

Post - COVID 19 Pandemic: Analysing India's Response Initiatives including Actions by our Armed Forces

Colonel Bhaskar Gupta[@]

Abstract

On 11 March 2020, WHO declared Novel Coronavirus Disease (COVID-19) outbreak as a pandemic and reiterated the call for countries to take immediate actions and scale up response to treat, detect and reduce transmission to save people's lives. This article is about the actions taken by governments across the world to counter infections and contain the virus's spread which led to global supply shocks, especially in manufacturing. In addition, lockdowns and other containment measures were imposed causing widespread business disruption. The article also looks into the steps needed to revive India's economy.

Introduction

Two years plus have passed after the World Health Organisation declared COVID-19 a pandemic, but it's still not going away any sooner, though the world is finally coming to terms with the disruptions caused by the virus. A profound and consequential impact has been the pandemic's toll on healthcare systems. And then, there has been the more persistent and reverberating economic toll.

It is now clear that the pandemic has brought the world to the second great economic and financial crisis of 21st century, which is likely to have long-term structural repercussions. In short, it has laid bare the fragilities of the global economic and geopolitical order. The current world order has been substantially altered and this is bound to give rise to a new post-Covid dispensation. In this

[@]Colonel Bhaskar Gupta is a serving Artillery officer with 30 years of service. A double Masters in Defence Studies and Business Administration, he completed his PhD in International Relations from JNU, New Delhi in 2021. He has contributed over 300 articles to various publications and co-authored three books.

Journal of the United Service Institution of India, Vol. CLII, No. 628, April-June 2022.

state of flux, space has been created for aspiring and emerging powers to take centre stage and help shape a new world, with a better future for all. As the world's regions were not affected in the same way, the medium and long-term impact varies significantly. This has three major dimensions as under:¹

- **The Health Crisis.** Densely populated urban areas were hit hardest, but in later 2020 and early 2021, COVID-19 spread towards less dense regions. Also, economically backward regions and deprived neighbourhoods had higher mortality rates.
- **The Economic Crisis.** Regions are also affected differently depending on 'telework-ability', which is compounded by digital divides. Unemployment increased dramatically in many regions, during latter part of 2020, with stark inter-regional differences.
- **Sub-national Finance.** Data for 2020 confirms the negative impact of the health and economic crisis on sub-national govt expenditure and revenue. This is due to significant central/federal govt measures to support local finance, as well as savings in expenditures, and deferrals or cancellations of investment projects. However, considerable uncertainty over the longer term remains. In 2022, and beyond, the impact will depend on continuation and extent of support provided by govt agencies.

Actions by governments across the world to counter infections and contain the virus's spread led to global supply shocks, especially in manufacturing, and lockdowns and other containment measures, causing widespread business disruption. All these initiatives, policy changes and their effects, including actions of Govt of India (GoI) and those by Indian military are analysed in subsequent paras.

Post-pandemic Economic Measures by India

Experts, including from the World Bank had predicted that India would have a V-shaped recovery, but latest IMF data shows 11.5 percent growth for India in FY 2021-22. It's a massive recovery in any terms, after the 23 percent slump in GDP in the first quarter of the pandemic (Apr-Jun 2020). Moody's predicts a 12 percent growth whereas OECD (Organisation for Economic Cooperation

and Development) has estimated it to be 12.6 percent in the same period. GoI has also committed a spend of INR 1.97 lakh crore on production-linked incentives (PLI) and identified more than 10 sectors to be inclusive, which would create job opportunities for the youth.¹ Our Finance Minister had boldly declared the govt's focus is on 'saving lives during the pandemic without bothering about the fiscal deficit', while allocating INR 35,000 crores for vaccination (and more if needed) in the FY21-22 Budget.

GoI's Relief Measure that Failed. Announced in May with a headline-grabbing figure of INR 20 lakh crore, India's fiscal stimulus package did not have enough firepower to boost demand. It was evident from different estimates of its actual fiscal cost (which ranged from 0.75 percent to 1.30 percent), that it was nowhere close to the claimed 10 percent (of GDP).² In any recessionary sit, money needs to be directly pump-primed into the system, mainly to boost immediate consumption and investment. Boosting immediate economic activities by investing public capital enhances people's purchasing power, which is then spent on consumption, thus boosting demand and instantly augmenting productions to meet that extra demand, thus creating more purchasing power. This cycle goes into the upper spiral and takes the economy out of recession. Even in its October 2020 monetary policy, Govt's stance of relying on increased credit supply, instead of going for an all-out fiscal intervention, was evident.

Six Steps to Revive India's Economy³

Universalise Public Distribution System (PDS) for a Year.

The first fiscal intervention should be in making food available to as many as possible. That can free substantial amounts of purchasing power for other kind of consumptions. With inequalities remaining large within the Indian economy, this pandemic can be an opportunity for redistributive measures. Given the upward movements in the prices of primary articles (mainly food), universal PDS has the capacity to keep the prices down (Figure 1). Along with the government's intent to launch "One Nation, One Ration Card", this can go a long way to revive flagging consumer demand and ensure food security for the majority.

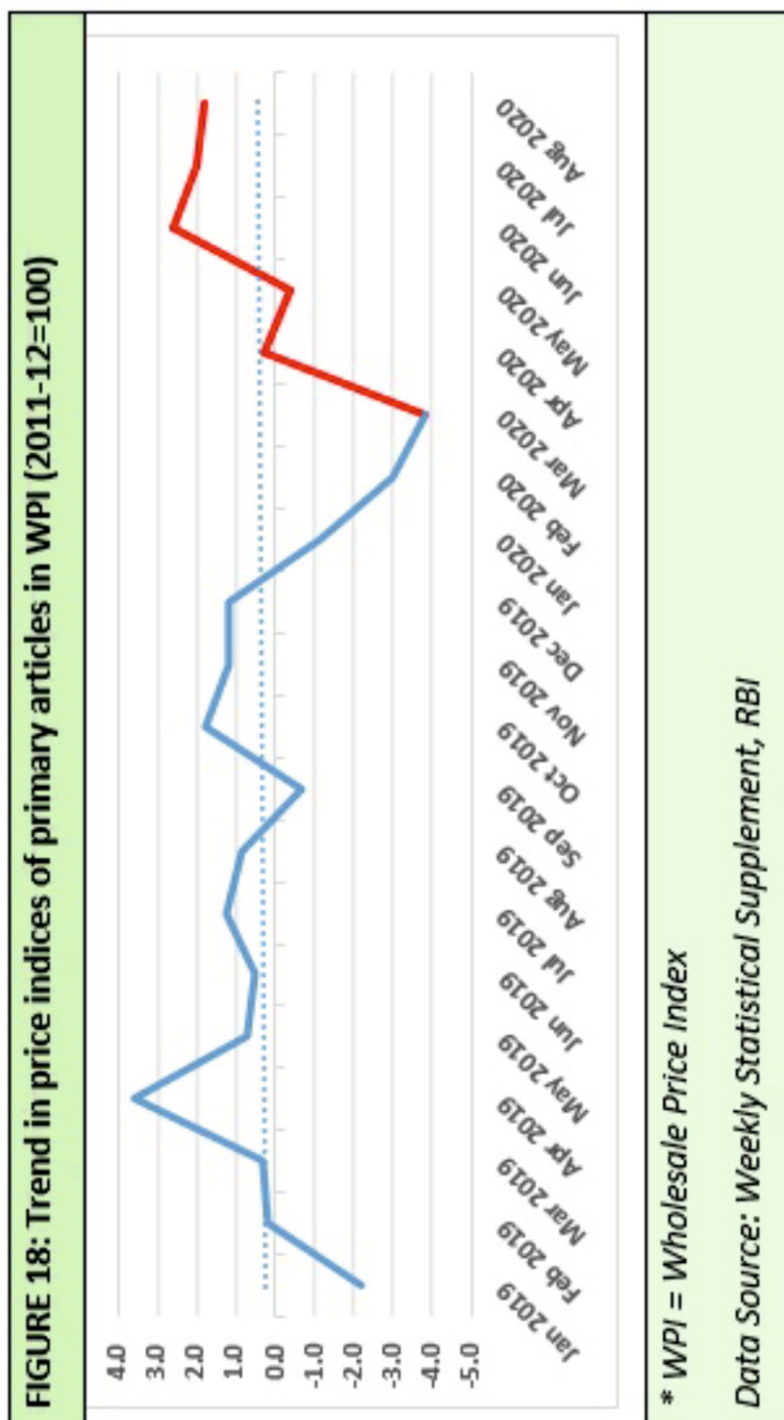


Figure 1

Expanding Employment Guarantee to Urban Areas. After the migrant workers' crisis during the lockdown, focus has shifted to reverse migration. There are already reports of workers returning from their homes, where they could not find gainful employment. This scheme has the potential to raise and stabilise urban wages and create urban assets like environment-friendly green public spaces and can also augment existing central government endeavours like smart cities. To start with, around 10-15 non-metro cities can be targeted immediately on a pilot basis, aiming to expand it countrywide in next two years.

Direct Benefit Transfer (DBT) to Affected Population. During early 2020, Gol admitted that nearly 90 percent of our workforce is in various informal sectors. There are other estimates projecting the number at 81 percent, while the National Accounts Statistics data pegs it at 52.4 percent. As per World Bank, our lockdown affected 26 crore informal workers. A SBI report estimated income loss of India's 37.3 crore workers during lockdown at INR 4 lakh crore. Hence, Gol's March 2020 relief package of INR 1.7 lakh crore for 80 crore people was inadequate. In August 2020, Centre for Monitoring Indian Economy (CMIE) reported a cumulative 18.9 million job loss among salaried people. In April 2020, around 403 million people were affected, out of which 121 million lost jobs. Hence the only successful mitigation strategy is DBT to informal workers.

Provide Input Tax Relief to Producers in Select Sectors. Quick estimates of Index of Industrial Production (IIP) and use-based index for July 2020 reaffirmed the fact that industrial production was in distress. The only large manufacturing segment showing consistent positive growth in May–July 2020 was pharma. The top 10 manufacturing sectors in terms of weightage in the index, totalling close to 63 percent, were mostly still showing double-digit growth contraction, as enumerated in **Table 1 below:**⁴

TABLE 3: Monthly NIC 2-digit sectoral growth rates of industrial production (base: 2011-12)							
NIC 2008	Description	Weights	March 20	April 20	May 20	June 20	July 20
24	Manufacture of basic metals	12.804336	-19.3	-70.7	-40.3	-21.0	-10.5
19	Manufacture of coke and refined petroleum products	11.774919	-1.7	-28.3	-24.5	-13.8	-17.2
20	Manufacture of chemicals and chemical products	7.873036	-21.6	-54.3	-19.2	0.2	-3.5
10	Manufacture of food products	5.302468	-14.9	-22.3	-17.7	-1.6	-4.6
21	Manufacture of pharma, medicinal chemical and botanical products	4.981002	-25.9	-53.8	2.8	34.8	22.0
29	Manufacture of motor vehicles, trailers and semi-trailers	4.857300	-48.9	-99.4	-81.7	-46.1	-31.4
28	Manu. of mach. & equipment	4.765303	-37.6	-91.3	-61.3	-33.4	-19.7
23	Manufacture of other non-metallic mineral products	4.085334	-23.7	-86.6	-27.7	-8.7	-13.8
13	Manufacture of textiles	3.291307	-16.6	-90.8	-68.3	-52.1	-14.8
27	Manufacture of electr. equipment	2.998264	-34.2	-94.5	-70.2	-37.4	-24.7
	Mining	14.372472	-1.3	-26.9	-20.5	-19.6	-13.0
	Manufacturing	77.633210	-22.8	-66.6	-38.4	-16.0	-11.1
	Electricity	7.994318	-8.2	-22.9	-14.9	-10.0	-2.5
	General	100	-18.7	-57.3	-33.9	-15.8	-10.4

Table 1- Source: Ministry of Statistics and Programme Implementation (MoSPI)

The problem is that the weightage of pharma in IIP is only a mere 5 percent. Expecting these two sectors to pull up overall industrial production is like expecting roughly 5 people to pull up 95 others. If overall production has to improve, other sectors need to be revived quickly. A possible way through this recessionary trend is to provide input tax concessions. Reducing or abolishing input taxes for some time (say, initially for a year) could have been a starting point. Once some of the initial beneficiary sectors revive themselves, those can be taken out and replaced by others such as machinery & equipment, textiles etc.

Public Investment in Physical and Social Infrastructure.

When the economy is suffering from lack of overall demand; it will be futile to expect private investment to come to the rescue. Therefore, public investment — at least for some time — is necessary to crowd in private investment. Infra has thus been a key issue in the inability to attract a sizeable amount of FDI. This crisis time may have created an opportunity to bridge that long-standing gap. There are also expectations to attract manufacturing companies, which are leaving China, towards India. Additionally, it will have a positive influence on future exports. Strengthening and augmenting health infra, urban planning, roads, rural and digital infra will be key drivers in the long run.

Monetise the Central Fiscal Deficit. As seen above, fiscal element of Gol's economic package was a fraction of the announced figure. SBI Research has put it at around INR 2 lakh crore or around 1 percent of our GDP. Back in April 2020, noted economists and public-policymakers argued for a direct fiscal stimulus of INR 10 lakh crore or 5 percent of GDP. If SBI's fiscal cost estimate is assumed correct, then INR 8 lakh crore more needs to be provisioned. To raise this amount, three suggestions are outlined below:

- Gol to tap international debt markets as interest rates worldwide have fallen, post COVID.
- NRIs are offered COVID bonds at floating rates, assuming that rates will be at lower levels for some more time. Rupee worsening in the foreign exchange market is indeed a risk but one worth taking at this juncture.
- In the domestic market, there is a larger possibility of mobility of finance because many institutional funds and HNIs may opt for an assured return (guaranteed by Gol) COVID bond — even at a relatively lower rate of interest.
- Mobility of INR 2 trillion each in these three categories of overseas debt market and COVID bonds is possible. Remaining INR 3 trillion can be monetized-borrowed from the RBI at a fixed rate lower than the repo rate (ideally around 3.5 percent) and with longer duration (at least 10-year period). If the economy is to be revived, then a stimulus of this magnitude is necessary.

Our Armed Forces — Challenges Faced and Measures Adopted

Challenges Faced. The onset of COVID-19 posed a unique challenge for the Armed Forces (AF), due to the potential for rapid spread of infection amongst troops and their families, hence making them equally vulnerable. However, keeping in view the state of high physical fitness and strict prevention measures like personal hygiene, safe distance protocol, mask etiquettes, controlled movement out of the designated cantonment locations and strict quarantine protocol, the disease was largely been kept in check initially. Another challenge was, 'Force Preservation', amidst an escalated deployment along the northern border with China, post the Galwan incident. Some other functional difficulties faces are summarized below⁵:

- Almost all hospitals had to run a dual set up, the 2-in-1 concept wherein one area of the hospital was earmarked as a COVID-19 hospital and the balance were for management of routine non COVID patients.
- Since these hospitals had limited staff/resources, there were difficulties in establishment of this dual set up, with available manpower for management of emergencies, at times.
- Quarantine/isolation of medical personnel and health care workers resulted in severe shortage of manpower for management of emergencies, at times.
- Initial lapse in promulgation/implementation of advisories leading to confusion. Thus, local guidelines were issued by the administrative authority, which were not always based on scientific data and medical evidence. This resulted in injudicious use of available resources, leading to disparity in resource necessity area vis-a-vis resource utilization areas.

Corrective Measures Taken. DGAFMS then issued guidelines on the measures required to contain the spread of infection and for treatment/ management of COVID-19 patients. These were regularly updated, in accordance with those issued by the MoH & FW, ICMR, and WHO etc. Some of the measures were⁶ :

- Mandatory quarantine for all persistent cases returning from leave/TD/permanent posting.

- Imparting required target on personal/hand hygiene, social distancing and mask etiquettes.
- Establishment of treatment facilities for all infected personnel and their families in earmarked AF hospitals. Some were also earmarked for treatment of civil population, as part of aid to civil authority.
- Establishment of Covid Care Centres (CCC) at all military stations, for isolation and management of asymptomatic & mildly symptomatic personnel.
- Efficient and timely dispensing of PPEs/other consumables centrally to all CCCs. In addition, under special financial powers, hospitals were able to procure COVID-19 related drugs and consumables on emergent basis.
- Formulation/timely updation of advisories issued by DGAFMS with respect to isolation, quarantine and management, thus standardizing guidelines across all military stations.
- Movement of troops/their families in cantonments was restricted to bare minimum and on emergencies, ensuring essential supplies like food and groceries were made available at door-steps. So, there was minimum exposure, thus preventing spread.
- As a welfare measure, leave of all personnel, who couldn't return due to the country wide lockdown, was regularised.
- Reclassification medical boards, annual and periodical medical examinations held in abeyance were resumed only after the situation was under control.
- As an additional measure, AF established quarantine centers for Indian citizens returning from abroad, besides setting up dedicated COVID treatment centres exclusively for civil population, especially during the second wave. Sardar Patel CCC in New Delhi was an example.
- Armed Forces Medical Service (AFMS) officers posted at Service HQs and lower formations were given emergency financial powers for procurement of medical stores, services, and management of facilities for treatment of Covid affected,

thus augmenting their ability to provide care to the military persons/civil administration, as applicable.

- IA initiated action to procure 13 items that included BIPAP machines, RDT Antigen and PCR test kits, virus transport media with swab, masks, full PPE sets, waste autoclave, multifunctional ICU beds, manual sprayer, ALS ambulances, and O2 concentrators.
- Army HQs established a Covid-19 management cell under the DGOL & SM to oversee assistance to civil administration.
- GoI approved engagement of 400 retired AFMS doctors for 11 months from among those who retired between 2017 and 2019. The remuneration offered — last pay drawn (inclusive specialist pay) minus the pension — was a decent enough incentive.
- MoD order authorized all DGs medical services at all Service HQs to spend up to INR 5 crores. Other med units at lower echelons headed by two-star Officers could spend up to INR 3 crores, and those by one-star officers, up to INR 2 crores. This delegation down the chain of command enhanced the ability of units close to affected areas to respond to the situation quickly. However, when they were approached, (in a big way), by the civil administration to help them in overcoming shortages of vaccine, oxygen, and even hospitalisation facilities, then they had to prioritise.

India's Response — Gaps that Remained and Key Recommendations

It is becoming increasingly clear that infra-assets will have to be sustainable: naturally and organically rooted in the local physical environment, and well aligned with the priorities and concerns of surrounding communities. Advent of technologies like 5G, Internet of Things (IoT), and Machine Learning (ML), Artificial Intelligence (AI), and hybrid cloud will shape future infrastructure. The experience has yielded possibilities for building infrastructure that is leaner (created just for the purpose), cheaper, capable of dynamic preventive maintenance and of multi-functionality, and also more responsive to varying user requirements.

There is also a need, particularly in domains like urban transportation, to integrate various disparate elements, while bringing the user to the foreground. In India's bustling cities, metro-trains, taxis, and buses need to function as part of one seamless system suited to the vagaries of urban commutes. India's struggle to reduce extreme pollution levels necessitates the transition from personal vehicles to public transport for urban commutes.

India's water sector where concerns around scarcity and universal availability, as well as quality and sustainability abound, demands careful action, with practically every drop accounted for and put to optimal use. The consumer also needs to be placed at the centre of India's water ecosystem.

This pandemic has also exposed weaknesses in our public health system, which really is the job of the central govt and its agencies. Hence, to be able to deal with such a catastrophe, we need to build an army of public health personnel to prevent crises during future pandemics. As a nation, we need to do more because simple diarrhoea and childhood pneumonia still kill millions of children in India.

To tackle infectious diseases, we need a solid public health human resource infrastructure, on the lines of IAS or IFS type centralised cadres. Given India's size, we need between nearly 20,000 well trained Public Health Officers (PHOs) to manage our system (USA with 33 crores population has 6,000 as part of US Navy). Every district will need about 10-15 such officers and staff with different skills. They will each need a hierarchy of PHOs, on lines of collector/deputy collectors/revenue officers. This is eminently doable in the next 2-3 years.⁷

At the PHC level (one for every 30,000 people), besides the one MO for clinical services, we should add a PHO for preventive and public health services such as immunization, control of malnutrition/disease, ensuring mosquito control and sanitation etc. Similar pattern can be replicated for urban areas at ward level. They will also supervise the nurses, health supervisors, lab techs, and *Anganwadi* workers at community levels, for implantation of national public health programmes.

In the Covid pandemic we could not even count the number of hospitalisations, and deaths. There were a lot of controversies

on these numbers. WHO suggested solution of Severe Acute Respiratory Illness also did not happen. Contact tracing, testing and isolation also were not happening to the optimal level. All this can be improved if we have a proper public health workforce. All medical doctors are not public health experts, they largely learn medical diagnosis and curative care. Health education and behaviour change in the community need social scientists with a public health target and not doctors or nurses. Thus, a well-trained multidisciplinary public health work force is essential for India to face the next pandemic. The price as a society we have paid (and continue to pay) due to infectious diseases is enormous. Compared to this, the additional cost of such public health workforce is small. India must do this now i.e., create a multi-disciplinary public health work force of international standards.⁸

Key Recommendations⁹

India must maintain the momentum of these laudable initiatives and continue to enhance the robustness and vitality of its economy. At the same time, these and other structural reforms should be aimed at ensuring equitable and inclusive growth. This is critical because the pandemic has exposed and exacerbated existing inequalities and their impact on vulnerable groups. Hence, following six recommendations are made:

- **Modernise the Infrastructure.** GoI has already announced the National Infrastructure Pipeline and National Monetization Plan, to boost infrastructure development. This wide-ranging agenda needs special initiatives across multiple sectors, including reforms to consolidate multiple and disparate labour laws, drafting of the Insolvency and Bankruptcy Code, and banking reforms.
- **Prioritise Economic Expansion and Sustainability.** In order to maintain its trajectory of growth and influence, India must continue to embrace transformational, rather than incremental change to shape an economic policy that supports rapid growth. This will require a continued commitment to wide-ranging and systemic sectoral reforms, with strong measures to restore fiscal balance and strengthening the banking system.
- **Ramp up Health and Education Infrastructure.** COVID-19 has sharply reinforced the importance of a robust primary

health and referral system and the potential of technology-enabled interventions. One such example is of *Armman*, an India-based NGO that leverages technology to create scalable solutions empowering mothers and enabling healthy children. When the pandemic struck, *Armman* was able to quickly adapt its focus to provide over three lakh women and eight lakh health workers with critical information on COVID-19, via their mobile phones. This helped to pre-empt, track, and respond to outbreaks early on, helping to slow down R^0 values and thus hospital admissions. As new surges threaten the world, such examples show that taking advantage of the agility of entrepreneurs (by integrating their responses into mainstream), public and donor-led response efforts increase speed by which the hard-to-reach last mile is covered the quickest. Equally critical is the need to ensure that India's demographic advantage becomes a dividend and that millions of young people entering the workforce every year gain meaningful employment.

- **Treatment and Relief.** While many organisations saw the new wave coming, no-one could foresee its magnitude and cross-cutting nature. It is here that some NGOs could use their extensive networks to rally stakeholders including government and corporate. For example, the Healing Fields Foundation leveraged its existing network of women community health entrepreneurs to lead the COVID-19 response across 5,000 villages in Northern India.

- **Inclusive Vaccine Access Ensuring No One is Left Behind.** After Jan 2021, as the focus of the pandemic response shifted towards vaccine access critical to containing the virus, several NGOs and local government bodies started using their existing expertise and networks to broaden access to vaccines, overcome vaccine hesitancy and build trust with local communities. With vaccines only estimated to reach the most remote areas by 2023, changing this could prove seminal in ending the pandemic. This is particularly important as all levels of govts must anticipate the surges and ensure that logistics and infrastructure is ready, as vaccine deliveries will take time to accelerate. Involving local governments in vaccination campaigns will thus ensure faster and better territorial coverage. One example is sharing dose delivery projections with all stakeholders.

- **Securing Livelihoods: Standing by Those Who Lost Jobs.** Besides being a health crisis, the pandemic has also delivered a hammer blow to livelihoods. Within three weeks of the first lockdown, most of our informal workers had lost their jobs. Sustained attention for these vital support needs is fundamental to 'build back better' and get back to the 17 Sustainable Development Goals. Nothing in history has shown more clearly than this pandemic that we need to rejig our economic, social and governance structures, to 'expect the unexpected'.¹⁰

Conclusion

India's future on the world stage is bright.¹¹ Rays of recovery are beginning to emerge in our economy. As per IMF projections global economy will grow by 3.6 percent in current FY (22-23), while India will see a 8.2 percent growth as per latest estimates. At the same time, the world is seeing exponential growth in digital services and infrastructure, from the adoption of large-scale work-from-home arrangements, to use of cloud services and video-conferencing. All these were achieved within a couple of months, which would have normally taken two-three years. Despite the economic devastation caused by the virus, India's agile response has been commendable, especially as the country rallied to manage a deadly second wave early in 2021. India was the first country to feel the impact of the virulent Delta variant, but quickly swung into action to ensure that as many people as possible were vaccinated. 195 crore doses of the vaccine have already been administered, covering nearly 90 percent of the target population, and counting.

Amid the on-going volatility and change, India has a rare opportunity to undertake several policy changes to not only address the short-term public health challenges but also to become an important axis of power and influence in the post-COVID world. The World Economic Forum stands with India in its efforts to assume new leadership roles and to help propel the world into a better, brighter, and more sustainable future.¹² The key challenge in navigating this transition is to change mind-sets and to bolster capabilities of all stakeholders, so as to create infrastructure that is efficient, resilient, sustainable, and user friendly. The post-COVID-19 age will be defined by radical changes in our lifestyles,

social interactions and economic transactions, as well as in our relationship with the natural world. What we've learnt the hard way is that we must cultivate a deeper understanding of our impact on the planet and be more prudent about breaching nature's delicate boundaries.

Endnotes

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