consumption and the Crisis

Abstract

The highest decline in employment and the subsequent income decline of much higher intensity in Kerala during the pandemic naturally affected her household consumption expenditure (MPCE) very badly. Being the highest consuming state (Rs 5004 vis-à-vis all-India average of Rs3527), Kerala's drop in consumption expenditure was around 50% compared to the national average of 37% during the first wave. However, the MPCE recovered to Rs 3845.2 in the post-lockdown period, which deteriorated again to Rs 3427.9 as the second wave began in May 2021, but always keeping intact the all-India lead. Thus, we observe a V-shape recovery and a fairly stable level of consumption post June 2020. Even though the impact of the second wave on MPCE was small compared with that of the first, Kerala has not yet reached the pre-pandemic levels of consumption.

Significantly, the households in Kerala reported a substantial drop in out-of-pocket expenditure on food because the State had made a significant in-kind transfer of cereals and pulses through the PDS, popularly known as Food Kit, to almost every household in Kerala, a fact also corroborated by the GIFT COVID Survey. Because of the sustained supply of food kits, Kerala's households were able to maintain their protein intake as savings on purchasing cereals and pulses were positively diverted to items such as fish, meat and eggs. There is significant reduction (Rs325) in non-food MPCE during the second wave, which may have its impact on pace of employment recovery and adverse implications for GST revenue at least for the current fiscal year.

Considering the vulnerable categories, the worst impact fell on the MPCE of SC/ST households and also of the fisher folks, construction workers, and trade-, travel- and tourism-based households. Consumption inequality also increased during the pandemic, although, kept in check by the government interventions. Based on occupation classification, blue collar workers, followed by self-employed (informal) and retired/aged were the worst affected categories.

5.1 Introduction

We have already seen in chapter three and four that Kerala was one of most severely hit state in terms of loss of employment and income due to the pandemic. Obviously, it will have its effect on consumption which is seen as key indicator of well-being. It is expected that jobs and incomes loss will have its impact on wellbeing of households. For example, reduced income will limit households' ability to maintain its regular consumption levels in pre-pandemic periods. However, different societies have different levels of resilience in overriding adverse impact of such pandemic induced shocks due to various factors. For example, certain societies may higher levels of savings that may help households in maintaining similar levels of consumption despite loss in incomes. Same can be true for societies where states intervene to protect the well-being of its population in times of crises. In this chapter we discuss changes consumption levels in Kerala during the pandemic in comparative perspective.

5.1.1 Consumption as an indicator of well-being

Despite income being a less direct of measure of well-being, developed countries usually use income as the main indicator of well-being. This is because, in formal settings, it is easier to get data on income with greater accuracy compared to consumption (Noll and Weick 2015). However, in the case of developing countries, the same logic may not apply as informal structures and institutions dominate the economy (La Porta and Shliefer 2014). In such situations, surveys may capture information on consumption with greater accuracy as compared to income. Apart from the conceptual superiority of consumption in approximating individual and household well-being (Carver and Grimes 2019), in the case of developing countries, consumption can be measured with relatively less error than income because households are likely to under-report their income earned in the informal sector due to fear of tax authorities (Deaton 2005).

Moreover, since one of the objectives of the current study is to understand the impact of the pandemic shock on well-being in developing country context, consumption certainly takes precedence over income. This is because of several reasons. Firstly, in times of pandemic, income loss may be huge, but families may be able to sustain their minimum consumption based on their savings, accumulated assets and by accessing credit (Deaton 1989). Secondly, insurance provided to households and individuals through welfare programmes in the form of in-kind and cash transfer programs is more likely to reflect in consumption than in income (Noll and Weick 2015). In the context of the ongoing pandemic, such transfers become critical for the lower economic strata. For example, if an in-kind transfer is a valuable source of insurance for low-income families during the pandemic, it would not be reflected in their income. However, that would show up in their consumption.

Therefore, the overarching objective of this chapter is to thoroughly examine changes in consumption of various sub-groups of population based on different dimensions of socio-economic classifications to examine the differentiated impacts of pandemic. This is particularly relevant at this juncture to identify the most vulnerable groups in the economy. While we delve deeper into the situation of consumption in Kerala, we do so in a comparative perspective to examine Kerala's relative resilience in maintaining the well-being of population measured in terms of consumption in times of pandemic.

Further, in times of huge upheavals such as COVID 19, what matters most, is to ensure that people do not have to make compromises on basic consumption needs that may damage well-being of individuals or households in an irreversible manner. From this point of view, it is important to track changes in consumption and its components particularly food and basic amenities. Those households that make compromises on such consumption can be seen as the most vulnerable groups of people in the population.

The chapter focuses on changes in MPCE and its components, namely food and non-food during the pandemic. The chapter goes deeper into the components of food consumption to identify most vulnerable groups. For example, if certain households compromised on consumption on cereals and pulses, which is the most basic component of Indian meal, then those households would be considered the most vulnerable household that needs immediate policy attention. Data analysis done for the chapter indicate that Kerala's battery of affirmative actions during the pandemic particularly the in-kind transfer of food-kit (mainly consisting of cereals and pulses) distributed through PDS was crucial in sustaining food consumption. Kerala has been able to maintain highest level of consumption in basic food items such as cereals and pulses, egg, fish, meat, vegetables and fruits. However, self-employed informal workers which mainly include fisher folks, retails traders and individuals engaged in travel tourism and hotels have suffered the most in Kerala. In addition, daily wage workers involved in construction industry have also suffered serious below on their well-being.

In this chapter, we examine the trends and patterns of consumption expenditure among Indian states with special reference to Kerala. We employ household level monthly time series of consumption expenditure data collected by Centre for Monitoring Indian Economy (CMIE) through their Consumer Pyramid Household Survey (CPHS) between January 2019 to June 2021. CPHS tracked nationally representative sample of close to 175,000 households for this period resulting in longitudinal data for a period of 30 months. Various sub-components of the consumption reported in the data are given in the Appendix 5.1. The focus of analysis has been on aggregate MPCE, non-food MPCE without delving into its sub-components. However, in case of food MPCE we have delved deeper into sub-components of it to identify which population groups have been the most vulnerable. The chapter is organized in six major sections.

Second section draws on an analysis of inter-state comparison of changes aggregate MPCE during the pre and post pandemic months. Third section comprise three subsections. The first focuses how food and non-food consumption has behaved within Kerala vis-à-vis over all Indian average and average of high income and low-income states. The second subsection has delved deeper into food consumption by looking at various sub-components, i.e., cereals and pulses, egg, fish and meat and vegetables and fruits, in a comparative perspective. The final subsection deals with how consumption has changed for different social groups.

The fourth section of is the heart of the chapter. In this section, we discuss changes in consumption of groups based on industry of economic activity and occupation of households. Our analysis suggests these are the most useful classification categories when it comes to understanding of impact of pandemic on well-being of households. For example, self-employed informal workers which mainly include fishermen, retails traders and individuals engaged in tourism and hotels have suffered the most in Kerala. In addition, daily wage works involved in the construction industry have also suffered serious below on their well-being.

Section 5 discusses policy recommendations using an interesting indicator i.e., Keynesian autonomous expenditure multiplier for each occupational and industry category of the households. The multiplier measure helps us measure the relative level of difficulty experienced by households in maintaining their consumption belonging to different categories of occupation and industrial activity. In addition, this measure also indicates the differential impact of public expenditure on economic recovery depending on which section of the population is beneficiary of public expenditure.

The sixth section is the last analytical section of the chapter discussing changes in inequality during pandemic year and the next. Analysis reveals that most states experienced in consumption inequality. In the pre-pandemic year i.e., 2019, Kerala was one of the states with highest level of consumption inequality. However, after the pandemic many states surpassed Kerala in their level of consumption inequality, indicating that Kerala's growth in inequality during the pandemic was much lower than others.

5.2. Consumption during Pandemic

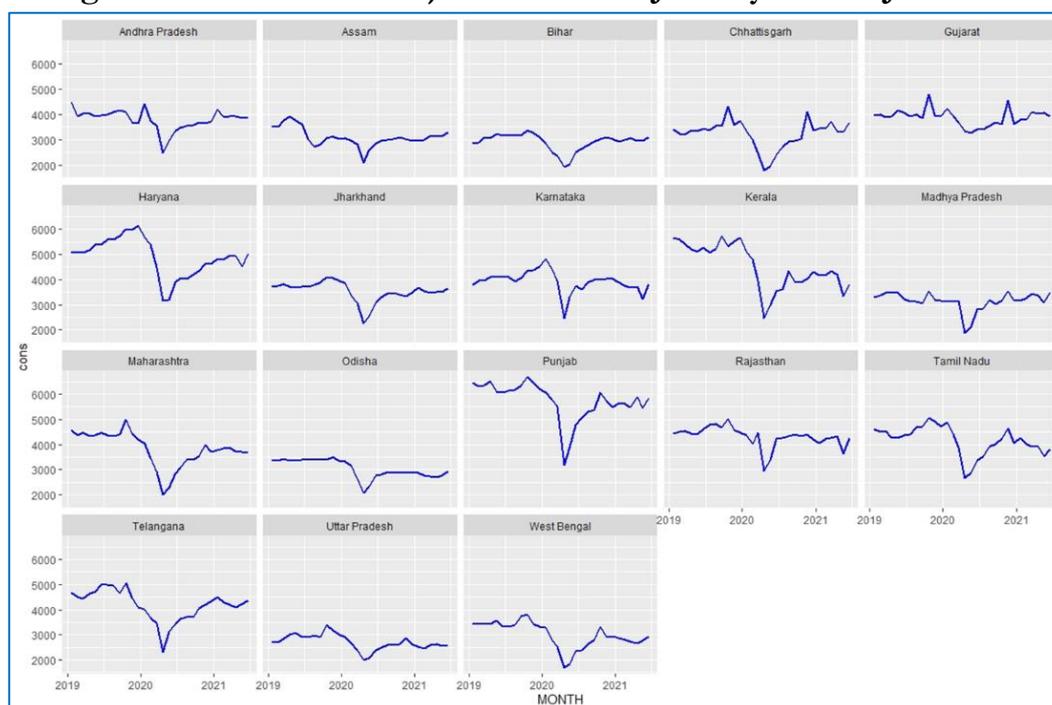
5.2.1 Interstate comparison of consumption shocks during the pandemic

We observe a decisive, historic and abrupt dip in monthly per capita consumption expenditure (MPCE) at the start of lockdown across all the states of India, irrespective of pre-existing economic positioning of states. States with better economic status and consumption levels tended to experience the brunt of the pandemic, for example, states like Punjab, Kerala, Tamil Nadu, Haryana etc. The depth of the impact is much higher in

these states compared to other states like Assam, Bihar, Madhya Pradesh, Odisha and Uttar Pradesh (Figure 1).

When it comes to Kerala, the average MPCE before the lockdown was at Rs. 5,004.3 (All India average being Rs 3526.5) and it hit the rock-bottom at 2,546.8 (All India average of Rs. 2,194.3) during the peak of the lockdown, indicating almost 50 per cent decline in Kerala as compared to a lower decline (37%) at the national level to eventually recover to Rs 3845.2 (All India average of Rs. 3,120.7) in the post-lockdown period, which deteriorated again to Rs. 3427.9 (All India average of Rs. 3,139.02) as the second wave began in May 2021. Thus, we observe a stunted V-shape kind of recovery and a fairly stable level of consumption post June 2020. This pattern gets replicated for almost all high-income states, with the notable exception of Punjab and Gujrat, where the reported MPCE has almost reached the pre-pandemic levels.

Figure 5. 1: MPCE for major states since January 2019 to June 2021



Understandably, states with high MPCE like Kerala, Punjab, Haryana, Tamil Nadu experienced a severe reduction in consumption due to complete halt of mobility, closure of retail shops. But in some cases, even poor states also had severe dips (e.g., West Bengal and Chhattisgarh). Such a shock in consumption is perhaps one of its kind, at least during last century which affected the entire nation simultaneously. Surely, this consumption shock affected other sectors of the economy in an unprecedented manner.

The abrupt announcement of the lockdown of the entire nation within four hours of notice period affected both supply and demand side of the economy at the same time. Reduced mobility of individuals meant that

- 1) people could not maintain their regular purchasing and spending pattern due to which demand plummeted to basic necessities like food and utilities.
- 2) they could not go to their workplaces which brought the supply side of the economy to complete halt.

Thanks to less severe monitoring of the rural areas during the lockdown, the agriculture sector was not so severely affected. However, the hampering of the supply chain due to lockdown meant fragmentation of markets for agriculture products including livestock. This means that some areas faced severe shortage and prices skyrocketed while others faced oversupply and lower prices. This hampering of supply chain and fragmentation of market not only adversely affected farmers' income and well-being of most populations in major urban centers because prices skyrocketed major cities due to supply shortages.

The supply-side effect on the economy meant reduced purchasing power due to reduced employment for working classes. This impact has serious implications for the recovery of aggregate demand in the economy. Reduced employment and income essentially mean that consumption would not bounce back to original level even after the lockdown was lifted because incomes have fallen. On the other hand, entrepreneurs would hesitate in boosting their supply and increasing employment immediately until they see sufficient increase in demand for their products which goes beyond their existing stock of inventories given the uncertainty about future waves of pandemic hitting the economy again.

The downward spiral of economic activities set in motion by lockdown could have been countered through fiscal spending. Cash or in-kind welfare payments could have provided immediate support to most vulnerable peoples. In fact, this is what most developed countries did. They announced generous fiscal support to the economy as soon as they announced the lockdown. Announcements of fiscal support sent a clear message to the rest of the economy that the government will not allow free fall of the aggregate demand in economy beyond a certain threshold level. This greatly reduced level of uncertainty about future level of aggregate demand in the economy. Such a support mechanism helped entrepreneurs to sustain value chain and maintain employment even when demand for their products were low or negligible.

However, in case of India, the unfortunate thing was the lack of sufficient amount of support which would maintain entrepreneurs' confidence that government is interested in maintaining minimum level of aggregate demand in the economy. The quantum of the package announced by the Centre was not significant enough to stall the free fall of the aggregate demand in the economy. As a result of this great uncertainty on aggregate

demand, Indian supply chains got dismantled, fixed capital got liquidated, people associated with those supply chains lost their jobs. This means that if the economy has to recover fully, those fixed capital needs to be brought back and supply chains needs to reestablish afresh. This obviously is a much bigger task than what developed countries are doing. They are re-activating existing supply chains that were in a dormant state during the lockdown. Even though they remained dormant, keeping those supply chains alive for faster and sustained recovery was necessary. The generous fiscal spending on wage subsidies and other welfare payments did just that. According to Oxford University's government response tracker, India turned out to be the country that imposed the strictest lockdown with the most stingy fiscal support (Economist 2020).

Multilateral organizations have estimated that developing countries are going to struggle longer before they attain full recovery. However, developing countries are going to recover immediately after the pandemic year. This is mainly on account of two reasons 1) faster vaccination and 2) generous fiscal support which sustained the supply chains of the economy and employment through wage subsidies. On the other hand, in case of developing countries, we see a slow progress of vaccination and low-level of fiscal support during the peak of pandemic.

5.3 Changing pattern of consumption during the pandemic in Kerala,

Since 1990s Kerala has attained a distinctive feature of consumer state. As reported earlier MPCE is way higher than other states in during the period of current analysis. Even in past surveys done by National Sample Survey (NSS) Kerala has often topped the consumption ladder. Kerala has been among top 3 states in terms of MPCE since 1990-91 (Padma et. al. 2018). High level of remittance income has been a major factor behind such a consumption boom in Kerala. In chapter four we have already seen that remittance accounts for about 10% of the total household income in Kerala which is way higher than national average (2.1%). In the next section subsections, we analyse changes in consumption levels food and non-food items in comparative perspective.

5.3.1 Food and non-food

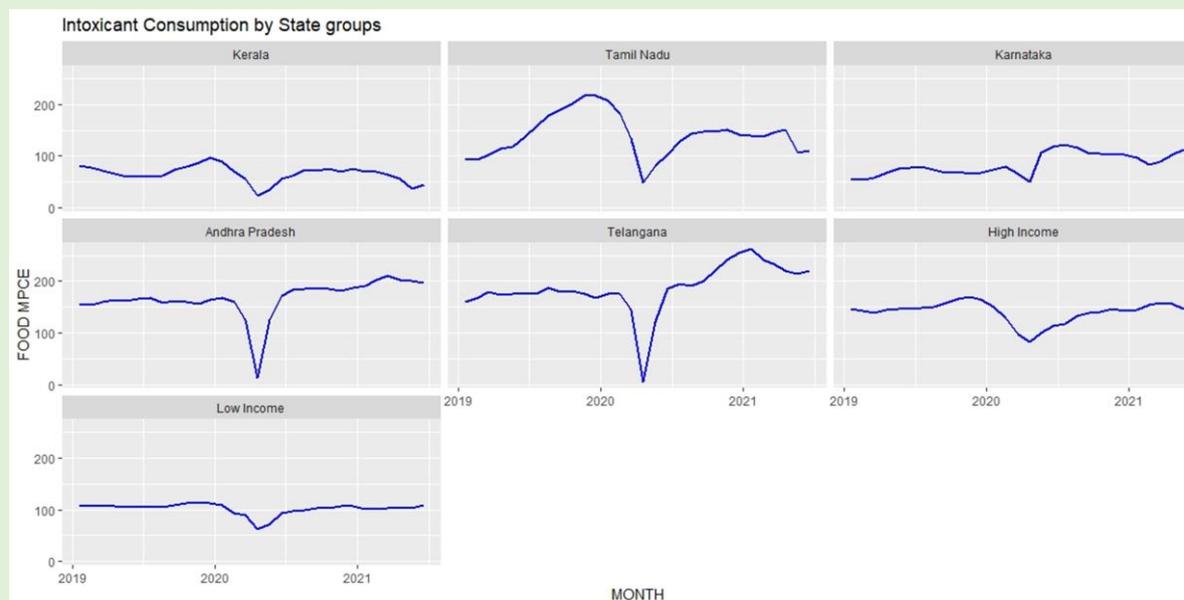
It is obvious that pandemic affected Kerala's otherwise high level of consumption. In the pre-pandemic period, we observe that the food consumption of Kerala was way above the national and high-income state average. While all-India average of MPCE on food was little above Rs.1500 mark, Kerala's food MPCE was around Rs. 2200. This was high not only compared to all India average, but also from the high-income state food MCPE which hovered around Rs.1700. However, the gap in food MPCE between Kerala and the rest of India narrowed down post-pandemic. In post-lock down/recovery period, the average food MPCE was around Rs.1800 while high-income states and all India average was around Rs.1700 and Rs.1550 respectively. As the second wave of COVID-19 was

much more severe in Kerala vis-a-vis other states, we see a minor dip of around Rs.75 in case of food consumption in Kerala while no such dip is observable for other states.

The massive reduction in reported food consumption in Kerala may be misleading because the Government of Kerala distributed a high-value food Kit for a prolonged period starting from May 2020. It is important to note here that CPHS accounts only for out-of-pocket expenditure. In other words, in-kind transfers to households either from government or employer goes unrecorded in CPHS surveys. Therefore, household consumption reported in the survey must be added with the value of in-kind transfers to arrive at Kerala's and for the matter, any other states actual level of food MPCE. While it is true that other states also distributed food grains with the support of the union government, the value of Kerala's food kit was way higher.

This policy of sufficiently increased in-kind food transfer in the case of Kerala not only supported consumption of food, which is one of the most essential human consumptions but also nudged households to re-direct their consumption expenditure for better and sustained health. This was critically important as a large section of Kerala's population is burdened with the prevalence of non-communicable deceases. In Kerala, about 40% population suffers from Hypertension and nearly a quarter of population suffers from Diabetes (Maya 2021). We have discussed this aspect (Box 5.1) in greater detail in the forthcoming section. This will also shed light on the ongoing debate on cash vs in-kind transfers.

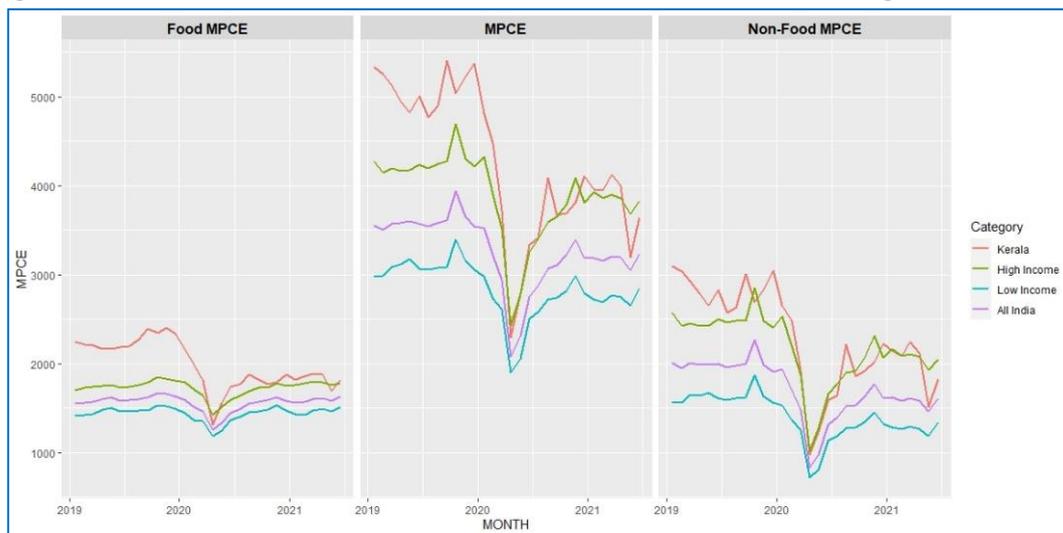
As we can see, the non-food consumption also dipped in the post-lockdown period across the country. Although there was a minor gap in non-food MPCE between Kerala and high-income states in the pre-pandemic period, that gap has almost disappeared. During the second wave, we see a significant deterioration in the non-food MPCE of Kerala — a reduction of around Rs. 325, from an average of Rs.2020 during the recovery period after the first lockdown. Thus, we see that non-food consumption was seriously affected by the second wave which may have been delaying the recovery of the non-farm employment in Kerala, as well as the GST revenue of the state. It is to be noted that the COVID caseload of Kerala has remained at very high levels since the peak of the second wave. Kerala's share in total case of the country went up to 63% during the peak of the second wave.

BOX 5.1: The curious case of intoxicant consumption

We have seen the consumption expenditure patterns of various essentials and how they plummeted due to the lockdowns. However, we see a curious pattern in intoxicant consumption (alcohol and tobacco products). Our supplementary analysis indicates that while nature government support i.e., cash vs kind, was immaterial in deciding the level of aggregate consumption, it did have its effect on composition of expenditure. We know that Kerala depended relatively more in-kind transfers while Telangana and Andhra Pradesh depended relatively more on cash transfers during the pandemic.

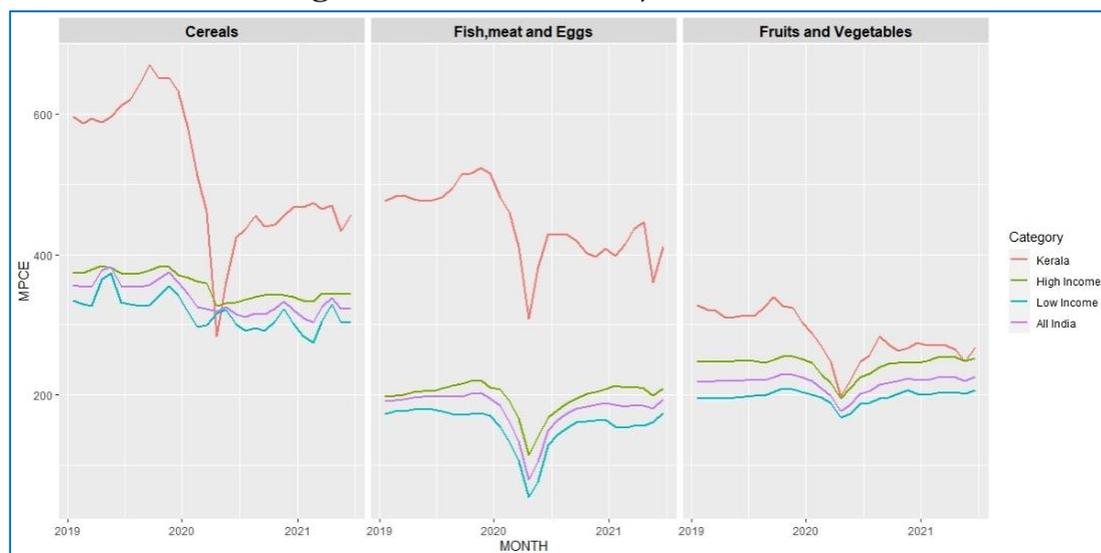
We can see that the intoxicant consumption has marginally fallen during post-pandemic period in case of Kerala. In fact, Kerala was able to maintain very high levels of nutritious food consumption. However, in case Andhra Pradesh and Telangana, the expenditure on Intoxicants shows significant increase after the Pandemic and surpassed levels of consumption in pre-pandemic period. We see an increase for Karnataka as well, even though not pronounced as compared to Andhra Pradesh and Telangana.

While there can be multitude of reasons (including psychological ones) behind this particular pattern, we see a positive association between the cash transfers and the increased intoxicant consumption in post pandemic period. While this issue needs to be studied in detail, yet we can safely say that debate on cash vs kind transfer is far from over.

Figure 5.2: Food and non-food MPCE of Kerala vis-à-vis categories of states

5.3.2 Differential effect of pandemic on components of food consumption

We know that even in food consumption, there are differential patterns across different categories of food items. A major chunk of food expenditure is often dedicated for essentials such as cereals and pulses. The other portion is usually spent on protein-oriented items such as fish, meat, eggs, vegetables and fruits, for maintaining the necessary protein and vitamins intake. In the normal course of time, it is possible for the households to maintain a somewhat balanced diet. However, during the pandemic, it is perfectly possible that the households may have to choose between the essentials such as cereals and pulses and the sources for protein and vitamins. If the pandemic forces households to maintain an unbalanced diet, it would be a worrisome situation and have a long-term impact on people's health. In this segment, we try to address this critical issue. In the figure below, we present the monthly MPCE on cereals and pulses, fish meat and eggs, fruits and vegetables.

Figure 5.3: MPCE of major food items

We see that cereals and pulses have the highest share at all levels among the food expenditure categories. Kerala has the highest MPCE of cereals and pulses in the pre-pandemic period. However, during the post lockdown period, we see a significant reduction in this category, while for other states, whether high income or low income, it is not that pronounced. In case of other states, MPCE on cereals and pulses has only a marginal reduction. However, it is maintained for other states, implying that the essential consumption is more or less maintained.

In case of Kerala, however, we observe a sharp drop in MPCE on cereal and pulses during the lock down, after which it is fairly stable at around Rs.300, roughly half the expenditure compared to the pre-pandemic level. This is indeed a curious situation. One can safely assume that households do not change their essential food consumption pattern in the short run. Therefore, there has to be a compensating factor that allows the households to curb their expenditure on cereals and pulses.

The government of Kerala had started distributing food kits from May 2020 as part of the COVID-19 release measures. The food kit contained cereals and pulses and other essential items for consumption. Once the households receive the essentials in the form of an in-kind transfer, they can re-allocate that part of their consumption expenditure towards consuming others items of nutritional value. We can see this by examining the MPCE of fish, meat, and eggs and the MPCE of fruits and vegetables.

We see that the level of Kerala's MPCE of fish, meat, and eggs is way above the national and high-income state averages before the pandemic. We see that dip is not severe compared to the MPCE on cereals and pulses. During the post lockdown recovery, we see that MPCE of this segment has significantly recovered, and the relatively high level of consumption is maintained throughout the recovery period. However, we see a slight dip

during the second wave of COVID-19. We must keep in mind that as compared to cereals and pulses; fish, meat and eggs had serious supply bottlenecks during the pandemic period that could have resulted in reduced consumption.

Looking into the vegetable and fruit consumption, we see that Kerala's monthly average MPCE is again significantly higher than the national and high-income state MPCE in the pre-pandemic period. However, this gap has significantly reduced in the post-lockdown period. We see a recovery for Kerala's MPCE of fruits and vegetables in the post-lockdown period. However, we observe a dip during the second wave, possibly attributable to the supply bottleneck.

The recovery of MPCE in fish, meat and eggs, and vegetables and fruits for Kerala is a good sign indeed. It implies that Kerala's households are maintaining a balanced diet, and the in-kind transfers by the government of Kerala was one of the major driving forces behind this.

5.3.3 Consumption by socio-economic categories

As we know, caste is a determining factor of all facets of Indian society. Even after the modernization of the economy, caste still remains as a major determinant of socio-economic and production relations in India. Therefore, it makes sense that differential consumption patterns may exist between different social groups. Existing research shows that caste is determining factor for consumption inequality in India (Kumar et.al.,2019, Kumar and Yazir 2017)

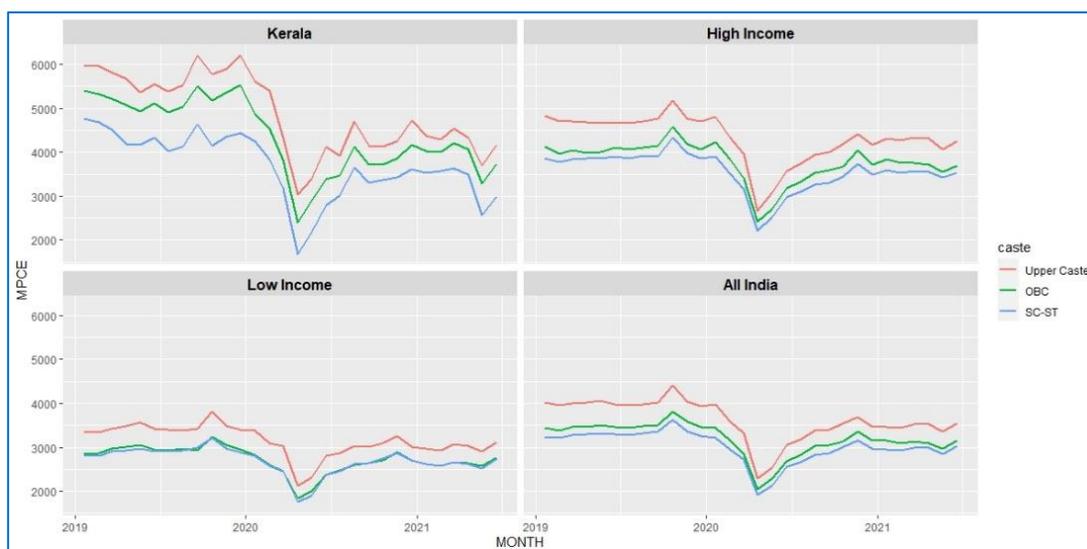
CMIE's CPHS data provides information on the social group category of HHs under survey. We employ three social categories viz. Upper caste, OBC, SC-ST. We club the SC& ST groups together because very thin sample size of ST category for Kerala. This will help get statistically significant estimates of MPCE.

We find obvious patterns in social group-based gradation in MPCE. Overall, the upper caste's MPCE is higher than the other marginalized groups. This is evident for Kerala as well as rest of India. In the pre-pandemic period, all the social groups posted the highest MPCE in case of Kerala. Further, the disparity between MPCE among different caste groups are also the highest in Kerala. In the post-pandemic period, we see that SC-STs were the most affected group for Kerala. Their MPCE had almost halved during the peak of the first lockdown. Even though there was a recovery, they never reached the pre-pandemic levels. The MPCE was also affected by the second wave, even though the impact was significantly reduced compared to the first wave. For the low-income states and the all-India scenario, we see that the MPCE of SC-ST and OBCs are almost converging, indicating that there is not much difference between the consumption patterns of the marginalized groups. In the pre-pandemic period, OBCs and SC-ST HHs of Kerala had a similar MPCE of uppercase households in the high-income states,

indicating that the well-being of marginalized communities was much better in Kerala compared to rest of India.

In the post-pandemic period, we see that there is a significant reduction in consumption levels between the groups for Kerala. For the other groups, we do not see this trend. This was made possible by the battery of interventions made by the GoK during the pandemic period to protect the vulnerable communities as was highlighted in chapter two.

Figure 5. 4: MPCE of major social groups



5.4. Identifying the most vulnerable groups affected by the pandemic

For informed policy decisions, it is important that we see deeper into the dynamics of the issue under study. From the previous segments, we see that the consumption patterns are of heterogeneous nature. Here, we delve deeper into the issue by analyzing MPCE of different industry and occupation groups. CPHS data provides a detailed classification of industry and occupation groups of the households. From that, we have constructed 12 broad industry classifications and six occupational classifications. While it is possible to construct more disaggregated measures, we stop at these so that sample size for each category is sufficient enough for us to produce statistically reliable estimates.

In the pre-pandemic period, we observed that MPCE of Kerala was higher than the high-income states in all the segments. For segments like fisher folks, Kerala's MPCE was much higher than the high-income states and the national average. In the pandemic period, we observe that Kerala's MPCE for various industrial segments are in tandem with the overall trend, indicating the nation-wide impact of COVID-19.

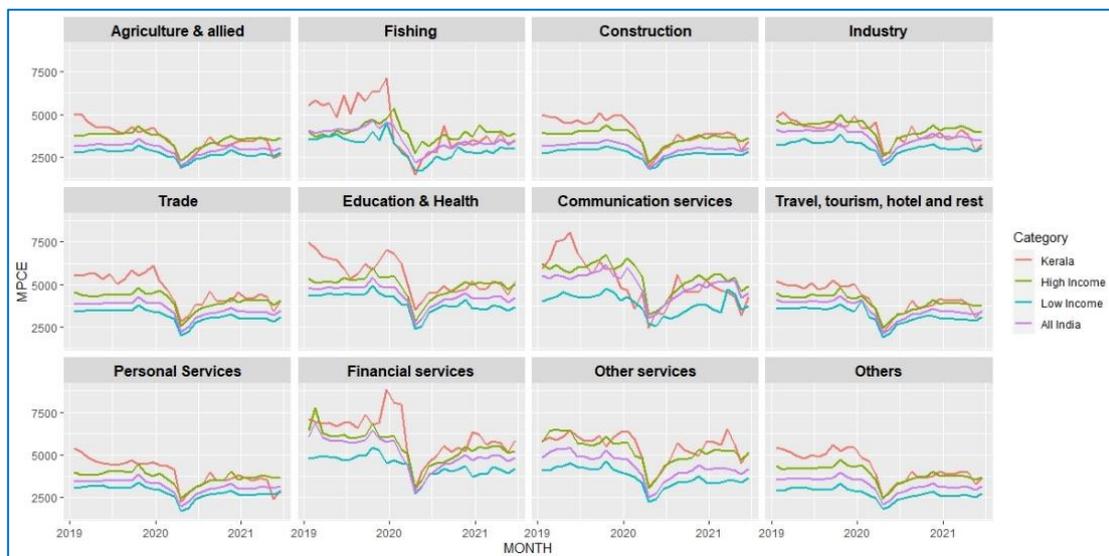
We see that households depending on the agriculture sector were least affected by the pandemic because demand for agricultural goods was stable during the pandemic.

However, the same cannot be said about the fishing community. The prospects of fishing industry was affected by the disruption of its logistical network due to the stringent lockdown. We see that their MPCE was more than halved during the peak of the first wave. Even though the MPCE recovered, it is of a stunted nature. We can see a similar trend in the retail trade segment as well. Here too, the retail trade dependent households were affected during the pandemic due to the lockdown measures. Another concerned group is the construction industry dependent households. We see a significant drop in MPCE of construction dependent households in the aftermath of the first wave. There is a stunted recovery, coinciding with the laggard manner of recovery of the construction sector dependent households.

Another group of households that is seriously hit by pandemic is the travel/tourism/hotel industry based households. As these segments are dependent upon physical presence of customers, the impact of COVID is severe upon them. As there were restrictions on international and inter-state travelers, the travel and tourism segment were seriously affected. We also observe a significant dip in MPCE of Education & health sector and Financial Services sector dependent households. We see a stunted recovery for these households as well.

Overall, the impact of second wave on the MPCE of industry groups are minimal compared to the first wave across the country. In case of Kerala, we see a small dip in almost all segments, due to the strict lockdown measures adopted in the state during second wave which was not as strong in other states.

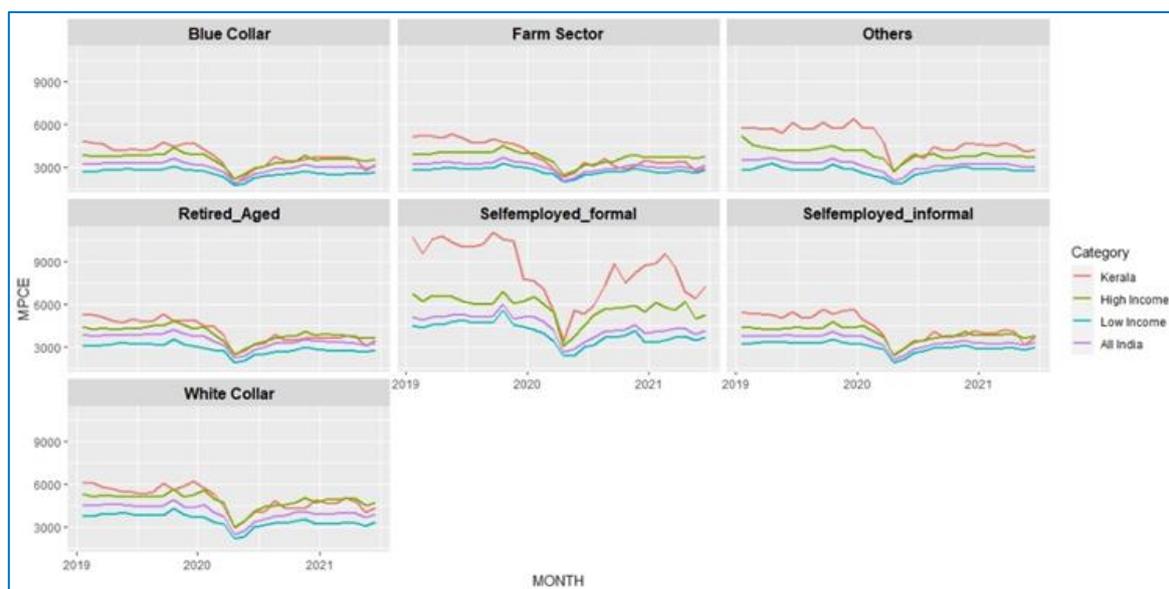
Figure 5.5: MPCE of major industry groups



Looking into the occupational categories, we see a much more clear picture. Like in the previous case, Kerala's MPCE for these groups were at par with the high income state MPCE in the pre-pandemic period. In case of self-employed(formal), Kerala's MPCE was much higher than the high-income state and the national average. In the post-

pandemic period, we see that farm sector has recovered to a certain extent. The same can be said about white-collar and formally self-employed households. However, we see that the blue-collar workers households and informally self-employed households were deeply affected by the pandemic, followed by Retired/aged households. The self-employed(informal) occupational group in Kerala roughly corresponds to industry groups that were earlier identified industry groups as seriously hit by the pandemic — fishries, travel, tourism & hotel and trade based households and construction sector. We see that MPCE of ‘Others’ households also reduced significantly for Kerala.

Figure 5.6: MPCE of major occupation groups



5.5. Policy recommendations

From the patterns observed above, we try to estimate some metrics that could help in providing some actionable policy recommendations. We employ an intuitive yet useful measure, i.e., Keynesian autonomous expenditure multiplier. The multiplier shows the extent to which a one-rupee spending by the state could affect the economy's aggregate demand depending which groups of households targeted beneficiaries of such public spending. The multiplier is calculated as follows.

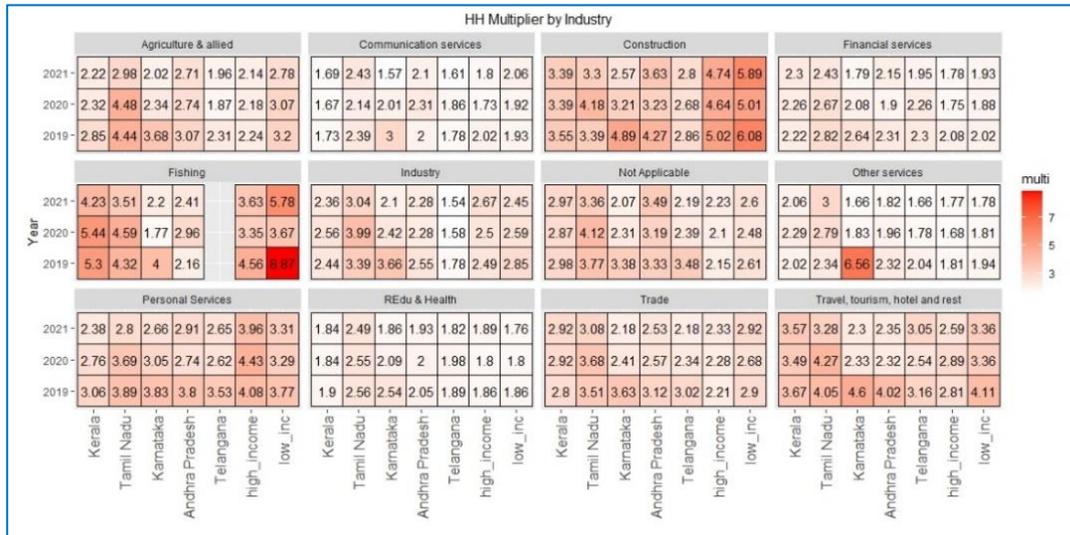
$$\pi = 1/(1 - APC),$$

where the APC is average propensity to consume and calculated as ratio MPCE to monthly per-capita income of the respective groups of households.

A much-affected household will have a higher π , as most of their income is spent on consumption implying that a higher proportion their income gets back to circulation in the economy. Alternatively, a higher π implies lower leakage of resources from the economy which helps in greater expansion of the economic activity. Thus, if the state

targets their intervention efforts to the most vulnerable segments, it is bound to put the economy back on track of a faster recovery by increasing aggregate demand through high multiplier effect. Additionally, since these groups are also poorer groups in the economy it will also ensure greater equity in growing economy.

Figure 5.7: HH multiplier by industry groups



The multiplier values have reduced for 2021 compared to 2020 for most of the segments indicating recovery or reduced pressure on incomes of household going towards consumption. However, the relatively high values for some segments based on industry or occupation of households calls for targetted action. Looking into the multiplier by industry classifications, we see that fishing households are the most affected group, followed by travel/tourism/hotels, construction, miscallanious and trade for the year 2021. This result is in line with our previous analysis.

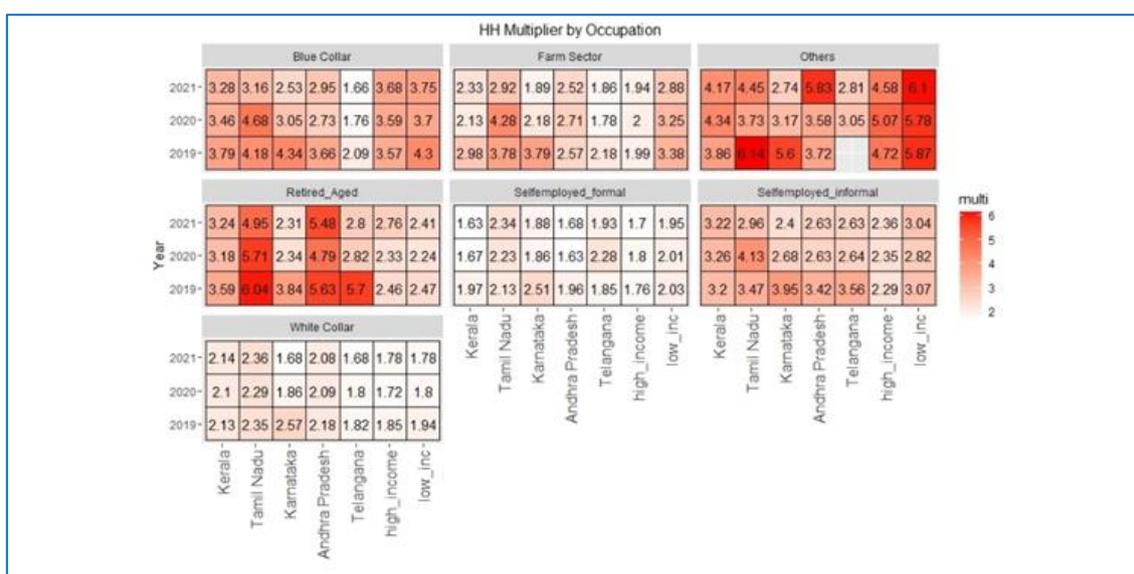
Looking into the occupation groups, we see that 'Others' households are the most affected group, followed by blue-collar workers, retired/aged and self-employed (informal) as their multiplier values are the highest. The vulnerable groups either identified through industry or occupational calssification have strong correspondence. For example, there is a close correspondence between households calssified under self-employed occupational category and households involving activities like fishing, travel, tourism and hotels and trade. Similarly households falling in 'Others' category based industry classification will closely correspond to housholds falling in blue-collar worker and retired/aged category based on occupational classification. In other words, whether one uses industry or occupational classification for targetting, benefits are likley to reach same households.

In fact, earlier chapter i.e. chapter three and four have already indicated these groups were major losers in terms of income and employment. The informal nature of their

engagement in the economy either as wage worker or as self-employed meant that lock-down immediately impacted their labour and production entitlements. In absence of social security for such individuals, it is inevitable that their consumption would be impacted most severely. Additionally, such households are going to face intergenerational disadvantage, children from such households could not continue their education as these households were less likely own digital devices that are compatible for online learning (Ahamad and Siddiqui 2020). Therefore, targeting such groups will help in economic recovery but will also help bridging social and economic gaps in Kerala.

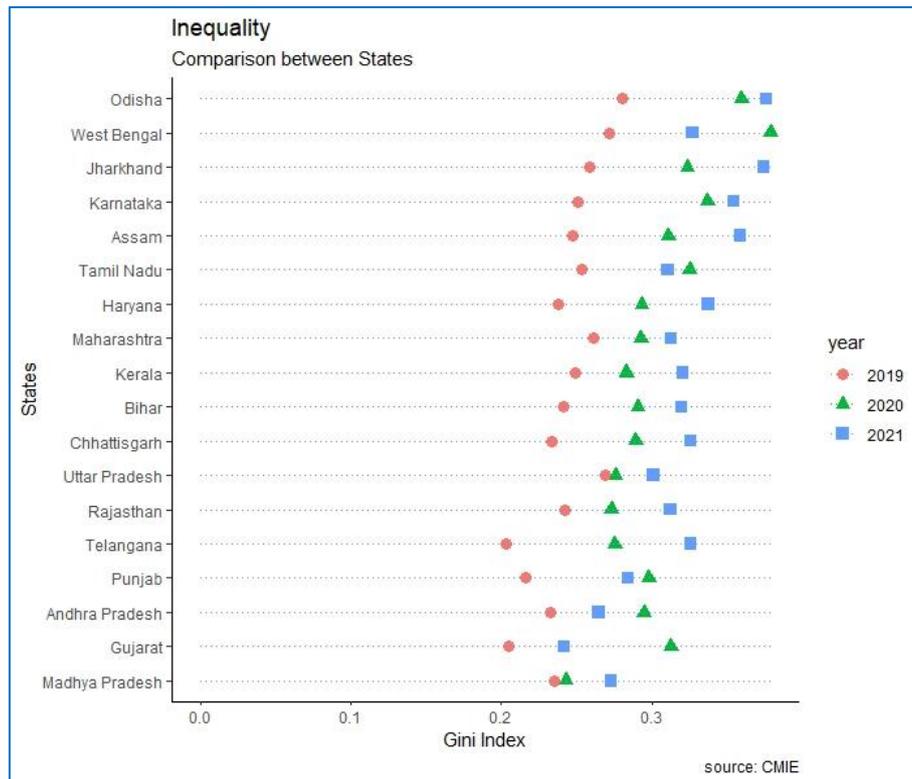
If we look into the rest of the country, we see that roughly the same pattern is followed. White collar worker households and self-employed (formal) households are the least affected. Farm sector households are also found to be relatively less affected. However, it is the informal, blue-collar and miscellaneous workers that have faced the brunt of the pandemic.

Figure 5.8: HH multiplier by occupation groups



5.6. Pandemic and changing inequalities in consumption across the Indian states

Inequality in consumption expenditure is a well-documented fact in the literature. An unequal society will have a skewed consumption pattern, whereas a relatively equal society will have a much more equitable distribution in consumption expenditure. Among the measures to estimate inequality, the Gini coefficient is the most popular one. Gini coefficient basically provides summary measure of disparity using the share of consumption/income for different consumption/income classes. A Gini coefficient of zero indicates a perfectly egalitarian society, whereas a Gini coefficient of unity indicates a perfectly unequal society.

Figure 5.9: Gini comparison between major states

From the figure, we see that the COVID pandemic has resulted in increasing inequalities in consumption in most states. Kerala was one among the highest unequal states in the pre-pandemic period. However, in the post-pandemic period, we see that Kerala's inequality has not increased much, compared to other high-income states like Haryana or Telangana.

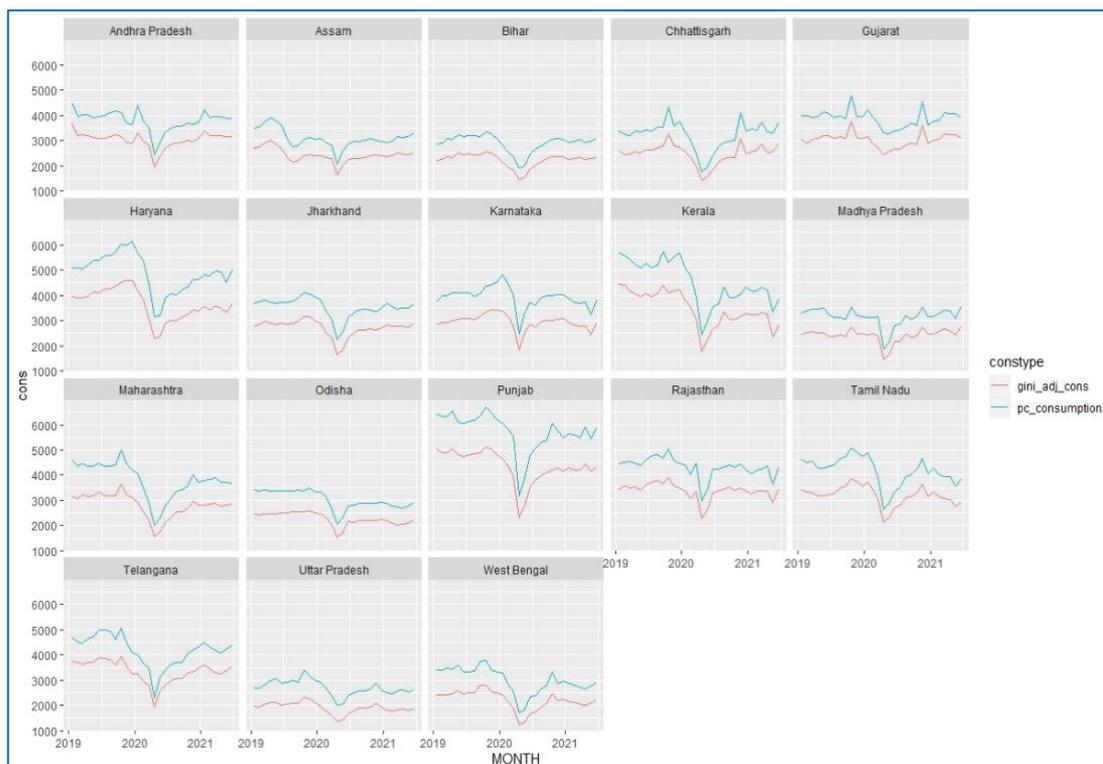
Another curious case is the state of Odisha. Well known for their fiscal discipline, Odisha's inequality has almost doubled in the pandemic period. The review of international experience in chapter two of the report has already hinted towards the criticality of public spending in protecting people from devastating effects of the pandemic induced shock. It would not be misplaced to indicate here that over emphasis of on maintaining fiscal discipline in times of pandemic may put society in troubles of complex nature that may continue to suck more fiscal resources in a sustained manner for times to come. The explosion of inequality in a state that has one of the highest prevalence of poverty, i.e., Odisha, implies that its fight against poverty just has got longer.

In the above we analysed Gini coefficient on an annual basis. In extreme situations, averages can be misleading. Therefore, we present inequality adjusted MPCE by using monthly time series of Gini coefficients for all the major states. We adjust the per-capita consumption MPCE with the inverse of Gini coefficient, which can be seen as a measure of equality, for all the major states. If the state has high inequality, they will be penalized

more. Thus, the inequality adjusted MPCE would be a better measure for comparison of MPCE between states. This measure would help us identify the change in inequality during the pandemic period. The Gini adjusted MPCE for each state is calculated as follows.

$$MPCE_{Gini} = MPCE(1 - Gini)$$

Figure 5.10: Inequality adjusted MPCE of major states



From the plot, we see some interesting trends. In the pre-pandemic period, we see that the gap between MPCE and Gini adjusted MPCE is high for high income states like Haryana, Punjab, Kerala, Tamil Nadu, Maharashtra and Gujarat. Among these states, Kerala and Punjab has the highest gap, indicating relatively high amount of consumption inequality. However, in the post-pandemic period, we see an interesting trend. In the case of Punjab and Maharashtra, we observe a further divergence, indicating increasing inequality. For Kerala, we see that the gap is reducing.

We can attribute state intervention or lack of it behind these interesting patterns. During a crisis of such magnitude, targeted intervention by the state is the only thing that could control the inequality in a society. In the case of Kerala, the state had made multi-faceted intervention ranging from welfare pensions, SHG based loans, targeted assistance, and the Food Kit provided for around 82 lakh households of the state. From the change in MPCE in the post-pandemic period, we can say that the interventions were successful.

Appendix 5.1:

Appendix 5.1: Consumption items reported CPHS data		
Total Expenditure	Monthly Expense On Biscuits	Adjusted Monthly Expense On Bottled Water
Adjusted Total Expenditure	Adjusted Monthly Expense On Biscuits	Monthly Expense On Baby Food
Monthly Expense On Food	Monthly Expense On Salty Snacks	Monthly Expense On Other Foods
Adjusted Monthly Expense On Food	Adjusted Monthly Expense On Salty Snacks	Monthly Expense On Intoxicants
Monthly Expense On Cereals And Pulses	Monthly Expense On Noodles And Flakes	Adjusted Monthly Expense On Intoxicants
Monthly Expense On Cereals Wholegrain	Monthly Expense On Noodles And Pasta	Monthly Expense On Cigarettes And Tobacco
Monthly Expense On Processed Cereals And Pulses	Monthly Expense On Flakes Muesli And Oats	Adjusted Monthly Expense On Cigarettes And Tobacco
Monthly Expense On Pulses	Monthly Expense On Chocolate Cake Ice Cream	Monthly Expense On Cigarettes
Monthly Expense On Edible Oils	Adjusted Monthly Expense On Chocolate Cake Ice Cream	Adjusted Monthly Expense On Cigarettes
Adjusted Monthly Expense On Edible Oils	Monthly Expense On Chocolates And Cakes	Monthly Expense On Bidis
Monthly Expense On Ghee	Adjusted Monthly Expense On Chocolates And Cakes	Adjusted Monthly Expense On Bidis
Monthly Expense On Dry Spices	Monthly Expense On Ice Creams	Monthly Expense On Other Tobacco Products
Monthly Expense On Vegetables And Fruits	Adjusted Monthly Expense On Ice Creams	Adjusted Monthly Expense On Other Tobacco Products
Monthly Expense On Vegetables And Wet Spices	Monthly Expense On Jam Ketchup Pickles	Monthly Expense On Liquor
Adjusted Monthly Expense On Vegetables And Wet Spices	Monthly Expense On Health Supplements	Monthly Expense On Clothing And Footwear
Monthly Expense On Fruits	Monthly Expense On Meat Eggs And Fish	Monthly Expense On Clothing
Adjusted Monthly Expense On Fruits	Adjusted Monthly Expense On Meat Eggs And Fish	Monthly Expense On Footwear
Monthly Expense On Dry Fruits And Saffron	Monthly Expense On Meat And Fish	Monthly Expense On Clothing Accessories
Monthly Expense On Potatoes And Onions	Adjusted Monthly Expense On Meat And Fish	Monthly Expense On Artificial Jewellery
Adjusted Monthly Expense On Potatoes And Onions	Monthly Expense On Eggs	Monthly Expense On Bags Wallets Watches Glasses
Monthly Expense On Milk And Milk Products	Adjusted Monthly Expense On Eggs	Monthly Expense On Gems And Jewellery
Adjusted Monthly Expense On Milk And Milk Products	Monthly Expense On Ready To Eat Food	Monthly Expense On Cosmetic And Toiletries
Monthly Expense On Milk And Milk Powder	Monthly Expense On Tea Coffee	Monthly Expense On Dental Care Products
Adjusted Monthly Expense On Milk And Milk Powder	Monthly Expense On Tea	Monthly Expense On Toothpaste
Monthly Expense On Milk Products	Monthly Expense On Coffee	Monthly Expense On Toothpowder

Adjusted Monthly Expense On Milk Products	Monthly Expense On Sugar And Other Sweeteners	Monthly Expense On Toothbrush
Monthly Expense On Mithai	Monthly Expense On Beverages And Water	Monthly Expense On Bathing Soap
Adjusted Monthly Expense On Mithai	Adjusted Monthly Expense On Beverages And Water	Monthly Expense On Cosmetics
Monthly Expense On Bread	Monthly Expense On Beverages	Monthly Expense On Face Wash
Adjusted Monthly Expense On Bread	Monthly Expense On Bottled Water	Monthly Expense On Shaving Articles
Monthly Expense On Hair Oil	Monthly Expense On Power And Fuel	Monthly Expense On School College Fees
Monthly Expense On Shampoo And Conditioner	Adjusted Monthly Expense On Power And Fuel	Monthly Expense On Private Tuition Fees
Monthly Expense On Other Hair Cosmetics	Monthly Expense On Cooking Fuel	Monthly Expense On Hobby Classes
Monthly Expense On Other Cosmetics	Monthly Expense On Petrol And Diesel	Monthly Expense On School Transport
Monthly Expense On Powder	Adjusted Monthly Expense On Petrol And Diesel	Monthly Expense On Additional Professional Education
Monthly Expense On Creams	Monthly Expense On Petrol And Cng	Monthly Expense On Overseas Education
Monthly Expense On Deodorants And Perfumes	Adjusted Monthly Expense On Petrol And Cng	Monthly Expense On Others Education
Monthly Expense On All Types Of Detergent	Monthly Expense On Diesel	Monthly Expense On Health
Monthly Expense On Detergent Bars	Adjusted Monthly Expense On Diesel	Monthly Expense On Medicines
Monthly Expense On Detergent Liquids And Powder	Monthly Expense On Electricity	Monthly Expense On Doctors Physiotherapists Fee
Monthly Expense On Scourers	Monthly Expense On Transport	Monthly Expense On Medical Tests
Monthly Expense On Other Housecare Products	Adjusted Monthly Expense On Transport	Monthly Expense On Hospitalisation Fees
Monthly Expense On Appliances	Monthly Expense On Bus Train And Ferry	Monthly Expense On Health Insurance Premium
Monthly Expense On Kitchen Appliances	Monthly Expense On Outstation Taxi Bus Train	Monthly Expense On Health Enhancement
Monthly Expense On Household Appliances	Monthly Expense On Autorickshaw And Cab	Monthly Expense On Other Beauty And Hygiene Products
Monthly Expense On Mobiles And Accessories	Adjusted Monthly Expense On Autorickshaw And Cab	Monthly Expense On Hygiene Products
Monthly Expense On Restaurants	Monthly Expense On Airfare	Monthly Expense On Fitness
Adjusted Monthly Expense On Restaurants	Monthly Expense On Parking Fees	Monthly Expense On Parlor Spa
Monthly Expense On Food In Restaurants	Monthly Expense On Toll Charges	Monthly Expense On All Emis
Adjusted Monthly Expense On Food In Restaurants	Monthly Expense On Communication And Info	Monthly Expense On Emi For House
Monthly Expense On Liquor In Restaurants	Monthly Expense On Landline Phone	Monthly Expense On Emi For Vehicles
Monthly Expense On Recreation	Monthly Expense On Cell Phone	Monthly Expense On Emi For Durables

Monthly Expense On Electronic Storage Devices	Monthly Expense On Cable Tv	Monthly Expense On Other Emis
Monthly Expense On Entertainment	Monthly Expense On Internet	Monthly Expense On Miscellaneous
Monthly Expense On Toys	Monthly Expense On Newspapers And Magazines	Monthly Expense On Domestic Help
Monthly Expense On Bills And Rent	Monthly Expense On Education	Monthly Expense On Motor Vehicle Repairs
Monthly Expense On House Rent	Monthly Expense On Books Journals	Monthly Expense On Remittances Sent
Monthly Expense On Water Charges	Monthly Expense On School Academic Books	Monthly Expense On Social Obligations
Monthly Expense On Society Charges	Monthly Expense On Fiction Non Fiction Books	Monthly Expense On Religious Obligations
Monthly Expense On Other Taxes	Monthly Expense On Stationery	Monthly Expense On Professional Consultation
		Monthly Expense On General Insurance
		Monthly Expense On Vacation
		Monthly Expense On Lighting
		Monthly Expense On Furniture And Furnishings
		Monthly Expense On Painting And Renovation

Chapter 6

Borrowing and Indebtedness

Abstract

As already noted, India's approach towards the pandemic induced crisis was mainly through monetary policy measures. Considering the vibrant banking sector in the country, systematically built up over the years through interventions including the bank nationalisation of 1969, the reliance on the banks to salvage the economy from the pandemic was deemed appropriate. Particularly because, India had managed to escape the 2008 crisis on the back of a vibrant state-owned banking sector. Even so, going by the CPHS data, there was an unacceptable and perhaps unprecedented renegeing by the organised banking sector on their prime business of lending to people in crisis conditions. In Kerala, the State known for its heavy reliance on bank finance (about 68%), the dependence declined by about 25 percent during the pandemic; so was at the All-India level and in other different groups of states categories also (about 5 to 6 %).

While the banks withdrew in the face of a crisis, in Kerala the SHGs and the cooperatives came forward with massive lending mostly through interest free lending, benefitting lower middle-income households, scheduled communities and small traders and wage earners. In the absence of similar local institutions, the crisis-ridden people from other states resorted increasingly to Non-Banking Financial Companies (NBFCs). Interestingly, the Kerala households were availing themselves of the interest free loan facility from the SHGs and the cooperatives to repay their loans in Public Sector Banks (PSBs). No wonder, during the last quarter the PSBs in the country recorded a profit of Rs.33000 crore! While the people and the economy were in distress, the banks were prospering. At the same time, it is alarming to note that there was a steady fall in the CD ratio of the State, from 67.74% in December 2019 to 61.81% in June 2021. This implies that the credit growth of the States was off the mark during the pandemic, primarily due to the heightened risk aversion by Banks. It goes without saying that if the access to credit market for the households is inadequate during a crisis, the resulting reduction in household spending will adversely affect the state's economic recovery.

6.1 Introduction

India experienced a large and persistent economic impact due to the COVID-19 pandemic. As already discussed, the unanticipated demand and supply shocks led to a significant reduction in employment and income in many Indian households (HH), Kerala being no exception. This steered households towards severe financial hardship. As a result, there was a sharp decline in most household financial assets and increased borrowing reliance (RBI, 2021). In fact, household borrowing and its accumulation (i.e., debt) can play a mitigating role in such scenarios.¹ It allows people to smoothen their spending over time and thereby greases the wheels of the economy. Therefore, borrowing is highly essential, and debt *per se* may not be bad.

Notably, India managed to escape the 2008 crisis on the back of a vibrant state-owned banking sector; particularly, the lending strategy of the banks appeared appropriate. 12 years since, when the pandemic has hit the economy hard, consumers would be expecting a similar kind of monetary policy intervention². Indeed, an adequate amount of credit growth has the potential to push the economy back to the pre-pandemic level. Also, progress in terms of financial inclusion, especially by means of formalization, is a long-standing priority of the banking sector. Therefore, it is essential to look at whether banks and other financial institutions have been successful in creating credit during the pandemic. Were they effective in implementing the same lending strategies adopted during the 2008 crisis? Whether the credit growth has been sufficient enough to overcome this one-off shock? Or was it off the waymark?

In India, household debt has been rising much before the pandemic, particularly in the aftermath of the 2008 crisis. While some studies reported that household debt had escalated lately due to the pandemic (SBI, 2021), few have observed that the credit growth is inadequate during the pandemic, primarily due to the heightened risk aversion by the banks (Dev and Sengupta, 2020). Suppose the access to the credit market for the households is not adequate during the pandemic: the resulting reduction in household spending will adversely affect the state's economic recovery, given that the credit access and the borrowing reliance of the household are not uniform across states in India during the pandemic. They are different in terms of motives, credit access, rural-urban differences, socio-economic conditions, etc. According to the All India Debt and Investment Survey 2019, Kerala topped the list of credit market participants even prior to the pandemic. Thus, it is safe to assert that improved credit access is vital to the state.

In this chapter, we attempt to explore the debt position of the households in Kerala, compared to other High-Income States, Low-Income States, and All India average since

¹ Household debt is an obligation of the household to pay interest or principal arising from borrowing money on credit (OECD).

² Since the government now has very little fiscal room, the only leeway is to facilitate the maximum access to credit.

the COVID-19 pandemic began, using the CMIE's Consumer Pyramid Household Survey (CPHS) data. In addition, it examines whether the banking sector withstands or withdraws from its prime business of lending to people, especially amidst a crisis. In the case of the latter, how has the state managed to continue the pre-pandemic level of borrowing? What are its major drivers and who are its beneficiaries?

The rest of the chapter proceeds as follows: Section 2 explains the pattern of household borrowing during the pandemic. Section 3 presents major sources of household credit. While the drivers of household debt are discussed in section 4, the incidence of borrowing by various groups- social, income and industry- is highlighted in sections 5, 6 and 7. The final section concludes the chapter.

6.2 Pattern of household borrowing during the pandemic

Changes in the level of borrowing dependency and its behaviour at the peak of the crisis can be understood by looking at the trends in household borrowings. It also addresses credit growth, or the lack of credit access, during the pandemic. Table 1 shows a comparative picture of the average borrowing dependency of the household in Kerala with other High-Income States, Low-Income States, and the All India level.³ In particular, it highlights wave-wise⁴ household debt levels during the pandemic (January 2020 to August 2021) compared to the pre-pandemic level (January 2019 to December 2019).

Nearly 53 percent of the households in Kerala relied on borrowing to run the household before the pandemic. This suggests that, as reported in the AIDIS 2019, the borrowing dependency of the state was relatively high even before the pandemic. Moreover, though there was a dip in reliance during the first wave (Jan-April) of 2020 due to the lockdown and associated issues, it increased perceptibly in the second wave (May-Aug) of 2020 immediately after the lockdown relaxation. Eventually, it reached the pre-pandemic level. However, the picture differed slightly in High-Income and Low-Income States and national level, where the pandemic effect on borrowing was somewhat evident only in the first two waves of 2021.

³ CPHS captures a binary response from households across states to the question 'whether the household has an outstanding borrowing?', i.e., borrowing yet to be repaid fully, as of the survey date. It could be for any purpose, from any sources, against any collateral, and for any duration of time. Moreover, the loan could be taken by one or more members of the household.

⁴ One wave corresponds to 4 months, as per CPHS

**Table 6.1: Borrowing dependency of the household in Kerala, India, HIS & LIS:
% of households with outstanding borrowing**

STATE	2019 Jan- Apr	2019 May - Aug	2019 Sep- Dec	2020 Jan- Apr	2020 May - Aug	2020 Sep- Dec	2021 Jan- Apr	2021 May - Aug
Kerala (KL)	52.33	53.81	53.97	40.43	59.99	51.15	52.23	52.85
High Income States (HIS)	53.6	58.02	62.87	53.77	46.02	47.02	50.94	54.37
Low Income States (LIS)	45.55	44.45	46.85	42.36	44.87	38.76	43.37	48.07
All India	48.88	49.95	53.22	46.66	45.74	42.35	46.56	50.63

Source: GIFT's calculation based on CPHS data.

During the pre-COVID period, Kerala recorded more than 50 percent borrowing reliance compared to the national average as well as low-income states. However, unlike the other higher-income states, the state maintained almost the same borrowing level during the pandemic.

While nearly half of Indians have primarily depended on borrowed money to run their households during the ongoing COVID-19 pandemic, more than half of the Keralites relied on borrowed money to run theirs. In other words, the borrowing dependency in Kerala remained at the pre-pandemic level, when it was expected to have increased. It is likely that this is due either to poor credit market participation of the household or to insufficient access to the credit market. This could be either because of the credit constraints of the financial institutions or because of the high cost of borrowing. Further, this raises concerns on how the state has managed its pre-pandemic levels of borrowing. The following sections explores it.

Although Kerala maintained a pre-pandemic level of household borrowing with more than half of reliance, its credit growth during the pandemic is way off the mark.

6.3 Sources of household credit

The credit market arrangements can be broadly classified into formal and informal. The former comprises of organized, institutional and regulated arrangements while the latter is unorganized and non-institutionalized. Developing countries are characterized by their co-existence, and the success of both is essential for the economy's progress (Rana & Viswanathan, 2019). In India, it is seen that formal organizations limit their credit availability. Consequently, households are forced to rely on the alternate. Even though the ease of credit acquirement is higher in such cases, they are characterised with very high interest rates. On the other hand, formal agreements have a pretty high transaction cost but lower reach. However, during earlier crises such as the one in 2008, banks exert

their influence much further to ensure the economy's recovery. The composition of formal, informal and the combined sources of borrowing is detailed in the appendix (see Table A6.1).

Borrowing from a formal institution includes: (i) borrowing from a bank,⁵ (ii) borrowing from Non-Banking Financial Companies (NBFC)⁶, (iii) borrowing from Self Help Groups (SHGs)⁷ (iv) borrowing from Micro Finance Institutions (MFI)⁸, (v) borrowing from credit cards⁹, and (vi) borrowing from the employer¹⁰. Notably, CPHS does not provide any exclusive picture on the intervention of cooperatives.

From Table 6.2, it is evident that the percentage of borrowings from banks has decreased perceptibly in Kerala during the pandemic. The borrowing dependency on banks declined from close to 70 percentage in 2019 to 45 per cent in 2021 (second wave), hitting a low of 30 per cent at the peak of the pandemic (May-August 2020). This indicates significant withdrawal of the banks from the credit market in the state. A similar trend is observed among other states and the All-India level, albeit to a lesser degree of withdrawal. Interestingly, Kerala has managed its pre pandemic levels of borrowing.

The percentage of borrowings from banks has decreased perceptibly in Kerala during the pandemic, indicating a withdrawal of the banks from the credit market in the state.

In Kerala, unlike in other states and at the All India level, the presence of NBFCs and MFIs is evident during the pandemic. Households' dependency on them rose from 6 percentage (2019) prior to the pandemic to 12 percentage after it (2021), hitting a high of 22 percent at the peak of the pandemic (Jan-Apr 2020). This implies that institutions like Muthoot, Manappuram and other small banking financial institutions find a market in the state during the pandemic.

Remarkably, the lion's share of formal household borrowing is from SHGs. The pandemic witnessed a three fold increase in the percentage of households dependent on

⁵ Banks include all kinds of banks. Correspondent banking is also included along with banks.

⁶ An NBFC includes registered companies engaged in loans and advances, insurance or chit business. They provide certain banking services but do not hold a banking license.

⁷ SHGs are groups that are formed by people who pool in money and then use it for lending to either members of the group or others in the same locality. Banks or micro-finance institutions also use SHGs to channelize their lending programs.

⁸ MFIs are lending institutions that usually reach out to borrowers in regions where typically, a bank does not find it viable to reach.

⁹ All unpaid credit card bills overdue by more than 2 months are captured as borrowings from credit cards. Usually, this is a costly source of getting money as the interest rates are very high. Any cash withdrawal using a credit card is considered as borrowing from credit cards.

¹⁰ Borrowing from employer includes loan facilities taken from the company. It also includes informal borrowings from employers, for example, a house help taking a loan from his/her employer, which may or may not be interest-free. The loan repayment is often through a direct cut from the salary.

SHGs for credit, from close to 15 per cent prior to it (Table 6.2). The same cannot be said in the case of other states or at the national level. During the pandemic, access to formal credit sources has been elusive in the state. Unlike what other studies may suggest, the so-called claim of formalization is not happening in Kerala through banks but through SHGs and MFIs, who play an intermediate role having some attributes of the informal network in the state.

Table 6.2: Formal sources of household borrowing

STATE	2019 Jan-Apr	2019 May - Aug	2019 Sep-Dec	2020 Jan-Apr	2020 May - Aug	2020 Sep- Dec	2021 Jan-Apr	2021 May -Aug
% of Household Borrowing from Banks								
KL	68.37	68.02	68.96	50.64	29.72	44.52	45.22	45.31
HIS	30.17	28.31	26.53	24.43	20.60	19.38	22.25	21.74
LIS	23.09	22.32	20.79	20.71	21.62	17.14	18.60	19.02
ALL	27.55	26.47	24.87	23.08	21.52	19.11	21.04	20.95
% of Household Borrowing from NBFC & MFI								
KL	6.54	6.44	6.81	21.58	14.61	16.10	14.00	10.10
HIS	9.95	10.09	7.87	8.59	12.32	14.00	13.59	14.03
LIS	2.70	3.20	2.56	4.51	3.49	2.55	1.47	2.08
ALL	5.92	6.38	5.10	6.73	7.34	7.99	7.03	7.26
% of Household Borrowing from SHG								
KL	8.94	17.79	14.44	17.31	55.01	39.85	40.53	44.53
HIS	18.83	14.64	11.33	14.03	20.29	16.28	14.30	16.61
LIS	4.30	4.56	3.60	4.53	5.27	5.24	4.63	2.92
ALL	10.65	9.49	7.44	9.02	12.97	11.27	9.93	9.87
Source: GIFT's calculation based on CPHS data.								
Note: Corresponding columns do not sum up to 100 as households borrow from multiple sources.								

Access to formal credit sources is elusive during the pandemic. Being formal Arrangements, Self Help Groups (SHGs), and some of the Microfinance institutions (MFI) play an intermediate role having some attributes of the informal network in Kerala.

Cooperative Credit in Kerala during the Pandemic

Kerala is known for co-operative movements in the country. It is well-regarded that the idea of cooperatives inspired by cooperative movements has played a critical role in the state's socio-economic development over the years. As several avenues are directly or indirectly covered under cooperative networks, it has been contributing in various ways to the state's overall progress. Therefore, its signature can be seen in all sectors of the state. Notably, 16112 co-operative Societies are functioning in the state, of which 12265 societies are working. The list includes Apex, Federal, Central Societies (23), Credit Co-operatives (3743), Marketing Co-

operatives (579), Consumer Co-operatives (4632), Processing Co-operatives (34), Housing Co-operatives (396), SC/ST Co-operatives (833), Health Co-operatives (199), Women Co-operatives (1238), Youth Co-operatives (30) and Other Co-operatives (4435). With decades of success stories behind them, most are ground-level organizations led by localities.

Remarkably, the credit cooperatives in the state have an extensive network. With the formation of Kerala Bank in 2019, the credit co-operative societies have received the greatest attention. As of now 3382 co-operative societies are working in the state, of which 1644 are primary agricultural credit societies (PACS). Through the empowerment of PACS with modern banking facilities, many rural people of the state benefited from it. However, the COVID-19 pandemic has altered the situation drastically. The situation demanded a revival by means of enormous credit creation. Hence, the co-operative credit societies, especially the PACS, grabbed the role. Eventually, it has become an increasingly important source of credit in the state. Table 6.3 exhibits the performance of Selected Indicators of the Credit Operation of the Primary Agricultural Credit Societies (PACS) during the pandemic. See box 6.1 for details of Mannarcaud cooperative society

During the pandemic, the PACS loan disbursement has significantly increased from Rs. 89,153.03 crores to Rs 1,08,816.15 crores in 2020-21, implying a 22 percent growth in credit creation (Table 6.3). Among the total loan disbursements, the long-term loan registered the highest growth of 69.3 percent, while the short-term loan registered a mere growth of 11.3 percent. In addition, a few PACS disbursed an interest-free loan of Rs 9.2 lakh per farmer to promote their economic activity and livelihood opportunities during the pandemic. In 2020-21, the outstanding loan amount recorded a 25 percent growth, despite a 42 percent growth in loan overdue. This implies that, unlike the Scheduled commercial banks, which have followed a risk aversion strategy of not lending during the pandemic, the co-operative banks actively disbursed the loans.

To meet the demand of the household during the pandemic, 4500 additional SHGs are formed by the PACs through which Rs. 1736.70 lakhs credit is disbursed. Overall, it is evident that PACSs in Kerala played a proactive role in credit disbursement when the commercial bank shied away from providing loans despite the RBI's liquidity measures to promote credit growth. From the forgoing discussion it is evident that during the pandemic the cooperative sector, with its long tradition of being with people at grassroots and help addressing their local specific requirements, rose to the occasion. However, it is important at this juncture to note that the remarkable role that the cooperative sector has been historically playing in Kerala is yet to receive the academic and policy attention that it deserves. Such an enquiry is specially needed when the "one size fits all" type policies are being imposed from the centre which is likely to adversely affect the firm roots of the cooperative in Kerala.

Table 6.3: Select indicators of credit cooperatives of Kerala

Indicators	Unit	2019-20	2020-21	Growth
No. of societies	Numbers	1643	1644	0.06
Total loans Issued	Rs in crore	89153.03	108816.15	22.06
Of which;				
Short-term loans Issued		51490.79	57306.71	11.30
Medium-term Loan issued		29210.96	37200.62	27.35
Long-term Loan issued		8451.28	14308.81	69.31
Deposits	Rs in crore	111100.19	173816.22	56.45
Loan Overdue	Rs in crore	16250.36	23158.31	42.51
SHGs Formed by PACS	Numbers	61358	65891	7.39
State Contribution to SHGs through PACS Credit	Rs. In Lakhs	1347.41	1736.79	28.90
Average loan per member	Rs.	28212.98	31177.22	10.51

Source (basic data) : Office of the Registrar of Co-operative societies

Box 6.1: Household debt and cooperatives- A case

Cooperative banks in Kerala played a vital role in the credit market participation of the household during the pandemic. They rescued many local people facing financial hardship due to the pandemic. However, the CPHS survey doesn't show any exclusive evidence in this regard as the cooperative sector is active only in a few states in India. The very motto of cooperatives i.e., "each for all and all for each" amply describes their role.

We observe the credit growth of the cooperatives taking the case of Mannarkkad rural SCB. Between March 2020 and April 2021, a total 38,355 loans were issued, amounting to 322.2 crores, including 1947 additional COVID Special Scheme Loans amounting to 17.8 crores through Special Liquidity Facility Loans, Chief Ministers Helping Hand Loan Scheme (CMHLS), CoWin Trade Loans, Special Gold Loans, Self Help Group *Vidyatharangini* Individual Loans, *Vidyatharangini* loans, CoWin Pravasi Gold Loans, CoWin100 Gold Loan, and Special Liquidity Facility Gold Loan.

The number of loans issued to SHGs increased sharply, from 244 loans (14.4 crores) before the pandemic (March 2019 to April 2020) to 213 loans in the subsequent year, and an additional 169 since (March-December 2021). 211 (16.8 crores) of them were agricultural purposes while 84 of them were *Vidyatharangini* individual loans, a part of the COVID Special Scheme Loans. Table A6.2 details the loan disbursement of Mannarkkad rural SCB during the pandemic.

While the banks withdrew at the event of a crisis, the SHGs and Cooperatives came forward with massive lending mostly through interest free lending. Going by the available evidence, the cooperative sector lending was around Rs. 60,000 crores of which a substantial part was interest-free lending.

While the banks withdrew at the event of a crisis, the SHGs and Cooperatives came forward with massive lending, primarily through interest-free lending

Borrowing from informal sources includes (i) borrowing from money-lenders¹¹ (ii) borrowing from relatives or friends¹², (iii) borrowing from other sources¹³. Such loans are usually used to meet urgent needs or shortfalls. From Table 6.4, it is observed that Households' borrowing dependency from money lenders increased only marginally. In contrast, households' borrowing dependency on friends and relatives spiked sharply during the peak of each wave (May- Aug 2020 and 2021 respectively). This implies a lack of alternate options for credit for many of the households during the lockdown. Almost a similar trend is observed in other states and at the national level.

Table 6.4: Informal sources of household borrowing								
STATE	2019 Jan-Apr	2019 May - Aug	2019 Sep- Dec	2020 Jan- Apr	2020 May - Aug	2020 Sep- Dec	2021 Jan- Apr	2021 May -Aug
% of Households Borrowing from Money Lenders								
KL	8.03	3.77	3.06	3.59	5.94	5.19	4.29	2.59
HIS	8.47	8.52	6.88	7.12	3.68	2.13	2.07	2.37
LIS	6.88	6.24	5.01	4.44	4.62	3.10	3.20	2.50
ALL	7.59	7.18	5.80	5.60	4.30	2.76	2.76	2.45
% of Households Borrowing from Relatives and Friends								
KL	7.92	3.58	4.93	6.32	20.90	6.13	3.00	14.42
HIS	16.91	17.18	15.58	15.93	25.57	12.30	15.39	14.68
LIS	16.63	13.37	11.95	11.58	21.09	8.88	8.30	12.66
ALL	16.47	14.75	13.38	13.36	22.83	10.26	11.13	13.55
Source: GIFT's calculation based on CPHS data.								
Note: Corresponding columns do not sum up to 100 as households borrow from multiple sources.								

¹¹ A Moneylender is usually a rich person in the locality, a local jeweller who takes gold or jewels as collateral for providing the loan, a local politician or a local strongman who settles disputes, provides funds, and arranges other facilities.

¹² Loans from relatives and friends are counted even if they may be unconditional, interest-free and without limitations on repayment schedules.

¹³ Others sources includes borrowing from chit funds, borrowing from shops and others. Chit fund is a scheme wherein unorganized or organized groups agree that all the persons in the group shall pay a certain amount of money in instalments such that each person in the group will be entitled to a prize amount in a pre-determined manner. If payments made to shops is overdue by two months or more it is captured as borrowing. Others include soft loans taken from a non-professional money-lender, religious institutions, and missionaries that provide loans without interest.

6.4 What drives household borrowing during the pandemic?

As discussed, households entering into the debt market depends on both demand and supply factors. Lenders' decision on whether and how much to lend is on the supply side as explained in the previous section, the households' decision to borrow is on the demand side. The latter can broadly classified into four- borrowing for consumption¹⁴, borrowing for health¹⁵, borrowing for investment¹⁶, and borrowing for others¹⁷.

From Table 6.5, it is evident that the borrowing for consumption is not a driving factor during the pandemic in Kerala. In fact, the borrowing dependency for consumption showed a decreasing trend during the pandemic. It may be partially because of the state support in household consumption. However, borrowing for consumption is clearly visible in other categories, particularly in LIS. Interestingly, health expenditure via borrowing is not visible in any states. This implies that the policy intervention in health spending was somewhat effective. Further, the borrowing dependency on business and investment started declining during the peak of the pandemic in 2020, but reached the pre-pandemic level in the second wave in 2021. Comparatively, Kerala's credit support for running a business or investment remained poor.

¹⁴ Borrowing for consumption comprises of borrowing for consumption expenditure and borrowing for consumer durables.

¹⁵ Borrowing for health covers expenditures made for any medical treatment, whether at the hospital or at home

¹⁶ Borrowing for investments includes borrowing (i) for starting or running a business, (ii) for investing in financial instruments such as equity shares, mutual funds, national savings certificates, insurance policies or to speculate on any of these markets or the commodities markets (including gold).

¹⁷ Borrowing for others includes (i) borrowing for housing (ii) borrowing for debt repayment (iii) borrowing for vehicles (iv) borrowing for marriage ceremonies (v) borrowing for education and (vi) borrowing for others

Table 6.5: Purpose of household borrowing- General

STATE	2019	2019	2019	2020	2020	2020	2021	2021
	Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug
% of Households which Borrowing for Consumption Purposes								
Kerala (KL)	9.81	13.99	15.85	23.57	23.12	16.54	15.64	11.66
High Income States (HIS)	55.65	63.87	68.85	67.39	58.51	65.27	66.55	64.88
Low Income States (LIS)	68.27	70.50	76.8	75.88	80.63	81.81	83.83	79.44
All India	61.03	65.71	71.32	70.86	69.87	72.29	74.22	71.33
% of Households Borrowing for Medical Purposes								
Kerala (KL)	1.01	0.94	0.89	1.32	2.11	0.39	0.65	0.49
High Income States (HIS)	1.68	0.96	0.96	2.17	0.71	0.38	0.23	0.34
Low Income States (LIS)	2.90	2.5	1.34	1.23	0.39	0.72	0.85	0.78
All India	2.32	1.76	1.15	1.65	0.58	0.56	0.58	0.59
% of Households Borrowing for Investment Purposes								
Kerala (KL)	3.83	3.82	3.29	3.18	1.16	1.99	2.66	3.92
High Income States (HIS)	20.73	19.38	16.85	16.15	18.5	16.38	16.97	17.90
Low Income States (LIS)	17.34	16.2	13.21	15.65	18.74	15.24	13.73	16.85
All India	18.36	17.22	14.56	15.56	17.99	15.25	14.73	16.88
% of Households Borrowing for Other purposes								
Kerala (KL)	88.61	86.87	85.58	82.4	85.22	85.69	86.24	89.06
High Income States (HIS)	46.17	38.72	35.25	34.60	36.44	34.32	35.04	36.4
Low Income States (LIS)	26.67	26.23	24.7	22.63	13.21	11.08	13.71	13.35
All India	36.96	33.77	31.36	29.36	24.94	23.83	25.18	25.21

Source: GIFT's calculation based on CPHS data.

Note: Corresponding columns do not sum up to 100 as households borrow for multiple purposes

Interestingly, unlike All India, HIS and LIS, borrowing for other purposes shows an increasing trend in Kerala. This implies that more than 85 percent of the households borrowed money for reasons other than consumption, health and investment activities. Therefore, we decomposed the other purposes and reported household borrowing for debt repayment and housing as it represented as a major driving force in that category. Borrowing for debt repayment consists of money borrowed for repaying earlier debts. However, loan swapping is not classified under the same. Borrowing for housing includes money borrowed for buying a house, an apartment, or a plot of land for commercial or non commercial purposes.

From Table 6.6, it is seen that household borrowing for debt repayment, more than than 40 percentage, records a significant increase during the pandemic. Apparently, the

households have been availing the interest-free loan from SHGs and the cooperatives to repay their loans in PSBs. No wonder, during the last quarter the PSBs in the country recorded a profit of 3,30,000 crore; while the people and the economy are in distress, the banks are prospering. It is also observed that there is a significant reduction in the percentage of households borrowing for housing. This could be because credit sources discouraged such lending.

The higher borrowing dependency in Kerala was driven by other than consumption, health, and investment factors. The main motives for borrowing among household in Kerala is found to be for repaying the old debt (almost 40-50%).

Table 6.6: Purpose of household borrowing-Specific

STATE	2019	2019	2019	2020	2020	2020	2021	2021
	Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug
% of Households Borrowing for Debt Repayment								
Kerala (KL)	20.3	18.6	18.4	23.3	48.92	39.94	39.36	44.82
High Income States (HIS)	14.62	12.8	12.58	15.24	18.46	19.85	20.36	21.22
Low Income States (LIS)	1.2	1.26	2.28	2.39	0.49	0.73	0.59	0.52
All India	7.53	6.98	7.45	8.55	9.3	10.41	10.27	10.44
% of Households Borrowing for Housing								
Kerala (KL)	33.9	32.29	32.91	28.25	14.52	15.68	16.17	18.74
High Income States (HIS)	6.5	5.6	5.48	4.38	2.83	2.68	2.73	3.06
Low Income States (LIS)	9.17	8.93	7.78	4.79	2.51	3.54	5.41	4.42
All India	8.82	8.2	7.51	5.19	3.08	3.61	4.64	4.3

Source: GIFT's calculation based on CPHS data.

Note: Corresponding columns do not sum up to 100 as households borrow for multiple purposes

6.5 Regional disparities in borrowing patterns

Type of region indicates whether a household is in a rural or an urban area. Although, the rural-urban difference is not significant in many of the household attributes in Kerala, there is a significant difference in household indebtedness. From Table 6.7, it is clear that borrowing dependency is more evident in rural than urban households in the state, particularly during the pandemic. Rural-urban differences in borrowing patterns are more apparent in other states and at the national level. Credit access via SHGs, cooperatives and MFIs is more pronounced in rural Kerala in comparison to other states, where money lenders, friends and relatives substitute for them.

Table 6.7: Borrowing dependency of the household by region

STAT E	Region	2019	2019	2019	2020	2020	2020	2021	2021
		Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug
KL	Rural	54.48	54.4	54.24	65.03	50.79	56.83	57.15	53.59
	Urban	45.52	45.6	45.76	34.97	49.21	43.17	42.85	46.41
HI S	Rural	61.24	60.69	61.6	63.52	60.16	63.51	61.89	60.34
	Urban	38.76	39.31	38.4	36.48	39.84	36.49	38.11	39.66
LIS	Rural	78.49	77.28	78.02	79.04	80.79	83.87	84.54	83.11
	Urban	21.51	22.72	21.98	20.96	19.21	16.13	15.46	16.89
AL L	Rural	70.36	69.13	69.83	71.87	71.63	74.09	74.03	72.79
	Urban	29.64	30.87	30.17	28.13	28.37	25.91	25.97	27.21

Source: GIFT's calculation based on CPHS data.

The credit access of the rural households in Kerala was relatively high, as borrowing access through SHGs, Cooperatives, and MFIs is comparatively more viable in rural than urban areas.

6.6 Borrowing dependency of household among various social groups

Caste influences both the institution's decision to approve the loan and household's decision to apply for loan from a particular loan source (Mitra and Venkatachalam, 2018). To capture the incidence of borrowing, we categorize the household into three social groups- General, Other Backward Community (OBC) , Scheduled castes, and Scheduled Tribes (SC-ST). Table 6.8 shows the borrowing dependency among various social groups. It is observed that the incidence of borrowing was higher amongs OBCs during the pandemic in Kerala. Notably, during the peak of the pandemic, borrowing dependency showed opposite trends with SC-STs and the other two social groups in the state. It increased for the former, when the lending activities of SHGs and Cooperatives peaked in the state.

As caste influences the household's credit market participation, the scheduled communities received a push from SHGs and cooperatives during the peak of the pandemic.

Table 6.8: Household borrowing among various social groups (%)

STATE	Category	2019	2019	2019	2020	2020	2020	2021	2021
		Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug
KL	General	9.02	9.53	9.31	9.67	6.72	7.29	7.60	7.48
	OBC	69.72	68.29	71.53	68.49	61.00	72.45	70.55	70.36
	SC-ST	21.26	22.18	19.16	21.84	32.28	20.26	21.85	22.17
HIS	General	29.05	28.84	27.94	28.03	24.92	27.29	27.83	27.67
	OBC	41.57	42.07	42.74	44.25	44.39	43.04	42.71	42.09
	SC-ST	29.37	29.09	29.32	27.72	30.70	29.67	29.46	30.24
LIS	General	26.36	26.43	26.51	24.76	24.78	23.02	22.85	23.36
	OBC	40.11	39.99	40.55	42.87	40.53	41.98	42.70	44.37
	SC-ST	33.53	33.58	32.94	32.36	34.69	35.00	34.45	32.27
ALL	General	27.02	27.02	26.69	25.88	24.24	24.36	24.50	24.70
	OBC	41.58	41.73	42.39	44.03	42.71	43.42	43.53	44.14
	SC-ST	31.40	31.25	30.92	30.10	33.05	32.22	31.96	31.16

Source: GIFT's calculation based on CPHS data.

6.7 Borrowing dependency of the household among various income groups

In order to capture the incidence of borrowing, Households are classified into four income groups, based on their annual income. The annual income of a household is the income of all its members from all sources. Since the annual income of a household could change from one wave to another, its classification into an income group could also change over time. If the annual income is below 1 lakh, they are classified as poor. Lower middle income groups have an income between 1 lakh and 6 lakhs, while upper middle income groups record an income between 6 to 12 lakhs. Those with an income more than 12 lakhs are classified as rich. Table 6.9 shows the borrowing dependency of households among these income groups.

Unlike in other states and at the national level, in Kerala, the borrowing dependency among poor households remained remarkably low despite increasing during the pandemic's peak (May-August 2020). Presumably, banks and similar institutions have less incentives to serve the poor. For them, lending out to economically poor households adds to “high risk” and “high cost” customers in their portfolios. Interestingly, the lower middle group, a sizeable section of the populace, registered a higher borrowing dependence in Kerala, but to a lower degree among other states and at the national level. Once again, the presence of SHGs and Cooperatives acts as a major driving force for the households.

STATE	Category	2019	2019	2019	2020	2020	2020	2021	2021
		Jan-Apr	May-Aug	Sep-Dec	Jan-Apr	May-Aug	Sep-Dec	Jan-Apr	May-Aug
KL	Poor	0.75	0.78	0.26	0.01	2.29	0.75	0.64	0.56
	L.Middle	85.27	85.19	84.41	86.69	93.61	95.62	95.69	95.77
	U.Middle	13.86	13.78	15.04	13.12	3.79	3.64	3.65	3.64
	Rich	0.12	0.26	0.29	0.17	0.31	0.01	0.01	0.03
HIS	Poor	4.38	4.89	4.42	3.56	5.42	7.47	5.12	4.47
	L.Middle	84.52	83.31	83.74	85.83	88.38	85.06	85.32	86.32
	U.Middle	9.93	10.59	10.65	9.86	5.86	7.03	9.04	8.82
	Rich	1.17	1.21	1.19	0.75	0.34	0.44	0.52	0.39
LIS	Poor	15.93	12.66	8.69	7.32	18.36	21.39	17.25	13.36
	L.Middle	80.58	83.21	87.2	89.07	80.01	77.29	81.12	85.08
	U.Middle	3.27	3.86	3.84	3.47	1.54	1.29	1.59	1.53
	Rich	0.21	0.27	0.27	0.13	0.1	0.03	0.04	0.03
AI	Poor	10.52	8.8	6.49	5.49	12.71	14.63	11.56	9.29
	L.Middle	82.41	83.32	85.55	87.59	83.77	81.32	83.39	85.92
	U.Middle	6.45	7.19	7.27	6.52	3.31	3.85	4.82	4.61
	Rich	0.62	0.69	0.69	0.41	0.2	0.2	0.24	0.18

Source: GIFT's calculation based on CPHS data.

Incidence of borrowing is too high among Lower middle-income households in Kerala. In fact, they have low financial resilience if they are over-indebted or find it difficult to withstand financial shocks.

6.8 Borrowing dependency of the household among various Sectors

The occupation group of a household is based on the distribution of members of a household by the nature of their occupation. The idea is to distinguish between households that are, for example, largely farmer-dominated, compared to those that are dominated by say, salaried employees. While there are 20 occupation groups, these can be clubbed into five broader groups – (i) business persons (ii) farmers (iii) salaried employees (iv) small traders and daily wage earners and (v) miscellaneous. Table 6.10 shows the incidence of borrowing across various occupation groups. It is shown that the incidence of borrowing is high in the case of small traders and wage earners during the pandemic. The presence of SHGs and Cooperatives is visible in this case too. When sources of income disappear as a result of employment loss, especially for those connected to the informal sector, i.e., small traders and daily wage earners, repayment of loans becomes a burden and are forced to rely on additional borrowing.

As those in the informal sector, particularly the small traders and wage earners, faced financial hardship during the pandemic the most, the intermediate role played by SHGs and Cooperatives helped them to avail credit.

STATE	Category	2019	2019	2019	2020	2020	2020	2021	2021
		Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug	Sep- Dec	Jan- Apr	May - Aug
KL	Business persons	35.64	34.90	36.37	33.85	26.13	31.11	28.02	30.27
	Farmers	2.12	2.05	1.69	1.59	1.80	1.78	1.40	1.43
	Salaried employees	21.80	21.70	20.60	20.16	15.14	19.09	20.11	19.99
	Small traders & wage earners	31.34	30.56	29.81	33.45	49.12	38.82	42.17	41.52
	Miscellaneous	9.09	10.79	11.53	10.96	7.81	9.20	8.29	6.79
HIS	Business persons	19.57	19.46	19.57	20.26	20.02	20.17	19.72	19.22
	Farmers	25.00	25.53	26.59	27.75	24.22	26.96	25.88	27.27
	Salaried employees	23.23	21.72	21.66	20.42	19.70	18.71	22.15	22.19
	Small traders & wage earners	27.06	27.08	26.27	25.55	30.87	28.90	27.19	26.72
	Miscellaneous	5.14	6.20	5.91	6.02	5.18	5.26	5.05	4.61
LIS	Business persons	18.70	18.76	19.01	17.35	15.60	15.30	14.83	15.69
	Farmers	30.09	29.71	29.53	31.52	36.03	34.05	33.13	34.92
	Salaried employees	17.57	17.52	17.38	15.03	12.66	11.61	12.45	12.44
	Small traders & wage earners	28.68	28.45	28.78	29.74	30.96	33.42	34.38	31.87
	Miscellaneous	4.97	5.56	5.29	6.36	4.74	5.62	5.22	5.09
ALL	Business persons	19.61	19.60	19.80	19.04	17.72	17.98	17.34	17.60
	Farmers	27.03	26.95	27.34	29.13	30.15	29.81	28.99	30.72
	Salaried employees	20.12	19.53	19.43	17.53	15.50	14.94	16.82	16.70
	Small traders & wage earners	28.07	27.91	27.67	27.99	31.60	31.67	31.60	30.04
	Miscellaneous	5.17	6.01	5.76	6.32	5.03	5.60	5.25	4.94

Source: GIFT's calculation based on CPHS data.

6.9 Concluding remarks

Debt greases the wheels of the economy, especially when a pandemic hits a country hardly. If the credit market access of the households is not adequate during the pandemic, the resulting reduction in household spending will adversely affect the economic recovery. Using CPHS data, this chapter observed some facts and figures on the patterns of household borrowing, household access to credit, drivers of borrowing

and incidence of borrowing among various categories during the pandemic. It is observed that despite maintaining its pre-pandemic level of household borrowing, with more than half in reliance, its credit market participation during the pandemic is way off the mark for recovery. This is because access to formal credit sources is elusive during the pandemic. Being formal Arrangements, Self Help Groups (SHGs), and some of the Microfinance institutions (MFI) played a critical intermediate role having some attributes of the informal network in Kerala. In other words, when the banks withdrew in a crisis, the SHGs and Cooperatives came forward with massive lending.

Notably, households' decision to borrow was driven by non-consumption, non-health, and non-investment factors. Instead, the main motives for borrowing among households in Kerala are repaying the old debt. As scheduled communities, low income groups and small traders and wage earners face financial hardship during the pandemic the most, the intermediate role played by SHGs and Cooperatives helped them to avail credit. Also, the credit availability of the rural households in Kerala was reported high, as borrowing access through SHGs, Cooperatives, and MFIs is comparatively more viable in rural than urban areas. Overall, there is a significant shift from banks to SHGs in availing of credit.

Policy intervention is much warranted at this juncture. If policy tools (monetary and fiscal) fail to respond to the demand and supply shocks, it will hinder the economic recovery. As far as the state of Kerala is concerned, the fiscal policy responses to the economic impacts of the COVID-19 pandemic were effective, to some extent, through various welfare schemes, COVID relief packages, medical aids, etc. However, since the government now has no additional room for fiscal expansion, the only leeway is to facilitate maximum access to credit through monetary channels.

Nevertheless, the monetary policy support was off the way mark. Low credit access due to the risk aversion by the financial institutions will jeopardize the recovery process. Ideally, Banks and similar institutions should have announced measures to offer various credit assistance to affected consumers, compromising the household's income status, social status, occupation status, regional differences, etc. Otherwise, when the crisis unfolds, it will further hamper economic growth. Suppose the household credit growth, has been supported by favorable macroeconomic conditions- lower interest rates, low inflation and robust economic growth. In that case, borrowing will become more attractive and affordable for all sections. Therefore, credit constraints need to be eased during the pandemic, and debt literacy should reach consumers who find it difficult to withstand financial shocks.

Appendix

STATE	2019 Jan- Apr	2019 May - Aug	2019 Sep- Dec	2020 Jan- Apr	2020 May - Aug	2020 Sep- Dec	2021 Jan- Apr	2021 May - Aug
Borrowing from Only Formal Sources								
Kerala (KL)	6.98	13.43	11.46	12.11	30.85	27.94	30.43	27.24
High Income States (HIS)	10.61	6.63	5.83	7.91	11.98	8.82	8.36	9.46
Low Income States (LIS)	2.36	2.89	2.02	2.82	2.80	2.84	2.50	1.62
All India	6.03	4.90	4.04	5.28	7.42	6.34	5.92	5.65
Borrowing from Only Informal Sources								
Kerala (KL)	5.69	2.46	2.35	3.05	2.18	1.53	1.69	1.26
High Income States (HIS)	4.48	3.98	3.02	3.99	1.35	0.89	1.18	1.43
Low Income States (LIS)	4.97	4.22	3.56	2.69	2.33	2.77	1.58	1.02
All India	4.78	4.06	3.28	3.27	1.94	1.92	1.41	1.20
Borrowing from Formal and Informal Sources								
Kerala (KL)	87.33	84.11	86.19	84.84	66.97	70.53	67.88	71.50
High Income States (HIS)	84.91	89.39	91.15	88.10	86.67	90.29	90.46	89.11
Low Income States (LIS)	92.67	92.90	94.42	94.50	94.88	94.38	95.93	97.35
All India	89.19	91.05	92.68	91.45	90.64	91.75	92.67	93.15
Source (Basic Data): CPHS								

Sl No	Loan Type	No.of Loans	Amount
1	Gold Loan Ordinary	33063	1,06,51,56,047.00
2	NAMT (Non Agricultural Medium Term)	1122	62,45,27,000.00
3	Gold Loan Agricultural Purpose	770	11,23,01,700.00
4	NAST (Non Agricultural Short Term)	468	2,40,12,500.00
5	Fixed Deposit Loan	250	6,76,65,807.00
6	Kissan Credit Card	201	3,04,02,000.00
7	Self Help Group Loan	170	13,63,20,000.00
8	Muttathe Mulla Cash Credit	94	24,66,45,184.00
9	Self Help Group Loan Agricultural Purpose	89	7,38,50,000.00
10	NALT Loan (Non Agricultural Long Term)	58	26,74,50,000.00
11	Day Deposit Loan	37	11,36,890.00
12	Staff Over draft	32	3,96,07,895.50
13	Members Over draft	21	4,34,10,238.80
14	Member's Mutual Benefit Scheme Loan	20	63,60,000.00
15	Provident Fund Loan	4	5,89,000.00
16	Employees Housing Loan	3	35,00,000.00
17	SLMT (Schematic Loan Medium Term)	2	1,50,000.00
18	Loan to Kerala Social Security Pension Consortium	2	30,05,00,000.00
19	SLMT (Schematic Loan Medium Term) Cow	1	5,00,000.00

20	Housing Loan to members	1	50,000.00
Total		36408	3,04,41,34,262.30
Covid Special Scheme Loans During Pandemic Period			
Sl No	Loan Type	No.of Loans	Amount
1	Special Liquidity Facility Loan	673	12,64,02,000.00
2	CMHLS(Chief Ministers Helping Hand Loan Scheme)	467	1,24,35,000.00
3	Co Win Trade Loan	314	2,99,00,000.00
4	Special Gold Loan	297	33,97,325.00
5	Self Help Group <i>Vidyatharangini</i> Individual Loan	84	30,80,000.00
6	<i>Vidyatharangini</i>	64	6,40,000.00
7	CoWin Pravasi Gold Loan	24	9,99,500.00
8	CoWin100 Gold Loan	21	4,31,500.00
9	Special Liquidity Facility Gold Loan	3	6,00,000.00
Total		1947	17,78,85,325.00
Grand Total		38355	3,22,20,19,587.30
Loans Issued 01/04/2021 to 31/12/2021			
1	Gold Loan Agricultural Purpose	370	52441900.0
2	<i>Kissan</i> Credit Card	72	11827000.0
3	Self Help Group Loan	47	6750000.0
4	Self Help Group Loan Agricultural Purpose	122	94377500.0
5	Day Deposit Loan	31	1176202.0
6	Employees Housing Loan	4	3800000.0
7	Fixed Deposit Loan	104	40657887.0
8	Member's Mutual Benefit Scheme Loan	10	7105000.0
9	NAMT (Non Agricultural Medium Term)	42	360144000.0
10	NAST (Non Agricultural Short Term)	159	9756000.0
11	Members Over draft	26	25297536.6
12	Staff Over draft	29	38061903.0
13	NALT Loan (Non Agricultural Long Term)	12	4,87,75,000.00
14	Provident Fund Loan	1	1,10,000.00
15	<i>Muttathe Mulla</i> Cash Credit	104	19,43,71,132.00
16	Gold Loan Ordinary	21530	69,59,51,229.00
17	VEHICLE LOAN FOR STAFF	1	5,00,000.00
Total		22664	1,59,11,02,289.60

Chapter 7

Emigration and Immigration

Abstract

According to the RBI Bulletin, Globalising People: India's Inward Remittances, 2018, Kerala is the largest remittance receiving state (about 19% of the inward remittances) in India, the largest remittance receiving country in the world. That these remittances have stood us in good stead in smoothening our consumption and in contributing in a number of ways to the growth performance of our economy is very well recognized. As the pandemic crisis hit the globe, a large number of emigrant Keralites had to return home on account of loss of job; coupled with this was a drastic reduction in emigration rate.

Thus, going by the CPHS data, remittance income of the households in Kerala declined by 15 per cent in January-August 2021 over the same period in 2020; Kerala also suffered the highest reduction in emigration rate in the country. It was also found that 69% of the returnees who had lost job were still unemployed at the time of the survey. It was also found that Kerala was among the top five states having the highest number of in-migrants during May-August 2020 through May-August 2021.

According to the GIFT survey of Non-Resident Keralites (NRKs), 58 per cent reported loss of income and 38 per cent loss of employment as a reason for returning home during the pandemic crisis. The respondents in general were of high regard for the welfare schemes of the Government during the crisis, especially, the Food Kit provision and free vaccination. A majority of the NRI survey respondents (75.5%) were in favour of direct cash transfer for meeting the present crisis; around 47 % called for continuing food kits distribution and 39.6% made a case for extending the moratorium on bank loans. Most of the respondents were for improvement of the quality of government intervention in crisis times.

The world has experienced a detrimental effect of COVID since 2020. To contain the spread of the virus, the economic activities were temporarily suspended. The COVID restrictions have largely affected mobility of migrants worldwide. Shut down of flights, trains, buses have severely affected the migrants. Especially the migrants in low paid jobs and in irregular situations may be affected and vulnerable to COVID (Migration Data Portal, 2021). This chapter seeks to evaluate various impact of COVID on migrants for immediate effective policies and response.

India has the highest number of emigrants in the world of nearly 18 million /180 lakhs (World Migration Report, 2022) of which 21.2 lakh emigrants are Keralites (Rajan and Zachariah, 2020). With migrants losing jobs and exposed to vulnerable economic conditions along with worldwide spread of virus, a decrease in the growth of emigrants is quite expected which will add further to the declining growth trend of emigrants in Kerala. It is observed by Rajan and Zachariah, 2020 that the rate of growth of emigration is continuously decreasing in Kerala since 2008.

Higher rate of emigration from Kerala contributes to the higher remittance income of household. Overseas remittances from international migrants plays an important role in Kerala (Seshan,2020) and the state is also referred as remittance-led economy by Rajan and Zachariah (2020) with remittance account for as high as 35 per cent of the NSDP of Kerala and Kerala accounting for 40% of total international remittances in India (Kerala State Planning Board (2017), Narayana and Venkiteswaran (2013)). The empirical studies on remittance income supports that remittances plays a contributory role in improving living standards, increasing consumption expenditure, reducing poverty and leads to human capital formation (Parida et al (2015), Banerjee et al (2002), Prakash (1998)). A large inflow of remittances in Kerala has been perceived as one of the prime factors in accelerating growth in the state since 1990s (Kannan, 2005). Inflow of remittances has led to unprecedented economic changes since mid-1970s in Kerala (Harilal and Joseph (2003), Prakash (1998)). Kerala's economy is largely dependent on emigrant's remittances (Zachariah and Rajan, 2016).

Recent studies that dealt with the impact of migration in Kerala can be broadly classified in to four categories one on the relation between international emigrants, remittances and growth (Seshan,2020), Rajan and Zachariah (2020), Kannan (2005), Harilal and Joseph (2003), Prakash (1998)). Second on remittances and human capital formation and its impact on poverty (Parida et al (2015), Zachariah and Rajan (2016), Kannan (2005), Chakraborty (2005), Banerjee et al (2002), Prakash (1998), Choudhary (1992)) and the third is related to the stock of other states migrant in Kerala, their working and living conditions and social and cultural problems faced by them (Parida et al (2021), Narayana and Venkiteswaran (2013)). Fourth is on the evidence on number of emigrants and remittance income in Kerala (Rajan and Zachariah (various years)).

This chapter focuses on the impact of COVID on migrants and its consequences on household remittance income in Kerala.¹ The chapter is based on the database from consumer pyramid household survey (CPHS) and a primary survey of Non-Resident Keralites (NRKs) undertaken by GIFT undertaken for this study. The chapter can be broadly categorised into two parts. The first part uses the CPHS data to evaluate the impact of COVID on the mobility of migrants and its consequences on remittance income of households in Kerala. The second part evaluates various socio-economic impact of COVID on return migrants and the benefits received from government interventions by using primary level survey by GIFT on NRKs. The analysis has provided much insight having relevance for policy action.

The chapter is designed as having eight sections. First to Sixth sections comprises of analysis based on the database from CPHS and the seventh section refers to analysis based on the primary survey of NRKs by GIFT. To be more specific on each section; The first section is on the state-wise analysis of migration rate with a special focus on Kerala. The analysis shows the mobility of the migrant workers is adversely affected in Kerala. Reduction in out-migration rate in Kerala has been the highest in the country as an impact of COVID. Kerala is among the top five states also showing the highest number of return migrants per thousand population. The second section analyses the reason for return migration in the state which finds that 23 per cent of total return migrants reported loss of job as a reason for in-migration. The third section focuses on the employment status of the return migrants along with the employment status of the return migrants who reported loss of job as the reason for in-migrations. Out of the return migrants of 2,46,091 who reported the reason for in-migration as loss of jobs, 69 per cent are still unemployed. The fourth section discusses on the nature of occupation of the in-migrants to Kerala. The analysis finds that 23 per cent possessed elementary job, 5.3% belonged to teaching and skilled job, 5 per cent are businessman, self-employed entrepreneur, 4 per cent are from technical and higher academics, 3 per cent are clerks, 3 per cent are Crafts and semi- skilled workers, 2 per cent are senior officials and 55 per cent are home makers, students or retired. The fifth section is a detail on the educational qualification of the in-migrants which suggests that highest number of in-migrants have education level up to secondary level, next is primary level and then in-migrants with higher secondary and graduate degree. For better provision of policy support to the in-migrants this chapter analyses the employment status, nature of occupation and educational qualification of the in-migrants. The sixth section discusses the impact of

¹ The impact of migration and remittance on Kerala economy is well understood. The impact of the pandemic on the economy therefore gets translated through decline in the migration opportunities on the one hand and return of migrants due to loss of job along with decline in the income of those staying back in the foreign countries. Guest workers from other states have become an inevitable component of Kerala economy and labour force. We are aware that a proper understanding of the migration-remittance dynamics calls for a specially designed detailed survey and CPHS data is at best a near substitute. The readers are requested to keep this mind while reading this chapter.

COVID on remittance income of households in Kerala. A decline in remittance income of the household in Kerala is observed by 15 per cent in Jan- Aug 2021 compared to Jan-Aug 2020.

The findings on the primary survey of NRKs by GIFT are provided in the seventh section. This section furnishes an insight on various social and economic impact of COVID on NRKs, reflects on different benefits provided to return migrants through government interventions and welfare schemes and the government support that the migrants are looking forward to overcome the crisis period.

The last section provides conclusion and policy recommendations based on the above analytical framework.

7.1 Migration rate

In CPHS, migration is measured by noticing the entry and exit of members in the household. **Only members that exited the households were considered as migrated (also known as emigrants) until April 2020. The data on immigrants, i.e., the data on entry of members into household is explicitly captured by CPHS since September 2020 after the migrant's crisis in April-May 2020.** However, CPHS has made the data on immigrants available from May 2020 by identifying them from the member of household as the immigrants were marked as member of household in the past (before September 2020). Immigration can lead to addition of member to the master member roster. However, emigration does not lead to exit of member from the roster. The members remain as emigrants in the data base till they become member of the household again through immigration. It is to be noted that a member's emigration does not remove the member from the master member roster. Detailed analysis on emigrants from the state and immigrants to the state is given below.

State-wise analysis of growth rate of out-migration shows a negative growth at both state and national level except for states like, Madhya Pradesh, Tamil Nadu, Uttar Pradesh and West Bengal during May-Aug 2021 as compared to May-Aug 2020 (Table 7.1). Kerala shows the highest reduction in the growth rate of out-migration (93%) compared to a reduction of 44 per cent, 69 per cent and 27 per cent at national level, high and low-income category states, respectively during May-Aug 2021 with respect to May-Aug 2020 (Table 7.2).

The growth rate in in-migration for the same reference period shows positive growth of 47 per cent at All-India level with highest positive growth of 278 per cent in low-income states, negative growth of 57 per cent in high income states and a negative growth of 82 per cent in Kerala. Although the growth rate of in-migration is negative in Kerala, the reduction in growth rate of out-migration (93 per cent) is even more during May-Aug 21 with respect to May-Aug 20.

Table 7.1: Growth rate of out and in-migration

State	Growth rate of Emigration					Growth rate of Immigration
	Jan-Apr 20 over Jan-Apr 19	May-Aug 20 over May-Aug 19	Sep-Dec 20 over Sep-Dec 19	Jan-Apr 21 over Jan-Apr 20	May-Aug 21 over May-Aug 20	May-Aug 21 over May-Aug 20
Andhra Pradesh	16.37	0.17	-0.55	-6.49	-3.99	48.16
Assam	19.37	32.15	-91.45	-98.64	-99.98	--
Bihar	22.79	8.56	-88.89	-94.30	-81.20	50.82
Chhattisgarh	35.27	32.17	-97.66	-99.99	-99.98	--
Gujarat	17.97	14.85	-97.35	-99.78	-99.62	23.35
Haryana	12.10	16.75	-91.04	-91.84	-85.87	201.30
Karnataka	21.58	-17.14	-96.96	-99.61	-98.21	-100.00
Kerala	17.27	-1.57	-91.28	-94.32	-93.47	-81.58
Madhya Pradesh	29.22	29.27	20.35	4.68	4.40	-77.94
Maharashtra	29.28	29.87	-92.57	-94.90	-96.47	-99.14
Odisha	24.60	3.91	-93.32	-94.82	-92.76	-73.35
Punjab	16.71	18.03	-76.29	-87.31	-86.21	-98.19
Rajasthan	19.43	6.02	-97.77	-98.61	-98.78	737.82
Tamil Nadu	34.69	9.75	9.70	-1.43	5.47	-26.13
Telangana	4.87	-11.22	-95.28	-99.98	--	--
Uttar Pradesh	23.87	14.65	7.77	6.42	10.78	274.36
West Bengal	15.75	1.14	-4.17	-2.98	11.10	981.75
All states	22.33	10.24	-45.47	-48.48	-44.49	47.17

Source: GIFT's calculation based on CPHS data.

Table 7.2: Comparison of growth rate of out and in-migration between Kerala and all-India during May-Aug 21 over May-Aug 20

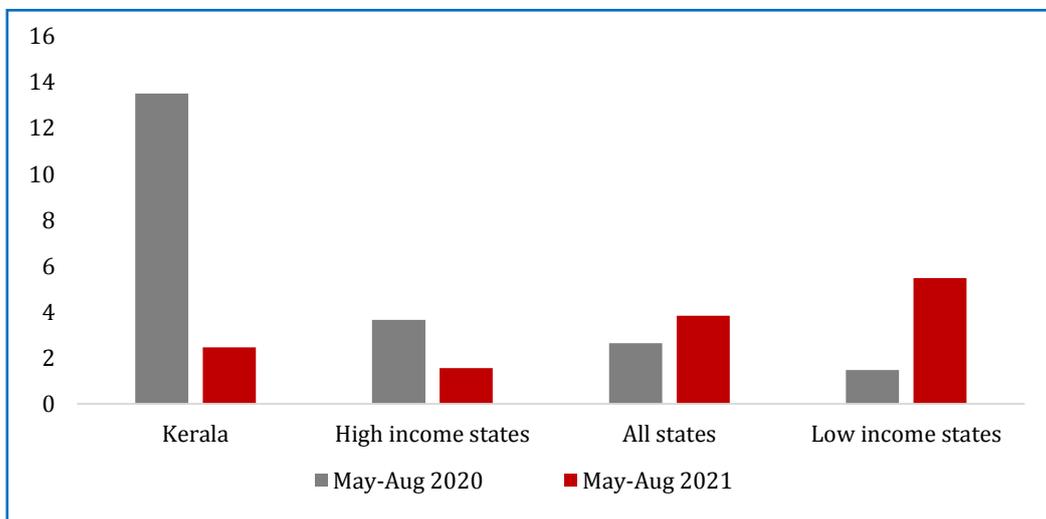
States	Emigrated	Immigrated
Kerala	-93.47	-81.58
Low ² income	-27.10	277.63
High income	-68.75	-57.06
All states	-44.49	47.17

Source: GIFT's calculation based on CPHS data.

² Low-income states are Bihar, Uttar Pradesh, Assam, Madhya Pradesh, West Bengal, Chhattisgarh, Rajasthan and Odisha and high-income states are Punjab, Kerala, Tamil Nadu, Karnataka, Telangana, Maharashtra, Gujarat and Haryana according to per capita GSDP during 2019-20

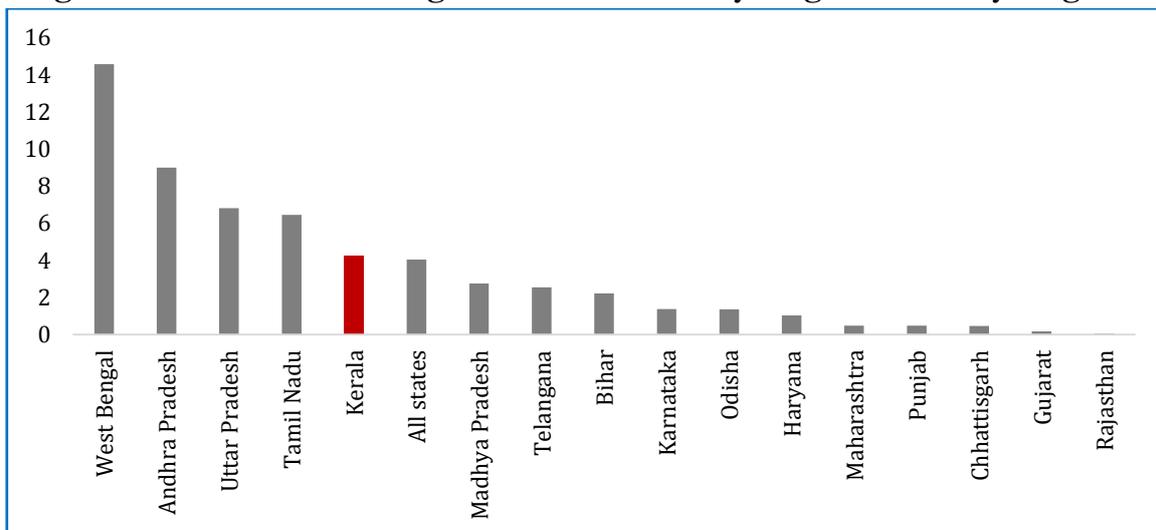
The in-migration rate, i.e., number of in-migrants per thousand persons was the highest in Kerala (14) during May-Aug 20 (Figure 7.1). However, the peak period for in-migrants varied from state to state. Southern states, Kerala, Telangana, Tamil Nadu, and Karnataka except Andhra Pradesh experienced its peak of in-migrants during May-Aug 21. West Bengal, Andhra Pradesh, Uttar Pradesh, Madhya Pradesh and Bihar experienced its peak during Sep-Dec 2020. Kerala is among the top five states having highest in-migration rate combining the period from May-Aug 2020 to May-Aug 2021 (Figure 7.2). Therefore, necessary policy is recommended to be implemented in Kerala to accommodate increased number of migrants (due to reduction in out-migrants and for having high in-migrants) in the state.

Figure 7.1: State-wise in-migration rate: Comparison between May-Aug 2020 and May-Aug 2021



Source: GIFT’s calculation based on CPHS data.

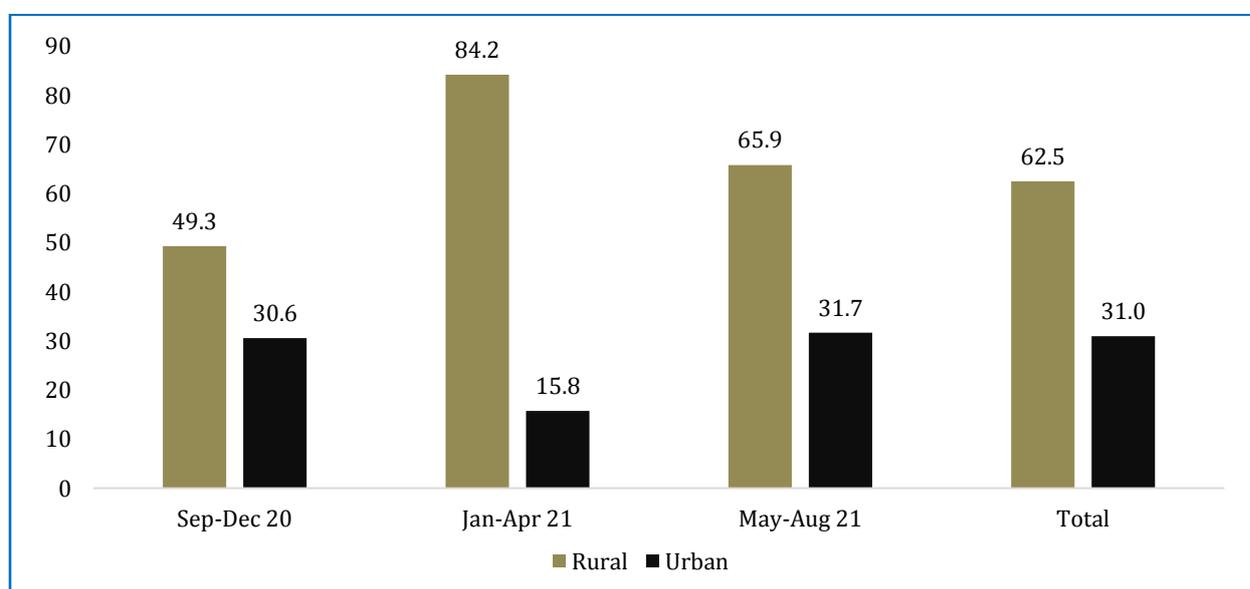
Figure 7.2: State-wise in-migration rate from May-Aug 2020 to May-Aug 2021



Source: GIFT’s calculation based on CPHS data.

As per CPHS, number of immigrants to Kerala is observed to be 10,60,302³ from May-Aug 2020 to May-Aug 2021 with 4,76,420 during May-Aug 2020 (1,37,546 during Sep-Dec 2020, 17,044 during Jan-Apr 2021 and 4,29,291 during May-Aug-2021). Considering the period from May-Aug 2020 to May-Aug 2021, total number of immigrants to Kerala is observed to be 5,83,882 with 62.5 per cent immigrants to rural sector (3,64,895) and 31 per cent to urban sector (1,80,777). The immigrants to rural sector are higher than in the urban sector for (Figure 7.3) all the quarters. These immigrants may even be termed as return migrants as it is traced from the data that the state of origin of these migrants is Kerala. So, it can be said that 6 lakhs of Keralites have returned back to Kerala during the pandemic referring to the data from May-Aug 2020 to May-Aug 2021.

Figure 7.3: Sector-wise percentage share of immigrants to Kerala

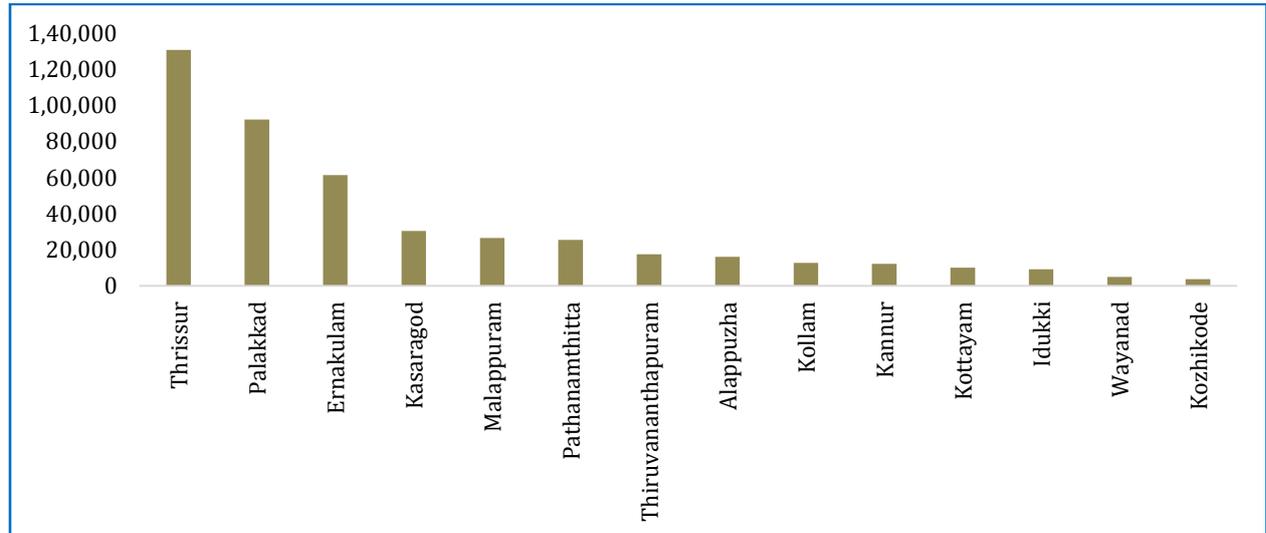


Source: GIFT's calculation based on CPHS data.

District-wise analysis based on CPHS data from Sep 2020 to Aug 2021 shows that top five districts having highest number of return migrants are Thrissur, Palakkad, Ernakulam, Kasaragod and Malappuram (7.4).

³ It may be noted that migrants in any area may be (i) from within the State, (ii) from other States, or (iii) from another country. Out of 10,60,302 immigrants to Kerala, 604,405 are the immigrants 'from other states' with state of origin having as Kerala. And rest of the immigrants are 'from within the state' category.

Figure 7.4: District-wise number of immigrants to Kerala (Sep-Dec 20 to May-Aug 21)



Source: GIFT's calculation based on CPHS data.

State-wise analysis shows highest number of immigrants to Kerala in the period from Sep-Dec 2020 to May-Aug 2021 are from Tamil Nadu (46,866), Karnataka (42,908) and Foreign (38,211) out of 583,882 immigrants.

7.2 Reason for in-migration in Kerala

With reference to data from May-Aug 2020 to May-Aug 2021 (Table 7.3 and Chart 7.1) 23 per cent of immigrants reported loss of job as a reason for in-migration⁴, 13.6 per cent reported in-migration for marriage, 10 per cent for shut down of educational institutes, 6.4 per cent for other reasons, 3.6 for employment, 0.7 per cent for seasonal unemployment and 0.1 per cent for work for home. 42.3 per cent reported in-migration for need. However, this indicator is not very transparent as need can be for employment, marriage, loss of job and other reasons as well.

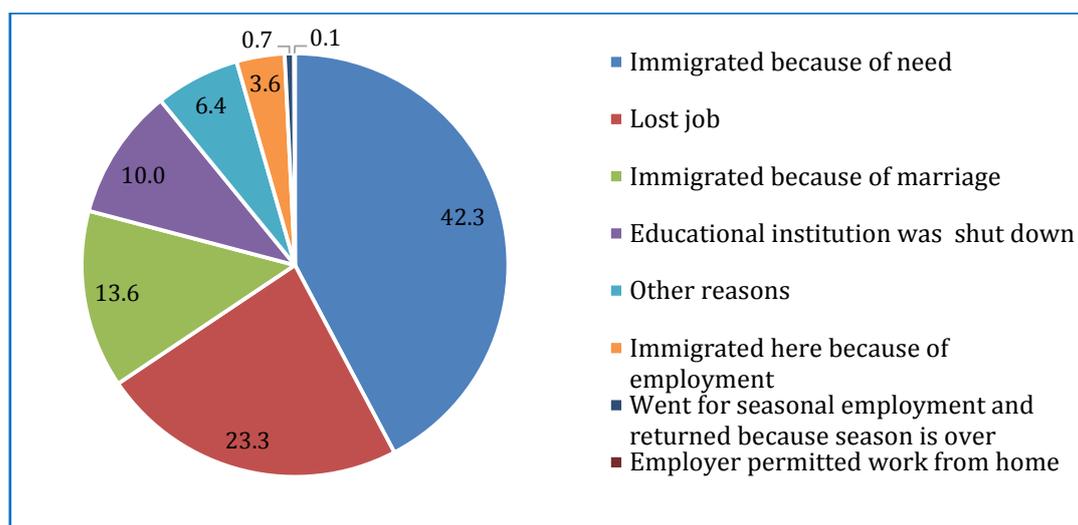
⁴ Reason given as job loss as an explanation for return migration during COVID wave is found to be 72 per cent of the total return migrants by Non Resident Keralite's Affairs (NORKA). It is reported as 29.4 per cent by Rajan and Zachariah (2020).

Table 7.3: Reason for return migration in different quarters in Kerala (May-Aug 2020 to May-Aug 2021)

Wave no	Item	Educational institution shut down	Employer permitted work from home	Immigrated here because of employment	Immigrated here because of marriage	Immigrated here because of need	Lost job	Other reasons	Seasonal employment and returned because season is over
(May-Aug 20) 20	Number	32559		948	40379	182327	170126	50082	
	Share	6.8	0.0	0.2	8.5	38.3	35.7	10.5	0.0
(Sep-Dec 20) 21	Number	11093	643	280	26737	44459	48529	5160	643
	Share	8.1	0.5	0.2	19.4	32.3	35.3	3.8	0.5
(Jan-Apr 21)22	Number				4622	12165	257		
	Share	0.0	0.0	0.0	27.1	71.4	1.5		
(May-Aug 21) 23	Number	62484		37309	71820	208103	27107	12673	6853
	Share	14.7	0.0	8.8	16.8	48.8	6.4	3.0	1.6
Total	Number	106151	644	38538	143612	447197	246091	67929	7497
	Share	10.0	0.1	3.6	13.6	42.3	23.3	6.4	0.7

Source: GIFT’s calculation based on CPHS data.

Chart 7.1: Reason for return migration in Kerala (May-Aug 2020 to May-Aug 2021)



Source: GIFT’s calculation based on CPHS data.

Henceforth, the study focuses on two classifications of immigrants, one on total immigrants to Kerala and second on immigrants to Kerala who lost their jobs and migrated to Kerala. This categorisation is done to critically analyse the characteristics of

overall migrants to Kerala and the migrants to Kerala who lost their jobs for better policy support.

7.3 Employment status of return migrants

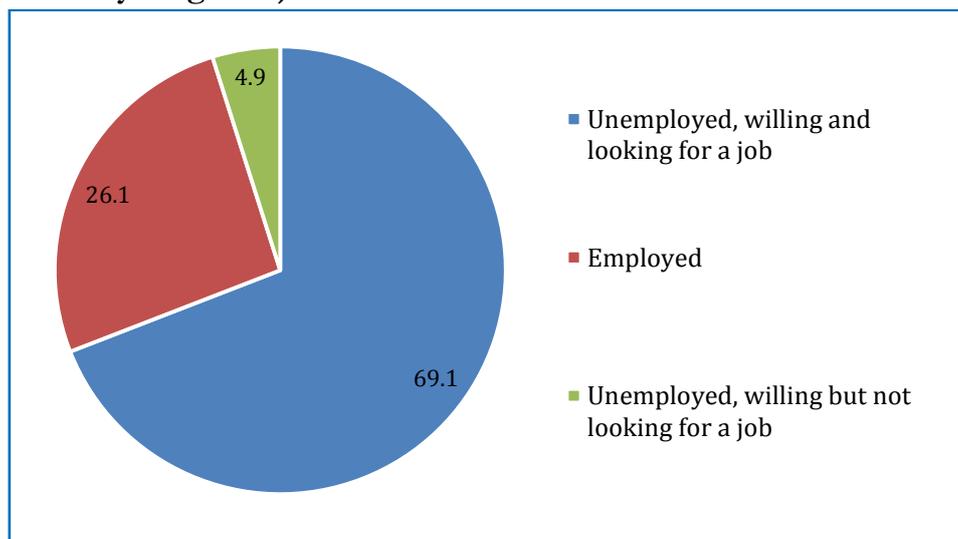
The employment status of the immigrants to Kerala shows that 37 per cent of immigrants are unemployed and not willing and looking for a job. 22 per cent are employed, 18 per cent are unemployed and looking for a job and 5.5 per cent are unemployed, willing but not looking for a job (Table 7.4).

Wave no	Month	Employed	Unemployed, not willing and not looking for a job	Unemployed, willing and looking for a job	Unemployed, willing but not looking for a job	Total
20	May 20 to Aug 20	136149	158168	114079	24963	476420
		28.6	33.2	23.9	5.2	100.0
21	Sept 20 to Dec 20	7791	65642	50242		137546
		5.7	47.7	36.5	0.0	100.0
22	Jan 21 to Apr 21	5302	5660		4622	17044
		31.1	33.2	0.0	27.1	100.0
23	May 21 to Aug 21	83942	161589	29673	28546	426349
		19.7	37.9	7.0	6.7	100.0
All waves	Total	233249	391174	194054	58163	1057659
		22.1	37.0	18.3	5.5	100.0

Source: GIFT's calculation based on CPHS data.

Out of the immigrants of 2,46,091 who reported the reason for in-migration for loss of jobs, 69 per cent are still unemployed and looking for a job, 26 per cent got employed and 5 per cent are unemployed but are not looking for a job though they are willing for a job (chart 7.2).

Chart 7.2: Employment status of immigrants to Kerala who lost their jobs (May-Aug 2020 to May-Aug 2021)



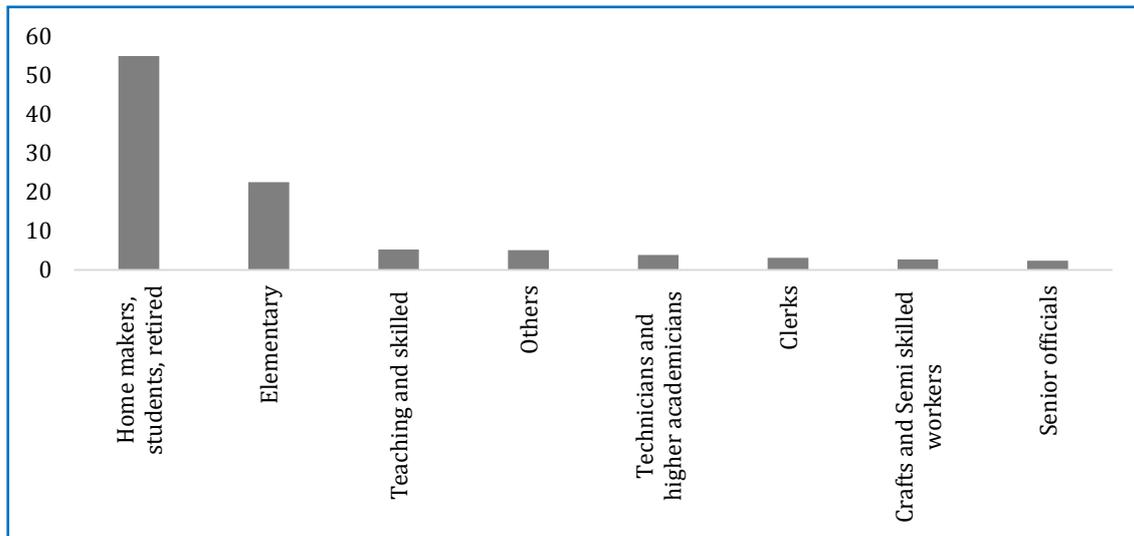
Source: GIFT's calculation based on CPHS data.

7.4 Nature of occupation of in-migrants in Kerala

Tracing the nature of occupation of the immigrants to Kerala from May-Aug 2020 to May-Aug 2021) show that 55 per cent of immigrants are home makers, students or retired. 23 per cent possessed elementary job (Agricultural Labourer, Small Trader/Hawker/ Businessman without Fixed Premises, Support Staff and Wage Labourer). 5.3% belonged to teaching and skilled job ((Legislator/Social Worker/ Activists, Non-Industrial Technical Employee, Qualified Self-employed Professionals). 5 per cent belonged to others occupation class (Businessman, Self Employed Entrepreneur, Unoccupied). 4 per cent are from technical and higher academics (White-Collar Professional Employees and Other Employees).3 per cent are clerks, 3 per cent are Crafts and Semi- skilled workers (Industrial Workers) and 2 per cent are senior official (managers) (Figure 7.5).

Maximum number of immigrants who reported loss of job as a reason for in-migration to Kerala possessed elementary job, like small trader, hawker, businessman without fixed premises, support staff and wage labourer (59.8 %). 12.4 per cent possessed teaching and skilled jobs. 10.8 per cent are crafts and semi-skilled workers (industrial workers), 10.8 per cent are businessmen and self-employed entrepreneur. 2.2 per cent are technical experts and higher academicians. 2 per cent are senior officials and 2 per cent are clerks (Table 7.5).

**Figure 7.5: Nature of occupation of the immigrants
(May-Aug 2020 to May-Aug 2021)**



Source: GIFT's calculation based on CPHS data.

Table 7.5: Nature of occupation of the immigrants who lost their jobs and migrated to Kerala (May-Aug 2020 to May-Aug 2021)

Wave no	Numbers				Percentage Share				Total
	20 (May-Aug 2020)	21 (Sep-Dec 2020)	22 (Jan-Apr 2021)	23 (May-Aug 2021)	20 (May-Aug 2020)	21 (Sep-Dec 2020)	22 (Jan-Apr 2021)	23 (May-Aug 2021)	
Elementary	128619	5174	257	13067	75.6	10.7	100.0	48.2	59.8
Teaching and skilled	23733	6883	0	0	14.0	14.2	0.0	0.0	12.4
Crafts and Semi-skilled workers	16403	10069	0	0	9.6	20.7	0.0	0.0	10.8
Others	0	12802	0	13645	0.0	26.4	0.0	50.3	10.8
Technicians and higher academicians	0	5034	0	394	0.0	10.4	0.0	1.5	2.2
Senior officials	0	5034	0	0	0.0	10.4	0.0	0.0	2.0
Clerks	1370	3533	0	0	0.8	7.3	0.0	0.0	2.0

Source: GIFT's calculation based on CPHS data.

7.5 Education level of in-migrants in Kerala

Based on the definition of educational classification of selected educational statistics, MHRD, an analysis is done to capture the education level of the in-migrants. Primary level includes classes I to V, upper primary or middle refers to classes VI to VIII,

Secondary is IX to X, higher secondary is from class XI to XII. The educational qualification of the in-migrants suggests that highest number of in-migrants have education level up to secondary level, next is primary level and then in-migrants with higher secondary and graduate degree (Table 7.6). The subject of discipline of the in-migrants are also given below (Table 7.7).

Education Level	In-Migrants	In-Migrants who lost their job
No education	9.47	0
Primary	14.96	24.01
Upper primary	12.79	0.05
Secondary	20.77	52.17
Higher Secondary	19.28	16.46
Graduate	18.84	5.88
Post Graduate & above	3.88	1.44

Source: GIFT's calculation based on CPHS data.

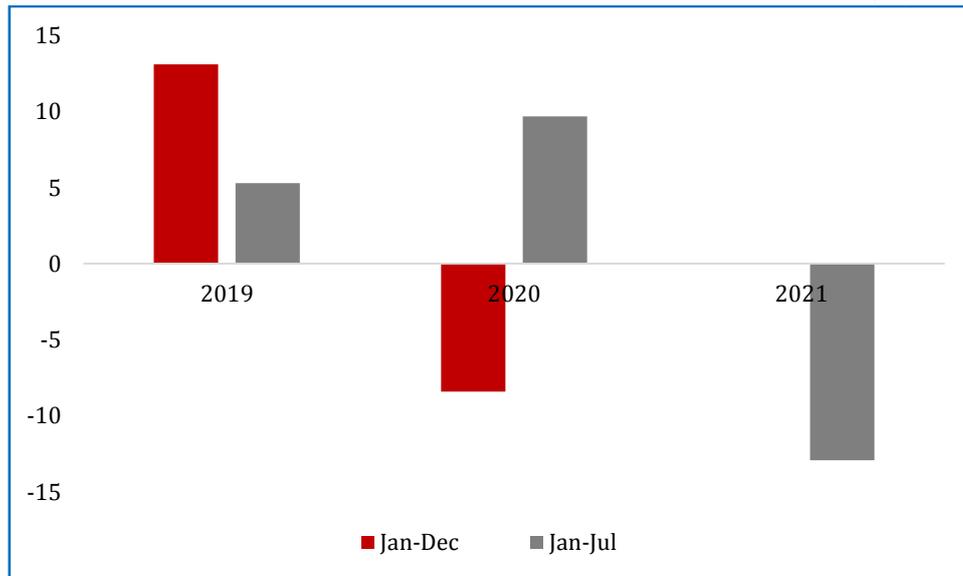
Discipline	In-Migrants	In-Migrants who lost their job
Arts	15.48	4.37
Commerce	14.70	12.97
Computer Application	1.51	0
Engineering	1.90	2.10
Management Studies in Human Resource	0.21	0
Management Studies in Operation	0.21	0
Not Available	57.99	76.23
Science	8.01	4.33

Source: GIFT's calculation based on CPHS data.

7.6 Impact of COVID on remittance income of households in Kerala

Out-migration of Kerala has been experiencing a negative growth rate as a result of COVID. The decline in the out-migration from Kerala is already mentioned above where it is observed that the state suffered huge negative growth of 93 per cent as per May-Aug 21 viz-a-viz May-Aug 2020. Since remittances are highly correlated to out-migration rate, the state economy is likely to be severely affected as the remittances are expected to decline.

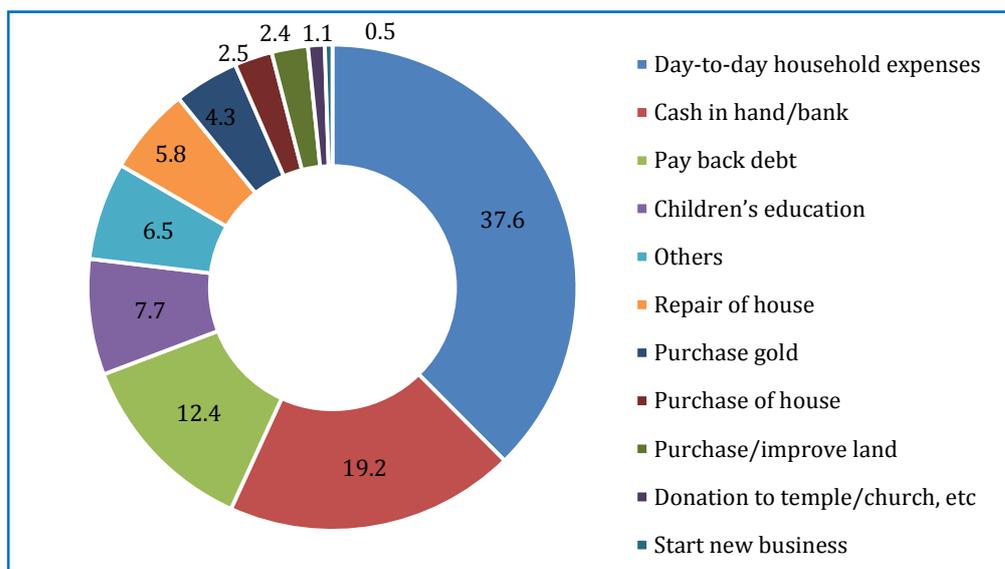
Figure 7.6: Growth rate of household remittance income in Kerala (%)



Source: GIFT’s calculation based on CPHS data.

From CPHS survey data, it is observed that remittance income of the household in Kerala have registered a negative growth rate of 13 per cent in Jan-Jul 2021 compared to Jan-Jul 2020. As per the annual data, remittance income shows a negative growth of 8 per cent in 2020 over 2019. A study by Rajan and Zachariah, 2020 shows that 38 per cent of remittance income is utilised by households for daily expenses, 19 per cent is hold as cash or transferred to bank, 12 per cent is used to pay back debt (chart 7.3). With a major share of day-to day-expenses in remittance income in Kerala, dependence of households on remittance income for household consumption expenditure is quite evident.

Chart 7.3: Percentage utilisation of remittance income by households in 2018 in Kerala



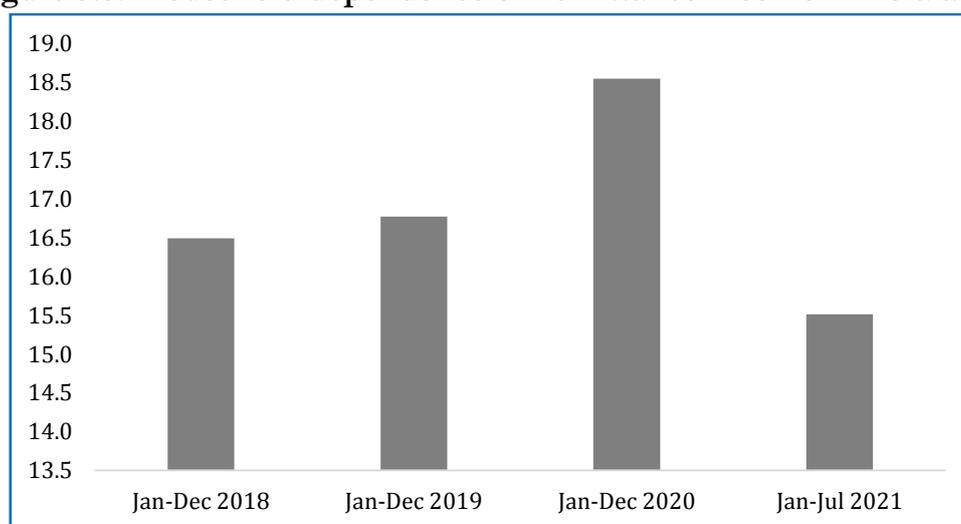
Source:

Estimates based on Rajan and Zachariah (2020)

Figure 7.7 presents household dependence on remittance income in Kerala which is defined in this analysis as percentage of households in total household who are only dependent on remittance income and having zero income from other sources. The figure shows that 16.5 per cent of households of the total household in Kerala, were solely dependent on foreign remittance income during 2018 which rose to 16.8 per cent in 2019. A higher dependence on remittance income of households is observed during 2020 of 18 per cent. The data from Jan to July 2021 shows percentage of household depending on remittance income is 16 per cent.

Given a substantial share of households surviving on remittance income and a higher share of remittance income spent on daily expenses, the household consumption expenditure suggests a fall during COVID wave with one of the reasons being a decline in remittance income in Kerala. A drop in consumption expenditure in Kerala was 50% compared to the national average of 37% during the lockdown of COVID-19 first wave which is one of the key findings of the chapter on consumption expenditure.

Figure 7.7: Household dependence on remittance income in Kerala (%)



Source: GIFT's calculation based on CPHS data.

The next section 7.7 focuses at the ground level survey by GIFT on non-resident Keralites which provides additional information on return migrants like, various sources adopted by return migrants to incur daily expenses during COVID period, how far the government interventions and welfare schemes were effective for return migrants and government's support the return migrants are looking forward to. The GIFT survey also provides specific impact of COVID on return migrants with respect to economic loss or burden, health and educational issues, social loss and other problems.

7.7 GIFT-NRK primary survey: Major findings

As per the State Level Bankers' Committee (SLBC) estimate, among the states, Kerala has the highest NRI deposits over Rs.2.27 lakh crore as of December 2020 which is 14 per cent higher than 2019. During the COVID 19 pandemic around 17.56 lakhs expatriates arrived Kerala (from May 2020 to November 2021) (NORKA data). The COVID 19 pandemic and subsequent lockdowns have led to mass reverse migration of Keralites which was reported in all the districts during the COVID 19 period. The return migration and the consequent decline in remittances is bound to have its adverse impact on a large number of families depending on remittance income. The plausible adverse effect on the economy due to the spending effect resulting from reduced remittance needs no elaboration.

In the event of COVID 19 NORKA has introduced a number of schemes to mitigate the adverse impact on the return migrants (see Box 7.1). To study the socio-economic impact of COVID-19 on NRKs a specially designed primary survey was conducted by GIFT. The survey aimed at to find out the impact of COVID-19 on their income loss, job loss, indebtedness and other social difficulties. 1151 NRKs participated in the survey which covered all the districts of Kerala. Appendix 7A presents the questionnaire used for the survey. Number of district-wise respondents is also presented in Appendix Table 7B. Out of 1151 expatriates, 1089 (94.6 per cent) are men and 62 (5.4 per cent) are women.

Box 7.1: The pandemic, the migrants and the NORKA

The NORKA Roots, the nodal agency of the Non-Resident Keralites Affairs (NORKA), a department of the Government of Kerala, formed in 1996, has already had a number of schemes to redress the grievances of the Non-Resident Keralites (NRKs). These included but not limited to; the scheme of the NORKA Department Project for Returned Emigrants (NDPREM) that provides benefits to those who had worked at least two years abroad and returned home; *Santhwana*, a distress relief scheme intended to provide time bound financial support to the returnees in terms of medical treatments, death assistance, marriage assistance, purchase of physical aids (such as wheel chair, crutches and artificial limbs) to combat disability etc.

Apart from the routine schemes, the NORKA Roots has also come forward in the context of the pandemic with various schemes towards addressing COVID-induced problems confronted by the NRKs and the returnees. Thus, the NORKA Department, in a bid to extend a sustainable livelihood for the return emigrants in the face of the prevailing global pandemic uncertainty, has formulated a rehabilitation package called *Co-ordinated Re-integration Programme for NRKs* to provide the returnees with financial support for developing income generation opportunities.

This rehabilitation package includes two major schemes and a micro one: *Pravasi Bhadratha – Pearl*, *Pravasi Bhadratha – Mega* and *Pravasi Bharatha – Micro*.

The first scheme seeks to address the weaker/low profile (i.e., without any savings or income) category of NRK returnees with a sustainable livelihood, proposed to be implemented through

the *Kudumbashree* Mission, the poverty eradication and women empowerment programme implemented by the State Poverty Eradication Mission (SPEM) of the Government of Kerala. The benefits of the scheme include (i) revolving fund for individual/ group livelihood activities, (ii) assistance to micro enterprises/livelihood activity groups, (iii) interest free loans up to Rs 2 lakh and (iv) repayment with equal instalments within two years.

Pravasi Bhadratha – Mega, being implemented through the Kerala State Industrial Development Corporation (KSIDC), the industrial and investment promotion agency of the Government of Kerala for the promotion and development of medium and large-scale units in the State, is envisaged to provide loans in the range of Rs. 25 lakhs to Rs. 2 crore per enterprise. The KSIDC provides loans at an interest rate of 8.25% to 8.75% and the NORKA-Roots meets the interest subsidy with incentives up to 3.25% to 3.75% for the first 4 years. The benefit is extended to the NRK returnees/NRK investors from other States in India also.

Pravasi Bharatha – Micro, being implemented through the branches of the Kerala State Financial Enterprises (KSFE), a Miscellaneous Non-Banking Financial Company (MNBFC) fully owned by the Government of Kerala, is envisaged to assist the return migrants in setting up micro and small-scale industries by providing (i) loan up to Rs 5 lakh (ii) capital subsidy of 25 per cent of the loan up to a maximum of Rs one lakh and (iii) interest subvention for initial 4 years at 3%.

NORKA Roots also has a support system to provide necessary training and orientation to the prospective emigrants, such as the Skill Upgradation Programme that focuses on upgrading the skills of the Keralites to meet the challenges in the employment market. The programme, being implemented through Industrial Training Institutes (ITIs), aims to bring knowledge, deep functional expertise, and a practical approach to building capabilities and delivering real impact.

Table 7.8 presents an analysis on the various impact of COVID on NRKs during first wave and during the period taken together from first to second wave. The impact can be evaluated with respect to economic loss or burden, health and educational issues, social loss and other problems. During the first wave, 58 per cent respondents reported loss of income, while employment loss was reported 38 per cent. Additional health expenditure was incurred by 14 per cent, and 30 per cent of respondents are reported to have fallen into heavy debt burden. The loss of job was more widespread (68.1 per cent) during the first wave as compared to second wave (31.9 per cent). The impact on health and education shows that 55 per cent of respondents are suffering from severe depression, 22 per cent have other health problems and 19 per cent faced education related issues (shut down of schools and colleges). The survey further revealed that 25 per cent lost their relatives and dear ones. Other problems include travel related issues which accounts for 52 percent of total. 4.6 per cent of respondents reported no crisis faced by during the pandemic.

Table 7.8: Impact of COVID 19 on NRKs during first wave and after both first and second wave (%)

Impact of COVID 19 to the survey respondents	Total No.	First Wave	After First and Second Wave
Economic Loss/Burden			
Job loss	432	37.5	47.2
Income loss	669	58.2	71.7
Additional health expenditure	159	13.8	18.9
Increase in indebtedness	347	30.1	52.8
Health and Education Related Problems			
Health related problems	255	22.2	22.6
Mental agony	636	55.2	37.7
Education related issues	217	18.8	9.4
Social Loss			
Loss of relatives and dear ones	289	25.1	18.9
Other Problems			
Others specify	5	0.4	
Travel related issues	602	52.3	22.6
No crisis	53	4.6	3.8

Source: GIFT Primary survey of NRKs 2021

Third column in table 7.8 presents the impact after both the first and second waves which shows that the major effect on NRKs has been the income loss which accounts for 71 per cent and a job loss accounting for 47 per cent. It is seen that income loss is more than job loss. It implies that even though there is high percentage of income loss, job loss is comparatively low. However, there is possibility of wage cut of those who were employed during COVID-19. Many of the respondents who lost job during the first wave is continuing as unemployed and the number of unemployed also increased after the second wave. 52.8 per cent of respondents show an increase in indebtedness burden. The impact after both the waves on health shows 22.6 per cent is suffering from health-related problems, 37.7 per cent is suffering from depression. 18.9 per cent have faced social loss by losing their relatives and dear ones.

The next table 7.9 evaluates various ways adopted by the return migrants for daily expenses. The table shows that most of the participants (41.5 %) resorted to gold loan to meet the expenses. Only 17 per cent resorted to banking facility. 30 per cent took loan from intermediaries. Support from friends and relatives is significant during the Pandemic crisis. Around 25 per cent found own temporary work like selling vegetables and provisions to meet their expenses. A few sold out property, vehicles for overcoming the crisis.

Table 7.9: Means of daily expenses adopted by return migrants during COVID

The ways in which families face the crisis after coming back to home	Per cent
Temporary work/ selling	24.5
Loan from Financial institutions	17.0
Loan other than financial institutions	30.2
Met from own savings	24.5
Support from relatives	37.7
Support from friends	35.8
Gold Loan	41.5
Sale of property	7.5
Sale of vehicles	7.5
Sale of domestic animals	0.0
House sold out	0.0
Pledge of property	5.7
Income from rent	0.0
Pension	7.5
No crisis	1.9

Source: GIFT Primary Survey of NRKs 2021

Majority of the respondents stated that the welfare schemes of Government during the time of pandemic was beneficial. Food Kit provision and free vaccination are the two important benefits received by most of the respondents (Table 7.10). Only 7.5 per cent received direct cash benefit from Government.

Government Interventions at the time of crisis	Per cent
Direct Cash Benefit	7.5
Medical assistance	3.8
Community Kitchen	5.7
Quarantine facility	7.5
Food provision	7.5
Ambulance assistance	1.9
Food Kit provision	43.4
Free vaccination	43.4
Loan Moratorium	7.5
No Benefit received	32.1
Not needed benefits	9.4

Source: GIFT Primary survey of NRKs 2021

18.9 per cent of the respondents stated that the welfare schemes of Government are highly beneficial during the pandemic. 15 per cent opined that the welfare schemes are beneficial and 32 per cent indicated that the schemes of Government are only partially beneficial (Table 7.11).

Welfare schemes of Government during COVID 19	Per cent
Highly Beneficial	18.9
Beneficial	15.1
Partially Beneficial	32.1
Not Beneficial	17.0
Not applicable	17.0

Source: GIFT Primary survey of NRKs 2021

Majority of the participants (75.5 per cent) opined that Direct cash transfer should be given for meeting the present crisis. Most people are of the opinion that the improvement of quality of government intervention should be ensured in times of crisis. 47.2 per cent stated to continue food kits distribution, while 39.6 per cent wants to provide COVID booster dose. 39.6 per cent wants the moratorium on bank loans to be extended, while 39.6 per cent stated that urgent steps to be taken to fully vaccinate the people on war footing (Table 7.12).

Table 7.12: Expectations of return migrations from government to overcome the crisis

Expectations from Government to overcome the present crisis	Per cent
Continue the present Government interventions/help as such	18.9
Improve Quality of Govt intervention/help	52.8
Fully vaccinate the people on war footing	39.6
Provide COVID booster if needed	39.6
Extent bank Loan moratorium	39.6
Direct cash transfer	75.5
Continue food Kit provision	47.2
Others specify (reduce bank interest)	1.9

Source: GIFT Primary survey of NRKs 2021

7.8 Conclusions and policy recommendations

An increase in the number of return migrants along with reduction in out-migration rate found from CPHS analysis suggests that the mobility of the migrant workers is adversely affected in Kerala. This might be characterised as one of the leading reasons behind a decline in remittance income of the household in Kerala by 13 per cent in Jan- Jul 2021 compared to Jan-Jul 2020. For a state like Kerala, which is highly dependent on remittance income is likely to face economic distress unless proper policy measures are implemented, like, developing skills and generating employment matching their skills and subject of discipline. Further research on the relation between remittance income and utilization of remittance income by households across different income classes would prove to be beneficial to divert and adjust the government expenditure accordingly to overcome the loss that occurred due to loss in remittance income.

GIFT survey on NRKs also suggests an increase in the number of return migrants. The economic and social condition of the return migrants reveals that a major share of return migrants are suffering from economic problems like income and job loss, facing burden of household debt, have various health related problems and going through severe depression. The welfare schemes and various government interventions were found to be beneficial by the return migrants.

The loans that are available to the migrants through NORKA are provided by mortgaging for same amount. The migrants are looking forward for a relaxation in this regard. The other demands by the return migrants during the crisis period are to speed up the distribution of aid to the families for the death of its family members for COVID, provide financial assistance for returning to the Gulf countries, provision of loans to the return migrants who have lost jobs at a lower interest rate, direct cash transfers from Government to meet the COVID crisis.

Rehabilitating the return migrants is a very serious issue to be addressed by Government of Kerala. A special rehabilitation package for the return migrants is highly recommended at present. Return migrants have different skill sets. Lack of data on the various skill sets of these returnees creates serious difficulty in framing policies for their rehabilitation. Hence it is suggested to conduct a skill set survey with the help of Pravasis cooperatives and Local Governments.

An immediate policy response shall be to provide short term income support to the members who lost their jobs till they are reabsorbed in the work force. This support shall also be extended to the families who were exclusively dependent on remittance income and are currently receiving no transfers from their relatives.

Appendix 7

Table 7A

NRK Survey Questionnaire of Gulati Institute of Finance and Taxation

For the study of the socio-economic impact of COVID 19, Government of Kerala entrusted Gulati Institute of Finance and Taxation to study the socio-economic implications of COVID 19 in Kerala. In order to gather information from the public for the study, you are requested to enter your response in the following questionnaire.

Director, GIFT

General Information

1.1 Name

1.2 Phone No.

1.3. Male/Female

1.4. Age

1.5 The district you represent

1.6. The country you are now working for / doing

The country you are now working for / doing

Gulf Countries

African countries

European countries

USA

Australia

Canada

other Countries specify

1.7. How many years have you been working abroad?

Less than one year

1 - 5 years

6-10 years

11-15 years

16-20 years

Above 20 years

1.8. Areas where you work / worked

1.9. Others please explain

1.10 Impact of the COVID 19 in the area you worked /
How did it get affected?

Severely affected

Highly Affected

Partially affected

Not Affected

1.11 Did you contract COVID 19 when you were abroad?

1.12 If COVID 19d was infected, how did you overcome the disease?

Not applicable
Medical Expenses met by company
Medical help from Government of the place of work
Treatment from own expenses
At home without treatment
Others specify

1.13 What impact did COVID 19 had on you and your family (Multiple issues may be reported)

Job loss
Income loss
Additional health exp
Health problems
Mental agony
Travelling difficulty
Education related issues
Increase in indebtedness
Loss of relatives and dear ones
No crisis
Others specify

1.14 Did you come home after losing your job during the COVID crisis?

2. Questions for returnees who lost Job due to COVID

2.1 In which COVID wave did you lose your job

2.2. Did you contract COVID when you came home?

2.3 If infected, how did you survive the disease?

Not applicable
Own expenses at Private Hospitals
At home without treatment
Treatment at Govt Hospital
Others specify

2.4 What were the ways did you and your family face with this crisis after coming home? How did you overcome these crisis (Multiple ways can be recorded) *?

Temporary work/ selling
Loan from Financial institutions
Loan other than Financial institutions
Met from own savings
Support from relatives
Support from friends
Gold Loan
Sale of property
Sale of vehicles
Sale of domestic animals

2.5 What were the Government interventions / assistance in times of crisis
What was it? (Multiple aids / interventions Can be recorded) *

Direct Cash Benefit
Medical assistance
Community Kitchen
Quarantine facility
Food provision
Ambulance assistance
Food Kit
Free vaccination
Loan Moratorium
No Benefit received
Not needed benefits
Other specify

2.6 How were the Government Actions / Interventions helpful for you and people associated with you? *

Highly Beneficial
Beneficial
Partially Beneficial
Not Beneficial
Not applicable

2.7 What problems are you currently facing? *

Job loss
Income loss
Additional health exp
Health related issues
Mental agony
Travelling difficulty
Education related issues
Increase in indebtedness
Loss of relatives and dear ones
No crisis
Other specify

2.8. At the government level, what can be done to overcome the current crisis? Can you elaborate on your suggestions? *

Continue the present Government interventions/help as such
Improve Quality of Govt intervention/help
Fully vaccinate the people on warfooting
Provide COVID booster if needed
Extent bank Loan moratorium
Continue Direct cash transfer
Direct cash transfer
Continue food Kit provision
Others specify and explain

2.9 Can you explain COVID 19 period crisis / experiences which are not included in this questionnaire

Table 7B: District wise respondents of NRK Survey

District wise respondents	No.	Per cent
Thiruvananthapuram	82	7.1
Kollam	56	4.9
Pathanamthitta	26	2.3
Alappuzha	43	3.7
Kottayam	40	3.5
Idukki	37	3.2
Ernakulam	81	7
Trissur	119	10.3
Palakkad	69	6
Malappuram	138	12
Kozhikode	282	24.5
Wayanad	48	4.2
Kannur	83	7.2
Kasaragod	47	4.1
Total	1151	100

This chapter is being reworked

Chapter 8

Evidence from GIFT- COVID Primary Survey

Abstract

The GIFT COVID Primary Survey (on 4200 respondents in the case of the general survey and 1151 in the case of the NRI survey) results show that the impact of the pandemic was more severe during the second wave than the first. The severely affected were mostly in the age-group of 41-50 years and age-group. 51-60. Among the social groups, the ST and SC were the most affected. In the case of economic groups, BPL and AAY families suffered compared with the APL ones. Private sector appears to have borne the brunt of the crisis more than the government and the cooperative sectors. Among the economic sectors, the construction, services and industry sectors, were among the worst affected categories.

Among the major problems faced by the respondents during the crisis were loss of job and income; 'mental struggle'; travel restrictions, additional indebtedness, additional health expenditure and loss of education. Death of relatives and dear ones were other hazards. A number of measures were taken to tide the problems over, such as incurring debt from banking institutions or money lenders, expenditure cut, and taking up of the available temporary works; some of them also had to fall back on savings as well as support of friends and relatives, and mortgage/sale of property/house/vehicles.

The survey collected information from the respondents on rating the interventions by the state government, local bodies and NGOs in providing benefits/reliefs/support services to the public during the pandemic period. Most of the respondents rated highly the institutional interventions highly during both the first and the second wave, especially the 'Food Kit' provision and free vaccination. Also appreciated by the respondents were the provisions (by the government, local bodies and NGOs) of ambulance facility, community kitchen, direct financial help, food provision, loan moratorium, medical help and quarantine facility. Among the respondents, 700 have been found to be members of various welfare fund boards; most of these respondents have reported the activities of the Boards during the pandemic period as beneficial in one way or another.

8.1 Introduction

The analysis of the impact of COVID 19 on employment, income, consumption, borrowing and to some extent migration and remittance has been almost entirely based on the CPHS data from the Centre for Monitoring Indian Economy. While this data is eminently suited to analyse the behaviour of the above-mentioned indicators during the pandemic, there are certain limitations to the nationally designed survey in capturing all the manifestations of the pandemic in a sub-national economy. This is because CPHS data is not primarily designed to capture the socio-economic impact of COVID 19. Considering this limitation of the CPHS data, we have undertaken a primary survey (GIFT COVID Primary Survey), with a view to capture the various dimensions of the socio-economic impact, which are not dealt with the previous chapters. The survey had the following specific objectives

- To assess the impact of COVID 19 across different sectors during last two wave periods in terms of employment loss and income loss.
- To understand the extent of COVID 19 disease among different sections of the society during last two wave period and the mode of treatment undertaken.
- To examine the various problems faced by the respondents and understand the interventions made by Government, Local Bodies, NGSs and Welfare Boards during COVID pandemic period.
- To understand the measures taken by the respondents to overcome the COVID 19 pandemic situations.

8.2 On the primary survey

For conducting the primary survey, GIFT developed detailed questionnaire in Google sheet to gather COVID related information from various segments of the Society under online mode. The Survey was entrusted to the stakeholders of GIFT, namely MLM trainees, Tax Consultants, building & contractors associations and the PGD-GST Students of GIFT under the guidance and support of the GIFT study team constituted by the Director. The assistance of Welfare Boards such as Shops & Establishment and Traders Welfare Boards were also sought for the collection of data from their respective Welfare Boards. In addition to this, the impact of COVID among the Pravasees/NRIs were also collected through a separate survey questionnaire among them through the assistance of NORKA and their Welfare Associations, (See Annexure 8.1 for the questionnaire for the study).

The Survey was commenced during the beginning of November 2021 and completed at the end of December, 2021. The devoted and voluntary services offered by the stakeholders of GIFT in collecting the data and the successful completion of the survey during short span of time are really commendable. The cooperation of the respondents in

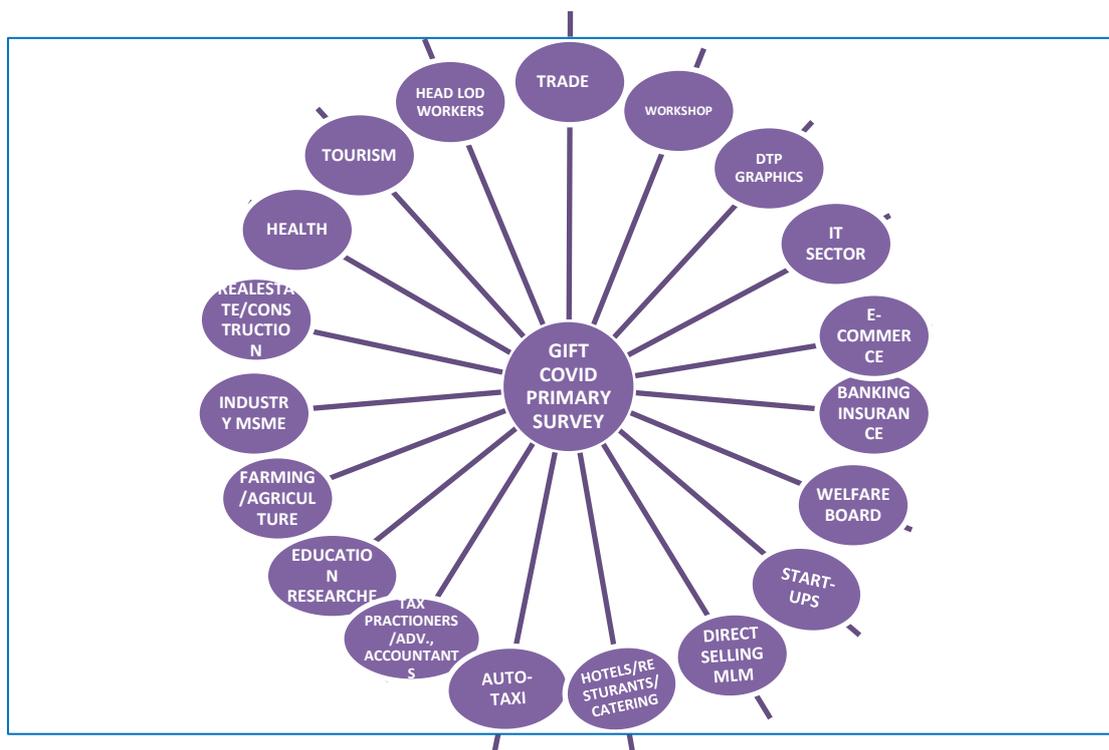
providing the information for all the questions also deserves a special mention here. Altogether, 4200 persons responded in the general survey and almost 1151 persons responded in the NRI survey.

The Primary Survey covers the impact of COVID during first wave (2020) as well as the second wave (2021). The survey collects the information pertaining to employment loss, income loss, problems faced during COVID waves, role/interventions of Government, local authorities, NGOs /Voluntary organisations, welfare boards in circumventing /addressing the pandemic situations and the measures/precautions taken by the respondents to overcome the various challenges faced by them etc.

8.2.1 Survey coverage

The mandate of the study is to report the socio-economic implications of COVID 19 pandemic on various sectors of the State's economy and keeping this in consideration, the Survey covers a wide spectrum of the Society consisting of : hotel / restaurants, tourism, IT sector, farmers, fishermen, welfare boards, auto/taxi/bus service operators, head-load worker, beauty parlours, anganwadis, media, direct selling / e-commerce, building/construction, carpenters, start-ups, education, tax practitioners/consultants, accountants, engineer, advocate/legal practitioners/health workers, tailors, farmers, printing /DTP workers, banking/ insurance, security guard, lottery agents, beedi workers, graphic designers/photographers, pensioners, job seekers, students etc. Altogether, 4200 persons responded in the survey. The following chart discloses the coverage of survey among the various segments of the society.

Chart 1. Survey coverage of respondents

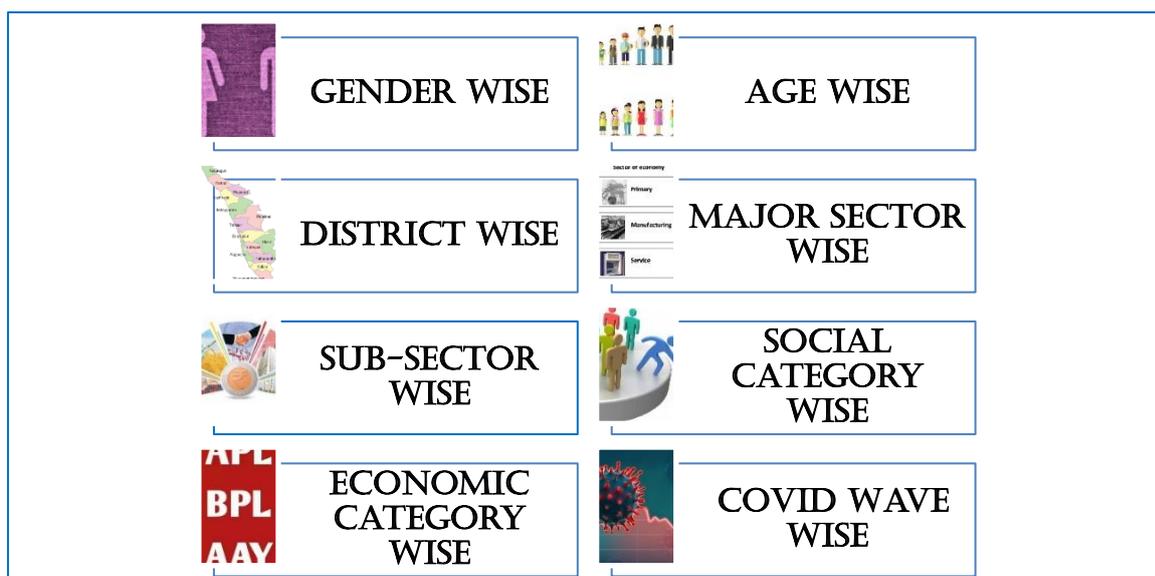


8.3 Analysis of data

8.3.1 Dimensions of data analysis

The collected data/ information is analysed in various dimensions as follows:

Chart 2. Dimensions of data analysis



8.3.2 Age & gender –wise analysis

Out of the 4200 respondents, 2434 (57.95%) were males and 1766 (42.05%) were females (See Table 8.1). Table 8.1 further reveals that the survey covered all the age group and more importantly the youth represents 34.3 percent out of the total respondents. Further 94 percent of the males and 98 percent of the females were within 60 years.

Age Group	Male		Female		Total	
	Male (in Nos.)	Per Cent of Male Respondents	Female (in Nos.)	Per Cent of Female Respondents	Total Respondents (in Nos.)	Total Respondents (in Per Cent)
Below 30 years	757	31.11	687	38.90	1444	34.38
31 to 40	657	26.99	601	34.03	1258	29.95
41 to 50	551	22.64	333	18.86	884	21.05
51 to 60	327	13.43	119	6.74	446	10.62
61 to 70	128	5.26	24	1.36	152	3.62
Above 70 yeas	14	0.57	2	0.12	16	0.38
Total	2434	100.00	1766	100.00	4200	100.00

8.3.3 District-wise distribution of the respondents

The district–wise distribution of the respondents are given in Table 8.2. The survey covers all the districts. The peak representation has been from Kozhikode district (25.4 percent). The Table shows that the survey has a fairly good representation from all the districts. The male and female representation is also almost similar in all the districts.

Table 8. 2: District-wise distribution of the respondents

Districts	Male		Female		Total	
	Number	Per Cent in Total Male Respondents	Number	Per Cent in Total Female Respondents	Number	Per Cent in Total Respondents
Thiruvananthapuram	174	7.15	122	6.91	296	7.05
Kollam	117	4.81	88	4.98	205	4.88
Pathanamthitta	56	2.30	41	2.32	97	2.31
Alappuzha	109	4.48	45	2.55	154	3.67
Kottayam	95	3.90	54	3.06	149	3.55
Idukki	66	2.71	67	3.79	133	3.17
Ernakulam	166	6.82	129	7.30	295	7.02
Thrissur	231	9.49	202	11.44	433	10.31
Palakkad	138	5.67	114	6.46	252	6.00
Kozhikode	584	23.99	445	25.20	1029	24.50
Malappuram	331	13.60	172	9.74	503	11.98
Wayanadu	104	4.27	74	4.19	178	4.24
Kannur	182	7.48	119	6.74	301	7.17
Kasargod	81	3.33	94	5.32	175	4.17
Total	2434	100.00	1766	100.00	4200	100.00

8.3.4. Sector-wise distribution of the respondents

In order to gauge the impact of the pandemic of various sectors, the survey covered almost all the important sectors as envisaged in the Government order. Out of the total of 4200 respondents individuals took part in the survey of GIFT, 1287 respondents were representing the business community (30.6%) , 219 respondents were representing the construction sector (5.2%), 1294 respondents (30.8%) were representing the various Service sectors such as tax consultants, farmers, hotels/restaurants, start-ups, auto/taxi operators, tourism, IT sector etc. and the remaining respondents 28.8 percent were representing the government servants, job seekers, pensioners, students etc. Table 8.3 shows the distribution of respondents among the major sectors along with male and female break up within each sector.

Table 8.3: Sector –wise distribution of the respondents

Sectors	Male		Female		Total Respondents	
	In Nos.	In %	In Nos.	In %	In Nos.	In %
Agri-Animal Husbandry	84	3.45	21	1.19	105	2.50
Industry (includes MSME)	72	2.96	10	0.57	82	1.95
Business (includes Ecommerce/ Direct Selling/Trade)	814	33.44	473	26.78	1287	30.64
Construction	204	8.38	15	0.85	219	5.21
Service Sectors	799	32.83	495	28.03	1294	30.81
Others Sectors	461	18.94	752	42.58	1213	28.88
Total	2434	100.00	1766	100.00	4200	100.00

Source: GIFT Survey

8.3.5 Social category-wise distribution

When the caste structure of the survey participants is examined, it is seen that 35.42% of the total respondents are in the general category, 54.93% are in Other Backward Community (OBC) category, 7.47% are in Scheduled Castes (SC) category and only 0.4% represents Scheduled Tribes (ST) category (Table 8.4).

Table 8.4: Social category –wise distribution of the respondents

Category	Male		Female		Total Respondents	
	Number	% (in total male)	Number	% (in total female)	Number	% in Total
SC	169	6.93	145	8.21	314	7.47
ST	9	0.39	7	0.41	17	0.40
OBC	1306	53.66	1001	56.67	2307	54.93
General	893	36.68	595	33.68	1488	35.42
Other	57	2.34	18	1.03	75	1.79
Total	2434	100.00	1766	100.00	4200	100.00

Source: GIFT Survey

8.3.6 Economic categories

Table 8.5 shows the distribution of respondents among the Economic category. In terms of economic status, 61.52% of the respondents are from Above Poverty Line (APL) and 32.68% of the respondents are from Below Poverty Line (BPL). The representation of AAY and other category among the total respondents are below 5%.

Table 8.5: Economic category-wise distribution of the respondents

Category	Male		Female		Total Respondents	
	Number	% (in total male)	Number	% (in total female)	Number	% in Total
AAY	45	1.85	7	0.41	52	1.25
APL	1489	61.17	1095	62.01	2584	61.52
BPL	760	31.22	613	34.70	1373	32.68
Other	140	5.76	51	2.87	191	4.54
Total	2434	100	1766	100	4200	100

Source: GIFT Survey

8.4 Impact of COVID effect among different age group

The survey reveals that the COVID has severely affected among 41-50 age group (44.91%) followed by 51-60 age group to the extent of 41.70%, 31-40 age group by 38.31%, 61-70 age group by 39.47%, 71-80 age group by 35.71% and 21-30 age group by 30.60%. In all the age group, COVID 19 is affected, i.e. either partially affected or highly affected or most seriously/severely affected as revealed by Table 8.6.

Table 8.6: General impact of COVID among different age group (%)

Age Group	Gender	Not affected	Partially affected	Highly affected	Severely affected	Total
11 to 20	Female	13.64	33.33	21.21	31.82	100.00
	Male	10.34	35.63	20.69	33.33	100.00
	Total	11.76	34.64	20.92	32.68	100.00
21 to 30	Female	18.04	31.24	23.51	27.21	100.00
	Male	20.45	28.21	17.61	33.73	100.00
	Total	19.29	29.67	20.45	30.60	100.00
31 to 40	Female	16.81	26.96	17.97	38.27	100.00
	Male	9.74	32.12	19.79	38.36	100.00
	Total	13.12	29.65	18.92	38.31	100.00
41 to 50	Female	13.51	30.03	19.22	37.24	100.00
	Male	11.25	24.14	15.06	49.55	100.00
	Total	12.10	26.36	16.63	44.91	100.00
51 to 60	Female	17.65	26.89	19.33	36.13	100.00
	Male	12.54	25.99	17.74	43.73	100.00
	Total	13.90	26.23	18.16	41.70	100.00
61 to 70	Female	20.83	29.17	16.67	33.33	100.00
	Male	11.72	28.91	18.75	40.63	100.00
	Total	13.16	28.95	18.42	39.47	100.00
71 to 80	Female	100.00	0.00	0.00	0.00	100.00

	Male	23.08	23.08	15.38	38.46	100.00
	Total	28.57	21.43	14.29	35.71	100.00
81 to 90	Female	0.00	0.00	0.00	100.00	100.00
	Male	0.00	100.00	0.00	0.00	100.00
	Total	0.00	50.00	0.00	50.00	100.00
Total	Female	16.65	29.28	20.33	33.75	100.00
	Male	13.60	28.35	17.79	40.26	100.00
	Total	14.88	28.74	18.86	37.52	100.00

Source: GIFT Survey

8.5 Impact of COVID effect among social category

In all sectors, COVID 19 affected, i.e. either partially affected or highly affected or most seriously/severely affected. The impacts of COVID effect among the various social groups are given in Table 8.7. The survey reveals that the COVID is severely affected among ST category (64.18%) followed by SC category to the extent of 51.49%, Other category by 50.92%, General category by 40.74% and OBC category by 36.70%. Among the severely affected group, 36.76% are females and 41.66% are males.

Social Category	Gender	Not affected	Partially affected	Highly affected	Severely affected	Total
SC	Female	12.50	27.50	12.50	47.50	100.00
	Male	7.04	25.35	12.68	54.93	100.00
	Total	9.57	26.35	12.59	51.49	100.00
ST	Female	0.00	50.00	0.00	50.00	100.00
	Male	0.00	0.00	25.00	75.00	100.00
	Total	0.00	21.65	14.18	64.18	100.00
OBC	Female	19.57	28.62	18.48	33.33	100.00
	Male	14.00	30.55	16.18	39.27	100.00
	Total	16.41	29.71	17.18	36.70	100.00
General	Female	18.29	23.78	19.51	38.41	100.00
	Male	12.23	23.40	22.07	42.29	100.00
	Total	14.66	23.55	21.05	40.74	100.00
Others	Female	0.00	20.00	0.00	80.00	100.00
	Male	33.33	20.83	4.17	41.67	100.00
	Total	25.29	20.63	3.16	50.92	100.00
Total	Female	18.28	26.90	18.07	36.76	100.00
	Male	13.27	27.22	17.85	41.66	100.00
	Total	15.37	27.08	17.94	39.60	100.00

Source: GIFT Survey

8.6 Impact of COVID effect among economic category

The impacts of COVID effect among the various Economic Category are given in Table 8.8. The survey reveals that on an average, COVID is severely affected by 39.6% among which 36.76% were females and 41.66% were males. Data given in Table 8.8 shows that 45.24% of the total BPL category is severely affected with COVID. Similarly, 43.20% of the AAY category and 36.22% of the APL category are also severely affected with COVID.

Economic Category	Gender	Not affected	Partially affected	Highly affected	Severely affected	Total
AAY	Female	0.00	50.00	0.00	50.00	100.00
	Male	26.32	21.05	10.53	42.11	100.00
	Total	22.67	25.06	9.07	43.20	100.00
APL	Female	21.19	26.16	20.53	32.12	100.00
	Male	13.40	28.23	19.14	39.23	100.00
	Total	16.70	27.35	19.73	36.22	100.00
BPL	Female	13.02	28.40	14.20	44.38	100.00
	Male	12.50	24.38	17.19	45.94	100.00
	Total	12.73	26.17	15.85	45.24	100.00
Other	Female	21.43	21.43	14.29	42.86	100.00
	Male	11.86	33.90	10.17	44.07	100.00
	Total	14.41	30.58	11.26	43.75	100.00
Total	Female	18.28	26.90	18.07	36.76	100.00
	Male	13.27	27.22	17.85	41.66	100.00
	Total	15.37	27.08	17.94	39.60	100.00

Source: GIFT Survey

8.7 Impact of COVID effect among the major sectors

In all sectors, COVID 19 is affected, i.e. either partially affected or highly affected or most seriously/severely affected. Table 8.9 shows the extent of COVID effect in major sectors. Data given in the Table 8.9 shows that COVID has severely affected the private sector by 38.43% followed by government sector by 27.39% and co-operative sector by 18.75%.

Table 8.9: Impact of COVID effect among major sectors (%)

Sector	Gender	Not affected	Partially affected	Highly affected	Severely affected	Total
Co-operative	Female	12.50	25.00	37.50	25.00	100.00
	Male	25.00	25.00	37.50	12.50	100.00
	Total	18.75	25.00	37.50	18.75	100.00
Government	Female	20.59	30.88	14.71	33.82	100.00
	Male	16.85	47.19	13.48	22.47	100.00
	Total	18.47	40.13	14.01	27.39	100.00
Other	Female	10.83	30.72	23.82	34.64	100.00
	Male	9.88	26.27	22.89	40.96	100.00
	Total	10.49	29.12	23.48	36.92	100.00
Private	Female	20.93	28.08	17.88	33.12	100.00
	Male	14.20	27.94	16.81	41.05	100.00
	Total	16.43	27.98	17.16	38.43	100.00
Total	Female	16.65	29.28	20.33	33.75	100.00
	Male	13.60	28.35	17.79	40.26	100.00
	Total	14.88	28.74	18.86	37.52	100.00

Source: GIFT Survey

8.8 Extent of COVID disease among the respondents

The survey also ascertained whether the respondent or his/her family is affected by COVID disease or not. In general, out of the total respondents, 29.48% of the female respondents and 26.45% of the male respondents reported that their family is affected by the COVID 19 disease during first wave and during the second wave, this number is increased to 37.45% and 32.57% respectively (Refer Table 8.10).

Table 8.10: COVID disease among Total Respondents-Affected or not?

Wave	Gender	Responses (Percentage)		
		No	Yes	Total
First Wave (2020-21)	Female	70.52	29.48	100.00
	Male	73.55	26.45	100.00
Second Wave (2021-22)	Female	62.55	37.45	100.00
	Male	67.43	32.57	100.00

Source: GIFT Survey

8.9 Extent of COVID disease among the social category: Wave-wise analysis

The COVID spread among the all the social categories are given in Table 8.11. It is evident that during the first wave, 35% of the female respondents among SC category reported that their family is affected by the COVID 19 disease and during second wave, this number is increased to 57.50%. Similarly, during the first wave, 25% of the male respondents among the ST category reported that their family is affected by the COVID 19 disease and during second wave, this number is increased to 50%. However, among

the General Category, this double fold increasing trend is not seen as evidenced by the figures given in the table 8.11.

Category	Gender	First Wave (2020-21)			Second Wave (2021-22)		
		Not affected	Affected	Total	Not affected	Affected	Total
SC	Female	65.00	35.00	100.00	42.50	57.50	100.00
	Male	76.06	23.94	100.00	60.56	39.44	100.00
ST	Female	50.00	50.00	100.00	100.00	0.00	100.00
	Male	75.00	25.00	100.00	50.00	50.00	100.00
OBC	Female	69.93	30.07	100.00	61.59	38.41	100.00
	Male	73.64	26.36	100.00	68.91	31.09	100.00
General	Female	71.34	28.66	100.00	66.46	33.54	100.00
	Male	70.48	29.52	100.00	65.96	34.04	100.00
Other	Female	60.00	40.00	100.00	60.00	40.00	100.00
	Male	83.33	16.67	100.00	70.83	29.17	100.00

Source: GIFT Survey

8.10 Extent of COVID disease among the economic category: Wave-wise analysis

The COVID spread among the Economic category of respondents are given in Table 8.12. During the first wave, no female respondents among AAY category was affected by COVID but during second wave, 50% female respondents among AAY category reported as affected by COVID. However, among the other Category, the number of respondents affected by COVID is almost same in both the waves as evidenced by the figures given in the table 8.12. In general, the survey leads to the finding that the spread of COVID shows a mild increase during the second wave.

Category	Gender	First Wave (2020-21)			Second Wave (2021-22)		
		Not affected	Affected	Total	Not affected	Affected	Total
AAY	Female	100.00	0.00	100.00	50.00	50.00	100.00
	Male	73.68	26.32	100.00	68.42	31.58	100.00
APL	Female	69.87	30.13	100.00	63.25	36.75	100.00
	Male	75.12	24.88	100.00	68.74	31.26	100.00
BPL	Female	69.23	30.77	100.00	60.95	39.05	100.00
	Male	68.44	31.56	100.00	62.81	37.19	100.00
Other	Female	71.43	28.57	100.00	42.86	57.14	100.00
	Male	72.88	27.12	100.00	74.58	25.42	100.00

Source: GIFT Survey

8.11 Mode of COVID treatment

Among the COVID patients, 13.75% of the female respondents and 11.81% of the male respondents took the treatment in Government hospitals, 6.37% of the female respondents and 3.87% of the male respondents took the treatment in Private hospitals, and 10.16% of the female respondents and 11.52% of the male respondents were remained in their houses and healed without any hospital treatment during the first wave. During the second wave, 17.33% of the female respondents and 12.76% of the male respondents took the treatment in Government hospitals, 10.16% of the female respondents and 5.43% of the male respondents took the treatment in Private hospitals, and 11.16% of the female respondents and 15.71% of the male respondents were remained in their houses and healed without any hospital treatment (Refer Table 8.13).

Wave	Gender	Government Hospital	Private Hospital	Healed, Without treatment	NA	Total
First Wave (2020-21)	Female	13.75	6.37	10.16	69.72	100.00
	Male	11.81	3.81	11.52	72.86	100.00
Second Wave (2021-22)	Female	17.33	10.16	11.16	61.35	100.00
	Male	12.76	5.43	15.71	66.10	100.00

Source: GIFT Survey

8.12 Mode of COVID treatment among social category: Wave-wise analysis

The survey reveals that during the first wave, among the COVID patients in SC sector, 15% of the female respondents and 16.90% of the male respondents took the treatment in Government hospitals, 7.5% of the female respondents and 4.23% of the male respondents took the treatment in Private hospitals, and 10.% of the female respondents and 2.82% of the male respondents were remained in their houses and healed without any hospital treatment during the first wave. However, during the second wave, the above percentage shows a significant increase i.e. 30% of the female respondents and 23.94% of the male respondents took the treatment in Government hospitals, 10.16% of the female respondents and 2.82% of the male respondents took the treatment in Private hospitals, and 17.50% of the female respondents and 12.68% of the male respondents were remained in their houses and healed without any hospital treatment (Refer Table 8.14).

Among the COVID patients in ST sector, all the respondents took hospital treatment and that too in Government Hospitals. The data shows that 50% of the female respondents and 25% of the male respondents took the treatment in Government hospitals in ST sector.

In OBC sector, 15.94% of the female respondents and 12.36% of the male respondents took the treatment in Government hospitals, 5.43% of the female respondents and

3.27% of the male respondents took the treatment in Private hospitals, and 11.23% of the female respondents and 11.27% of the male respondents were remained in their houses and healed without any hospital treatment during the first wave. However, during the second wave, the above percentage shows a marginal increase i.e. 19.57% of the female respondents and 12.91% of the male respondents took the treatment in Government hospitals, 10.51% of the female respondents and 4.73% of the male respondents took the treatment in Private hospitals, and 11.23% of the female respondents and 15.09% of the male respondents were remained in their houses and healed without any hospital treatment (Refer Table 15 below).

Among the COVID patients in General Category, 10.98% of the female respondents and 10.90% of the male respondents took the treatment in Government hospitals, 7.32% of the female respondents and 5.05% of the male respondents took the treatment in Private hospitals, and 9.15% of the female respondents and 14.63% of the male respondents were remained in their houses and healed without any hospital treatment during the first wave. However, during the second wave, the above percentage shows a marginal increase i.e. 12.80% of the female respondents and 9.57% of the male respondents took the treatment in Government hospitals, 10.37% of the female respondents and 7.45% of the male respondents took the treatment in Private hospitals, and 9.76% of the female respondents and 18.09% of the male respondents were remained in their houses and healed without any hospital treatment (Refer Table 8.14).

Among the COVID patients in other category, 6.32% took the treatment in Government hospitals, 4.83% took the treatment in Private hospitals, and 11.15% were remained in their houses and healed without any hospital treatment. During second wave, only 34.95% were affected by COVID disease among which 22.13% took the treatment in Government hospitals, 4.83% took the treatment in Private hospitals, and remaining 7.99% were remained in their houses and healed without any hospital treatment (Refer Table 8.14).

Cate-gory	Gender	First Wave (2020-21)				Second Wave (2021-22)			
		Govt. Hospital	Pvt. Hospital	Healed, Without treatment	NA	Govt. hospital	Pvt. hospital	Healed, Without treatment	NA
SC	Female	15.00	7.50	10.00	67.50	30.00	10.00	17.50	42.50
	Male	16.90	4.23	2.82	76.06	23.94	2.82	12.68	60.56
	Total	16.02	5.74	6.14	72.10	26.74	6.14	14.91	52.21
ST	Female	50.00	0.00	0.00	50.00	0.00	0.00	0.00	100
	Male	25.00	0.00	0.00	75.00	25.00	0.00	25.00	50.00
	Total	35.82	0.00	0.00	64.18	14.18	0.00	14.18	71.65
OBC	Female	15.94	5.43	11.23	67.39	19.57	10.51	11.23	58.70
	Male	12.36	3.27	11.27	73.09	12.91	4.73	15.09	67.27

	Total	13.92	4.21	11.26	70.62	15.80	7.23	13.42	63.55
General	Female	10.98	7.32	9.15	72.56	12.80	10.37	9.76	67.07
	Male	10.90	5.05	14.63	69.41	9.57	7.45	18.09	64.89
	Total	10.93	5.96	12.44	70.67	10.87	8.61	14.76	65.76
Other	Female	0.00	20.00	20.00	60.00	0.00	20.00	20.00	60.00
	Male	8.33	0.00	8.33	83.33	29.17	0.00	4.17	66.67
	Total	6.32	4.83	11.15	77.70	22.13	4.83	7.99	65.06
Source: GIFT Survey									

8.13 Mode of COVID treatment among economic category: Wave-wise analysis

Table 8.15 gives the response of COVID affected respondents among the Economic Category and their treatment methods. The survey reveals that during the first wave, among the COVID patients in AAY sector, 4.53% of the respondents (both male & female together) took the treatment in Government hospitals, 9.07% of the respondents took the treatment in Private hospitals, and 13.60% of the respondents were remained in their houses and healed without any hospital treatment. However, during the second wave, 9.07% of the respondents took the treatment in Government hospitals, 15.99% of the respondents took the treatment in Private hospitals, and 9.07% of the respondents were remained in their houses and healed without any hospital treatment.

In APL sector, 11.92% of the female respondents and 9.89% of the male respondents took the treatment in Government hospitals, 7.28% of the female respondents and 4.47% of the male respondents took the treatment in Private hospitals, and 11.59% of the female respondents and 11.00% of the male respondents were remained in their houses and healed without any hospital treatment during the first wave. However, during the second wave, the above percentage shows a marginal increase i.e. 16.23% of the female respondents and 10.53% of the male respondents took the treatment in Government hospitals, 11.59% of the female respondents and 5.74% of the male respondents took the treatment in Private hospitals, and 10.26% of the female respondents and 15.799% of the male respondents were remained in their houses and healed without any hospital treatment (Refer Table 8.15 below).

Among the COVID patients in BPL Category, 18.93% of the female respondents and 18.13% of the male respondents took the treatment in Government hospitals, 5.33% of the female respondents and 2.19% of the male respondents took the treatment in Private hospitals, and 7.69% of the female respondents and 12.19% of the male respondents were remained in their houses and healed without any hospital treatment during the first wave. However, during the second wave, the above percentage shows a marginal increase i.e. 21.30% of the female respondents and 19.06% of the male respondents took the treatment in Government hospitals, 7.10% of the female respondents and 4.38% of the

male respondents took the treatment in Private hospitals, and 12.43% of the female respondents and 16.25% of the male respondents were remained in their houses and healed without any hospital treatment (Refer Table 8.15).

Among the COVID patients in other sector, 5.63% took the treatment in Government hospitals, 3.73% took the treatment in Private hospitals, and 18.14% were remained in their houses and healed without any hospital treatment. During second wave, the data shows that only 35.10% were affected by COVID disease among which 7.53% took the treatment in Government hospitals, 10.68% took the treatment in Private hospitals, and remaining 16.90% were remained in their houses and healed without any hospital treatment (Refer Table 8.15).

Cate- gory	Gender	First Wave (2020-21)				Second Wave (2021-22)			
		Govt. Hospital	Private Hospital	Healed, Without treatment	NA	Govt. Hospita	Private Hospital	Healed, Without treatment	NA
AAY	Female	0.00	0.00	0.00	100.00	0.00	50.00	0.00	50.00
	Male	5.26	10.53	15.79	68.42	10.53	10.53	10.53	68.42
	Total	4.53	9.07	13.60	72.79	9.07	15.99	9.07	65.87
APL	Female	11.92	7.28	11.59	69.21	16.23	11.59	10.26	61.92
	Male	9.89	4.47	11.00	74.64	10.53	5.74	15.79	67.94
	Total	10.75	5.66	11.25	72.34	12.94	8.22	13.45	65.39
BPL	Female	18.93	5.33	7.69	68.05	21.30	7.10	12.43	59.17
	Male	18.13	2.19	12.19	67.50	19.06	4.38	16.25	60.31
	Total	18.49	3.59	10.18	67.74	20.06	5.59	14.54	59.80
Other	Female	7.14	0.00	21.43	71.43	14.29	21.43	21.43	42.86
	Male	5.08	5.08	16.95	72.88	5.08	6.78	15.25	72.88
	Total	5.63	3.73	18.14	72.49	7.53	10.68	16.90	64.90

Source: GIFT Survey

8.14 Loss of Employment days due to COVID effect: Wave-wise analysis

The decrease in number of employment days due to COVID effect during the last two wave periods are given in Table 8.16. The survey data shows that loss of employment days is severe during the first wave in compared to the second wave. The data shows that more than 25.95% of the respondents lost their employment days (above 75%) during the first wave which is 17.67% in during the second wave. The employment loss up to 75%, up to 50% and up to 25% during the first and second wave is given separately in Table 8.16.

Employment Loss (In days)	First Wave (2020-21)	Second Wave (2021-22)
Above 75%	25.95	17.67
Up to 51-75%	15.10	14.69
Up to 26-50%	22.50	23.83
Up to 25%	14.74	19.00
Not decreased	21.71	24.81
Total	100.00	100.00

Source: GIFT Survey

8.15 Loss of Employment days due to COVID effect among major sectors: Wave-wise comparison

The survey reveals that loss of employment days is severe during the first wave in compared to the second wave. The data shows that 25% of the respondents under Co-operative sector, 10.19% of the respondents in government sector, 26.52% of the respondents in private sector and 26.69% of the respondents in other sector lost their employment days by more than 75% during the first wave which is respectively 12.50%, 7.64%, 17.19% and 20.28% during the second wave. The employment loss up to 75%, up to 50% and up to 25% during the first and second wave is given separately in Table 8.17

Sector	Above 75%		Up to 51-75%		Up to 26-50%		Up to 25%		Not decreased	
	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave
Co-Operative	25.00	12.50	12.50	18.75	18.75	25.00	18.75	25.00	25.00	18.75
Government	10.19	7.64	6.37	5.10	19.11	11.46	21.02	22.93	43.31	52.87
Other	26.69	20.28	16.55	14.99	21.32	23.48	11.87	16.12	23.57	25.13
Private	26.52	17.19	15.00	15.07	23.18	24.64	15.52	19.91	19.77	23.18

Source: GIFT Survey

8.16 Loss of Employment days due to COVID effect among sub sectors: Wave-wise comparison

The survey reveals that loss of employment days is severe during the first wave in compared to the second wave. The data shows that 22.86% of the respondents under Agricultural and animal husbandry lost their employment days to the extent of more than 75% which is 19.11% in business sector, 38.81% in construction sector, 29.27% in industry sector, 31.30% in Service sector and 25.23% in other sectors during the first wave which is respectively 19.05%, 12.12%, 25.11%, 23.17%, 19.78% and 19.46% during the second wave. The employment loss up to 75% , up to 50% and up to 25% during the first and second wave are given separately in Table 8.18

Sub Sectors	Above 75%		Up to 51-75%		Up to 26-50%		Up to 25%		Not decreased	
	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave
Agri-Animal Husbandry	22.86	19.05	23.81	21.90	30.48	31.43	13.33	15.24	9.52	12.38
Business	19.11	12.12	13.13	11.58	21.21	22.14	15.62	20.59	30.92	33.57
Construction	38.81	25.11	23.74	18.72	26.03	34.70	7.31	16.44	4.11	5.02
Industry	29.27	23.17	8.54	10.98	29.27	23.17	26.83	29.27	6.10	13.41
Service Sectors	31.30	19.78	14.99	18.32	23.96	24.50	16.15	19.63	13.60	17.77
Other Sectors	25.23	19.46	15.42	13.03	20.53	22.34	12.94	16.74	25.89	28.44

Source: GIFT Survey

8.17 Loss of employment days due to COVID effect among social category: Wave-wise comparison

The decrease in employment days due to COVID effect among the social groups are given in Table 20. The data shows that 37.03% of the respondents under SC category lost their employment days (above 75%) which is 35.82% in ST category, 28.71% in OBC category, 24.25% in general category, 33.45% in other sectors during the first wave which is respectively 19.81%, 14.18%, 19.39%, 15.03%, and 28.62% during the second wave. The employment loss up to 75%, up to 50% and up to 25% during the first and second wave are given separately in Table 8.19.

Table 8.19: Decrease in employment days due to COVID effect among social category (%)

Category	Above 75%		Up to 51-75%		Up to 26-50%		Up to 25%		Not decreased	
	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave
SC	37.03	19.81	15.62	22.52	21.40	26.39	9.92	14.11	16.02	17.18
ST	35.82	14.18	14.18	35.82	0.00	0.00	50.00	35.82	0.00	14.18
OBC	28.71	19.39	17.06	15.23	19.53	19.51	14.38	19.39	20.32	26.48
General	24.25	15.03	17.52	17.25	19.50	24.69	14.54	16.54	24.19	26.50
Other	33.45	28.62	11.15	11.15	14.31	12.82	15.81	15.81	25.29	31.61

Source: GIFT Survey

8.18 Loss of Employment days due to COVID effect among economic Category: Wave-wise comparison

The decrease in employment days due to COVID effect among the economic categories are given in Table 8.20. The data shows that 25.06% of the respondents under AAY Category, 35.53% of the respondents under BPL Category, 24.15% of the respondents under APL Category and 23.77% of the respondents under other Category lost their employment days by more than 75% during the first wave which is respectively 18.14%, 22.57%, 15.59% and 18.21% during the second wave. The employment loss up to 75%, up to 50% and up to 25% during the first and second wave are given in Table 8.20

Table 8.20: Decrease in employment days due to COVID effect Among economic category (%)

Sector	Above 75%		Up to 51-75%		Up to 26-50%		Up to 25%		Not decreased	
	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave
AAY	25.06	18.14	9.07	4.53	22.67	13.60	13.60	18.14	29.60	45.59
BPL	35.53	22.57	20.50	21.77	17.78	23.63	12.57	17.36	13.62	14.67
APL	24.15	15.59	15.07	14.28	20.63	21.04	15.04	18.17	25.11	30.92
Other	23.77	18.21	20.04	11.85	15.58	18.07	16.24	19.97	24.36	31.89

Source: GIFT Survey

Source: GIFT Survey

8.19 Decrease in income earnings due to COVID effect: Gender-wise comparison

The decrease in income earnings due to COVID effect among the gender categories are given in Table 8.21. The data shows that 39.04% of the female respondents and 60.96 male respondents opined that their income earnings is reduced by more than 75% during

the first wave which is respectively 39.93% and 60.97% during the second wave. The decrease in income earnings up to 75%, up to 50% and up to 25% during the first and second wave are given separately in Table 8.21

Table 8.21: Decrease in income earnings due to COVID effect: Gender & wave-wise analysis (%)

	First Wave (2020-21)			Second Wave (2021-22)		
	Female	Male	Total	Female	Male	Total
Above 75%	39.04	60.96	26.40	39.93	60.07	19.38
Up to 51-75%	40.27	59.73	15.79	37.37	62.63	15.74
Up to 26-50%	40.93	59.07	23.10	42.08	57.92	24.21
Up to 25%	41.45	58.55	13.10	42.56	57.44	17.45
Not decreased	48.57	51.43	21.62	46.56	53.44	23.21
Total	42.05	57.95	100.00	42.05	57.95	100.00

Source: GIFT Survey

8.20 Decrease in earnings due to COVID effect among major sectors: Wave-wise comparison

The decrease in income earnings due to COVID effect among major sectors are given in Table 8.22. The data shows that the income of 25% of the respondents under Co-operative sector, 5.73% of the respondents under Govt. sector, 26.70% of the respondents under private sector and 28.51% of the respondents under other sectors are reduced by more than 75% during the first wave which is respectively 12.50%, 7.64%, 18.97% and 22.10% during the second wave. The decrease in income up to 75% , up to 50% and up to 25% during the first and second wave among various sectors are given separately in Table 8.22

Table 8.22: Decrease in earnings due to COVID effect among major sectors: Wave-wise analysis (%)

Sector	Above 75%		Up to 51-75%		Up to 26-50%		Up to 25%		Not decreased	
	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave
Co-Operative	25.00	12.50	37.50	25.00	18.75	31.25	12.50	12.50	6.25	18.75
Government	5.73	7.64	66.24	70.06	17.20	14.65	7.64	4.46	3.18	3.18
Private	26.70	18.97	18.52	20.99	13.54	18.06	24.92	25.72	16.32	16.25
Other	28.51	22.10	23.05	22.36	11.35	16.12	20.80	23.31	16.29	16.12

Source: GIFT Survey

8.21 Decrease in Income earnings due to COVID effect among sub sectors - Wave wise comparison

The decrease in income earnings due to COVID effect among the social groups are given in Table 8.23. The data shows that the income earnings of 28.57% of the respondents under Agriculture – Animal Husbandry sector, 20.05% of the respondents under Business sector, 38.81% of the respondents under construction sector, 28.05% of the respondents under Industry sector and 30.22% of the respondents under service sectors are reduced by more than 75% during the first wave which is respectively 23.81%, 13.6%, 27.40%, 23.17 and 21.10% during the second wave. The decrease in income earnings up to 75%, up to 50% and up to 25% during the first and second wave among various sub sectors are given separately in Table 8.23

Table 8.23: Decrease in income due to COVID effect among major sectors: Wave-wise analysis (%)

Sectors	Above 75%		Up to 51-75%		Up to 26-50%		Up to 25%		Not decreased	
	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave
Agri-Animal Husbandry	28.57	23.81	26.67	23.81	33.33	33.33	6.67	11.43	4.76	7.62
Business	20.05	13.60	13.68	13.44	23.23	22.14	13.36	19.97	29.68	30.85
Construction	38.81	27.40	26.03	19.63	24.20	36.07	7.31	14.61	3.65	2.28
Industry	28.05	23.17	12.20	10.98	28.05	29.27	19.51	19.51	12.20	17.07
Service	30.22	21.56	16.62	18.16	25.50	26.04	14.68	17.31	12.98	16.92
NA	26.55	21.10	14.59	14.51	18.96	21.19	12.28	15.83	27.62	27.37

Source: GIFT Survey

8.22 Decrease in Income due to COVID effect among Social Category: Wave-Wise comparison

The decrease in income due to COVID effect among the social groups are given in Table 8.24. The data shows that the income earnings of 36.27% of the respondents under SC Category, 50% of the respondents under ST Category, 29.44% of the respondents under OBC Category and 23.37% of the respondents under general Category are reduced by more than 75% during the first wave which is respectively 25.55%, 14.18%, 21.99% and 16.95% during the second wave. The decrease in income earnings up to 75%, up to 50% and up to 25% during the first and second wave among various social sectors are given separately in Table 8.24.

Table: 8.24: Decrease in income due to COVID effect among social category: Wave-wise analysis (%)

Category	Above 75%		Up to 51-75%		Up to 26-50%		Up to 25%		Not decreased	
	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave
SC	36.27	25.55	18.65	22.88	21.80	19.49	9.92	16.82	13.35	15.26
ST	50.00	14.18	0.00	35.82	14.18	0.00	0.00	14.18	35.82	35.82
OBC	29.44	21.99	16.27	16.61	21.99	20.20	12.96	17.53	19.34	23.67
General	23.37	16.95	18.24	16.92	23.22	25.65	10.20	13.25	24.97	27.23
Other	41.44	28.62	3.16	11.15	17.47	12.82	12.64	15.81	25.29	31.61

Source: GIFT Survey

8.23 Decrease in Income earnings due to COVID effect among Economic Category - Wave wise comparison

The decrease in income earnings due to COVID effect among Economic Category are given in Table 8.25. The data shows that the income earnings of 25.06% of the respondents under AAY Category, 36.05% of the respondents under BPL Category, 24.20% of the respondents under APL Category and 24.43% of the respondents under other Category are reduced by more than 75% during the first wave which is respectively 18.14%, 27.55%, 16.88% and 20.70% during the second wave. The decrease in income earnings up to 75%, up to 50% and up to 25% during the first and second wave among various economic sectors are given separately in Table 8.25.

Table: 8.25: Decrease in earnings due to COVID effect among economic category: Wave-wise analysis (%)

Category	Above 75%		Up to 51-75%		Up to 26-50%		Up to 25%		Not decreased	
	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave	First Wave	Second Wave
AAY	25.06	18.14	9.07	4.53	36.27	22.67	4.53	13.60	25.06	41.05
BPL	36.05	27.55	20.23	20.54	21.89	24.14	10.29	15.35	11.54	12.41
APL	24.20	16.88	15.16	15.75	22.36	20.73	12.49	16.33	25.79	30.31
Other	24.43	20.70	17.48	15.58	20.56	20.56	13.10	15.00	24.43	28.16

Source: GIFT Survey

8.24 Problems faced during COVID pandemic period: Wave-Wise Comparison

The problems faced by the respondents during COVID first and second wave periods were multi fold. The responses towards the identified problems during two wave periods are presented in table 8.26. Income loss and mental struggle were the two major problems in both waves as reported by the respondents.

Sl. No	Problems faced during COVID pandemic	Responses in No. & Percentages	
		First wave	Second wave
1	Income loss	67.90 (2852 Nos.)	57.61 (2420 Nos.)
2	Mental struggle	50.83 (2135 Nos.)	42.52 (1786 Nos.)
3	Travel restrictions	43.33 (1820 Nos.)	29.42 (1236 Nos.)
4	Additional health expenditure	39.97 (1553 Nos.)	17.42 (732 Nos.)
5	Job loss	33.40 (1403 Nos.)	26.66 (1120 Nos.)
6	Health issues	32.19 (1352 Nos.)	30.21 (1269 Nos.)
7	Additional indebtedness	25.92 (1089 Nos.)	39.23 (1648 Nos.)
8	Educational related issues	25.11 (1055 Nos.)	20.92 (879 Nos.)
9	Loss of relatives & dear ones	17.35 (729 Nos.)	12.71 (534 Nos.)

Source: GIFT Survey

8.25 Overcome measures taken during COVID pandemic period: Gender & Wave-Wise Comparison

Table 8.27 shows different ways/measures taken by the respondents for facing the COVID Crisis, both gender wise and wave wise. It is evident that the respondents had faced the COVID Crisis in different ways. The data reported that 40.38% respondents (1696 Nos.) during first wave and 36.38% respondents (1528 Nos.) during second wave had availed Gold loans for facing the COVID Crisis and another 29.61% (1229 Nos.) respondents during first wave and. 30.05% (1262 Nos.) respondents during second wave had availed loans other than bank loans. Notably, 27.48% (1154 Nos.) respondents during second wave had managed the crisis by way of expenditure cut measures and 23.57% respondents (990 Nos) had engaged in temporary job/ business to overcome the situation during both the waves. 24.90% (1046Nos.) of the respondents during first wave & 21.88% (919 Nos.) of the respondents during second wave reported that they had faced the COVID situation by taking loans from financial institutions. The other measures taken by the respondents to overcome the COVID crisis during the two waves are:

- Spending out of savings (599/505 respondents during first & second wave respectively)

- Support from friends (923/902 respondents during first & second wave respectively)
- Support from relatives (884/811 respondents during first & second wave respectively)
- Sale of domestic animals (238/193 respondents during first & second wave respectively)
- Mortgage of Property (227/174 respondents during first & second wave respectively)
- Sale of property (110/104 respondents during first & second wave respectively)
- Sale of house (31/36 respondents during first & second wave respectively)

The extreme measures taken by the respondents are sale of their property/vehicles, out of which 36 persons had disposed their houses for facing the COVID Crisis.

Table 8.27: Overcome measures taken during COVID pandemic period: Gender & wave-wise (in nos.)

Overcome Measures	First Wave (2020-21)			Second Wave (2021-22)		
	Female	Male	Total	Female	Male	Total
Agriculture	0	5	5	0	1	1
Business	77	114	191	33	60	93
Curtailement of Expenses	17	16	33	455	699	1154
Gold Loan	785	911	1696	702	826	1528
Gold Sale	0	2	2	0	0	0
Income From Rent	31	42	73	24	37	61
Loan from Financial Institutions	431	615	1046	376	543	919
Other loans	490	739	1229	539	723	1262
Pension	11	53	64	11	46	57
Mortgage of Property	89	138	227	65	109	174
Property Sale	34	76	110	31	73	104
Salary	7	9	16	1	0	1
Sale of domestic animals	109	129	238	86	107	193
Sale of house	11	20	31	14	22	36
Spending out of Savings	230	369	599	182	323	505
Support from friends	320	603	923	306	596	902
Support from relatives	363	521	884	326	485	811
Temporary job / business	413	577	990	407	583	990
Vehicle sale	52	114	166	45	86	131
No Crisis	204	275	479	190	285	475
Still in Crisis				235	399	634

Source: GIFT Survey

8.26 Government Interventions during COVID pandemic period: COVID Relief schemes/facilities provided by Government

Table 8.28 shows different relief measures provided by the Government during both the waves to overcome the COVID crisis, both gender wise and wave wise. The survey revealed that the COVID relief measures provided by the Government during both the waves to overcome the COVID crisis were well received and endorsed by the respondents. The 'food Kit' and 'free vaccination' provided by the Government are well accepted and appreciated by majority of respondents. The 'food kit' is accepted by 68.38% of the total respondents surveyed and the 'free vaccination' is accepted by 60.29% of the total respondents. The following are the various other relief schemes provided by the Government and enjoyed by the respondents:

- Ambulance facility:
- Community Kitchen
- Direct financial help
- Food kit
- Food provision
- Free vaccination
- Loan Moratorium
- Medical help
- Quarantine facility

Schemes/ Facilities	First Wave			Second Wave		
	Female	Male	Total	Female	Male	Total
Ambulance facility	77	152	229	105	153	258
Community Kitchen	104	266	370	130	303	433
Direct financial help	42	74	116	49	85	134
Food kit	1250	1622	2872	1091	1388	2479
Food provision	198	255	453	232	309	541
Free vaccination	1087	1445	2532	920	1114	2034
Loan Moratorium	278	418	696	173	201	374
Medical help	131	204	335	161	275	436
Quarantine facility	180	296	476	200	319	519
Loan-Kudumbashree	1	0	1	0	0	0
Other help	0	3	3	0	1	1
No Benefit received	181	297	478	227	329	556
No need of any help	2	2	4	0	0	0
NA	62	110	172	115	224	339

Source: GIFT Survey

8.27 Government Interventions during COVID pandemic period: Rating of the respondents

The rating of the interventions made by the Government in providing the benefits/reliefs/support services given to the general public during the COVID pandemic is also collected from the respondents. It is reported that 22.57% of the respondents during first wave and 16.57% of the respondents during second wave had opined that the Government interventions during COVID Pandemic period are highly beneficial to them. Similarly, 28.10% of the respondents during first wave and 27.86% of the respondents during second wave had opined that the Government interventions during COVID Pandemic period are beneficial to them. Further 29.90% of the respondents during first wave and 28.26% of the respondents during second wave had opined that the Government interventions during COVID Pandemic period are partially beneficial to them. However, 9.50% of the respondents during first wave and 11.19% of the respondents during second wave had opined that the Government interventions during COVID Pandemic period are not beneficial to them (Refer Table 8.29).

Table 8.29: Government intervention during COVID pandemic period: Rating of the respondents (In Nos. & %)

Responses	First Wave		Second Wave	
	Number	%	Number	%
Highly beneficial	948	22.57	696	16.57
Beneficial	1180	28.10	1170	27.86
Partially beneficial	1256	29.90	1187	28.26
Not beneficial	399	9.50	470	11.19
NA	417	9.93	677	16.12
Total	4200	100.00	4200	100.00

Source: GIFT Survey

8.28 Local Government Interventions during COVID pandemic period – COVID Relief schemes/facilities provided by Local Government

The involvement of the Local Government in the process of providing support services during COVID pandemic situations were also enquired in the survey and the result is presented in Table 8.30. The COVID relief measures provided by the Local Government during both the waves to overcome the COVID crisis were well accepted and endorsed by the respondents. ‘The Community Kitchen’, the Quarantine Facility’ and the ‘Medical Assistance’ are the three major area support services given by the Local Bodies. The following are the various other relief schemes provided by the Local Government and enjoyed by the respondents:

- Ambulance Facility
- Direct Financial help
- Food Provision

**Table 8.30: COVID relief schemes/facilities provided by local government:
Gender-wise (in nos.)**

Schemes/ Facilities	First Wave			Second Wave		
	Female	Male	Total	Female	Male	Total
Ambulance Facility	132	198	330	116	180	296
Community Kitchen	185	390	575	146	335	481
Direct Financial help	61	78	139	34	60	94
Food Provision	385	451	836	232	332	564
Medical Assistance	219	316	535	161	242	403
Quarantine Facility	267	428	695	210	321	531
Other help	3	11	14	0	7	7
No Benefits Received	767	1041	1808	416	584	1000
No need of any help	11	18	29	5	4	9
NA	208	367	575	162	310	472

Source: GIFT Survey

8.29 Local Government Interventions during COVID pandemic period – Rating of respondents

It is observed in the survey that the Local Governments had also provided lot of support services to the public during pandemic period. The data reveals that 16.6% of the respondents during first wave and 11.5% of the respondents during second wave had opined that the Local Government interventions during COVID Pandemic period are highly beneficial to them. Similarly, 27.9% of the respondents during first wave and 23.9% of the respondents during second wave had opined that the Local Government interventions during COVID Pandemic period are beneficial to them. Further 28.2% of the respondents during first wave and 24.4% of the respondents during second wave had opined that the Local Government interventions during COVID Pandemic period are partially beneficial to them. However, 11.2% of the respondents during first wave and 15.9% of the respondents during second wave had opined that the Local Government interventions during COVID Pandemic period are not at all beneficial to them (Refer Table 8.31).

Table 8.31: Local government interventions during COVID pandemic period – Rating of the respondents

Responses	First Wave		Second Wave	
	Number	%	Number	%
Highly beneficial	530	12.62	481	11.45
Beneficial	978	23.29	1006	23.95
Partially beneficial	950	22.62	1026	24.43
Not beneficial	725	17.26	666	15.86
NA	1017	24.21	1,021	24.31
Total	4200	100.00	4200	100.00

Source: GIFT Survey

8.30 NGOs Interventions during COVID pandemic period: COVID Relief schemes/facilities provided by NGOs

Table 8.32 shows different relief measures provided by the NGOs during both the waves to overcome the COVID crisis, both gender wise and wave wise. It is observed that the Non -Governmental Organisations were also contributed a lot for the wellbeing of the people during COVID pandemic situations. 39.83%(1673 Nos.) of the respondents expressed that they had received ‘Food and vegetable kit’ provided by the Non -Governmental Organisations. The other notable and useful services provided by the NGOs are Ambulance facility, Community Kitchen, Quarantine facility and the Medical Assistance. Table 8.32 gives an idea about the different relief measures provided by the NGOs during both the waves to overcome the COVID crisis, both gender wise and wave wise.

Table 8.32: COVID relief schemes/facilities provided by NGOs: Wave-wise(in nos.)

Schemes/ Facilities	First Wave			Second Wave		
	Female	Male	Total	Female	Male	Total
Ambulance facility	185	323	508	134	202	336
Community Kitchen	217	426	643	140	290	430
Direct financial help	70	113	183	51	84	135
Food Provision	524	800	1324	269	437	706
Food and vegetable kit	803	870	1673	120	229	349
Medical Assistance	210	310	520	158	228	386
Quarantine facility	304	454	758	205	298	503
Other help	3	6	9	0	2	2
No benefit received	678	850	1528	414	622	1036
No need of any help	16	11	27	3	8	11

NA	201	350	551	317	505	822
Source: GIFT Survey						

8.31 NGOs Interventions during COVID pandemic period – Rating of respondents

The survey also enquired the extent of interventions made by NGOs during COVID pandemic period. 14.45% of the respondents during first wave and 12.10% of the respondents during second wave had opined that the NGOs interventions during COVID Pandemic period are highly beneficial to them. Similarly, 26.90% of the respondents during first wave and 23.57% of the respondents during second wave had opined that the NGOs interventions during COVID Pandemic period are beneficial to them. Further 19.93% of the respondents during first wave and 24.19% of the respondents during second wave had opined that the NGOs interventions during COVID Pandemic period are partially beneficial to them. However, 14.02% of the respondents during first wave and 14.45% of the respondents during second wave had opined that the NGOs interventions during COVID Pandemic period are not at all beneficial to them (Refer Table 8.33).

Table 8.33: NGOs interventions during COVID pandemic period – Rating of the respondents

Responses	First Wave		Second Wave	
	Number	%	Number	%
Highly beneficial	607	14.45	508	12.10
Beneficial	1130	26.90	990	23.57
Partially beneficial	837	19.93	1016	24.19
Not beneficial	589	14.02	607	14.45
NA	1037	24.69	1079	25.69
Total	4200	100.00	4200	100.00
Source: GIFT Survey				

8.32 Welfare Fund Board Interventions during COVID Pandemic

Table 8.34 shows the details Boards participated in the survey with number of respondents. Majority of the respondents (19%) are from Kerala Tailoring Workers Welfare Fund Board, 12.71% of the respondents are from Kerala Building and Other Construction Workers Welfare Board, 10.14% of the respondents are from Kerala State Unorganised Workers Social Security Board, 9.42% of the respondents are from Kerala

Agricultural Workers Welfare Fund. Table 8.34 shows the representation of respondents from various Welfare Boards participated in the GIFT Survey.

Sl No.	Name of the Board	Number of respondents	%
1	Kerala Tailoring Workers Welfare Fund Board	133	19
2	Kerala Shops and Commercial Establishment Workers' Welfare Fund Board	91	13
3	Kerala Building and Other Construction Workers Welfare Board	89	12.71
4	Kerala State Unorganised Workers Social Security Board	71	10.14
5	Kerala Agricultural Workers Welfare Fund	66	9.42
6	Kerala Pravasi Welfare Board	42	6
7	Kerala Labour Welfare Fund Board	38	5.43
8	Kerala Motor Transport Welfare Fund Board	35	5
9	Kerala Traders Welfare Board	13	1.85
10	Kerala Autorikshaw Workers Welfare Fund	12	1.71
11	Kerala Fishermen's Welfare Fund Board	11	1.57
12	Kerala State Anganwadi Workers' and Helpers' Welfare Fund	11	1.57
13	Other	88	12.57
	Total	700	100

Source: GIFT Survey

8.33 Response of Welfare Fund Board Members

Around 700 respondents were participated from various welfare fund board members in the GIFT google survey. Table 8.35 shows the rating of board activities by the respondent board members. 31.43% of the respondents reported that the activities of the Board during COVID pandemic are not beneficial. However, 13.43% of the respondents reported that the activities of the Board during COVID pandemic are highly beneficial, 23.57% of the respondents reported that the activities of the Board during COVID pandemic are beneficial and 23.14% of the respondents reported that the activities of the Board during COVID pandemic are partially beneficial.

Responses	Number	%
Highly beneficial	94	13.43
Beneficial	165	23.57
Partially Beneficial	162	23.14
Not beneficial	220	31.43

NA	59	8.43
Total	700	100.00
Source: GIFT Survey		

8.34 Observations/Suggestions gathered from Focus Group discussions

The most important input received from the Survey and connected focus group discussions is that a large number of people fell into a severe financial crisis during and after COVID 19. Such crises occurred due to loss of employment, loss of income / stagnation of people who have made regular loan repayments on a monthly basis and are generally pursuing a decent standard of living. Most of them have progressed in relatively better living conditions. The problem was exacerbated by the arrears of loans taken by these people for various purposes, which had almost a steady income. They are currently facing severe mental stress and tension, including the threat of foreclosure. The majority of those surveyed suffer from this type of severe mental crisis. A system needs to be set up on ward basis to identify such persons and take necessary action. Suicidal ideation also needs to be looked at with special care. The response of a person who is only 34 years old is particularly noteworthy. His total debt is Rs 34 lakh. Many have a similar situation. Artists in a variety of fields, including temple art, from the make-up artists behind it, to those working in the light and sound sector, to women fishmongers, to auto, taxi and bus drivers, bus/taxi owners faced a severe crisis during the COVID period.

Those in the agricultural sector mainly pointed out that their produce was ruined without getting a price. People from many walks of life are completely deprived of income. Although the economic sector has gradually opened up, many people still do not have significant incomes, according to the survey.

Another concern that the survey reveals is the breakdown in children's education. The survey reveals that the situation in families is worse than is generally understood. A good portion of students are lagging behind in learning. For many, learning is like an alien object. The emotional and psychological stress it creates in children is profound. There is a marked change in the lifestyle of children. Many have been turned into sleepers and daydreamers. A small section also has no sleep at all. It can be seen from the initial assessment that very serious problems are occurring in the case of students. A detailed study is needed here. Each particular case should be analysed in detail and the solution should be formulated. The survey suggests that skin-only treatment may not solve these problems. Even so, owning one is still beyond the reach of the average person. Many of those surveyed said they were unable to go to work, even occasionally.

A small section has made it clear that they were starving during the lockdown. Some also pointed out that the lack of a ration card has made it difficult to get help, including free

food grain kits. Deficiencies in vaccine supply are another major problem. The solution is to go home and get vaccinated, or to get vaccinated on a ward-by-ward basis. Farmers in general also shared the problem of non-availability of pesticides and fertilizers for cultivation. But the shortage of workers, especially guest workers, has been detrimental to small entrepreneurs. The unavailability of raw materials made it impossible to continue production even to a limited extent. Electricity charges have become a negative factor for a section of traders and business owners.

This was a stage where the treatment of people, including children with serious illnesses, posed a great challenge. The problem for many of those surveyed was that even the medicines needed to sustain life had to be planted. Dissatisfaction is also expressed in cases of undue interference by the police and high fines. The plight of those involved in the tourism sector, such as tour operators, travel vehicle owners and employees, was deplorable. Still no significant change in that. The maximum avoidance of public transportation by people after the lockdown has not created a retail crisis for such areas. A large section of the population argues that the imposition of a moratorium on loans was later detrimental. This is because most banks and financial institutions charge penalty interest for the deferment periods. The survey also highlights the high interest rates charged by private moneylenders and the pressure to withdraw money, leading to many committing suicides. Women in rural and hilly areas are more prone to this miserable condition. It is safe to say that the COVID crisis has devastated traditional industries such as coir, handloom and cashew nuts. The floods of 2018 had wreaked havoc in such areas in Kerala. COVID can be said to have completed it. Therefore, the traditional industrial areas are also an area that needs immediate attention of the Government. Catering is another area where the COVID crisis has totally shaken. Hundreds of entrepreneurs, large and small, and thousands of workers work in this sector.

Some have pointed to isolation from relatives and the community, especially those affected by COVID. This is a tendency that should not be discouraged and opposed. Strong awareness is needed against such thoughts which are very detrimental to the unity of the society. Similarly, there are children and the elderly who have lost their parents or guardians due to COVID 19. Their voice may go thinner due to the small number. Special care is required in holding them together. In general, it can be assessed as visible acute problems, rising debt, job loss, significant decline in all sources of income (which adversely affected living standards), rising inflation, problems with children's education, expatriate returns, and after effects of COVID disease and resultant health problems.

8.34.1 Suggestions of Welfare Boards

The survey suggests that financial assistance of Welfare Boards should be provided more efficiently and effectively. The core suggestion is that the current pension amount is inadequate and should be increased in line with changes in the economic situation.

According to the survey, the minimum pension should be raised to Rs.10,000 per month. The survey participants strongly and unanimously demanded an increase in the amount of pension. It is opined that during crisis times, there should be survival schemes/assistances to sustain life through welfare boards. The majority of those surveyed demanded that adequate funds be allocated through welfare boards for undertaking various welfare measures including treatment aids. It was also suggested that a lump sum of Rs.50,000 should be sanctioned in such emergencies.

Another important suggestion is that welfare boards should make an effort to create awareness about health issues. Few suggest that boards should be involved in job-creating and entrepreneurship promotion activities. There is also a proposal to provide interest free emergency loans through welfare funds. There is also a need for a special assistance scheme for those seeking treatment for serious illness.

Similarly, many have fallen short in terms of subscription payments in the COVID period. Another key demand raised by the survey was that there should be an amnesty plan for members who are unable to pay dues to various reasons. Another suggestion is to avoid delays in the payment of pensions and other benefits. This requirement is especially relevant in a situation where many such applications for assistance are pending in the offices. Members should be given awareness on various assistance/ welfare schemes and how to apply for them. The survey also suggested that members' children should be given more educational benefits.

8.35 The main recommendations:

1. Provide interest free or low interest loans to overcome financial obligations and revitalize enterprises. Implement the plans for this comprehensively, extensively and efficiently. Make arrangements to make the loans available to the needy exactly as in the case of drip irrigation.
2. Extend moratorium for loans and allow the defaulters to renew or re-schedule the loans with maximum interest waiver. The interest portion may be funded by the Government in the case of re-scheduling of loans.
3. Study the mental state of the people separately. A good portion of people are found to be experiencing mental stress and depression especially among the students. Conduct a thorough study at the local level and find solutions.
4. Ensure reasonable prices for agricultural products. Examine the problems in the agricultural sector thoroughly and find solutions along with the adoption high end farm technologies
5. Study the problems of seasoned work artists, instrumentalists and those working in the field of light and sound, catering, tourism sector and other weaker sectors and formulate appropriate rehabilitation programmes for their recovery . It is advisable to form an expert committee for this.

6. Strengthen market intervention to reduce the prices of essential commodities such as rice, nuts, pulses, edible oils and vegetables.
7. Pay close attention to solving problems in the field of education and reducing the stress of students and parents. Make online education a continuous process and provide the necessary permanent infrastructure for ensuring interrupted classes to the students at all parts of the State including villages and remote areas.
8. Ensure the functioning of various welfare boards strong and efficient and if possible all boards shall bring under the control and management of one APEX Council / Federation
9. Formulate and implement a comprehensive and flawless health and treatment plan to ensure expert treatment for all citizens. Develop a plan that specializes in lifestyle diseases and hereditary diseases.
10. Provide medical and life insurance services to all citizens on government initiative.

8.36 Conclusion

The findings and recommendations drawn by the present study is expected to become instrumental in designing and formulating appropriate policies and implementing suitable action to accelerate the economy back to normal. We hope this report is expected to serve as a helpful tool for Government in their ongoing effort to design evidence-based policies that leave no one behind.

Appendix 8

Questionnaire

For the study of the socio-economic impact of COVID 19

Government of Kerala entrusted Gulati Institute of Finance and Taxation to study the socio-economic implications of COVID 19 in Kerala. In order to gather information from the public for the study, you are requested to enter your response in the following questionnaire.

Director, GIFT

General Information

- 1.1 Name
- 1.2 Phone No.
- 1.3. Male/Female
- 1.4. Age
- 1.5 Social category *
- 1.6. Financial Category *
- 1.7 The district you represent *
- 2.1 Sector you represent *
- 2.2. Sector you represent in Govt. sector
- 2.3 Sector you represent in private sector
- 2.4 Subsector you represent
- 2.5 If any other, please explain
- 2.6 Sector represented especially by non-income earners *
3. How does the impact of the COVID affect the area you represent generally?

COVID 1st wave (2020-2021)

- 4.1 In COVID first wave (2020-21) did you or your family members contract COVID 19?
- 4.2. If yes, how did you overcome it ?
- 4.3 In COVID first wave (2020-21) what was the reduction in working days in your area of operation?
- 4.4 In COVID first wave (2020-21) what was the approximate reduction in your income?
- 4.5. During this crisis what were the problems faced by you and your family members?
- 4.6 What were the ways in which you and your family overcame this crisis? (Multiple ways can be recorded)
- 4.7 What were the Government interventions / assistance in times of crisis?(Multiple aids / interventions can be recorded) *
- 4.8 How were the Government Actions / Interventions helpful for you and people associated with you? *

- 4.9 *What were the Local Government Interventions in times of crisis (Multiple aids / interventions can be recorded)*
- 4.10 *How was the Intervention of Local Governments in Crisis (Multiple aids / interventions can be recorded)*
- 4.11 *What were the interventions of voluntary organizations / other organizations in times of crisis (Multiple aids / interventions can be recorded)*
- 4.12 *How were the interventions of voluntary organizations / other organizations in times of crisis (Multiple aids / interventions can be recorded)*
- 4.13 *During the first wave (2020-21), did you or your relatives / acquaintances lose your/ their jobs in abroad?*
- 4.14. *If yes, how many*
- 4.15 *From which countries did they return?(Multiple Options can be entered) **

COVID 19 II Wave (2021-22)

- 5.1 *In COVID second wave (2021-22) did you or your family members contract COVID?*
- 5.2. *If yes, how did you overcome it ?*
- 5.3 *In COVID second wave (2021-22) what was the reduction in working days in your area of operation?*
- 5.4 *In COVID second wave (2021-22) what was the approximate reduction in your income?*
- 5.5. *During this crisis what were the problems faced by you and your family members?*
- 5.6 *What were the ways in which you and your family overcame this crisis?(Multiple ways can be recorded)*
- 5.7 *Was there any Government interventions / assistance during COVID IIst phase like in the Ist phase?(Multiple aids / interventions can be recorded) **
- 5.8 *If yes what were the Government Actions / Interventions (Multiple aids / interventions can be recorded) **
- 5.9 *How were the Government Actions / Interventions (Multiple aids / interventions can be recorded) **
- 5.10. *Was there any local govt. Interventions during IInd phase like in Ist phase?*
- 5.11 *If yes, what were the Local Government Interventions in times of crisis (Multiple aids / interventions can be recorded)*
- 5.12 *How was the Intervention of Local Governments in Crisis (Multiple aids / interventions can be recorded)*
- 5.13 *Was there any support from voluntary organizations/ others during IInd phase like in Ist phase?*
- 5.14 *If yes, what were the interventions of voluntary organizations / other organizations in times of crisis(Multiple aids / interventions can be recorded)*
- 5.15 *How were the interventions of voluntary organizations / other organizations in times of crisis (Multiple aids / interventions can be recorded)*

- 5.16 *What can be done to overcome the crisis at the government level? Can you elaborate on your suggestions?*
- 5.17 *During the second wave (2021-22), did you or your relatives /acquaintances lose your/their jobs in abroad?*
- 5.18 *If yes, how many*
- 5.19 *From which countries did they return?(Multiple Options can be entered) **
6. *COVID period crisis / experiences not included in this questionnaire. Can you explain?*
7. *Are you a member of the Welfare Fund Board?*
- 7.1 *What is the name of the Welfare Fund Board of which you are a member?*
- 7.2 *If you are a member of any of the boards not listed above, Explain ?*
- 7.3 *What were the aids received in the first wave (2020-21) from the said board(Multiple aids / interventions can be recorded)*
- 7.4 *How helpful were the aids received from the boards to you and those associated with you?*
- 7.5 *At the board level what can be done to overcome the crisis ? Can you explain?*

Chapter 9

COVID and State of State Finances and A New Deal for A Resurgent Kerala

Abstract

COVID-19 pandemic was a fatal blow to the Kerala economy. Turning to the fiscal health of Kerala, it is evident that the countercyclical approach of the state government to address the pandemic induced challenges has had its adverse effect on the fiscal health of the economy. There was hardly any option left for the state in the short-run other than the to borrow. Given the limits to raise the tax rates and unprecedented growth in revenue expenditure to counter the pandemic, the revenue deficit and fiscal deficit are estimated to hit the roof in 2021-22 (6% and 7.4% of the GSDP respectively) This is undoubtedly unsustainable, precarious and much beyond the limit set by the FRBM. Going by the projections for the next few years with the business-as-usual scenario is bound to manifest in the state's fiscal position crumbling further especially when the GST compensation is likely to cease by June 2022 and revenue deficit grant is set to peter out within two years.

*Even so, if the evidence of this study is any indication, we are inclined to believe firmly that Kerala is in a position to handle rather effectively the impending crisis. Extraordinary times warrants extraordinary interventions. We propose, drawing insights from our study and taking cognisance of state's potential that came to the rescue of the state during 2018- 2019 deluge and the once in century health crisis but yet to be harnessed in the sphere of production, **a New Deal for a Resurgent Kerala (NDRK)**. The NDRK, quintessentially, envisages harnessing the synergetic effects of unique institutional thickness of Kerala towards evolving a vibrant system of production and innovation with local anchoring and global orientation while being within the framework of recent innovative institutional interventions initiated in the recent past.*

NDRK stands on three pillars. The central pillar is the synergy between pre-existing decentralised democratic institutions coupled with the 'collective action' based on the institutional thickness of the state as manifested in SHGs, cooperatives, civil society organisations, producers' associations, trade unions, welfare societies, religious organisations, educational institutions, residence associations, diaspora, to list a few and the innovative institutional interventions introduced in the recent past such as Knowledge Economy at the instance of K-DISC, re-build Kerala, KIIFB, Start-up Mission, K-SWIFT at the instance of KSIDC, Loka Kerala Sabha among others.

The challenge for the state is to make effective use of the first pillar to build the second pillar that involves mobilization of the latent financial and others resources for an ambitious investment strategy, led by the cooperatives with the active involvement of NRKs, private sector and others, that envisages an additional investment of Rs 1.2 lakh crore in 2022-23 and an average annual additional investment of Rs 1.48 lakh crore during the coming three years.

For a state wherein the people are perceived to be rich and the government poor, while the tax-GSDP ratio is at African level and social provisioning at that of Scandinavia, the

third pillar dwells on raising the own tax to GSDP ratio to 9.5% within three years coupled with expenditure rationalisation.

9.1 Introduction

At the core of this study is the centrality of the state in development which got reiterated under the pandemic, while the world has been persistently pushing the state to the back seat. Internationally it was evident that wherever the strong hands of the states were visible with countercyclical fiscal policy interventions, economies reverted to the pre-pandemic position. For those dependent on the invisible hand of the market, the revival is far from sight. The pandemic has taught us that when in crisis, concern for debt burden should not be a deterrent for borrowing. Yet, in its ultimate analysis fiscal health of the state does matter. Hence, we need to be concerned about revenue, expenditure, deficits and debt. It is quite evident that COVID induced reduction in employment, income, consumption and remittances has had its accentuated adverse impact on the GSDP of the State. Further, the state's concern for the people has led to increased revenue expenditure. The issue of relevance, therefore, is how has the pandemic impacted the fiscal health of the state?

9.2 Emerging fiscal position in 2021-22

This section deals with the state of state finance in Kerala after the second wave of COVID 19. GIFT (2020) has estimated the impact of the first wave of COVID on the key components of state finances - revenue, expenditure, debt and deficit. A revenue loss of Rs 33,456 crore was estimated during 2020-21 fiscal year. It is seen that own tax revenue and own non-tax revenue have declined alarmingly in 2020-21. A sharp decline in the share of central taxes has also been observed from Rs 20,934 crore (BE) to 9,944 crores (RE). This increased revenue deficit and borrowing, and other liabilities in the year 2020-21. Since the expenditure commitment on protecting the lives and livelihood of the people has increased, especially with the second wave, the observed fall in revenue has worked towards a stressed fiscal situation for the state.

Based on the monthly indicators published by CAG till the month of November 2021 and the GSDP figures from the Directorate of Economics and Statistics, we have estimated the fiscal situation for the year 2021-22 (see Table 9.1).

It is evident that with limited room for raising tax rates and the full potential of GST is yet to fructify, the revenue receipts during April-November 2021 has been only Rs 64,291.9 crore. Based on the monthly average collection up to November 2021, we have estimated the revenue for the year 2021-22 at Rs.96, 437.98 crores. The shortfall in revenue receipts is estimated at Rs 34,542 crores for the year 2021-22. When it comes to different revenue components, the GST shortfall is Rs.11,631.9 crore. A significant fall (Rs.8,134 crore) is also estimated in the state's own non-tax revenue. This is mainly because of the fall in lottery revenue resulting from the lockdown and consequent

Fiscal Indicators	2021-22					
	Budget Estimate		Up to November 2021	GIFT Budget Estimate (Revised) after Revenue Fall		Difference
	Rupees in Crore	% of GSD P		Rupees in Crore	% of GSD P	
Revenue Receipts	130980.15	14.95	64291.97	96437.96	11.88	-34542.2
Own Tax Revenues (of which)	71833.28	8.20	41349.52	54386.07	6.70	-17447.2
State GST	36922.45	4.21	16860.39	25290.59	3.11	-11631.9
Sales Tax and VAT	23101.38	2.64	12569.62	18854.43	2.32	-4246.95
Excise Duty	2700.67	0.31	1255.36	1883.04	0.23	-817.63
Stamp and Registration	4156.24	0.47	2734.17	4101.26	0.51	-54.99
Land Revenue	440	0.05	293.00	439.5	0.05	-0.5
Other taxes	4512.54	0.51	2544.84	3817.26	0.47	-695.28
Non -Tax Revenue	14335.79	1.64	4133.67	6200.51	0.76	-8135.29
Central Transfers	44811.08	5.11	23900.92	35851.38	4.41	-8959.7
Share in Taxes	12812.08	1.46	5092.14	7638.21	0.94	-5173.87
Grants including GST compensation	31999.91	3.65	18808.78	28213.17	3.47	-3786.74
Revenue Expenditure	147891.18	16.88	96591.82	144887.73	17.84	-3003.45
General Services (of which)	66319.38	7.57	46863.65	70295.48	8.66	3976.09
Interest Payment	21940.2	2.50	12706.55	19059.83	2.35	-2880.38
Pension	23105.98	2.64	19002.14	28503.21	3.51	5397.23
Other General Services	21273.2	2.43	15154.96	22732.44	2.80	1459.24
Social Services	51138.73	5.84	35900.54	53850.81	6.63	2712.08
Economic Services	19984.64	2.28	9860.24	14790.36	1.82	-5194.28
Grant-in-aid and other contributions	10448.43	1.19	3967.39	5951.09	0.73	-4497.35
Capital Expenditure	14141.21	1.61	7558.94	11338.41	1.40	-2802.8
Revenue Deficit	-16910	-1.93	-32299.85	-48449.78	-5.97	31539.78
Fiscal Deficit	-30698	-3.50	-41772.49	-59788.19	-7.36	29090.19
Primary Deficit	-8757.09	-1.00	-29065.94	-40728.36	-5.02	31971.27
Outstanding Debt	327655	37.39		358289.04	44.12	30634.04
GSDP	876283.09			812067.52		

Source: GIFT estimate based on the data from AGs monthly data , CAG

restrictions. Except for land revenue, all the other taxes showed a decline in the collection during the year 2021-22, based on the collection trend up to November 2021. A significant decline (Rs 8,959.7 crore) in the central share of taxes and grants is also estimated during the year 2021-22. This decline, to a greater extent, weakened the fiscal position of the state.

On the expenditure side, the expenditure on a pension showed an alarming increase from Rs.23,105.98 crore (BE) to Rs 28,503.44 crore (RE), recording an increase of more than Rs.5000 crore. This is because of the 10th pay revision implementation (monthly pension increases and arrear disbursement). During the reporting year, about Rs.10,000 crore increase has been observed in the estimated salary payments, could be on account of pay revision implementation. This is reflected in the revenue expenditure. The grants in aid contributions to local bodies showed a decline from Rs.10,448 crore to Rs.5,951 crore. This is a matter of serious concern. The decline in the devolution to local bodies could lead to the bunching of expenditure in the remaining months of 2021-22. As already indicated, a substantial increase in the expenditure on social services, especially on health and education, during the COVID pandemic has also been observed. In capital expenditure, there observed a decline in spending mainly due to the delay on account of the COVID 19 restrictions.

Revenue deficit increased from Rs 16,910 crore (BE) to Rs.32,999.95 up to November 2021. Hence, the revenue deficit for the whole year 2021-22 is likely to be about Rs.48,449.8 crore. Even if we realise the budgeted GST compensation, revenue deficit grants and other grants, the revenue deficit will still be unsustainable. The budgeted fiscal deficit in the year 2021-22 has been Rs 30,698 crore which became Rs.41,772 crore up to November 2021. Going by this trend, we estimated the fiscal deficit at Rs.59,788 crore for the year 2021-22 (7.36% of GSDP), with a plausible marginal reduction provided that we receive grants from the centre presented in budget estimate. The budgeted outstanding debt of Rs.32,7655 crore for the year 2021-22 is likely to reach a higher level of Rs.35,8289 crore 2021-22 (Table 9.1).

On the whole, the fiscal health state is far from satisfactory and clearly unsustainable. The need for an urgent turn around cannot be over emphasised. In what follows, we propose a strategy in this direction, drawing insights from previous chapters and taking cognisance of states underutilized potential.

9.3 New deal for resurgent Kerala

Drawing insights from the findings of this study and earlier studies on Kerala, especially Kerala State Planning Board (2021), we propose a **New Deal for a Resurgent Kerala (NDRK)**, with three pillars and is driven by investment and innovation. The central pillar is the synergy between pre-existing decentralised democratic institutions coupled with the ‘collective action’ based on the institutional thickness of the state as manifested in civil society organisations, SHGs, local self-governments, cooperatives socio-religious organisations among others and the innovative institutional interventions introduced in the recent past such as Knowledge Economy at the instance of K-DISC, re-build Kerala, KIIFB, Start-up Mission, K-SWIFT at the instance of KSIDC, Loka Kerala Sabha among

others. The challenge for the state is to make effective use of the first pillar to build the second pillar that involves mobilization of the latent financial and other resources for an ambitious investment strategy, led by the cooperatives with the active involvement NRKs, the private sector and others, in coming three years to the tune of Rs 4.5 lakh crore to 6.25 lakh Crore. The neighbouring state Tamil Nadu is already pursuing such an investment-driven revival strategy.

The crisis of this nature is a great source of inspiration for self-reflection. So far, the state of Kerala has provided its people with incomparable levels of social security and human development within the developing world. However, the state is at the brink of collapse until it revisits its revenue and expenditure pattern. It is high time that revenue augmentation measures are galvanised up, and expenditures are rationalised. Therefore, the third pillar of the proposed strategy dwells on raising the own tax to GSDP ratio to 9.5% within three years coupled with expenditure rationalisation.

9.3.1 The NDRK is based on the following premises.

- No economic revival is possible without substantial additional investment, and the fear of debt should not be a deterrent to borrowing for investment.
- Kerala's locally anchored institutional thickness led collective action to be resilient in handling the deluge 2018, 2019 and once in a century pandemic crisis. Such strength could be harnessed for taking the Kerala economy to further heights.
- Harnessing the decentralised democratic institutions and local level non-governmental collectives is bound to give a higher return with respect to growth and development than conventional market-driven concerning market-driven investment.
- Kerala has many untapped financial resources for fostering investment for development which partially manifested from the intervention of cooperatives in providing loans to the order of more than Rs 1 lakh crore during the pandemic (see chapter 6).
- Following the Chinese strategy of mobilising overseas Chinese investment, Kerala has an immense untapped potential to harness NRK investment along with the private sector and FDI at our terms and our pace. A beginning has already been made. What is needed is a booster dose.
- Kerala is a state where people are apparently rich while the state is poor because while our own tax to GSDP ratio is at African levels, our social provisioning is at par with Scandinavian countries.
- The academic and scientific community needs to be adequately challenged to prove their potential and their relevance by effectively getting involved in the NDRK.

- It is high time, following the Oita prefecture of Japan, to initiate the One Panchayat One Product (OPOP) program within the knowledge economy framework, especially harnessing the experience-based knowledge of the people along with the scientific knowledge of the academic community. This could be in sync with the One District One Product (ODOP) of the central government and harness the institutional endowment and the individual initiatives at the level of local self-government.
- Given the chronically low CD ratio, which deteriorated further during the pandemic, Kerala continues to be a net exporter of financial resources. NDRK envisages transforming Kerala into a net finance importer by facilitating a conducive environment. This could result in an additional annual investment of the order of Rs 25,000 crore.
- Notwithstanding the recent revival, Kerala remains one among the least industrially developed states despite its enormous potential. The pandemic further shook the fragile foundation. The need of the hour is to get back to our industrial glory. Given the emerging global consensus on the role of the public sector, we envisage a revival of the public sector along with a vibrant business climate for the private sector as already initiated by KSIDC with the K-SWIFT initiative.
- Kerala is a high wage/cost economy. NDRK sees it not as a limiting factor provided; we evolve into a product structure that supports high-value knowledge-intensive products.
- The returning migrants are not a liability but an asset if appropriate institutional architecture is provided to harness their capabilities and needed skilling, reskilling, upskilling, which is not necessarily limited to returning migrants. K-DISC initiatives in this direction need to be scaled up.
- The ongoing growth/development-oriented programs - skilling and upskilling and reskilling - at the instance of K-DISC towards transforming Kerala to a knowledge economy have to be pursued with greater integration with the historically evolved institutional thickness of the state.
- It is well within the state's capacity to mobilize additional investment of Rs 1.2 lakh crore in the initial year and an annual additional investment of the order of Rs 1.50 lakh crore during the coming three years facilitated by the government wherein at least 50% of the interest cost is borne by the state in the form of subsidy from budgetary resources.
- Going by available evidence, wage inequality is on the rise; unorganised income was nosedived while the government employee's income increased at a normal rate.
- The outliers of Kerala's development – the fisherfolk, the scheduled castes, and Scheduled tribes - need special attention.
- There is a need to focus on creating quality employment, not just jobs: Pandemic has led to increased informalisation as well as changing nature of employment

contracts. Those who lost jobs are joining the labour force with low-quality employment. Additionally, employment created in the gig economy is of low quality. Hence, the need to strengthen the institutional foundations of inclusive, sustainable and resilient economic growth and development by enhancing social protection systems; promoting formalization, and ensuring that all workers, irrespective of their contractual arrangements, have the right to freedom of association and collective bargaining, enjoy safe and healthy working conditions and receive adequate minimum wages. Kerala has to move from the highest human development index to universal social protection.

9.3.2 Action plans under Pillar 1: Harnessing institutional thickness led collective action

- Inducing various organisations/institutions to make the productive sectors of the economy more vibrant and provide services of various types to the citizens using IT platforms to create more high-quality employment manifested in employment with social protection, higher wages and dignity.
- The initiatives towards augmenting different sectors of the economy could be integrated with Chief Ministers one lakh entrepreneurship program within the framework of One Panchayat One Product scheme with clearly articulating the backward, forward linkages with the effective use of IT.
- Farmer's knowledge needs to be integrated into the local production and innovation system *inter-alia* for generating niche markets for Kerala specific products. On the one hand, greater value addition coupled with greater price realisation by reaching out directly to the consumers through IT platforms designed for the purpose.
- Harnessing the vibrant IT sector of the State by making it a more active partner in the making of resurgent Kerala by articulating their role in Kerala's Development (IT4KD).
- Greater integration with the academic and scientific community is important-involvement of college/university faculty/scientists in such ventures should be properly recognised by including them in the academic performance index (API).
- Makers' spaces; co-workers' spaces, and start-ups at the instance of all the District panchayats and in as many local bodies as possible.
- The returned NRKs being an asset, their skill set may be effectively used, especially through overseas investments.
- Program for skilling and re-skilling: Skill creation and up-gradation have been at the forefront of employment policy for several years. The pandemic has pushed many out of the labour force. Hence, skill development programs tailored to specific demographic groups and social groups who witnessed the greater loss of employment.

- Return migrants have different skill sets. Lack of data on the various skillsets of these returnees creates serious difficulty in framing policies for their rehabilitation. Hence it is suggested to conduct a skill set survey with the help of Local Governments.

9.3.3 Action plans under Pillar 2: Investment strategies

- New Deal for a Resurgent Kerala (NDRK) envisages an additional investment of Rs 1.21 lakh crore in 2022-23 and an average annual additional investment of Rs 1.48 Lakh crore during the coming three years. The lead source of financial sources could be the cooperative sector in the state along with the Scheduled Commercial Banks (SCBs), private sector, NRKs, FDI. The state shall provide an interest subsidy at least of the order of 50%.
- This will help achieving an annual GSDP growth of 17% rate (nominal) during the next three years. Without this additional investment the state could grow only at around its historical average of 11% annual growth which unlikely to help in achieving fiscal balance.
- The additional investment envisaged above is based on the assumption that Incremental Capital Output Ratio (ICOR) for the state is about 2.5 which is a reasonable assumption given the higher share of service sector in the NSDP, low capital intensive nature of our agriculture and industry. Table 9.2 also presents alternative scenarios assuming higher ICOR of 3 and 3.5.
- Being a high wage cost economy, KSIDC and other agencies involved in industrial development may be further strengthened and induced to evolve an industrial structure conducive to our endowment. Here K-Swift holds the Key. Kerala may aim to remerge in the electronic system design and hardware/chip manufacturing *inter-alia* by harnessing central schemes valued at Rs 76,000 crore.
- Kerala needs to exploit its potential and ensure that it does not miss the opportunity window in Industry 4.0.

9.3.4 Action plan under Pillar 3: Rationalisation of state finances

- The state should effectively communicate with citizens regarding Kerala's precarious fiscal situation to stimulate public discourse the to revive state finances. This should particularly be done by invoking the critical role of the state in the context of pandemics and the impressive performance of the state in the social sector.
- The state shall initiate measures to take the own tax to GSDP ratio to 9.5 per cent within three years from 6.7 per cent at present. In addition, with increased GSDP growth the share of non-tax revenue in GSDP is likely to increase from 1.65% at

present to 2%. Annexure 9.1 provides specific action points towards additional resource mobilization.

- Direct income support for the unemployed: Considering Kerala's employment recovery is still far from pre-pandemic levels, direct income transfer policy to support those who lost jobs during the pandemic is essential for consumption smoothing help people at the margins to stay afloat from falling into the poverty trap. The fisherfolk and the SCs and STs need special attention.
- Scaling up public employment programs: Public employment produces public goods and services that enhance the productivity of private investment and enable job creation in the private sector. Increase the number of working days under Ayyankali urban employment guarantee scheme to 150 at least for two fiscal years.
- Households whose significant income came from remittance (both international and interstate) need greater support in providing employment and transfers.
- Considering the precarious fiscal situation and growing inequality of wages and salaries in the states, we recommend freezing any further salary increases such as DA enhancements and annual surrender for two years to mobilise at least Rs 10,000 crore. Further, there is a need to freeze all new appointments in the short run except in health and education. NDRL also calls for expenditure rationalisation. Annexure 9.2 consolidates the recommendations earlier made in this direction by different committees appointed by the Government during 2020.
- With envisaged growth scenario under NDRK, our revenue deficit is expected to be sufficiently below 2% mark and fiscal deficit within 3% by 2024-25.

9.4 Monitoring the progress of NDRK

- Implementation and progress of NDRK have to be monitored regularly using an IT-based dashboard at the level of different pillars and its components by the Chief Minister/Finance Minister. The whole program could be monitored quarterly at the district level using a Master NDRK Dashboard. At the same, time, the monitoring of different pillars of NDRK at regular intervals could be done at the district level with the help of the Dashboard developed for the pillars concerned.

- The database, including the high-frequency data from the field, could be gathered with the help of faculty and students of the colleges/universities/research institutes in Kerala.

9.5 State finance projections with NDRK

With the implementation of NDRK in letter and spirit, GIFT has charted a roadmap for achieving fiscal balance and sustainability along with accelerated GSDP growth of 17% for next three years in contrast to the historical average annual growth of 11% in GSDP.

We envisage the additional investment proposed with expenditure growth to be restricted at 12% after 2022-23 instead of a historical average of 13% for the past seven years before the pandemic and floods since Government of Kerala already making every effort to rationalise expenditure. On the revenue front, own tax to GSDP ratio is assumed at 8.5%, 9% and 9.5%, respectively in the coming three years against the historical average of 7.3% as we understand that the Government of Kerala is determined to take every necessary effort to mop up every revenue that is due. Additional investment envisaged is expected to achieve an annual GSDP growth of 17% as against the historical average of 11%. This higher growth coupled with revenue augmentation and expenditure rationalisation measures will result in revenue and fiscal deficit of 2.6% and 4% in 2022-23, 2.3% and 3.7% in 2023-24 and 1.46% and 2.8% respectively in 2024-25.

On the whole, NDRK envisages that with an increase in investments coupled with a higher tax to GSDP ratio alone will not help the state to make turn around in its fiscal situation. What is of paramount importance at this juncture is walking on three legs i.e., augmenting investment, raising tax (and non-tax) to GSDP ratio and expenditure rationalisation.

Table 9.2: GIFT Projections for the next three Fiscal years			
	2022-23	2023-24	2024-25
	Rupees in Crore	Rupees in Crore	Rupees in Crore
Revenue Receipts	137803.68	157532.69	184586.48
Own Tax Revenues (of which)	80760.12	100047.53	123558.70
State GST	40000.01	46800.01	54756.01
Sales Tax and VAT	25083.14	29347.28	34336.31
Excise Duty	2945.37	3446.08	4031.92
Stamp and Registration	4506.45	5224.70	6112.90
Land Revenue	477.07	558.18	653.07
Other taxes	4892.77	5724.54	6697.71
Non-Tax Revenue	16152.02	22232.78	26012.36
Central Transfers	40891.54	35252.38	35015.42
Share in Taxes	13891.63	16253.21	19016.25
Grants	26999.91	18999.17	15999.17
Revenue Expenditure	162274.26	183369.91	203556.83
Capital Expenditure	13301.67	15562.95	18208.65
Revenue Deficit	24470.58	25837.22	18970.35
RD%GSDP	2.58	2.32	1.46
Fiscal Deficit	37772.25	41400.17	37179.00
FD%GSDP	3.98	3.72	2.86
GSDP	950119.0	1111639.23	1300617.9
Additional output due to investment	138051.48	161520.23	188978.67
Additional Investment if ICOR=2.5	121810.12	142517.85	182422.85
Additional Investment if ICOR=3	146172.15	171021.42	218907.42
Additional Investment if ICOR=3.5	170534.18	199524.99	255391.99
GSDP Growth (%)	17.00	17.00	17.00

Annexure 9.1

Recommendations for Revenue Augmentation (GIFT 2021)

In 1980 the Per capita income of Kerala (Rs. 1,690) was only about 84% of the national level and its rank was 10th among Indian states. Yet its tax GSDP ratio was about 12%. By 2018-19 Kerala's per capita income (Rs 2.27 lakhs) became 159% of the national level, but the tax GSDP ratio almost halved. The paradoxical situation of rich people and poor government needs to be changed sooner than later.

Our recommendations on mobilizing more revenue from each item are followed based on an analysis of Kerala's comparative performance with other states.

To begin with, it is recommended that all the possible taxes and non- taxes by the State be indexed to inflation.

Goods and Services Tax

GST accounts for about 42% of States Own Tax Revenue (SOTR). Although GST is a consumption-based tax and Kerala is a high consumer-oriented State with heavy dependents on goods from other states, revenue from GST belied all our expectations. Kerala is the only state that recorded a lower growth rate in revenue from the subsumed goods in GST during the post- GST period compared to the lower the pre-GST period. Among the South- Indian states IGST- SGST ratio is the highest for Kerala (1.12 in 2019-20). What is more, during the post-GST period (2018-19 & 2019-20), the recorded growth rate in IGST has been negative (-3.7). There is the need for more detailed enquiries on the working of GST in general and IGST in particular.

Sales Tax & Excise Duty

a. Realization of arrears and fines

According to the CAG report on Revenue Sector, 2019, there is an arrear amount of 258.80 crores, including those dates back up to 1952, under the Kerala State Excise. Therefore, suitable actions must be planned and implemented to realize this outstanding sum.

b. Increase in the excise duty

Increasing duty rates or increasing sales volume are the two ways the government can improve its revenue collection from excise duty. The increase in the excise duty will have a dual effect: (i) it reduces the consumption of liquor and incentivizes the majority to be responsible drinkers and (ii) it protects the State's revenue collection for adequate funding of welfare measures. This study proposes that ₹ 100 crore can be collected through a 50 percent hike in the present excise duty rates on liquor.

c. Home delivery of liquor

If the rate increase is not a feasible solution in the short run, the alternative way is to increase sales volume by (i) opening up new alcohol parks in the urban centers (ii) switching to home delivery options employing the co-operative societies. Because, in Kerala, liquor is sold either through the retail outlets of KSBC or through bar outlets of hotels/restaurants. On average, the liquor sales through these channels are in the ratio of Outlet: Bar as 60:40 (Ramanathan, 2010), while the possession limits for alcoholic beverages are 3 litres for IMFL, 3.5 litres for Beer and Wine, and 1.5 litres for toddy.

Report on COVID-19 Pandemic and Kerala: A response Strategy (June 2020)- The committee recommended the following:

“The committee suggests that Rs.6452 crore can be collected as the most likely amount by Government of Kerala through a 50 per cent hike in the present rates of Excise Duty

and Sales Tax and by the introduction of membership fees for home delivery of liquor on the basis of a five years membership systems to be opted for by the interested consumers”.

e. Improving the efficiency of assessment

One of the main reasons for leakages in Excise Duty is due to the underassessment or non-realization of various fees. The loss in this regard for the year 2015-16 was 45.22 crores. The system has to be made more efficient in order to bring these under surveillance.

First, at present, there are only two tax slabs for IMFL. Instead of two, the government could increase the tax slabs to four based on the median price of with landed cost per case. This would allow a tax rate range of 300 percent.

Second, at present the tax on FMFL and FMW is 78 and 25 percent respectively. Even after adding import duty on liquor which is maximum of 150 percent does not equate with IMFL tax rate. Since the FMFL is relatively more price inelastic, the tax on FMFL could be increased by 5-10 percent. Similarly, for FMW. The tax could be increased by 10 percent or at least made equal to wine produced in India.

Third, Kerala imposed a flood cess post 2018 devastating floods and has been removed. In the current context of COVID, the government could introduce COVID cess on alcohol for next two fiscal years.

Motor Vehicle Tax

Tax on Motor vehicles is estimated at accounts for about 7.4% of States Own Tax Revenue in 2021-22 as compared to 6.2% in 2011-12.

- It is recommended that the regressive nature of tax for motor vehicles (higher rate of two-wheelers as compared to four-wheelers) needs correction which could bring additional revenue.
- We recommend an annual increase of 5% in fees of various services offered by the department (that is under the control of the state), so that the revenue from this segment is indexed to inflation.
- CAG Revenue Audit Report (2021) talks about arrears amounting to 2,457.16 crore (as of October 2019) of which 1796.75 Cr is owned by KSRTC and 660.42 crores is owned by Individuals. This amount needs to be recovered as soon as possible.

Electricity Duty:

- In 2018-19, Kerala collected electricity duty of only Rs. 29, 000 per Million units of electricity sold. This has to be compared very poorly with other states. For example, while Chhattisgarh, Gujarat and Maharashtra collected Rs. 8 lakhs per Million units, it was Rs. 5 lakhs in the case of West Bengal, Himachal Pradesh and Punjab.
- Given Kerala's consumption level and average rate of duty for different categories of consumers, the State should have collected at least Rs 1,825 crores in 2018-19 instead it reported an amount of only Rs. 62 Crores.
- The apparently disappointing performance of Kerala in this area is not because consumers of electricity do not pay their electricity duty but because KSEB which collects electricity duty on behalf of Government of Kerala (GoK) has not been remitting it.

- This non remittance is owing Government Order no. G.O. (MS) No.42/2011/PD. dated, 03-11-2011 which allows KSEB Limited to adjust the electricity duty payable to Govt for the next 10 years towards setting up a corpus of Pension Fund.
- The analysis reveals that Kerala could have raised additional revenue ranging between Rs 1,464 to 4,199 Crores in 2018-19 if Kerala's Electricity duty and tariff were at par with benchmark states.
 - For example, domestic consumers of electricity would have contributed additional revenue of Rs 2,349 to 1,246 Crores in 2018-19 provided that Kerala's tariff and duty rates were at par with either Maharashtra or Karnataka.

Stamp Duty and Registration Fees (SRF)

Stamp duty registration, for long, has been the second largest revenue in the State. It shares in SOTR declined from 11.6% in 2011 to 6.35 in 2021. In terms of its share in SOTR Kerala is 15th position among 18 major states. The growth rate of SRF in Kerala is lowest among the major states.

The additional revenue can be mobilized through a combination of measures such as raising the stamps duties and registration fees at par with other southern states, levying additional taxes, and administrative reforms among others. Some suggestions are proposed below.

- 1) It is recommended to increase the fair value of the property which is known for the undervaluation
- 2) A surcharge of 1-2 percent in all urban areas without any further distinction can be considered.
- 3) In the case of settlement not among the family members, the state has the lowest duty compared to Tamil Nadu and Karnataka. This can be raised at par with them.
- 4) As of 8th October 2020, the registration fees for registration of an agreement have been revised downward in the wake of the covid pandemic. At present, there are three slabs. Once the economy recovers from the pandemic, the registration fees in terms of the *maximum amount* have to be raised. After the upward adjustment of the *maximum amount*, it needs to be revised upwards every year by 5-10%, sort of indexed to inflation.
- 5) The state should aim to raise its share of SRF in SOTR to 9% over a period of 2-3 years which is the group average, and within 5 years, it should aim to collect 10% of SOTR. Assuming the economy returns to the pre-Covid level normalcy, this is expected to fetch the state additional revenue of approximately Rs 1000 crores per year.

Land Tax

- Land Revenue accounts about 1% of SOTR and it was only 0.24% in 2011-12. Yet in terms of share in SOTR, 'Kerala ranks 12th position among the 18 major Indian States'. Hence there is much scope for increase in land revenue following West Bengal which record highest share in SOTR
- If Kerala adopts use based fixation of land revenue, as is done by West Bengal where land tax accounts for more than 5% of total SOTR (Rs 2747 Crore) vis-à-vis Kerala's mere 0.41%. With just about double our land read W Bengal collects 6 times more revenue than Kerala

- If the land tax rates are based on land use, the revenue can be increased between a range of Rs. 639 crore to Rs. 871 crore from Rs.440 crore as per 2020-21(RE).
- States like Tamil Nadu, Gujarat, etc also levy vacant land tax. Tamil Nadu levy land tax at the rate of 5 to 8 % on capital value plus library cess of 10 paise per Rupee excluding Education tax. Vacant land tax can also be added to the LR component of Kerala.
- If we have the estimate of vacant land area, we can calculate the LR potential from vacant land area.

Non- Tax Revenue

Mining and Quarrying Royalty

The diagnosis

- Kerala has been lagging behind compared to the neighboring states.
- While Kerala is following the *consolidated royalty payment* system for Granite mining, Tamil Nadu and Karnataka is following a *quantity-based Royalty payment* approach.
- Based on our preliminary analysis, we feel that this could be one of the major reason for the increased revenues in this segment for Karnataka and Tamil Nadu.

Specific Recommendation

- Revise the rate of Royalties for ordinary sand, earth and clay from Rs 40/Tonne to 200/Tonne, considering the change in market rates
- Auction the Sands from Dams and Rivers where ever possible, after conducting environmental assessment. It could generate a one-time revenue.
- In the short run, increase the Dead Rent and Consolidated Royalty Payment System for Mining and Machines by 20%. With this, an additional revenue of 138.53 Crs. can be generated between 2021-22 to 2025-26.
- In the long run, switch to quantity-based mining permits from CRPS and implement IT based electronic tracking system for vehicles carrying mined minerals.
- An amount of 69.76 Cr. is pending in arrears (CAG Revenue Sector Report 2021), out of which 32.68 Cr. is given stay by the State as well as by court orders. The remaining 37.06 Cr needs to be collected promptly. Further, the state must take necessary steps to vacate the stay where ever possible.
- There is a need to estimate the actual number of quarries operating in Kerala. As per the study conducted by two scientists from KFRI Peechi (2015), the number of sanctioned quarries (750) in Kerala is pretty much high than this estimate. Even though the methodology used in the report may not be precise, the issue of the illegal quarries still remains. The illegal quarries should be either closed and/or heavily penalized and allowed to function (based on environmental assessment), and this could be a possible source of revenue.

Social Services: Education, Sports, Arts and Culture

Performance in comparison to other States

- In General Education head, Kerala receives revenue from secondary education (Rs.131 crores – (average – 2011to 2019) elementary education (Rs.23 crore). But States like, Andhra Pradesh (Rs.649.32), Telangana (Rs.317.39 crores) and Haryana (Rs.388.78 crores) collects more revenue from elementary education head. Tamil Nadu collects more than Rs.500 crores from both elementary (Rs.562.04 crores) and secondary education (Rs.593.54 crores).

Action Points

- Though it is not advisable to generate income through increase of fees, cess or surcharge at this pandemic period, we are proposing an increase of 20% in fees, public contributions to the educational institutions, receipts of museums and archaeological monuments. Based on the analysis, it is expected that an additional amount of Rs.51.35 crores in 2019-20, Rs.61.60 crores in 2020-21 and Rs.73.9 crores in 2021-22 can be generated.
- Additional actions proposed collect more revenue are:
 - A cess amount may be charged from the fees paid by the students enrolled in private education institution.
 - Extend the sports training programmes to the general public with a rational fee.
 - Extend the arts training programmes to the general public with a rational fee.
 - Revise the public library membership/other fees periodically.
 - Introduce a hike in the entry fees in the Museums and Archaeological monuments
 - Identify new historically important cultural heritages and make it available to the general public with a nominal fee.
 - Develop industrial collaboration of technical education.

Social Services: Housing

- Kerala only gets revenue from the subsector "government residential buildings," but other states get money from sources like "urban housing" (Karnataka) and "rural housing" (Madhya Pradesh) too.

Action Points

Short term

- State governments' rent tariffs for properties they own and operate, such as inspection bungalows, rest houses, and government servants' quarters, may be raised.
- All government owned and operated housing facilities, if not occupied for government purposes, may be made available to the general public with a reasonable fee.

Long term

- If commercially exploitable, idle components of government facilities such as inspection bungalows, rest houses, auditoriums, halls, and related grounds can be competitively tendered out on a BOT basis to private parties.
- The unoccupied quarters under State Farming Corporation (eg. Chithalvetty estate, Pathanapuram, Kollam district) may be renovated and rent out to tourists with a rational charge as part of farm tourism

Social Services: Urban Development

- Kerala collects revenue from the subsector 'Other urban development schemes' only whereas other states collect revenue from other sources like Integrated Development of Small and Medium Towns (Gujarat), Slum Area Improvement (Madhya Pradesh).

Action Points

Short term

- Slight increase in fee, penalties, service charges etc
- Optimize collection and audit processes to increase collection and minimize leakage.

Long term

- Kerala, like Gujarat, might embark on an integrated development of small and medium towns in order to generate more revenue receipts from services and service fees.
- Rate of penalty/fine may be linked with the income of the violator (In Finland, for example, fines for over speed driving are broadly linked to the income of violators and how far over the speed limit they were traveling when caught.)
- Create new revenue streams; such as
 - New charges for the disposal of food-waste. (In 2013, Seoul introduced a volume-based food waste disposal charge that succeeded in reducing its daily food waste significantly.)
 - Use of unused land plots through monetizing them either as lease contracts or through other more innovative public–private partnership structures.
 - Introduce public parking facilities like multi storied parking system in more places with a rational fee.
 - Develop recreation parks and charge rational entry fee.

Social Services: Other Social Services

Action Points

- Convert the departments entrusted for SC/ST/OBC/Minority welfare into social enterprises mode (A social enterprise is an organization that applies commercial strategies to maximize improvements in financial, social and environmental well-being of the people associated with it) and encourage internal resource mobilization.
 - Convert Industrial Training Centres managed by SC/ST departments to Production cum sales point etc.
 - Make value-added products from minor forest products collected by Tribals and market it with an ethnic brand name through a society owned and operated by government.
 - Transform traditional knowledge and traditional skill of SC/ST/OBC people into products and link them with the international market.
 - Using the surplus land areas attached to the hostels/ITIs/Model Residential Schools etc. for income generation.

General Services: Public Service Commission (PSC)

Key take away

- Kerala collects very nominal amount in PSC receipt head as compared to other states at least on par with UPSC.

Action Points

- Introduce a minimum amount as fees from the candidates appearing for various competitive examinations and interviews.
- Extend the examination facilities to conduct recruitment for private/semi-governmental/banking institutions through PSC by charging fees.

General Services: Stationery and Printing

Key Take Away

- Kerala performs well in collecting revenue receipts from stationery and printing as compared with other states.

Action Points

- Channelize all the purchases for the government institutions/public sector undertakings/ autonomous institutions through the stationery departments
- Provide facilities of the stationery and printing department for the bulk purchase of private entities.
- Extend the service of Stationery Departments in schools for the supply of the stationery items.

Receipts from Co-operation

Kerala is the best performing state among major states in this area. Major receipts of the Co-operative department are audit fee, audit cost, arbitration fee, fee for appeal or revision, interest/penal interest on loan, penal interest for delay in retirement of share capital, dividend on share capital, guarantee fee and liquidation charges etc.

The Government may consider implementing the following recommendations for effective collection of co-operation receipts

- Kerala co-operative societies act, 1969 should be refurbished.
- The information on revenue recovery of the outstanding balance of principal and interest was unreliable. However, it's time to take adequate steps for the realization of the amount under revenue recovery.
- A considerable change can be made in the fees and charges, so that the receipts will grow by at least 10 percent. For Instance, the application fee charged for new registration is only ₹ 5000, which is very low. However, the department can charge double the amount since many contemporary cooperative societies emerge as part of various government schemes.
- A sperate audit fee norms can be made in respect of urban co-operative thrift & credit Societies and cooperative Banks, Youth Co-operative Societies, Consumer Co-operative Societies and other societies such as Housing, Industrial, credit and non-credit societies etc. At least a 10-percentage hike in the audit fee is to be charged to the four existing audit fee categories from the first five lakhs working capital to above 50 lakhs working capital.
- Co-operation spending to receipts ratio is likely to increase in the coming years as the government has created a space to attract new cooperative societies. However, there exists a considerable gap between receipts and spending. Therefore, spending (Revenue & Capital) to receipts ratio on Co-operation should restrict to 2 or below.
- The government may evolve a system for ascertaining the eligibility of beneficiaries before sanctioning the assistance. In addition, they may take steps to avoid retaining huge amounts received as loans from National Co-operative Development Corporation (NCDC) on behalf of the beneficiaries in the TP account for a long period.
- Evolving appropriate mechanism for watching the realization of dividend declared by the societies and crediting the dividend to the Government account.
- The co-operation department should maintain a proper record to watch the recovery of loans sanctioned by NCDC.

Expected Additional Revenue Mobilisation from various sources

From table A9.1 it is evident that at least Rs 6800 crore could be mobilised in the immediate short run from different SOTR heads indicated. We must hasten to add that the expected additional revenue indicated here is highly conservative estimate for the following reasons.

Table A 9.1: A conservative estimate of short run additional revenue mobilization

States Own Tax Revenue Items(SOTR)	Expected Additional Revenue (Rs. Crore)
GST	0
State Excise	1,000
Motor Vehicles	100
Electricity Duty	1,500
Stamp Duty and Registration Fees	1,000
Land Revenue	430
Arrears to be collected	2,800
Total	6,830

First, we have not taken into the considerable potential from non-tax revenue.

Secondly, the arrear amount considered above is very conservative for the following reasons: As per CAG data, an arrear amount of Rs. 20146.39 Crore is due to Government of Kerala from individuals, private firms, PSUs, various Govt depts and Govt of India. Out of this amount, Rs. 5765.84 Crore is pending for the last five years. Around 30.85%, (Rs. 5,362.9 crore) is under stay by courts. If the government is successful in initiating steps to collect at least 50 per cent of the arrear amount not stayed by the courts, an amount of about Rs. 7,500 crore could be realised. Even if we focus on those arrears pending less than five years and succeed in collecting 50 per cent of it, an amount of Rs.2,800 crore could be realised as indicated in table A 9.1. If we succeed in collecting at least 50 per cent of the total arrears excluding the amount stayed by the court, the additional revenue mobilized would be of the order of Rs 11,530 Crore.

Thirdly, it is well known that for various reasons there is large scale evasion under GST and our full potential is yet to be reached and that our GST-GSDP declined. If the GST Department earnestly exploits this potential an additional revenue of at least Rs 5000-8000 crore could be tapped. Here we note the new initiatives being introduced by the vigilance section of SGST which has already started yielding rich dividends. With all these efforts the total additional revenue mobilization could be crossing Rs 16500-20,000 crore.

Annexure 9.2

Recommendations on State Finances by Different Committees Appointed by the Government

During 2020, different Committees appointed by the Government submitted their recommendations focusing on different aspects of government functioning. Almost all committees reflected on scope for improving Kerala's state finances. In what follow highlight their specific recommendations pertaining to additional revenue mobilization and expenditure rationalization by the Government of Kerala (GoK).

Recommendations regarding Revenue Receipts

Report on COVID-19 Pandemic and Kerala: A response Strategy (June 2020)

1. The Committee analysed the additional revenue from Stamp Duty and Registration fees. The committee suggests that a calibrated increase in fair value of land accompanied by a small reduction in the stamp duty rates, along with measures such as e-stamping for all documentation combined with the measures already announced in the budget will yield additional revenue of at least Rs 700 crore in the financial year 2020-21.
2. The Committee discussed on the additional revenue from liquor. Liquor is considered a non-merit good. States raise revenue from liquor by levying excise duty or/and sales tax on its manufacture and sale points. The ostensible reason for heavy duty and taxes is to demotivate the public from irresponsible liquor consumption. As the demand for liquor is inelastic in nature, increase in tax rates will raise almost assured revenue to the Government. However, the past two years data in Kerala signals to the policy makers that the consumption in terms of quantity (litres) is reducing on one year on year basis. The committee suggests that Rs.6452 crore can be collected as the most likely amount by Government of Kerala through a 50 per cent hike in the present rates of Excise Duty and Sales Tax and by the introduction of membership fees for home delivery of liquor on the basis of a five years membership systems to be opted for by the interested consumers.
3. The Committee looked at the additional non-tax revenue from lottery. Through the introduction of high value monthly lottery earmarked for welfare pension, creating an attractive prize structure for all the existing lotteries and other suggestions mentioned by the Committee, a 20 per cent increase in lottery sale is estimated during 2020-21. This will realize Rs.200 Crores as additional net surplus of from lottery to the State.
4. Kerala from its formation has been spending more on Education and Health sectors. The average percentage of Non-tax revenue to Revenue Expenditure for Education is 1.45 percent and that for Health it is 3.68 percent from 2016-17 to 2020-21. It shows that for every Rs 100 spent by Government on these sectors the user charges collected from these sectors is only Rs.1.45 from education and Rs.3.68 from the health sector. Non-Tax Revenue for the current fiscal year (2020-21) is expected as Rs.2000 crore apart from lottery receipts. By adopting a 5 percent annual increase in line with inflation, along with effective governance initiatives (including collection of arrears) additional revenue of at least Rs.300 crore can be collected.
5. The present system of collection of rent from leased lands were analysed by the Committee. A task force is suggested to function on a mission mode to collect the lease rent arrears along with re-assessment and resumption of land not being used as per lease terms. The Committee suggests fixing the lease rentals based on market rate

determined by usage of land as per the master plan in the urban areas. Apart from the revenue generated from leased land, there is considerable scope for resumption of unutilized land with Public Sector Undertakings (PSUs) and other Government institutions. Due to problems in fixing the market value, the committee suggests that instead of market value the lease rent may be fixed on an interim measure based on fair value of the area, which is already notified. This can be followed till the market value of various user categories of land in urban areas is ascertained and notified.

Mani committee (June 2020)

1. Most Village offices accept online payments of basic tax, cess etc. But if a specific payment is not possible online, there is no help desk which can rectify the problem. Such a facility will save the manpower now employed for collection.
2. Incentivizing government employees to implement innovations in reducing revenue expenditure. Government employees best know how to reduce the non-salary component of revenue expenditure like purchase of consumables, TA and DA, repair and maintenance, reuse/repair of available equipment/ machinery etc.
3. Doing away with retired employees working on contract basis.
4. The government may rethink on earned leave provided to its employees, a practice that exists only in Kerala. They may be allowed to accumulate leave of up to 300 days only during their entire service period. Encashment of earned leave should ideally be allowed only at the time of retirement and not at the end of every year. Alternatively, government may consider suspending this provision for one year under normalcy is restored. If the government were to accept this recommendation an amount equivalent to Rs 1000 crores can be saved per year.
5. Most of the offices are computerized and steps are being taken to speed up the process of 100% computerization. With computerization coming in, the posts of typists can be reduced.
6. Rationalization and integration exercises have to done in respect of Government funded agencies like boards, authorities, societies, commissions, universities etc. There are different organizations for similar areas of activities and this is a drain on the exchequer.

Joseph Committee

1. **Paid Service at Government Hospitals for the Affordable:** It is also possible to explore the possibility of offering paid services for the affordable by the Government hospitals after the general working time. A specified time can be allotted for paid services of Doctors. The revenue thus generated could be shared between the doctors and meeting the hospital's own expenditure
2. **Revision of Lease Rent:** The high price of land in the state means that the asset value of government land is also high. The lease rent levied on government land need to be revised in line with the market values.
3. **Hike in Service Charges:** Service charges and rates of saleable items in various departments have to be increased by 25 per cent and should be indexed with inflation rate.

Additional Chief Secretary's (Finance) Committee (January 2020)

This report comes up with recommendations for mobilizing additional financial resources from State's own tax and non-tax revenue sources. The report also looks into

the potential means of revenue sources for local governments. We present here some relevant recommendation pertinent to sources of tax and non-tax revenue.

2. Stamp Duty and Registration

The revenue from stamp duty depends on the value of the property registered along with the stamp duty rate. Hence for mobilising more resources, the options are limited to raising either or both.

Recognising the undervaluation of property, the Government had initiated several steps towards preventing undervaluation. A notable initiative was the introduction of fair value system of land in 2010. However, undervaluation is widely prevalent.

The stamp duty rate at present, as per the last revision in 2014-15, is 8% irrespective of the location. In addition, there is a 2 per cent Registration fees. Kerala has the highest rate of Stamp duty and Registration fee compared to other states.

1. Considering the absence of a scientific fair value fixation and the existing fair value being much lower than the prevailing market value, an annual increase in fair value may be attempted along with a gradual reduction of stamp duty and registration fee.

An illustration with potential for additional revenue mobilization with a 20% annual increase in fair value along with a gradual reduction in stamp duty from 8% at present to 5% within five years is presented in the table below. It is evident that a 20% annual increase in fair value along with a gradual reduction in stamp duty and registration could lead to 8% increase in total revenue in 1920-21 with a 24% growth in 2023-24

Year	Fair value increased by 20% each year*	Rate of stamp duty (%)	Stamp duty	Rate of Registration Fee (%)	Registration fee	Total (Rs.)	Growth in revenue (%)
2019-20	100000	8.0	8000	2.0	2000	10000	
2020-21	120000	7.25	8700	1.75	2100	10800	8%
2021-22	144000	6.50	9360	1.50	2160	11520	15%
2022-23	172800	5.75	9936	1.25	2160	12096	21%
2023-24	207360	5.0	10368	1.0	2074	12442	24%

*Fair value increases by 20% each year.

**Stamp duty declines by 0.75% each year.

The registration fee decreases by 0.25% each year.

Registration fee should be reduced only for property sale, while the rates for others should be kept at the present rate of 2 per cent in order to protect the current revenue.

Flat Registration

In the case of registration of residential Flats, large scale under valuation is reported. Valuation certificate is compulsory for flat registration.

2. Similar to the fair value for land, a system of fixing fair value for flats based on the location and plinth area following GO (Rt) 52/2017 of labour Department may be adopted

Other services of Registration Department

3. Fee for all the services rendered by the Registration Department may be indexed at least to the rate of inflation.

3. Land Revenue

The existing land tax in the Municipal areas is only Rs. 2.02 per a Cent or Rs. 5 per Are. The current rate is too low and therefore it could be raised to at least to Rs. 10 per Are. This in turn could lead to a doubling of land revenue.

It may be noted that even with a 4 fold increase, the tax amount would be Rs. 48.6 per annum for 2.43 Are (6 cents) (Option 1). The third option is to double the rate (Rs. 10 per Are). This will entail a payment of only of 24.3 for 2.43 Are (6 cents) that appears reasonable while resulting in an almost two fold increase in the land tax revenue.

Table below gives 3 options of land tax rate in Municipalities.

Existing and proposed rate of Land Tax and its revenue potential for Municipalities

Are 2.43 (6cent)	Existing rate per Are in Rs.	Upto 2.43 Are land revenue in an year in Rs.	Proposed rate per Are per year in Rs	Proposed Amount for 2.43 Are in an year	Revenue increase in the proposed rate for existing extent of land in Rs. For 2.43 Are	Revenue increase in the proposed land revenue for 100 cents of land in Rs.
Option 1	5	12.15	20	48.6	36.45	607.35
Option 2	5	12.15	15	36.45	24.3	404.9
Option 3	5	12.15	10	24.3	12.15	202.45

In the corporation area the existing land tax rate is only Rs. 10 per Are (or Rs. 4.04 per Cent). Hence a person having 4 Cents of land (1.62 Are) has to pay only Rs. 16.12 as land revenue in a year. It implies that the present rate is too low which could be increased by at least fivefold. Even with an increase of three fold increase (Rs.30 per Are), the own tax to be paid land up to 1.62 Are (4 cents) is to be Rs. 48.6 in an year. Table below gives 3 options of land tax rate in Corporations

Existing and proposed land revenue rates and its revenue potential for Corporations

Are 1.62 (4 cent)	Existing rate per Are (in Rs)	Upto 1.62 Are in an year	Proposed rate per Are (in Rs)	Proposed Amount for 1.62 Are in an year	Revenue increase in the proposed rate for existing extent of land in Rs. For 1.62 Are	Revenue increase in the proposed rate for 100 cents of land in Rs.
Option 1	10	16.2	30	48.6	32.4	809.8
Option 2	10	16.2	25	40.5	24.3	607.35
Option 3	10	16.2	20	32.4	16.2	404.9

4. It is proposed to double the existing land tax rate in the Municipality, Corporation and Panchayat areas. It is justified considering higher administrative cost and the compliance cost involved in tax revenue.

Transfer of Registry Fee

The transfer of registry fee is Rs. 45 up to 5 Ares. The highest rate of transfer of Registry is Rs. 830. Considering the land value in Municipal and Corporation areas the rate of land registry can be increased.

5. The existing rate of transfer of registry fee of Rs. 45 up to 5 Ares may be enhanced to Rs.500 and the highest rate proposed is Rs.2500 for property above 2 hectare. An estimated amount of Rs.10 crores can be raised from this hike.

Thandapper Extract / Record of Right (RoR)

At present Thandapper extract/RoR is issued to every land holder free of cost. An average number of 4 lakh Thandapper extract is being issued by the Village officers every year.

6. A fee of Rs. 100 may be fixed as Thandapper extract which could mobilize an additional revenue of 4 crores
7. Fees for title deed, demand notice fees, collection charges, resurvey charges, demarcation fees, royalty fees, seignior age fees etc. may index with the rate of inflation
8. In the case of Royalty, fees on Quarry, which are making drastic environmental issues, more detailed study may be undertaken.

Collection of arrears and enhancing collection efficiency

9. Immediate steps may to be taken for the collection of the pending arrears of land revenue through proper awareness schemes, further strengthening and popularising the online tax collection, greater involvement of residential associations and other means

Recommendations on Rationalization of Expenditure

Report on COVID-19 Pandemic and Kerala: A response Strategy (June 2020)

1. Pension outflow of the state accounts around 20 per cent of the Revenue Receipts and 17 per cent of the Revenue Expenditure of the State. Increasing the age of retirement has been a point of contention in Kerala. There is a perception that it cuts massively into the employment opportunities of the youth. On the other hand, the number of jobs that Government offers is only in the range of 18000-20000 each year against annual retirements. So, the real loss in terms of employment may not be as substantial as one would expect. The net savings on account of extending the current retirement age from 56 to 60 are analysed by the committee.
2. Raising of pension age from 56 years is clearly a major benefit given to the employees. Though in the short run the Government will be able to defer the payment of retirement benefits but this will substantially increase the medium- and longer-term burden on the Government in two ways. Firstly, the eligible pension amount would rise for every employee with four increments getting added if it is increased to 60 years. Secondly, with additional 4 years in service, the quantum of pension payable to each employee will also go up.
3. Considering the above burden of the Government, an alternative proposal is suggested by committee. Instead of raising of pension age for all employees as a matter of right, allow only the privilege of re-employment, at the option of the

employee, on same pay and allowances (*or at lower level; we suggest*) as existing on date of retirement of the employee i.e., at the age of 56 years with some conditionality.

4. The committee believed that the goals of expenditure rationalisation should also study in detail the salaries incurred by Government to aided educational institutions. The pros and cons of this should be subjected to detailed review and discussion in the public domain. The Committee recommends that the Government may appoint a **High-Level Expert Group comprising of recognized Experts in Education, Finance and Law to submit a report to *inter alia* examine the issues such as system of financing aided educational institutions**, the burden on the finances of the State and the benefits the society is getting out of it and framing of new legislative and administrative framework.
5. **Interest expenditure** accounts for nearly 18 per cent of the total revenue receipts of the State and 15 per cent of its total revenue expenditure. The Committee recommends: (a) Government of Kerala may initiate steps to discuss with Government of India seeking concessional repayment facilities by way of write-offs/moratoriums/Debt swap accommodation/Debt consolidation and relief activities on its debt burden specifically the portion that the State owes the Centre.(b) Reserve Bank of India may be approached for facilitating a programme for switch/conversion of State Development Loans taken in the past in the manner that is available to Government of India currently and (c) Finance Department should engage Market Advisory Services of premier institutions to firm up arrangements for the programme and to liaise with RBI for the implementation of the same.

Mani committee (June 2020)

1. Posts in various Government departments which have become redundant and not filled up for a period of more than 1 year may be abolished. G.O. (P) No. 1208/2001/Fin dated. 22.10.2001 already exists providing for this, and the provisions of this G.O. may be implemented forthwith
2. No new posts should be created in Government/Aided organizations for the next 2 years.
3. At the entry cadre in Kerala State and Subordinate Services, during the probation period, the report suggests paying only 75% of the total emoluments before confirmation is declared. On an average, around 25000 new persons join State Govt. service every year. With a reduction of 25% in total emoluments during probation period, an estimated amount of Rs. 66 Crores will be saved per year
4. Technical departments are saddled with a large number of clerical staff who duplicates the work of technical staff. Most of them can be redeployed and the technical staff can take over most of their work, especially now that computerization is almost universal.
5. There are a large number of temporary posts in the Government that are created for various purposes and these continue perpetually.
6. No temporary posts need to be created hereafter and existing temporary posts need not be regularized or made permanent.
7. There are 34 welfare boards with overlapping functional areas catering to the same set of beneficiaries. These boards can be consolidated and merged based on functional areas and create a Kerala State General Welfare Fund Board.

8. There are number of ad-hoc non-statutory commissions of enquiry under the Commission of Enquiries Act which continue for years together. This practice has to be streamlined.
9. Purchase of new vehicles should be limited to enforcement departments such as Revenue, Police, Excise, Forest, Fire force etc. A complete database of all vehicles being used by government departments, both owned and hired, needs to be prepared so that the size of the problem can be understood and addressed.
10. TA claims and its settlement process should be streamlined using on-line systems wherein proof of travel must necessarily be uploaded.
11. There should be reprioritization of State Plan projects in consultation with State Planning Board and unviable projects may be dropped.
12. Release of funds to grant-in-aid institutions may be agreed only on consideration of the financial position of the institution and its performance. Institutions that have not become self-sustainable need not be given any grant-in-aid.
13. Many Centrally sponsored schemes even after their discontinuance of the Central aid are accommodating staff and their salaries are being met from the State exchequer. Such posts may not be permitted to continue.
14. Merging of corporation, PSUs with same objectives (e.g. Women's development corporation, Gender Park etc.). To examine clarity of different PSUs working under same dept.
15. Establishment of new grant-in-aid /PSUs/board/corporation/ autonomous institutions should be frozen for next 2 years.
16. Commissions and corporations having similar nature of work may be closed and a single entity may be retained as per necessity.
17. Consideration of proposals of the following may be suspended for a period of at least 1 year (*We suggest for two years*)
 - a. Post creation & up gradation of posts;
 - b. New construction works
 - c. Modernization/Modification of Govt. buildings
 - d. Purchase of furniture
 - e. Purchase of vehicles.
18. Following items comes under Plan/Non Plan allocation of Govt. Departments may not be permitted for the time being:
 - a. Starting of new Divisions/Branches
 - b. Trainings, Workshops, Seminars, - these can be conducted through online means
 - c. Study tours
 - d. Printing of brochures, journals, catalogues etc.
 - e. Fairs, exhibitions
 - f. Foreign tours.
 - g. Hospitality expenses to be limited to the bare minimum.
19. Government appoints several ad hoc non-statutory Commissions of Inquiry under the Commission of Inquiries Act with similar staffing. These Commissions tend to answer extremely routine questions due to some temporal significance over periods of three years or so. As they tend to recur during a five year period instead of appointing different superannuated Judges or Commissioners of Enquiry, maintain an establishment in the Home or Law Department, an office of

Commissioners of Inquiry under a Deputy Secretary who shall be the Secretariat and have a panel of Judges who are willing to serve as Inquiry Commissioners. As far as possible, same Judge may be asked to enquire into, say, three-four related matters.

20. Judicial commissions functioning for more than 2 years should be asked to submit the final report within 2 months and be wound up thereafter.
21. The requirement of “countersigning” of challans before making payments to Government can be dispensed with.
22. All Village offices, Panchayat offices, Municipal and Municipal Corporation offices have been provided with Internet facilities. But in most of them, digital payment or net banking payments are not permitted. Permitting digital payments will help the public and reduce collection expenses.
23. Even though all Treasuries and Government offices are computerized and are online, the departments insist that many payments should be made in Trivandrum only. This should be done away with
24. Expenses in Kerala Jails are exorbitant. There are two items of expenditure that require closer attention. First is on food expenses and second is on the actual wages paid
25. Measures may be taken to dispose the unserviceable articles including furniture, machinery, vehicles etc. through proper procedure and remit the sale proceeds to Govt. account.
26. The integration of PSU’s of similar nature (e.g. Malabar Cements, Travancore Cements, SIDCO, KADCO etc.) needs to be considered.
27. Government have set up certain institutions and given financial assistance for a particular period for their sustenance. Such institutions have formed corpus fund from internal revenue collections and the same is getting accumulated.
28. Instead of reappointing Judges on salaries full-time, their services can be availed on specific enquiries on the basis of honoraria and each enquiry may be completed not exceeding a period of one financial year.
29. Non-plan expenditure, except salary and wages in state government offices, autonomous and grant-in-aid institutions should be limited to 75% of actual expenditure occurred during the previous financial year.
30. The scholarship and educational assistance to students should be limited to the norms of Central Government. Criteria for allowing scholarship/educational assistance should be reconsidered.
31. There is a need to scrutinize the functioning of government subsidized institutions like orphanage/old age home/private training institute and whether they are eligible for continuous financial aid.
32. The two departments or areas where employment and recruitment and management practices need a complete overhaul that will lead to substantial expenditure reductions are in (a) Education department; and (b) Kerala State Road Transport Corporation. These two are dealt with in some detail below:
Education
33. Cap admissions in a school taking into account its intake capacity, including infrastructure and recreational facilities

34. The uneconomic schools in a locality (covering a radius of 3 to 5 kilometres) shall be merged with one of the uneconomic schools and the rest of the schools land and facilities be used for other government/developmental purpose.
35. Student count shall be based on UID and measures to find out bogus strength shall also be worked out.
36. UGC Regulations for 2010 and 2018 have been adopted by the State Government in all government and aided colleges. According to these, workload of 16 hours per week is required for every Assistant Professor.
37. The consideration of one hour for teaching PG programme being equivalent to 1.5 hours of teaching UG programme, will no longer be applicable as it is not provided in the UGC Regulations.
38. The posts existing for less than 16 hours workload should be done away on retirement/resignation/relieving of the present teacher or occurrence of vacancy in any other manner.

KSRTC

39. A turnaround strategy to overcome the crisis in KSRTC was submitted to government on 27th February 2019 by a committee headed by Professor Sushil Kanna. Several recommendations in the report which are vital to the reorganization are yet to be implemented. KSRTC which has already been weak financially has been virtually on the verge of collapse with its operations completely halted for the last two months due to the lockdown in connection with the Corona pandemic. The study recommended for reconstituting the board of KSRTC with professionals, to replace the archaic government structure now which is inefficient. The board shall be reconstituted immediately so as to provide better governance and direction to the turnaround strategy.

Joseph Committee

1. **Pension Deferment Scheme:** The main three committed expenditure of the State are salary, pension and debt service (Interest). In the present-day crisis, like most of the states, Government of Kerala has also implemented the Salary deferment scheme. In sync with above, a pension deferment Scheme for those receiving pension above Rs.20000 is proposed. The monthly pension expenditure comes to Rs.1900 Crores for 5,38,313 pensioners.
2. **Debt Swap Scheme:** The annual interest payment comes to Rs.19850 Crores during 2020-21(BE). This commitment is being met with an average interest burden ranging from 8 - 9 per cent. But the present market rate hovers around 5-6 per cent only. As the part of long-term Public Expenditure Management (PEM) the Government of Kerala may think of a debt swapping scheme on a regular basis, with the help of professional experts, for reducing the yearly interest burden to a larger size. Government of India had already practiced such schemes during 2002-05. The Debt swapping Scheme capitalizes the current low interest market rates by swapping some of the higher interest-bearing outstanding debts with lower interest debts and thereby reduces the interest burden of the State.
3. **Streamlining welfare payments:** The state's firm commitment to the poor and vulnerable has resulted in an elaborate social protection scheme. However, the system as it exists today requires a detailed review and streamlining which could save the Government at least Rs.1,200 crore in a year.

4. **Review of Post creation in Aided School:** Around 15000 posts in aided school are created. It is time to review the created posts with the actual work load and any excess post created need to be dispensed with. Necessary amendments need to be made in the Kerala Education Rules.
5. **Review of Post creation in Higher Education Institutions:** Similar to aided school there is also room for reviewing the process of post creation in higher education institutions considering the work load.
6. **Re-deployment of excess Staff:** There are many departments which are having excess staff that needs to be redeployed urgently to the Local Governments especially when the LGs are assuming ever increasing role at present.
7. **Reviewing deputation/work arrangement:** There is the need for reviewing of deputation/work arrangement of various departments through appropriate mechanism.
8. **Streamlining the capital expenditure:** Streamlining of all the capital expenditure like purchase of vehicles, building construction work for various departments, autonomous bodies, public sector undertakings is called for.
9. **Reviewing the Non-Plan Expenditure:** Non-plan expenditure such as fuel, travel, foreign tours, hiring of buildings, telephone, mobile phones, internet and etc. are to be reviewed and at least 10 to 20 per cent cut need to be done overboard.
10. **Universal short-term credit Scheme:** Creating provision for easy credit (on personal security) at low interest rate for self-employed, small business, micro enterprises and lower income groups through co-operative Banks with a provision of interest subsidy by the State.
11. **Interest on pay revision arrear:** In the last pay revision implementation, arrears were distributed within a period of three years with interest rate of 8 per cent. This created additional financial burden to the state. Such practices are to be done away with.

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