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**State and the COVID-19
pandemic
Kerala in the context of global,
national and subnational
experiences**

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**State and the COVID-19 pandemic
Kerala in the context of global, national and
subnational experiences**

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Abstract

Historically, pandemics have united humanity against the common enemy; the recent Covid crisis period has also once again forced on humanity the role of the collectivity, state, hitherto subordinated to the neo-liberal liberalization. The present paper explores the strategies followed by countries at the various levels of development, with special focus on India and Kerala. The paper begins with an overview of the global trends of the crisis and response and seeks to locate the factors behind the diverging performance in terms of the Great Vaccine Divide and differences in fiscal support; also discussed 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 paper then moves to an overview of the trends of the crisis and response in India, and discusses 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 paper also presents the GDP growth scenario under the crisis. Then follows 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 penultimate part of the paper 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 paper concludes with a few observations on the inevitable importance of government interventions in a deadly crisis such as the present one, whatever the costs.

Keywords: Covid-19 crisis, Global trends, Indian scenarios, lockdown, undercounting, public debt

JEL Classification: I100, I150, I180, I190, I30, I380, J68, O1, O2,
O4.

1) Introduction

History repeats, ironically, in times of crisis. History has repeated in the recent Covid crisis period by raising once again the role of the collectivity, state, hitherto subordinated to the neo-liberal liberalization. Thus has started the present state-led war against the pandemic. However, given the profoundly unequal world, characterized by unacceptable divides between and within countries, in the aftermath of over thirty years of 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

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)

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

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

protection of their citizens from the virus, even at an enormous economic cost of depression at home.

In this paper we explore the strategies followed by countries at the various levels of development, with 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 paper 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 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 paper with a few observations on the inevitable importance of government interventions in a deadly crisis such as the present one, whatever the costs.

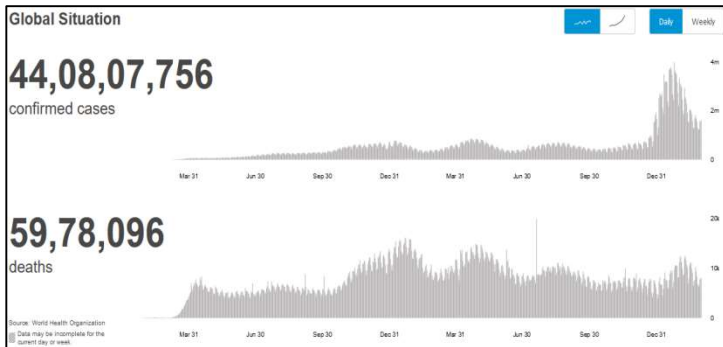
2) The crisis and the response: Global trends

Battled and battered by ever 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. As of 4 March 2022, there were 44,08,07,756 confirmed cases of COVID-19, including 59,78,096 deaths, reported to WHO, with 1.92% case fatality rate. As of 26 February 2022, a total of 10,58,57,66,316 vaccine doses were administered, number of persons fully vaccinated per 100 population being 55.52.⁴ 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

⁴ <https://covid19.who.int/table>. Accessed 5 March 2022.





essential necessity for speedy and universal vaccination on a war footing.

Figure 1: COVID-19 infection: Global situation (daily counts)



Source: : <https://covid19.who.int/>. Accessed 5 March 2022.

Table 1: 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	440,807,766	10,348,446	5,978,096	52,700	135.81	65.52
High-income	23,90,45,146	65,22,827	22,79,136	26,452	187.57	71.21
Upper middle-income	12,85,40,830	27,55,269	26,53,549	21,582	175.09	70.58
Lower middle-income	7,03,03,926	10,43,749	9,95,900	4,463	102.9	44.94
Lower Income	18,43,744	3,569	42,596	131	18.55	9.09
 United States of America	7,84,28,884	3,98,915	9,47,625	11,862	162.41	63.5
 India	4,29,51,556	57,211	5,14,589	1,363	127.65	56.53
 Brazil	2,88,42,160	3,57,270	6,50,000	3,581	173.85	69.99
 France	2,22,28,657	3,48,863	1,35,835	1,112	227.3	79.75

Source: <https://covid19.who.int/table>. Accessed 5 March 2022.

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 percent.⁵ 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

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

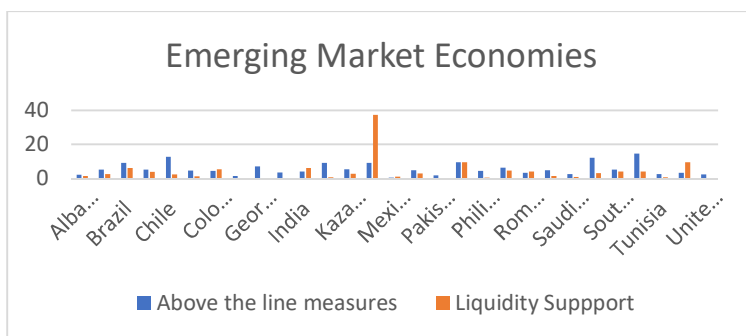
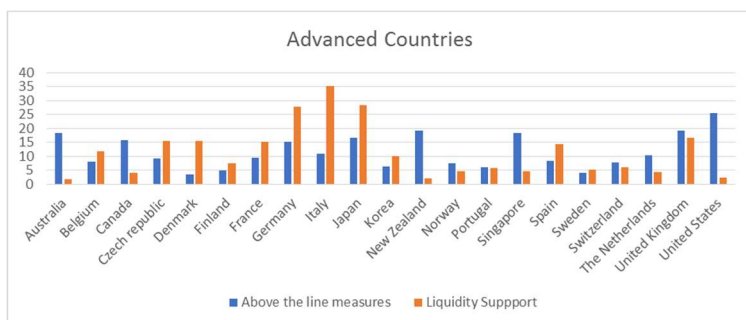
recovery could take 14 times longer, more than a decade (World Bank 2020).

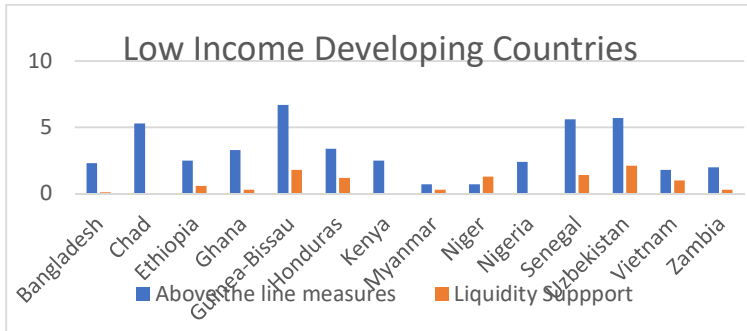
It is significant to note that the global equality advocates have called on all the nation-states to levy a one-time 99% tax on these billionaire windfall gains during the pandemic, enough to pay for COVID-19 vaccine for everyone across the globe and to provide a \$20,000 cash grant to all unemployed 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).

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

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





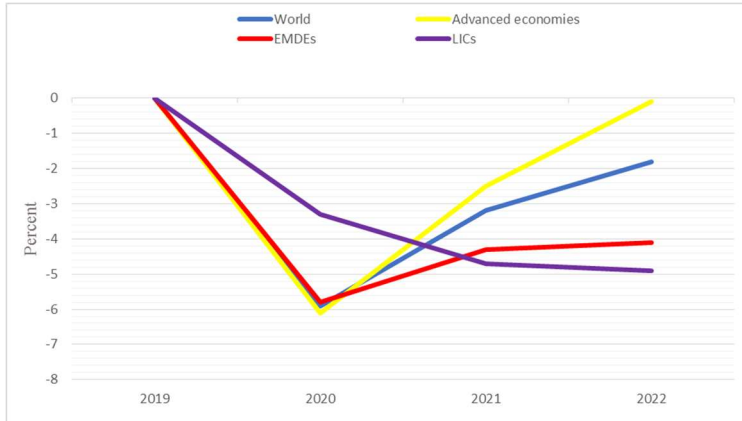
Source: <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>. Accessed 5 March 2022.

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. Fig. 2 vividly shows the predominance of fiscal spending in the advanced countries (such as the US, the UK, Australia, New Zealand, Singapore, Canada, etc.) compared with the emerging market economies and the low-income countries. Very few countries among the emerging market economies (Chile, Serbia and Thailand) were able to muster above-10% fiscal spending, and unfortunately none among the low-income countries. Especially notable is the case of India, among the emerging market economies, with less than 5% fiscal spending and a little-above 5% monetary support; note that in India, the GDP growth was in the southward direction even before the outbreak of the pandemic on account inter alia 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 moderate from 5.9% in 2021 to 4.4% in 2022 (IMF (2022: 1), the countries may be broadly divided into two groups (see Figure 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 3: Deviation of output from pre-pandemic projections



Source: World Bank (2021)

Note: EMDEs = emerging market and developing economies; LICs = low-income countries. Figure shows percent 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 recovery of the labour market 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 market 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).

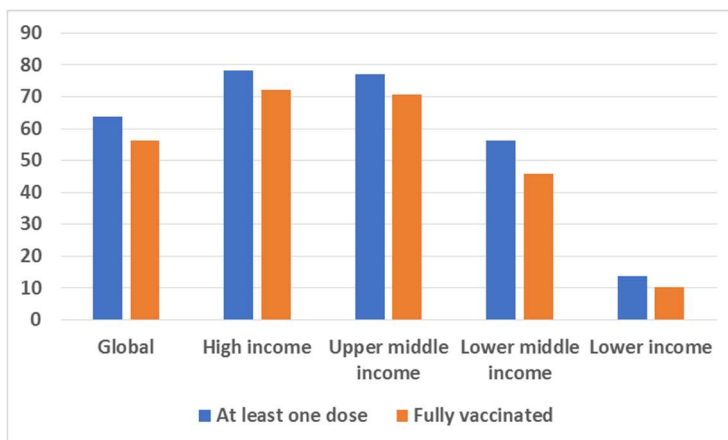
Behind the diverging performance

The great vaccine divide

The diverging performance across countries could be attributed to a great extent to the great vaccine divide (see Fig 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 the protection from the virus through vaccination. The fully vaccinated share of the population is 72.25% for high-income countries, but only 10.36% for low-income countries, as of 5 March 2022. “And 86 countries—accounting for 27 percent of the

world's population—fell short of the end-2021 40 percent vaccination target (excluding boosters) set out in the IMF pandemic proposal” (IMF (2022: 1).

Fig 4: The great vaccine divide (per cent of population)



Source: <https://covid19.who.int/table>. Accessed 9 March 2022.

Note: “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).

It goes without saying that 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, and the rest of the world especially the less developed will have to survive with the uncertain world bearing with 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 10% 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 involve 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.

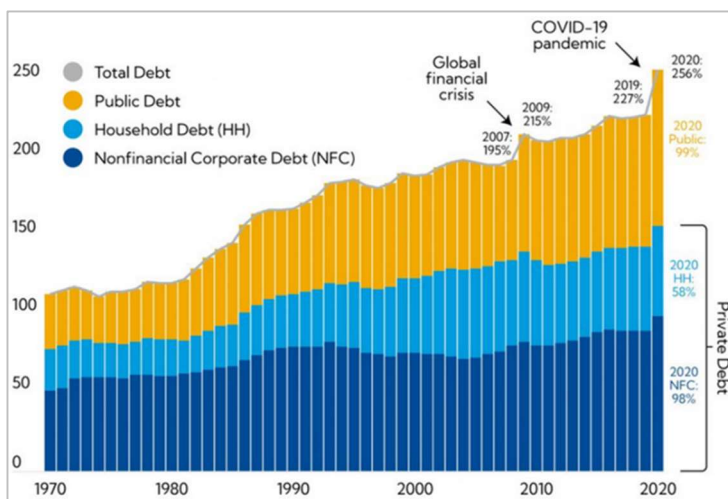
While the advanced economies continue with substantial fiscal support, many emerging market economies have started fiscal tightening, shifting to less and less accommodative stance mainly on account of financial constraints, which unfortunately may not augur well in the current fluid situation. That virus here easily becomes virus everywhere must be a clear lesson for the inward-looking advanced economies at least 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 world was hit by the pandemic and a deep recession followed. The global debt rose by 28 percentage points to 256 percent of GDP in 2020, and the global public-debt-GDP ratio reached a new peak of 99% in 2020 (see Fig 5), which is apparently 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 unprecedented increase, the public debt now accounts for almost 40 percent of total global debt, the highest share since the mid-1960s.

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

It is evident that 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, inflation rate has got rapid momentum in the United States and in some emerging market 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.

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

“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).

It goes without saying that these price rises against below pre-pandemic levels of employment are posing difficult choices to policymakers, particularly in the emerging market and developing economies. With 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, the 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 effected by some countries such as

Germany, Belgium and Austria in their fiscal stimulus packages to address the economic crisis caused by the pandemic.⁸

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 a 24-hour period.¹¹ Now in India, as of 8 March 2022, there were 4,29,71,308 confirmed cases of COVID-19 (the second-highest caseload in the world) with 5,15,210 deaths,

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

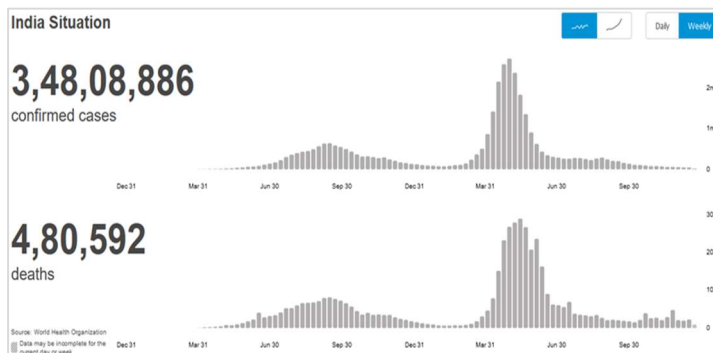
⁹ <https://www.hindustantimes.com/india-news/covid-19-number-of-recoveries-exceed-active-cases-for-first-time/story-uA0C6zESJTdkl9UQ2IHc2M.html>. Accessed 3 January 2022.

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.

reported to WHO, with a case fatality rate of 1.199%.¹² And a total of 179.33 crore vaccine doses were administered,¹³ number of persons fully vaccinated per 100 population being 83.21%.¹⁴

Fig. 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 that got manifested in a series of measures.

¹² <https://covid19.who.int/table>. Accessed 9 March 2022.

¹³ <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1804193>. Accessed 9 March 2022.

¹⁴ <https://www.cowin.gov.in/>. Accessed 9 March 2022

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 the 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 phases of lockdown followed till 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 her 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 crore (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% fully vaccinated.¹⁵

Hasty lockdown with too little support?

India's immediate response in the form of an abrupt announcement of lock down 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 both poverty and inequality are ingrained structural features of the economy and the society, there may be a case for a relaxed version of the stringent universal lockdown approach. The Economist 2020 argued that while India topped in lock-down stringency index, it bottomed in providing

¹⁵ <https://dashboard.cowin.gov.in/>. Accessed 5 January 2022.

fiscal support to its citizens during the lockdown (See Fig 7). Elderly, Children and women turned out to be the worst sufferers of this pandemic. Elderly paid through their lives and isolation. Women were first ones to exit the workforce but the last to join back. They assumed greater burden of reproductive activities and unpaid care work; several suffered the domestic violence in isolation. Children lost their schooling and suffered prolonged isolation. India had to silently witness 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.

Fig 7: Government response to COVID 19: Lockdown stringency vis-à-vis fiscal stimulus



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

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),” ...”.¹⁶ 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!

It is impossible to come to any conclusion about how many lives would have been saved because of the lockdown except perhaps we know that we have saved approximately 300-400 lives per day that is lost due to traffic accidents.

¹⁶ <https://thewire.in/rights/hasty-lockdown-crawling-relief-from-duty-to-charity>. Accessed 3 January 2022.

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 (self-sufficient India), 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.¹⁷

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 crore additional emergency working capital funding for farmers through NABARD, additional pension payments, provision for free gas 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

¹⁷ <https://www.rbi.org.in/Scripts/AnnualReportPublications.aspx?Id=1314>
Accessed 3 January 2022.

Rojgar Abhiyaan (employment plan for welfare of the poor) on 20 June 2020 for a period of 125 days in 116 districts of 6 States. Also launched was an Emergency Credit Line Guarantee Scheme to provide the required relief to sectors under stress by helping them sustain employment and meet liabilities; this was followed by its second version 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 infrastructure sector.

Monetary policy measures

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

- (i) 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,
- (ii) Rs20,000 crore through two purchase auction OMOs in State Development Loans (SDLs),
- (iii) Rs1 lakh crore via Targeted Long Term Repo Operations (TLTROs) of up to three years' tenor,

- (iv) Rs1.25 lakh crore through Long Term Repo Operations (LTROs) during February-March 2020,
- (v) 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,
- (vi) 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.
- (vii) 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.

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) and 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).

It goes without saying that the pandemic crisis has had a significant impact especially on the poor and vulnerable households in India, as elsewhere. In an already worse situation of humanitarian crisis coupled with the 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 2016.¹⁸ According to a survey on 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.¹⁹ The Centre for Monitoring the Indian Economy reported that by April 2020, 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%,

¹⁸ <https://www.worldbank.org/en/country/india/overview#1>. Accessed 5 January 2022.

¹⁹ <https://fikki.in/study-page.asp?spid=23194§orid=130>. Accessed 3 January 2022.

and over 45% households reported a reduction in income compared to a year ago.²⁰ Various businesses such as hotels and

Table 2: Real GDP growth (per cent)

Component	2016-17	2017-18	2018-19	2019-20	2020-21
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

airlines and manufacturing enterprises resorted to salary cuts and layoffs notwithstanding the mass exodus of migrant workers.

With gradual lifting of restrictions and reopening of the economy, signs of recovery appeared in terms of moderation in the pace of contraction and a promising GDP return to positive terrain by the

²⁰ <https://scroll.in/article/959756/podcast-how-has-indias-lockdown-impacted-unemployment-rates-and-income-levels>. Accessed 3 January 2022.

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).

4 The Crisis and the response: Indian states

Even before 24 March 2020, when the Central government ordered a nationwide lockdown from the 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 in 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.

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 up on 21 March 2020 with 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 a 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.

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 labor and labor welfare of the selected states (see Table:3). The Covid-19 induced lockdown affected the labor force, which has welfare implications. The budget estimates of 2020-21 over the realized spending of 2019-20 show that all the selected states' allocation have considerable increase, with Andhra Pradesh, Maharashtra and Punjab standing out. But these increases are not completely absorbed when it comes to 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 3), except Andhra Pradesh, all states show an increase in the growth rate. Maharashtra and Odisha spent around 60 percent more, while Bihar, Kerala, and Karnataka around 30 percent more. Spending by Gujarat and UP shows an increase below 10 percent and Punjab, Rajasthan, Tamil Nadu, Telangana and West Bengal have a growth rate between 10 to 30 percent.

Table 3: Government expenditure on labor and labor welfare

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)
Andhra Pradesh	83.46	-57.14	-21.37	28.67
Bihar	32.58	0.00	32.58	-7.30
Gujarat	24.60	-15.89	4.80	9.56
Karnataka	46.46	-4.59	39.75	14.96
Kerala	33.11	0.10	33.24	16.01
Maharashtra	86.18	-14.65	58.92	18.94
Odisha	62.66	2.44	66.63	-2.88
Punjab	94.30	-35.82	24.69	9.56
Rajasthan	46.25	-15.98	22.88	25.19
Tamil Nadu	24.77	-8.92	13.64	11.85
Telangana	18.96	0.00	18.96	-15.10
Uttar Pradesh	42.28	-23.69	8.57	12.13
West Bengal	40.09	-14.72	19.47	18.46

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

Table 4: Government expenditure on social security and welfare

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)
Andhra Pradesh	-8.06	-0.12	-8.17	-2.04
Bihar	14.71	24.33	42.62	3.96
Gujarat	9.68	46.19	60.34	15.86
Karnataka	2.79	0.03	2.82	2.46
Kerala	97.97	32.52	162.35	41.52
Maharashtra	12.53	35.92	52.96	11.72
Odisha	-13.48	-16.91	-28.11	-7.27
Punjab	17.77	-2.44	14.89	46.29
Rajasthan	-5.93	26.98	19.45	42.43
Tamil Nadu	15.92	1.74	17.94	17.15
Telangana	39.07	0.00	39.07	10.15
Uttar Pradesh	41.27	-11.88	24.49	5.87
West Bengal	-17.38	11.27	-8.07	122.70

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

Table 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. 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.

The first column of Table 4 represents the growth of budgeted figures for the 2020-21 over the actualized spending on 2019-20. Except Andhra Pradesh, Rajasthan and West Bengal, all other

states showed an increase. Coming to 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 percent while Andhra Pradesh, Odisha, Punjab, and UP showed a negative growth in the 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 around 50 percent. Except Andhra Pradesh, Odisha and West Bengal which showed a negative growth, all other states showed an increase in spending.

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 not added suspected (probable) Covid-19 deaths²¹ 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

²¹ 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.

respect, two states, Gujarat and Telangana, were found to have under-counted very heavily.²² 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.²³ However, in India, it is still not clear if suspected deaths are also 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 5.78 times the official COVID-19 death toll (Table 5), 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

²² <https://www.bbc.com/news/world-asia-india-53773070>. Accessed 6 January 2022.

²³ <https://science.thewire.in/health/india-mccd-comorbidities-covid-19-deaths-undercounting/>. Accessed 6 January 2022.

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

Table 5: State-wise estimates of undercount

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.

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).

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.²⁴ The state

²⁴ <https://www.bbc.com/news/world-asia-india-52283748>.
<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.

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, there appeared a ‘second wave’ of new cases, 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,²⁵ 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. The state, however, has continued to register 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).

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The state-wide lock-down was replaced after 16 June 2021 with a four-tier system of local self-government bodies based on test

²⁵ 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.

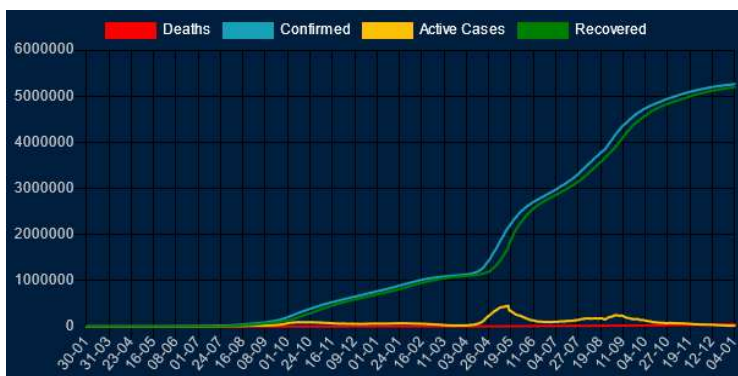
²⁶ <https://pib.gov.in/PressReleasePage.aspx?PRID=1667085>. Accessed 7 January 2022

positivity rate (TPR), and 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 lock-down. 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 the safety of students 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 17 January 2022 (also see Fig. 8), Kerala reported 5378831 total confirmed cases, with a recovery rate of 97.11% (against 94.09% all-India), active cases of 1.93% (against 4.62% all-India), case fatality rate of 0.945% (against 1.29% all-India), and a test

positivity rate of 30.55% (against 14.43% all-India).²⁷ About 76.98% of total population have so far been vaccinated, with 99.86% in the age group of above 18 years and 47.46% in the age group of 15-17 years.

Fig 8: COVID-19 situation in Kerala



Source: <https://dashboard.kerala.gov.in/covid/index.php>. Accessed 18 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

²⁷ For Kerala, <https://dashboard.kerala.gov.in/covid/index.php>; and for all-India, <https://www.mohfw.gov.in/>. Accessed 18 January 2022.

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 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 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".²⁸

The 'Kerala model of controlling the epidemic' had its roots in the strong and vibrant health care system consistently built over more than a century of time. 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

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

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 team from all specialties 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) has also been initiated in eight government institutions and nine private institutions for testing samples for patients undergoing an emergency surgery, symptomatic health workers, sick patients or Covid-19 suspected death.

A longer quarantine period of 28 days was initially instituted by the government 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 all designated isolation facilities for accommodating 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 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.

Another feature of this health care mechanism has been the provision of psychosocial support through the Tele medicine portal, e-sanjeevani, for tele-consultation 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 480,504.²⁹ Counselling service is also provided to frontline workers working in corona outbreak control activities. The government has adopted an inclusive approach and addressed

²⁹ <https://dhs.kerala.gov.in/wp-content/uploads/2020/06/Bulletin-HFWD-English-June-23.pdf>. Accessed 7 January 2022.

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 an enabling environment to deal with stress related to the novel coronavirus outbreak (ibid).

An awareness campaign 'Break the Chain' was successful in promoting the importance of hand hygiene, physical distancing and cough etiquette. Hand washing stations were installed in strategic locations, including exit and entry points of railway stations etc to instil and institute a behavior change. The Kerala Arogyam (Health) portal, Covid Jagratha (Awake) 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 emphasized that the empowered women self-help groups, Kudumbashree (Family Prosperity), helped the cause in a big way. Kudumbashree formed close to 1.9 lakh WhatsApp groups with 22.5 lakh neighborhood group members to educate on key safety measures as advocated by the government during lockdown.³⁰ According to the WHO (on 2 July 2020), Community Kitchen initiative through the Local Self Government Department (LSGD) with the support of Kudumbashree has provided more

³⁰ <https://kudumbashree.org/pages/828>. Accessed 7 January 2022.

than 865.2 lakh meals free meals to workers, those in quarantine/ isolation, destitute and other needy persons.³¹ It goes without saying that such mechanisms of distribution of cooked meals and provision of free ration under the Public Distribution Scheme to those in need is reflective of a well-thought-out and a caring response and relief strategy.

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 along with measures to ensure food security and to 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 to disburse welfare pensions in advance for 2 months in March itself. Another tranche of Rs100 crore was to provide assistance of 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.

³¹ <https://www.who.int/india/news/feature-stories/detail/responding-to-covid-19---learnings-from-kerala>. Accessed 7 January 2022.

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 have enough food materials and no one is 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 Athijeevana (survival) 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 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 crore. 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 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 market and developing economies, along with the pandemic, despite the dampening demand and subdued supply under the lockdown restrictions, adding fuel to fire in the lives of millions left in the lurch with no job and income. In fact, 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 inflation³² 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

³² 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.

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, reached a peak of 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.³³

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 as compared with 5.17% in June and

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

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).³⁴ 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 2.74 lakh 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 of Kerala 2021: 44). As per the budget for 2021-22, the outstanding debt ³⁵of 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 being 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.

³⁴ <https://spb.kerala.gov.in/economic-review/ER2020/>. Accessed 8 January 2022.

³⁵ Outstanding debt is the accumulation of borrowings taken by the state government over the years.

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 neo liberal 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 in 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.

Needless to say, 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 counter cyclical 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 growing debt was mostly driven by public debt in developed countries. Thus viewed, the concern for 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 Covid pandemic and fairly successful in managing it during the first wave, although the lockdown imposed with a view to ensuring social distancing to prevent the spread of the pandemic has had its

adverse effect. As we travelled in time with the pandemic, evidence trended to suggest that there was much more room for fiscal stimulus. India was at its best when it came to lockdown strictness. Apparently, heavy dependence has been on monetary policy measures, to induce the banks to come forward to provide with 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 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 observed hardly any state in the country reneged from their responsibility in times of pandemic. Almost all the States initiated schemes to protect especially the weaker section from the pandemic that included, but 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 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 for a year, while 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) as compared to 2019-20 (actual), which is remarkably higher when compared to other states. True, there is a price that Kerala paid 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 increased by 1.02% to 32.07%, in 2019-20, which has become a fascinating subject for some myopic journalists. That this is the price for the collective care in a crisis is the invaluable lesson of the history that has repeated now.

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Appendix 2.A: Evolution of lockdown/unlock measures by Government of India

Period/Date	Lockdown/unlock Strategies
March 24, 2020	Government of India declared a nationwide lockdown for 21 days to ensure social distancing with a view to preventing 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.

<p><i>Phase 3 (4–17 May)</i></p>	<p>Normal movement was permitted in green zones with buses limited to 50 percent capacity. Orange zones were to allow only private and hired vehicles but no public transportation. The red zones were to remain under lockdown.</p>
<p><i>Phase 4 (18–31 May)</i></p>	<p>The local bodies were given the authority to demarcate containment and buffer zones.</p>
<p><i>Unlock 1.0 (1–30 June)</i></p>	<p>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.</p>
<p><i>Unlock 2.0 (1–31 July)</i></p>	<p>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.</p>

<i>Unlock 3.0 (1–31 August)</i>	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.
<i>Unlock 4.0 (1–30 September)</i>	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.
<i>Unlock 5.0 (1–31 October)</i>	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.
<i>Unlock 6.0 (1–30 November)</i>	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 percent 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 percent of GDP, of which about 2.2 percent of GDP is estimated to have been utilized in the last fiscal year), (ii) foregone or deferred revenues (about 0.3 percent of GDP falling due within the past fiscal year), and (iii) expedited spending (about 0.3 percent of GDP falling due within the past fiscal year);	designed to support businesses and shore up credit provision to several sectors (about 5.3 percent 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 percent of GDP); b) wage support and employment provision to low-wage workers (0.5 percent of GDP); c) insurance coverage for workers in the healthcare sector; and d) healthcare infrastructure (0.1 percent 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;

	<p>g) A fund for farm-gate infrastructure <u>farm-gate infrastructure</u></p> <p>h) amendments to the Essential Commodities Act, as well as</p> <p>i) the opening up of the defence sector, power sector and space sector for privatization.</p>
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	<p>a) Additional public investment (higher capital expenditure by the central government and interest-free loans to states, of about 0.2 percent of GDP); and</p> <p>b) Support schemes targeting certain sectors including</p> <p>(i) Production Linked Incentive scheme targeting 13 priority sectors with an expected cost of about 0.8 percent of GDP over 5 years,</p> <p>(ii) a higher fertilizer subsidy allocation benefiting the agriculture sector (0.3 percent of GDP); and</p> <p>(iii) support for urban housing construction (0.1 percent of GDP).</p>
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	<p>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).</p> <p>b) Also extended a scheme for providing interest-free loans to states for capital expenditure to FY2021-22 (Rs150 billion) and</p> <p>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.</p>
April – May 2021	<p>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.</p> <p>b) Measures without an immediate direct bearing on the government's deficit position aimed at</p> <p>(i) providing credit support to businesses (1.9 percent of GDP), poor households, especially migrants and farmers (1.6 percent of GDP), distressed electricity distribution companies (0.4 percent of GDP), and</p> <p>(ii) targeted support for the agricultural sector (0.7 percent of GDP), as well as</p> <p>(iii) some miscellaneous support measures (about 0.3 percent 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 be provided 24% of their monthly wages into their Provident Fund account for April-June 2020.</p>
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 BCWW 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

<p>Reduction in Repo and Reverse Repo Rates.</p>	<p>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.</p>
<p>Rescheduling of Payments of Term Loans and Working Capital Facilities</p>	<p>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.</p>
<p>Long Term Repo Operations (LTROs): Targeted Long Term Repos Operations (TLTROs) and TLTRO 2.0</p>	<p>In order to help ease the funding conditions in the market and to bring down the elevated term premiums, the RBI conducted LTROs 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 exempted from banks' capital market exposure limits. Liquidity infusion measures, taken by the RBI through an array of</p>

	instruments including term repos, LTRO, TLTRO, TLTRO 2.0, refinancing facilities, CRR and MSF add up to aggregate liquidity to the system of over \square 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 \square 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	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 \square 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

and of States/UTs	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-cyclical capital buffer (CCyB)	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 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	<i>Food Grains</i> 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. <i>Pulses</i> 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.
Farmers	<i>PM KISAN</i> 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

	<p>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> 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> 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> 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> 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> Rs. 500 per month will be deposited in bank accounts of women for the next three months (April</p>

	<p>to June 2020). Women with bank accounts under the Pradhan Mantri Jan Dhan Yojana (PMJDY).</p> <p><i>Credit to Self Help Groups</i> 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> <i>Additional Cash Transfer</i> 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> Pensioners, Widows and Divyang persons receiving assistance from the National Social Assistance Program (NSAP).</p>
Construction Workers	<p><i>Financial Aid</i> 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> 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> 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> More than 21,000 relief camps to be set up by various State Governments and UTs. Migrant workers stranded as a result of the lockdown</p> <p><i>Rent Relief</i> 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> 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
Chhattisgarh	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



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