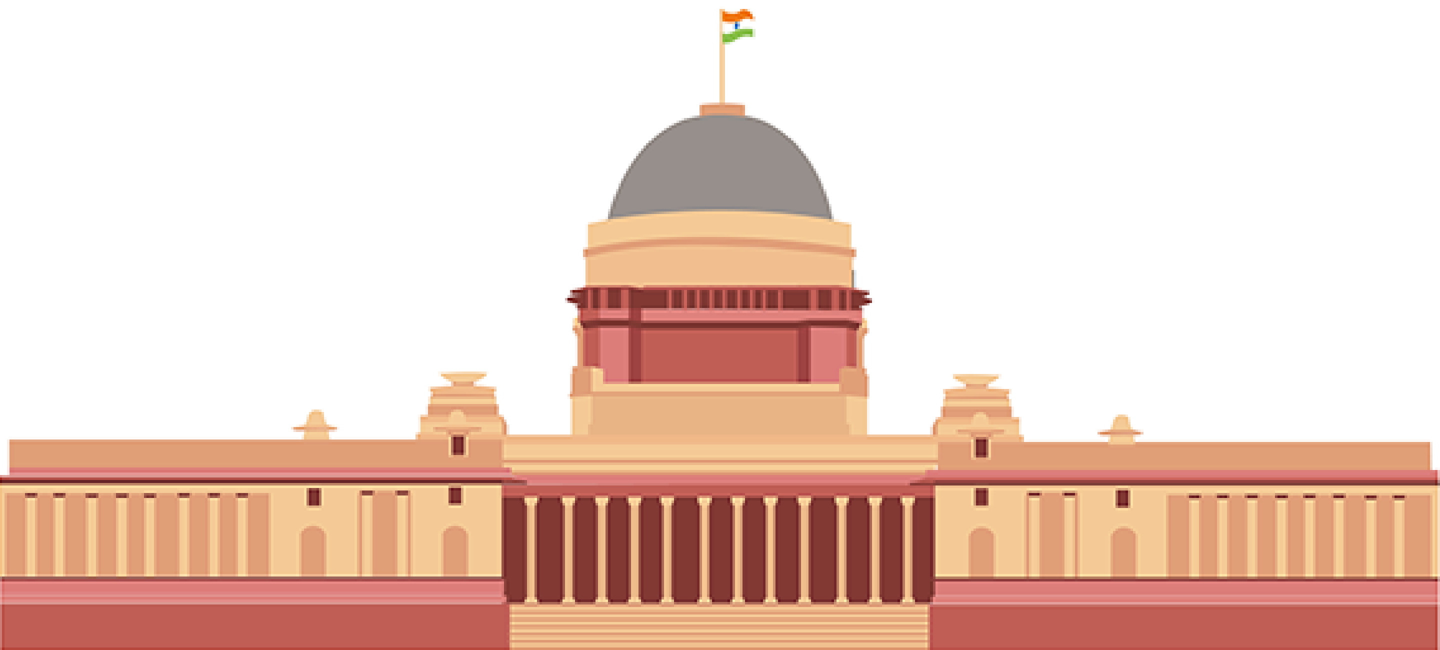
INDIA'S RESPONSE TO COVID-19

Generational opportunities for the Indian Government to invest and rebuild national economic security in the post-pandemic world

TV Mohandas Pai
Chairman, 3one4 Capital

Nisha Holla
Technology Fellow, C-CAMP



Foreword

The COVID-19 pandemic has morphed into a global economic crisis. The GOI has taken a bold decision to prioritise the lives of its citizens and face the consequences of the economic fallout. This leadership has undoubtedly helped mitigate the spread of the infection in the country. Many other countries have delayed this decision with debates on compromising economic activity in the face of higher infection risk.

The GOI can consider assuming an equally serious stance on the economic consequences of the pandemic and lockdown. The steps to preserve India’s national economic interests, both in the near-term and long-term, have to be planned and taken now. The *Atma Nirbhar Bharat Abhiyan* is a transformational step forward for building a New India. It largely addresses supply-side reforms and relief with a focus on farmers, rural workers, MSMEs, and section of manufacturers and employers. Hopefully the next package looks at providing relief on the demand side which will be crucial for India’s economic growth post-pandemic as an estimated 70% of growth comes from internal consumption.

In this report, we present data and solutions for securing India’s near- and long-term national economic interests and to protect jobs. The middle class, taxpayers esp. salaried, investors, large business operators esp. those directly impacted by the pandemic like in travel and other sectors, and startups require relief from the loss of income and economic activity through the lockdown. These groups might be small in number but asymmetrically contribute to the Indian economy, tax revenues and employment opportunities.

The pandemic also gives us an opportunity to reconfigure India’s subsidy system and make it more efficient, like the DBT 2.0 Model we present below. We also analyse how the development and digital push during NDA-I under PM Modi has enabled India’s poor to better weather this COVID-19 health crisis and the resultant lockdown and stoppage of economic activity.

India needs undaunted action by the GOI at this juncture. We must utilize all resources at hand to secure the economy – for example, borrowing INR 3 lakh crores from RBI’s Forex reserves. We must fearlessly avail 20/30 year long-term loans and bonds raised globally to finance the next decade of growth, with much of it maintained as a special program outside the budget. Sticking to the conventional notion of a 3-3.5% fiscal deficit is inadequate.

Other nations are already approaching this as a war-time scenario and raising long-term bonds. Their views are clear – they will spare no efforts to prevent economic disaster and compromise national economic security. We must also not spare any efforts to protect India’s economic security and realign India to its $5 trillion GDP target.

Powered by 3one4 Capital Research

Author Profiles

TV Mohandas Pai is Chairman of 3one4 Capital, Chairman of Aarin Capital, Chairman of Manipal Global Education, a Member of the Board of Havells India, Former Chairman of the FICCI Skills and Higher Education Committees, Past President of AIMA, Chairman of multiple SEBI committees, Founder-Trustee of the Akshaya Patra Foundation, Former Investment Committee Member of the SIDBI India Aspiration Fund and the India Fund of Funds, and a Former Member of the Board of the National Stock Exchange of India.

Mohan served as a Member of the Board and CFO at Infosys, one of India's largest software services companies. Over a 17-year period, he was voted 'CFO of the Year' multiple times, spearheaded the first listing of an India-registered company on NASDAQ, and headed several additional departments. Mohan has also helped launch 14+ different investment vehicles across private equity and venture capital which have cumulatively invested in over 250 companies with a capital base of $400+ Million. In 2000, he co-founded the Akshaya Patra Foundation, Bangalore - a mid-day meal program for school children. Today, this program feeds 18 lakh+ children each day in 13,500+ government schools across India.

Mohan was awarded the Padma Shri award by the President of India in 2015 and the Karnataka Rajyotsava Award in 2004. Mohan holds a bachelor's degree in commerce as a University Rank Holder, a bachelor's degree in law (LLB) from Bangalore University, and is a Fellow Member of the Institute of Chartered Accountants of India as an All-India Rank Holder.

Nisha Holla is a researcher and engineer. She regularly writes about the Indian economy and technology. Nisha produced India's first report on deep science innovation, as Consulting Editor for YourStory.

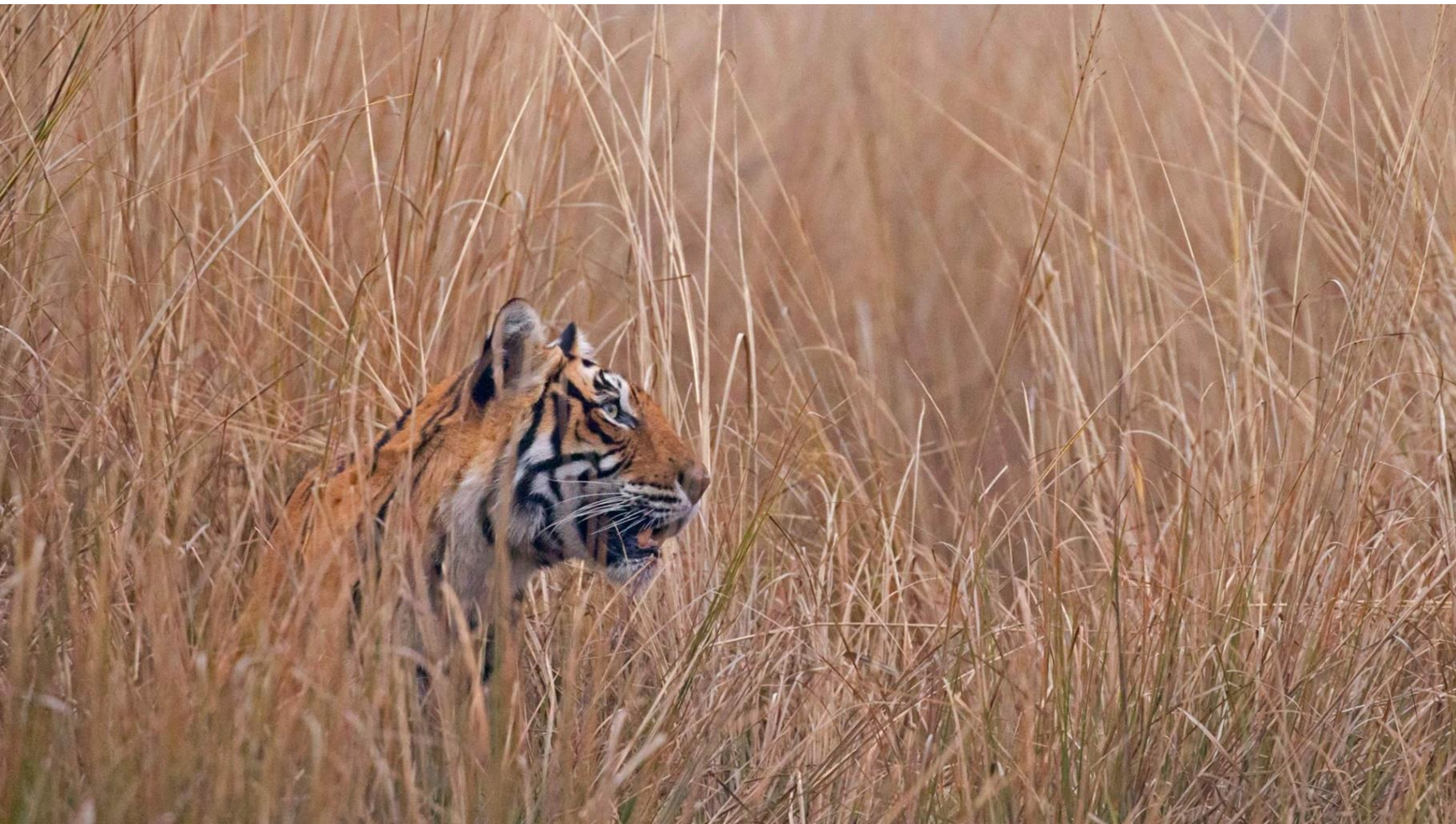
Nisha is Technology Fellow at the Center for Cellular and Molecular Platforms, India's premier life-sciences innovation hub. She was co-founder of Biomoneta Research, a biotech start-up. Nisha recently moved back to India from Silicon Valley where she worked at the cutting edge of product development in semiconductors at Applied Materials, and fuel cell technology at Bloom Energy.

Nisha holds a Master's degree in Chemical Engineering from Carnegie Mellon University, and Bachelor's in Engineering degree from R.V. College of Engineering.

The authors write regularly about the Indian economy, education, employment, and technology. They produced several reports on Human Capital Development of India, Maharashtra 2025 – Road to USD One Trillion, India's Response to COVID-19, Karnataka's Response to COVID-19, and were key contributors to the Bengaluru Innovation Report 2019.

TABLE OF CONTENTS

SECURING NATIONAL ECONOMIC INTERESTS



Near Term National Economic Security

Many countries are mobilizing economic relief packages to ensure their citizens have enough cash to survive until the pandemic is under control and normalcy returns. **GoI must not hesitate to come up with an extensive package to restore the confidence of its 137 crore-strong population.** It will send a clear signal that the Government is committed to the livelihood and safety of its citizens.

A snapshot of the suggested Rs 5.4 lakh crore economic relief package looks like this:

- DBT for 15 crore families at Rs 12,000 each Rs 2,000 p.m. = Rs 1.8 lakh crore
- Postponement of taxes = Rs 50,000 crore
- Direct-impact industry relief = Rs 10,000 crore
- Backstop for first losses for bank lending = Rs 50,000 crore
- IT/GST/State GST refunds = Rs 1 lakh crore
- Health spending on testing and hospitalization = Rs 25,000 crore
- Long term spending on health capacity = Rs 1.25 lakh crore

India does not lack the financial capital to make this happen but needs broad vision and firm resolve to execute. This special recourse is only 2.5% of overall GDP. It may seem large but is within the ambit of what other countries are also preparing. Comparatively, the US is looking at spending US$2 trillion for this purpose, which is 10% of GDP and may even go as high as US$4 trillion. The UK is planning a fiscal package of GBP 350 billion while its GDP is GBP 2.21 trillion—amounting to 15% of GDP! India must not hesitate at this crucial juncture.

We live in perilous times, and citizens all over India look to the steady hand of Government to help tide them over in this crisis. Some of these suggestions have already been implemented in the form of the INR 1.7 lakh crore relief package to the poor under the PM Gareeb Kalyan Yojana. The *Atma Nirbhar Bharat Abhiyan* package also brought much-needed relief to agriculturalists, MSMEs, and select industries and employers. A relief package is now required to protect taxpayers esp. salaried, the middle class, large business operators, investors and startups, as analyzed below.

We also explore a 'New Deal' for Bharat, a technology-enabled development agenda that enables our farmers, rural workers, artisans, migrant labour, and others in rural India to drive their future and strive for success. Too long has India's vast population been reduced to day-to-day subsistence and reliance on subsidies. It is time to break out of that cycle, unlock our nation's true potential and take *Atma Nirbhar* to its logical conclusion.

India needs economic relief package of INR 5 Lakh Crore

In the short-term to survive COVID-19 and lockdown

First published before the COVID-lockdown on March 23, 2020. Subsequent government relief programs like PMGKY and ANBA have been analyzed in later sections.

The coronavirus pandemic has created panic in countries all over the world. Whole cities are under lockdown to arrest the spread of the virus. Social distancing – vital to the slowdown of the pandemic – also means people will stay at home, and not interact at offices, shops, factories, and elsewhere. As a result, economic activity is almost at a standstill and is creating considerable disruption; expected to continue for some time as nobody can predict when normalcy may return. Economic growth globally for this calendar year may be zero or even negative. Around USD 27 trillion of the market value of stocks have been wiped out in the financial markets.

The most significant impact is on employment as tens of lakhs of people will be laid off due to the massive decline in economic activity. A substantial number of people globally are self-employed or in small businesses which depend on daily cash flows now shut off. The US is already experiencing a massive increase in unemployment claims.

Many countries are mobilizing economic relief packages to ensure their citizens have enough cash to survive until the pandemic is under control and normalcy returns. The United States government is working on a USD 2 trillion package which includes sending money directly to citizens' accounts, deferment of taxes, and bailing out direct-impact industries like airlines, airports, restaurants, hospitality chains, and others. Similarly, Canada announced a USD 82 billion package, including a weekly payment to people in need. The UK too announced a GBP 350 billion package including tax holidays for impact industries and businesses, and offering to pay 80% of wages up to GBP 2,500 per month for impacted people.

India must follow suit immediately. Out of the 52.5 crore people in the workforce, around 22.6 crores are in agriculture and the balance in industry and services. Of this nearly 30 crores, about 11 crores are on the payroll of either private players or Government as evidenced by EPFO/ESI monthly job reports. Of these 11 crores, around five crores are on contract labour and can be easily laid off by cancellation of the contract as is happening right now. The balance is in informal sectors, MSMEs or are individual wage earners who may see a dramatic decline in daily incomes.

This follows that a minimum of 10 crores in the workforce may be directly impacted by the decline in economic activity with shutdown or lockdown of cities, stoppage of transportation, and reduction in supply chain activities for weeks at end. **Those who depend on daily cash flow will be suddenly bereft of cash for livelihood.** India is facing an unprecedented situation, more severe than any in recent history and no light at the end of the tunnel.
We must take stock of the economic losses in different sectors and announce a relief package that will help citizens in dire straits as well as industries directly impacted by the virus. The package can be put together using data which can consider the following:

Agriculture: Around 43% of India's workforce depends on the agriculture sector, which contributes about 17.6% to national GDP. At the moment, we have the *rabi* crop cycle ongoing at an estimated record high which starts entering the market in a week or so. We must fortify the supply chain for receiving the stock in the markets and *mandis*, ensure government agencies make timely procurement payments, and maintain minimum procurement prices. Ensuring minimal disruption to this massively beneficial economic activity over the next three months will be essential to stabilizing the livelihood of such a large workforce in states across India.

Rural areas dependent on agriculture have been primarily isolated from the pandemic because of scattered human activity, almost no international travel, and possibly the lack of data or knowledge about the virus. Uttar Pradesh and Karnataka have already announced they will supplement the INR 6,000 per year that Central Government pays farmers under the Prime Minister's Kisan Samman Nidhi scheme. If all the state governments join together to increase the INR 6,000 to at least INR 10,000 a year, this will go a long way in helping the nine crore farmer families.

Industry: Around 25% of the workforce depends on the industry sector, which contributes about 27.4% to national GDP. The sector might see near-zero growth in FY 2019-20 and FY 2020-21 as industrial production is negative in many areas. While labour shedding has occurred, not many jobs have been lost as yet. With an imminent 3-month lockdown, large scale job loss is likely. PM Modi has appealed to desist laying off workers, and some fiscal measures must be adopted to make this possible.

Of about 13.1 crore people in industry, half might be in informal sectors or MSMEs. In the organized sector, 25-40% of people in contract labour or small scale supply may lose jobs. The construction industry is in deep trouble. It employs the largest number of workers after agriculture. It depends significantly on government spending on infrastructure, investment from the private sector, and housing and commercial real estate activities by real estate operators; these activities are now at a near standstill impacting 50-60% of direct employment.

There is an urgent need to bail out the industry sector through direct benefit transfer (DBT) to workers through the information available with PF and ESI authorities, as well as measures to ensure adequate liquidity with the MSMEs and others.

This is not yet a solvency issue, but one of liquidity at a time when business revenues might fall to zero. It is remarkable to note the announcement of State Bank of India led by its dynamic chairman, Shri Rajnish Kumar, on providing loans up to INR 200 crores to clients with good accounts with a moratorium of 6 months at 7.25% interest. All banks must mobilize such schemes to increase the working capital of MSMEs and others that face liquidity challenges.

RBI has so far been a bystander; making sympathetic noises but not taking the lead in providing assistance. RBI must work with banks for deferment of payment of all loans, including EMI on consumer loans for the next six months without classifying them as NPA based on the individual banks' discretion. A moratorium on payment of loan instalments for all MSMEs, too, will go a long way in keeping these businesses afloat in troubling times.

Services: The sector employs 32% of the workforce while contributing 55% of national GDP. This is where the effect of the pandemic has been most devastating. Thankfully, a fair component here work in Government and parastatals and will continue receiving salaries from the Government's tax revenues.

The other services sub-sectors are reeling. Trade faces 25-30% decline, as does retail; tourism about 70-80% and travel, hospitality and restaurants about 80-90%. The entertainment and events sectors have crashed; Bollywood is in deep trouble. The livelihood of 5 crore people may be in jeopardy here. In the professional sector, professionals will be able to sustain for the next 3-4 months provided their EMIs are deferred for some time. The formal sectors like IT, banking and others are mostly in the hands of larger companies who have the cash but may require some support to survive.

The airline industry must be allowed to defer all taxes for 3-6 months, and avail reduced prices for aviation turbine fuel weekly for about four weeks till they can access the low prices in the global market. Deferment of all loan instalments as well as economic relief with working capital on the condition that they do not lay off anybody will help them. The Government must talk to the associations in the hospitality, hotel, travel, entertainment and other troubled industries to work out similar packages there too. There are also a large number of individual shops and small informal businesses in the services sector that need help.

With this overall economic view, India needs an economic relief package of around INR 5.4 lakh crores to be maintained by the Government to spend over a period:

1. **DBT** for about 15 crore families including farmers, unskilled labour, construction labour, informal sector, MSMEs and so on. At INR 2,000 per month per family for six months, that amounts to INR 1.8 lakh crores.
2. **Postponement of taxes** of many sectors like hospitality, aviation, and so on amounting to roughly INR 50,000 crores over the next six months
3. **Economic relief** for direct-impact industries like airlines which could total to INR 10,000 crores over six months
4. **Liquidity**: Asking banks to defer all EMI and loan instalments for six months at the discretion of the banks for people who do not have the necessary liquidity. The RBI can issue a directive that deferment for six months will not be considered as NPA, and banks do not have to provide for it. RBI has ensured liquidity in money markets by open market operations. Money markets have cash, but banks are not lending. It is essential for RBI, the banks and Government to come together and state that at all banks will give 20% increase in working capital to firms and 20% increase in personal loans up to a particular limit to people in need on the condition that they start paying back after six months. There could be some loan losses for some time for which the Government could give them a backstop at 10% on a first loss basis. These measures could approximate to INR 50,000 crores of the total.
5. **IT and GST refunds** already due to people and companies must be processed immediately so people can access increased liquidity of their own. Similarly, the INR 30,000 crore shortfall due to states per the guaranteed 14% GST returns can be processed to provide states with cash to offer relief packages to citizens. These were

refunds due to people and entities which the Government had held back due to the liquidity crisis earlier in the FY and must be processed quickly in light of the new crisis. This totally could be INR 1 lakh crores.

6. **Medical testing**: About 60% of the population do not have the means to spend INR 2,000-5,000 on testing for the virus. However, it is essential to test anyone that exhibits symptoms, and the Government has to bear the costs. Even if we test 1 crore people over the next three months – a near-impossible task – costs of about INR 5,000 crores need to be set aside for this.
7. **Hospitalization**: If 2 lakh people are hospitalized for two months, it could cost the government INR 25,000 each to keep them under medical care amounting to INR 500 crores. Taking the much larger target population into account, a suggested 20,000 crores must be kept apart for this purpose to take care of all health spending.
8. **Long term crisis management**: At this time of crisis, Government must also take a long term view to ensure that medical health is available in all states and districts. India has around 718 districts across the country with above par medical care in roughly 218 (in urban areas or the more developed areas of the South). In the balance 500 districts, It is suggested that Government build 500-bed hospitals in every district as part of this program to insulate the Indian population against future shock. At the rate of about INR 50 lakh per bed for 2.5 lakhs beds, this could cost INR 1.25 lakh crores over the next three years. This move is essential because everyone must be able to avail medical health in their district instead of travelling far. This will go a long way in enabling India to build health infrastructure for the next generation requirements.

Of this INR 5.4 lakh crores, states can share a 20% burden with the centre raising the remaining 80% through various means.

A snapshot of India's INR 5.4 lakh crores economic relief package looks like this:

1. DBT for 15 crore families at INR 12,000 each INR 2,000 p.m. = INR 1.8 lakh crores
2. Postponement of taxes = INR 50,000 crores
3. Direct-impact industry relief = INR 10,000 crores
4. Backstop for first losses for bank lending = INR 50,000 crores
5. IT/GST/State GST refunds = INR 1 lakh crores
6. Health spending on testing and hospitalization = INR 25,000 crores
7. Long term spending on health capacity = INR 1.25 lakh crores

GoI must not hesitate to come up with an extensive package to restore the confidence of its 137 crore-strong population. It will send a clear signal that the Government is committed to the livelihood and safety of its citizens.

To raise the resources, it is suggested that the Government can float 20/30 year bonds at about 6.5% from the market for this purpose for a period of time. A part of the current budget spending of Government can also be repurposed. This borrowing should be outside the fiscal deficit and shown separately as a line item for a special exercise to meet the virus crisis. **These bonds can be called the Karuna bonds, showing compassion in the times of Coronavirus**. The Government can also approach the World Bank and/or the Asian Development Bank to avail a line of credit to the tune of USD 10 billion or INR 75,000 crore or tap overseas financial markets like Tokyo with significant surplus funds.

India does not lack the financial capital to make this happen but needs broad vision and firm resolve to execute. This special recourse is only 2.5% of overall GDP. It may seem large but is within the ambit of what other countries are also preparing. Comparatively, the US is looking at spending USD 2 trillion for this purpose which is ~10% of GDP and may even go as high as USD 6 trillion. The UK is planning a fiscal package of GBP 350 billion while its GDP is GBP 2.21 trillion – amounting to 15% of GDP! India must not hesitate at this crucial juncture.

Indian citizens are in existential crisis; both their health and livelihood are in flux. Central and State governments must work together in these extraordinary circumstances to raise the necessary capital and put together an effective delivery mechanism to help the vulnerable 60% of India's population. Kerala has worked out an INR 20,000 crore package to meet state requirements despite not having visible resources. The UP government has announced a large scale package to take care of daily wage earners and construction labour. All states must work this out and announce packages where 20% can be funded by the state and the balance 80% by the centre. We live in perilous times, and citizens all over India look to the steady hand of Government help to tide them over in this crisis.

Atma Nirbhar Bharat Abhiyan – A transformational step forward towards New India

After the PMGKY launched early in the lockdown to protect 80-crore of the most vulnerable citizens, the government has announced the *Atma Nirbhar Bharat Abhiyan* (ANBA) – an INR 20 lakh crore package combining reforms, and monetary and fiscal measures to make India self-reliant.

Various economic estimates place the fiscal impact of ANBA at 0.8-1.2% of GDP. The government has smartly focused on some long-pending structural reforms and enhancing liquidity. While some sections of the population are yet to receive relief, we must consider that no one knows for sure when the pandemic will end and economic operations will fully return. It is possible the government is conserving resources at its disposal to be ready to invest more later.

DEMAND AND SUPPLY

ANBA focuses largely on supply-side reforms and relief. MSMEs, a section of manufacturers and employers, agricultural producers, DISCOMS, and other economic suppliers are rightfully beneficiaries.

The demand side needs support too, as an estimated 70% of India's economic growth since liberalization has been fuelled by internal consumption. With the loss of income and liquidity, crash in demand will impede growth. Apart from increasing liquidity, the government could look at further reducing interest rates to increase borrowing, reducing taxes, and providing more direct income support. Various countries around the world, including USA and Japan, have deployed a combination of these strategies. The government's next economic package hopefully can focus more on fiscal policies to increase liquidity in the hands of the middle class and taxpayers to drive consumption.

ECONOMIC SECTOR IMPACT ANALYSIS

Agriculture: The government has announced large-scale reforms and investment in the sector. INR 1.4 lakh crores are directed towards strengthening Agri-infrastructure, and various investments in micro-food clusters, livestock, medicinal plants, Operation Greens, and others. These investments as well as liberalizing trade by amending the Essential Commodities Act will go a long way in empowering farmers who now have long-awaited freedom to sell where they want.

Construction: One of the largest opportunities for growth and to provide mass employment after the pandemic is in construction and infrastructure projects. ANBA hasn't addressed this sector yet which could hopefully form a large part of the next package. The government can enable NHAI, railways and other parastatals to pay off dues to contractors so these large employers have the liquidity to finance the next round of projects. New projects need to be commissioned to sustain jobs.

Manufacturing: This sector has seen much relief. Manufacturing MSMEs can now avail the government-guaranteed loans to a total of INR 3.7 lakh crores. 75% of India's manufacturing jobs are though SMEs per NITI-Aayog data, and this liquidity infusion will greatly help preserve them. Further, the announcement of transformational reforms in coal, mining, defence production, and power can spur local manufacturing. However, these are all capital-intensive industries. The government can consider a major economic package to similarly incentivize labour-intensive industries, especially in the highly-populous heartland states, to absorb excess labour locally. This is especially needed to solve the migrant crisis. Flatted factories can be rapidly built and launched for this purpose.

Services: MSMEs in services sectors can avail loans, but large business operators have not seen much relief. This is especially worrisome because most of the direct-impact sectors from COVID-19 are substantial employers – aviation, hospitality, restaurants, tourism, and others. Without relief from the government, they have had to let go of many employees. A special economic package including a 1-year loan repayment deferment is required to tide them over until their operations start up again, which could take 6-9 months to get to even 50% of normal operations in light of the pandemic.

POPULATION SECTIONS IMPACT ANALYSIS

Farmers & rural workers: The first tranche of INR 2,000 per beneficiary via PM-KISAN Yojana was front-loaded to provide minimum income support to farmers during the lockdown. Agriculture operations were shielded and allowed to start up quickly. Many measures were taken to harvest the record-breaking *rabi* crop and sow the *kharif* on schedule. Farmers can avail loans to the tune of INR 2 lakh crores via the Kisan Credit Card scheme. DBT for MGNREGA was also issued in record time with an additional allocation of INR 40,000 crores to provide cover to rural workers.

Migrants: Most states have not treated their migrant populations well, with many washing their hands off and blaming the centre, resulting in an eye-opening crisis in the country. ANBA has allotted INR 3,500 crore worth of free food for migrants to be disbursed by state governments. Two large issues remain – one, state governments hardly have any records of how many migrants are in their states, where they immigrated from, etc. Lack of records makes it hard to distribute DBT and food to those in need. A separate department is required to track migrant movement, just like NRI Affairs tracks non-resident Indians. Two, a concerted effort to provide people with jobs in their own states is required to solve the migrant crisis permanently.

Small businesses: The differentiation between different MSMEs who can avail targeted loans, as well as the expanded definition of MSMEs, has helped. With two months of economic lockdown inducing stress, it is suggested these funds be released quickly and banks be directed to lend per the PM's directives. The move to clear IT, GST and customs duty refunds is also helpful.

Large businesses: Large business operators have not received much relief. Many of them were hit by the pandemic-lockdown, as discussed under Services above. Corporate revenues have reportedly dropped over 25% during the lockdown and may take more than a year to recover. To retain payroll and maintain liquidity to start operations as the lockdown lifts, large businesses still need relief and urgent tax refunds. RBI can also offer a 1-year loan repayment deferment to ensure liquidity.

Taxpayers: The 25% reduction in TDS and TCS for non-salaried payments is a welcome move to increase short-term liquidity. While this is applicable on payments for FY'21, it does not address the loss of income due to the lockdown. Tax refunds are being processed into the hands of non-corporates; corporates also need refunds to retain payroll, especially the IT industry. In terms of structural reforms, the long-pending move to a simplified three-slab system with no deductions from the current convoluted seven-slab system will provide more relief and make tax laws simpler.

Salaried individuals: In a 137-crore population in 2019, only 2.9 crores are salaried income-taxpayers. They have borne India's high tax-burden for years and deserve support. Sadly they have not been included in the 25% TDS reduction or fully in the accelerated processing of IT refunds. US and Japan are giving direct cash support in the accounts of honest and compliant taxpayers to spur spending in a recessionary environment. India also needs to take care of salaried taxpayers.

Investors: Investors, overwhelmingly middle-class, have been devastated by the dramatic decline of INR 45 lakh crores in the stock market since the beginning of March. An estimated 3 crore investors through 9 crore folios have been impacted. SIP investors are critical for domestic wealth creation – they had invested INR 1 lakh crore in FY'20 and were a counter to the FIIs. The best way to support wealth creators is to abolish long-term capital gains tax for individuals. In AY'19, out of INR 45.3 lakh crore total income declared, LTCG by individuals was only INR 67,000 crores. At best, LTCG yielded INR 13,000 crores tax out of a total INR 8.9 lakh crores collected – barely 1.5%. Abolishing individual LTCG tax will hardly impact government tax collections but will have a tremendous feedforward wealth effect to drive spending.

Startups: Hardly any relief has reached startups. GoI can capitalize SIDBI in order to fund AIFs to disburse money to startups. Removing the LTCG tax can also help startups access capital from Indian investors. Reforms to incentivize insurance companies and other Indian institutional investors to pool money into Fund-of-Funds and direct investments are the need of the hour to keep India's once-shining startup ecosystem afloat while the pandemic-lockdown goes through.

The PM's ANBA program is visionary and will have a substantial impact. The Indian government has boldly prioritised lives first and has now focused on reforms to strengthen national economic security. The middle class and direct-impact sectors now require measures to spur demand and boost morale urgently.

A ‘New Deal’ for Bharat

India has two facets. One, an urban, tech-savvy India in big cities with tall buildings – 35% of the population. The other of rural India which produces our food, and houses 65% of the population. The latter holds the spirit of Bharat, the land that our Constitution extols.

Unfortunately, because Bharat lacks 21st-century readiness, there is a wide income disparity between the two. A vast majority lack quality wage and employment prospects in rural India. As a result, 43% of India’s workforce (per World Bank data) depends on agriculture which contributes only 17.6% to GVA with low 3% YoY growth. Pre-COVID, industry and services contributed 27.4% and 55% respectively to GVA and have higher growth potential. Accordingly, mean Agri-income is INR 56,000, compared to INR 1.6 lakhs for industry and INR 2.2 lakhs for services. ***The ratio is 1:3:4, resulting in high income inequity***.

An overwhelming majority of rural India is perpetually dependent on subsidies and government help, even seventy years post-Independence. We must invest in making Bharat future-ready and our people secure with increased income.

NEW DEAL FOR AGRICULTURISTS

Market prices: By reducing the scope of the Essential Commodities Act and dismantling APMCs, PM Modi is actively empowering our farmers. After decades of restricted selling and repressed pricing, farmers are at last free to sell at market prices. The FPO model (Farmer Producer Organisations) where farmers aggregate their produce to sell as a collective is yielding results. However, selling directly to market requires grading, sorting, quality control, efficient harvesting, access to markets and supply chains, and the ability to realise competitive prices. Here, technology and real-time information platforms are foremost enablers.

Agri-tech platforms: Over the last 5-7 years in Bengaluru and other cities, 500+ Agri-tech companies have formulated and validated tech-enabled strategies for farmer empowerment. These platforms encompass real-time market intelligence, post-harvest intervention and storage capabilities, price forecasting, D2C offerings, competitive financing and insurance, and market linkages. Their use has resulted in 20-25% more income for farmers, instant payment via COD and UPI, low wastage, and other significant benefits. GOI can consider an INR 5,000 crore fund under NABARD as part of *Atma Nirbhar Bharat Abhiyan* (ANBA) to invest in 1,000+ Agri-tech companies that develop platforms and tech-enabled strategies to connect farmers all across India to markets and supply chains. These platforms will prove significant in realising PM Modi’s vision of doubling farmer income by 2022.

Differentiated Agri-strategies: Cereal production contribution towards total Agri-value is reducing while the output of fisheries, milk production, animal husbandry, and fruits and vegetables via horticulture is increasing. Farmers can diversify their products to increase income, mitigate risk, and access export markets. This will require training on multiple crop inputs, growth cycles, supply chains, farm management, quality assessment, and other crucial factors. It is no longer viable to have one Agri-policy for a whole state or even a district. Each taluk must have a differentiated plan based on climate and crop conditions, storage facilities, and market linkages, and every farmer must be empowered to pursue a differentiated strategy.

RETURNING MIGRANTS AND EXCESS AGRI-LABOUR

An estimated 7.2 crore migrants had left labour-surplus states like Uttar Pradesh, Bihar, West Bengal, and Rajasthan, due to insufficient opportunities to sustain such large populations. They have emigrated to Delhi and the developed states of the south and west in search of work. Due to surplus labour availability and lack of focused skills development, they have earned meagre wages for many years in the hope of sending INR 5,000 every month to their families.

For the first time, due to the COVID-lockdown, we see a reverse migration back to the heartland states. ***Now is the time to roll out a future-readiness investment agenda that takes advantage of the reverse migration***. It is also estimated that 25% workforce in agriculture might be sufficient, and the excess labour (from 43%) be systematically moved to other sectors at the rate of at least 2% per year.

Labour-intensive industries: Most industries are located near India's few urban areas; instead, they must be located closer to labour-surplus regions. Census 2011 shows India has 7,933 census towns. We can pick 5,000 of these all over India, especially in the labour-surplus heartlands, and locate/relocate industries nearby. CM Adityanath promised that none of the returning labour has to seek out jobs again, and labour-intensive manufacturing is a comprehensive way to fulfil this promise. Many returning migrants have skills, participated in large projects and lived in urban India. We can tap into this unexpected resource and enable them to become the nuclei of great revival and growth.

Special Economic Zone model: Of India's 725 districts, 400 could be classified as new SEZs where labour-intensive industries from a defined list can be incentivised to set up. Flatted factories are a quick way to build and launch industries to tap into labour. With this model, Ranchi has today become a centre for garment manufacturing, with workers travelling from the nearby 10-30km to access viable employment opportunities there. A new set of incentives and cash investment are required to set this up all over India. The FICCI Skills Committee has provided an in-depth analysis of commodity-based clusters which can help.

Skills development: GOI has an INR 3,000 crore annual budget for skills development. In light of the migrant crisis, we suggest expanding the yearly budget to INR 15,000 crores. There is a need to analyse the level of skills in labour-surplus states, impart skills for labour-intensive manufacturing and other sectors, and allocate the skills efficiently to work projects. Electronic platforms like Better Place that link skilled labour to markets will be crucial to manage such an extensive skilling program. This drive will lead to the most comprehensive skills development and economic empowerment program in the world.

Encourage entrepreneurship: Many of the returning migrants have been part of cottage industries, large construction projects, manufacturing product lines, sales operations, and other aspects of business. If those with an entrepreneurial mindset get capital from banks or the government via MUDRA and other schemes, they can set up enterprises in their home towns and villages. They could utilise their connections in large cities for market and distribution efforts. It is suggested that INR one lakh crore be set aside as part of ANBA to provide at least INR 1 lakh to approximately one crore entrepreneurs. There will be some failures, but the successes could change the face of economic empowerment in the heartlands.

The migrant crisis and pandemic are throwing open new opportunities to create the largest entrepreneurship and upskilling drive in the world. This will create the impetus for India's long-marginalised "poor" to believe in their own skills and indeed be *Atma Nirbhar*.

TECHNOLOGY IS THE DIFFERENTIATOR

Connectivity: In a vital first step, 1.4 lakh *gram panchayats* have been enabled with optic fibre connectivity during NDA-I. GOI can incentivise TELCOs to accelerate 4G networking across India to cater to banking needs like credit and deposits, and connecting farmers, artisans, and other rural producers to markets, distribution and supply chains instantaneously.

Next-gen empowerment: An extensive technology training program for children of farmers, artisans, etc. is required. Many of these children have learnt the family business and intimately know the pain of being unable to market goods to the end consumer and procure market prices for the same. The Deshpande Foundation in North Karnataka has successfully taught many children of farmers and artisans the use of technology in the Hubli-Dharwad area. The children are now utilising technology and connectivity to do business online and push for their family's success. This model can easily be implemented across rural, labour-surplus areas to empower the next generation.

Recently, all our hearts went out to a young woman in Karnataka who posted a video about surplus onion production on their farm. Middlemen were offering a price much lower than what they had spent to grow it. The video caught the attention of CM Yediyurappa, who immediately deployed officials to facilitate competitive selling in Bengaluru. The woman's entrepreneurial skills enabled her family to procure market prices and highlight the plight of onion growers in the region.

In conclusion, Bharat needs a New Deal. This technology-enabled 21st-century readiness plan will empower our farmers, rural workers, artisans, migrant labour and others to drive their future and strive for success. Too long has India's vast population been reduced to day-to-day subsistence and reliance on subsidies. It is time to break out of that cycle, unlock our nation's true potential and take *Atma Nirbhar* to its logical conclusion.

Multiplexed maximization of farmer earnings and national food security

Strategies based on Compositional Agri-GVA Trendlines

Agriculture is India's most asymmetric workforce-economic dynamic. 43% of India's workforce depends on the sector which contributes only 17% to national GDP. This results in low average per-capita farmer income at INR 55,000 compared to a national average of INR 1.5 lakhs.

PM Modi's promise to double farmer incomes by 2022 is an opportunity to break out of a 70-year stagnation. At the heart of this is to empower farmers to realize the full consumer-price for their crops and other products. Atma Nirbhar Bharat Abhiyan (ANBA) is a transformational step towards this. Further, the composition of agricultural gross value add (GVA) is rapidly changing, and we must evolve a strategy that capitalizes on these market forces and utilizes technology to deliver on this promise.

INDIA'S AGRI-COMPOSITION IS RAPIDLY CHANGING

A look at agricultural GVA composition over the last decade reveals rapidly changing dynamics. Projecting to 2024-25 shows starker changes are yet to come. Strategies based on these trendlines will enable higher market value realization for our farmers.

Agriculture (Nominal) GVA Composition (INR lakh crores)									
Agri-components	2011-12		2014-15		2018-19		7-year CAGR	2024-25 Projected	
	GVA	% share	GVA	% share	GVA	% share		GVA	% share
Crops	9.82	65.4%	12.93	61.8%	16.15	55.3%	7.4%	24.73	45.6%
Horticulture*	2.66	-	4.52	-	6.71*	-	14.1%	14.84	-
Livestock (Less Inputs)	3.27	21.8%	5.10	24.4%	8.72	29.8%	15.0%	20.19	37.2%
Milk*	3.28	-	4.96	-	7.96*	-	13.5%	17.05	-
Meat*	0.96	-	1.54	-	2.51*	-	14.7%	5.69	-
Forestry & Logging	1.24	8.3%	1.74	8.3%	2.23	7.6%	8.7%	3.68	6.8%
Fishing & Aquaculture	0.68	4.5%	1.17	5.6%	2.13	7.3%	17.7%	5.66	10.4%
Total Agri sector	**15.02**	**100.0%**	**20.94**	**100.0%**	**29.23**	**100.0%**	**10.0%**	**54.27**	**100.0%**

Table: Nominal Gross Value Add composition in India's agriculture sector. Source: MOSPI, MAFW, MFAHD. (* indicates total value output, not value added. 2018-19 GVO for horticulture, milk and meat is projected by authors based on latest available data).

Crops: Contribution of crops to total Agri-GVA has fallen from 65.4% in 2011-12 to 55.3% in 2018-19. It is projected to fall to 46% in 2024-25. Within crops, the value-output of horticulture, including fruits and vegetables, is growing at 14%. There is a need to track horticulture value-add separately as data shows this segment is growing faster than the 7.4% crop value add.

Livestock: Contribution of livestock to total Agri-GVA has risen from 22% in 2011-12 to 30% in 2018-19, growing 15% YoY. Dairy production and meat consumption are rising, and again there is a need to track them separately since they require different modes of growth and distribution and vastly different policies for income growth. The milk group forms the bulk of the livestock GVA, and its value-output is growing at 13.%. Meat value-output is growing faster than dairy, at 14.7%. Livestock might grow to 37% of Agri-GVA in 2024-25.

Fishing and aquaculture: This segment is registering highest growth at 18% YoY, and is projected to contribute 10.4% in 2024-25.

Non-crop: These segments together are growing at 14% YoY and projected to 55% of GVA in 2024-25. Crops have an MSP fixed by the government and leveraged by large government purchases while non-crops are left to market forces – leading to price volatility and higher uncertainty for farmers. These segments now need the help of Agri-tech platforms so the producer can receive market prices.

The Agri-GVA composition projected to 2024-25 shows tectonic changes. To capture maximum value and double farmer incomes, our policies must be proactive to these trendlines.

STRATEGIES FOR CAPTURING HIGHER VALUE

Horticulture optimization: India is the second-largest producer of horticulture, at 307mn tonnes. Value output of horticulture is fast-growing at 14%. The sector needs an exclusive strategy to optimize value realization for farmers, reduce wastage, and orient for export markets.

Food processing value-add: Top Agri-export economies like the USA, European countries like Germany and the UK, and China balance their exports of natural produce with processed products that are higher value add. These products are efficient to make in mass, are less perishable than produce and fetch higher prices. India needs more investment in food processing to capture local and global markets.

Food parks: The Ministry of Food Processing has created Mega Food Parks in India based on a cluster approach that aims at maximizing value and minimizing waste. More investment is required to enhance the capabilities of the currently-operational food parks and to build more. Each state must be empowered to create unique processed foods based on the local produce.

Export-orientation: India is the second-largest agricultural producer, but doesn't rank the same in terms of export values. While high internal consumption accounts for some of this mismatch, the larger reason is we have not consciously oriented our economy, and particularly the agriculture sector, towards exports. Apart from food processing, branding, grading and sorting, and global supply chain connectivity are crucial.

Branding: India needs a massive, recognizable brand makeover that capitalizes on existing Indian food trends that exist all over the globe. For example, Thailand has a well-known national brand. Thai restaurants all over the world subscribe to this brand and procure unique spices, vegetables and rice from the motherland exclusively. Likewise, India can build a cohesive brand that can fuel its exports and increase its standing as an exporter of unique Indian products.

Grading and sorting: For exports, grading and sorting are crucial and these activities start at the farms. We need to formulate a national policy that is conducive to building the brand image discussed earlier. With a cohesive policy, we can start training our farmers and producers to grade and sort as required. This will help farmers consciously orient toward export markets as well.

Supply chain facilities: Internal supply chains have been strengthened with GST and extensive road infrastructure projects. Further enhancement with a focus on high-speed rail like the freight corridor projects and port development for export orientation comes next.

Fisheries: The ANBA reforms give special attention to fisheries with the launch of PMMSY intended to double exports to INR one lakh crore. India needs additional infrastructure to improve value-add in fisheries also.

Dairy procurement: India is the largest dairy producer globally at 169mn tonnes. Our dairy production is rising at 13.5% by value-output and we need better strategies to procure and consume it. We can utilize part of it to increase domestic protein consumption by incorporating dairy products in the midday meal schemes. To capture export market share, we require bigger private players and dairy cooperatives like Amul that can maximize brand and supply chain value. Though a small country, New Zealand has managed to build a massive dairy brand with these strategies.

Essential commodities: Amending the Essential Commodities Act was a vital gateway to implementing all of these suggested steps. Products like cereals, oils, pulses, onions, and others are being deregulated, allowing farmers to realize better market prices. The logical conclusion of ANBA would be for our farmers to get market or near-market prices for their products and to stop having to rely heavily on subsidies.

In the 21st century, the quickest way to deploy these reforms and strategies at scale across a massive country like India is via technology platforms. The use of Agri-tech platforms can now become part of national policy via an INR 5,000 crore Fund under NABARD's leadership.

All the strategies discussed here, with export-orientation being the lynchpin, will enable our farming citizens to earn incomes closer to the national average, to be independent and stop relying heavily on subsidies, pursue their own differentiated strategies to maximize value, and walk with their heads held high.

Protecting Jobs in the COVID-Era

Any delay in substantial relief to taxpayers, job creators, and MSMEs will be perceived as a complete failure of reciprocation from the administration. An overwhelming majority of these segments are compliant and honest citizens who have followed the directives of the system for decades. Perhaps more crucial than anything else, Middle India is losing hope that the government will secure their economic interests. If there is no urgent relief now, we will break the spine of our country and cause irreparable damage to India's collective consciousness.

A strong relief package is required to protect jobs in India otherwise the Indian economy will fail to recover when the pandemic subsides. In this context, the authors analyse India's population cross-section:

1. **Bottom-of-the-pyramid** - 80 crore people or 58.4% of the population is being protected by the PM Gareeb Kalyan Yojana and the Rs. 1.7 lakh crore relief package announced by Finance Minister.
2. **Government employees & pensioners** - The only safe section through the economic lockdown as their salaries and pensions are guaranteed by taxes and govt. borrowing.
3. **Other taxpayers** - India has one of the highest tax burdens in the world borne by only 2.4% of the population or 3.3 crore people. These include promoters of companies, successful entrepreneurs, senior management and white-collared employees of industry, banks, etc. and their families.
4. **Middle India** - Including the salaried class and job creators via MSMEs and businesses, roughly 21.4% of the population

We need a strong relief package that eases the burden on taxpayers and Middle India, the job creators and business backbone of our economy. In the event the government doesn't have the resources to help job creators and taxpayers, it can access RBI's Forex reserves. The RBI is fully owned by the Government via an Act of Parliament. GoI can ask RBI to transfer Rs 3 lakh crore as non-tax revenue to the government budget to be utilized in these extraordinary circumstances. This Rs 3 lakh crore can be used to give relief as detailed below:

1. Credit guarantee fund with backstop for first losses at 10% guaranteeing Rs 5 lakh working capital to MSMEs – Rs. 50,000 crore
2. Refunds of IT, GST and 14% guaranteed GST collection to states – Rs 1 lakh crore
3. Payments to NHAI contractors/railway contractors/health sector/other goods and services availed by the government but not paid – Rs 1 lakh crore
4. Advance to NHAI and railways to start infrastructure works by making advance payments – Rs 50,000 crore

Every country in the world is scrambling to secure its national economic interests in this pandemic-struck reality. The Indian administration must not abandon its honest taxpaying, job-creating citizen minority as it addresses other priorities. This Rs 3 lakh crore borrowing from RBI reserves will enable the Indian economy to sustain itself, restart growth, keep existing employment going and give hope to the Indian people. These measures are discussed in detail in the following post.

Middle India and taxpayers need more economic support from the government

In the time of the COVID crisis, the Indian government has boldly prioritised the lives of Indian citizens by maximising social-distancing and shelter-in-place via a complete lockdown. PM Modi's strategy seems to be working - India's pandemic curve is flattening barring some hotspots, and the lockdown is extended to May 3. However, the government and administration must acknowledge that this is not a situation where you choose between national health security and national economic security. The country cannot compromise or delay on securing either – this must be approached as a war-time scenario and urgent response is needed.

The Indian economy has ground to a complete halt due to the lockdown, threatening the livelihood of crores of people. SBI's Economic Research division predicts a total income loss of Rs. 4.05 lakh crores through the lockdown for the 37.3 crore workers estimated by PLFS as self-employed, regular and casual workers. These citizens will not all have the ability to last through the very obvious economic slowdown without intervention.

While the Rs. 1.7 lakh crore package offers much-needed relief to the bottom-of-the-pyramid, Middle India and taxpayers have not been addressed. PM Modi has infused hope in the hearts of these citizens by asking employers to hold on to jobs and make payroll in these difficult times, and employers are doing their best despite lack of liquidity and resources.

Several high-ranking government officials have asked these citizens to be patient as they design relief measures. With three weeks of lockdown already past and a 19-day extension announced, the administration cannot delay further. This is not the time to maintain a 3.5% fiscal deficit or cobble together a relief package for Middle India from the refuse of other priorities. In these extraordinary times of need, it is important to stretch all resources at hand to offer urgent relief to save lives and livelihood and give hope to job creators.

With the global world order in flux and India in a relatively better position vis-à-vis the pandemic, the administration can actually afford to be aggressive and secure long-term global funding to drive India's growth and employment for the next decade. This winning dynamic is ours to lose in the absence of strong action from the government.

The stakes for India have never been higher. We are at a GDP of Rs. 205 lakh crores and a top-five world economy now. We have performed better than most expected and much to the surprise of the Anglo-Saxon first world. The IMF projects that India is the only top-5 economy that may register positive growth in FY'21. The Indian administration must focus on protecting jobs and job creators to keep the economy intact and to have a chance at a coordinated recovery.

PROTECTING JOBS

Jobs from COVID-impact have been in jeopardy for more than a month now. The south went into lockdown ahead of the rest of the country and jobs have been in flux for 45+ days in southern cities like Bengaluru. On an all-India basis, the lockdown is officially running from 25th March to 3rd May, a long time for economic suspension. The biggest challenge for India post-lockdown is protecting current jobs and generating new employment post-lockdown.

- **Agriculture**: 43% of the workforce is in agriculture which is being ramped up to harvest the *rabi* crop cycle. This sector is less affected by COVID and with the right policies and workforce deployment, could register minimal losses. Agriculture already receives Rs. 70,000 crore through the PM-KSNY along with Rs. 61,500 crores for rural workers via the MGNREGA scheme. GoI is fully committed to provide for rural jobs, as can be seen in the Rs. 1.7 lakh crore relief package that is focused largely on this sector.
- **Industry**: 24% of the workforce is in industry and manufacturing. These sectors are devastated and may register negative growth in FY'21. Unemployment could be the highest in this sector, if the government doesn't provide relief to job creators and MSMEs in industry. An equally systematic relief program must be constructed for industrial jobs.
- **Services**: 33% of the workforce depends on services that may plummet to 2.5-3% from 7.5% growth. Many high-employment COVID-impact sectors like airlines, airports, entertainment, hospitality, restaurants, tourism, and others form a part of services. It will be devastating for income earners in this segment if relief does not arrive to protect jobs here promptly.

The Rs. 1.7 lakh crore relief package does not majorly address either the industry or services sectors. RBI has come out with various measures for money market liquidity, which are not translating to an increase in credit or working capital to job creators in these sectors; with the exception of some measures taken by SBI and other PSUs.

JOBS AT RISK IN INDUSTRY/SERVICES

In the absence of economic relief, adequate increase in working capital, or firm measures to protect jobs in industry and services, many formal and informal jobs are at risk. This sector is fast losing hope, despite wanting to uphold the PM's request to retain employees.

- **Formal employment**: About 8 crore people are formally employed, as detailed in the EPFO and ESI databases. Of this, about 4-4.5 crores are contract labour and their jobs are in jeopardy. Data indicates a majority have been paid wages in March but the April payroll is a matter of worry because people are unsure of when the economy will open, how staggered is the opening, and whether they will receive any relief to retain payroll.
- **EPFO beneficiaries**: The FM has already announced that the government will contribute both the employee and employer contribution over the next three months for some EPFO beneficiaries, but this comes with restrictions on wages (Rs. 15,000 ceiling) and the number of employees in the company (up to 100) – leaving many other companies in a crunch. This must be extended to cover all MSMEs – at a salary level of Rs. 30,000 and up to 1000 people as this will ease the stress on larger job creators and employees who have been working for 10-15 years and earning more; otherwise, they may be laid off in these distressing times. It is hard to believe that the administration is unwilling to protect employees simply because they earn higher

wages due to their specialisation or experience, or work in larger companies. Their livelihoods are also important. The administration must do away with arbitrary restrictions on who receives relief.

- **ESI/Other**: The administration must also consider finding a way to directly help ESI beneficiaries. Further, the EPFO only includes companies with 20+ employees in 190 industry classifications while the ESI includes companies with 10+ employees in 90 industry classifications. There are many smaller entities that do not fit this bill but aggregately employ crores of contract labour and cannot make payroll. With the amount of data available with GoI in the EPFO/ESI/GST and other databases, similar measures to identify and provide smaller companies with relief must be considered urgently. The ability for these smaller firms to recover from this economic shock is more impaired and the case for relief in this segment cannot be ignored.

India's foremost national goal on the economic front currently is to protect jobs. Many issues concern employers and require urgent redressal from the government:

1. **Lack of liquidity and working capital**– Most people in industry and services sectors want to stand by the PM's request to not lay off jobs and cut salaries. To do this, they need liquidity and money. The administration must increase working capital for which a large Credit Guarantee Fund of at least Rs. 50,000 crores needs to be set up to assure at least 10% first losses to buttress bank lending to the employers. Some bank chairmen have publicly announced that banks are hesitant to lend because of the high uncertainty and in the absence of a credit guarantee from the only entity large enough in the country to bear it – the government. Increasing working capital through bank lending will help maintain payroll and give hope to these sectors that when the lockdown is lifted, they will be able to start operations again. RBI says about Rs. 6.3 lakh crores is parked with RBI by banks showing clearly that they are not lending to MSMEs who are starved for liquidity.
2. **Why is liquidity the issue, and not solvency?** – With the economic lockdown, companies in these sectors are unable to collect receivables and to complete payables. The system is jammed, preventing inflow of working capital required to maintain payroll. The government must understand that most of these companies have adequate assets and are not in danger of insolvency, but in these times of frozen capital flow, they need help with liquidity to make payroll. If it comes down to the survival of the company to make it to the end of lockdown, they will be forced to lay off labour and preserve whatever cash they have to open up after lockdown. By not providing relief, the government will force these companies to lay off labour, affecting the economy deeply and going against the sincere intent of PM Modi.
3. **Direct support** – We have already discussed increased measures for EPFO/ESI beneficiaries above. The government can also consider transferring a direct credit of Rs. 3000 per month for three months to the accounts of 4-4.5 crore people which they can withdraw instead of wiping out their savings – this will amount to Rs. 36,000-40,000 crores. It is important to give these people and their employers hope and support in these trying times.
4. **Direct-impact sector relief** – Special relief for direct-impact sectors is necessary since they are laying off employees because revenues have come to zero due to the lockdown. A one-year deferment of EMI instalments and term-loan and interest

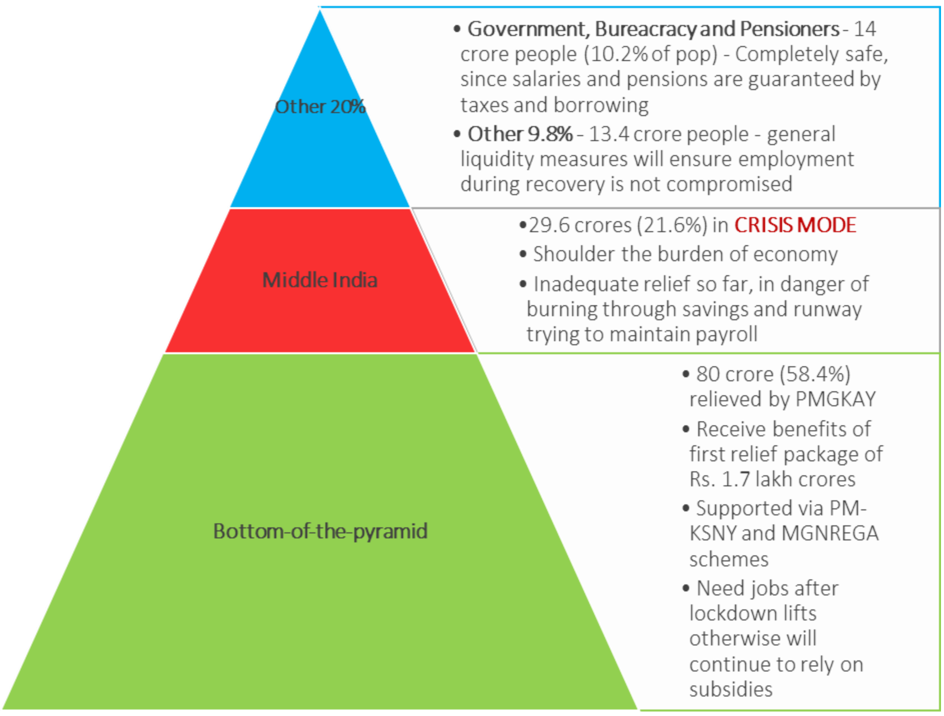
payments and other measures to improve their working capital is important to maintaining whatever jobs are left in these sectors. Otherwise, not only will post-COVID unemployment be high, these sectors will find it hard to start up again after the pandemic subsides if they are not ready with payroll and capacity to re-employ.

5. **Blue-collar labour** – India's biggest startup for blue-collar workforce management that processes 70+ lakh worker profiles, gives some indication about job loss in this area. Its records indicate that out of 5 lakh people in the facilities and security sectors, 80%+ are not marking attendance. It is not known if they are being paid regularly or asked to leave. A majority may be kept on the roster, but for how long is the question, given the uncertainty. Blue-collar labour is a very large sector, mainly on contract so they will be promptly laid off if there is no relief.
6. **Cab drivers** - Additionally, many companies that employ drivers for cabs are reporting zero utilisation and are unsure about making April payroll. Reports say that banks are looking at Rs. 30,000 crore+ in defaults of loans given to cab drivers who have returned to their villages in the absence of employment.
7. **Real estate, road transport and construction sectors** – After agriculture, the highest number of unskilled or low-skilled workers are employed in these sectors. With suspended operations here, unemployment is very high. The devastation to these segments due to the lockdown will have long-standing negative impact on employment and productivity. Without relief, this will drag down any chances of revival for the economy.

Even after the lockdown ends, workers in these sectors listed above may not be immediately employed as before because their employers have to slowly ramp up operations in a highly-uncertain, post-COVID economy. These workers and employers need support from the government as they ramp up to 50-60% of the operation over 3-6 months.

JOB CREATORS AND TAXPAYERS NEED RELIEF

For the purposes of understanding the economic effects of the extended lockdown and absence of strong relief measures, Indian civic structure can be broken down into three sections:



1. **Bottom-of-the-pyramid**: The first relief package of Rs. 1.7 lakh crore announced by FM Sitharaman on March 27 2020 provides relief to India's most vulnerable citizens, those without staying power to sustain themselves through the lockdown. These include construction workers, rural labourers, agricultural workers and farmers, BPL families, senior citizens, and women Jan Dhan (JD) account holders. It includes Direct Benefit Transfer (DBT) of which the first set were transferred in record time thanks to the DBT-JD account infrastructure set up during NDA-I by PM Modi. The government has considered many facets of the lives of Indian citizen by including free gas connections for Ujjwala Yojana beneficiaries and food for 80 crore people under the PM Gareeb Kalyan Anna Yojana. This is a very good step and helps 80 crore people – 58.4% of India's population.

2. **Other 20%:** The other 20% of the country has the wherewithal to survive the lockdown with strong government employment links or their savings. These include:

    a. **Government employees and pensioners**: The Central and State governments, parastatals, and bureaucracy together employ approximately 2.5 crore people. At a typical family of 4, this amounts to 10 crore citizens. Further, 2 crore people receive government pensions – supporting on average one more person, this amounts to 4 crore citizens. A total of 14 crore citizens are part of this services sub-sector. Most economists state that only this sub-sector will remain unhurt by the economic lockdown since they are guaranteed salaries and pensions via tax collection.
    b. **Other taxpayers**: The balance 9.8% in the Other 20% constitute promoters of companies, successful entrepreneurs, senior management and white-collared employees of industry, banks, etc. and their families. They either have adequate savings or secure jobs or both. They don't need relief from the government for personal benefit. However, urgent relief measures infusing liquidity into the economy will enable them to retain more employees on the payroll and retain their jobs as employees. There may be a perception that this is the lowest priority for any government in such a situation. However, history is clear that any economy that does not protect its employers and tax payers during a crisis will struggle to recover when it needs them to contribute to growth and revival. These are compliant, honest, tax-paying citizens and the administration must not abandon them at this time of crisis.

3. **Middle India**: Middle India, including the salaried class and job creators via MSMEs and businesses – roughly 21.4% of the population, has not been adequately addressed. They haven't received any substantial help from the government and most only have 1-2 months spending power to sustain their business. With the lockdown extension and absence of any relief so far, they will burn into their savings and be hurt deeply. The lockdown is being felt most acutely by this section as they shoulder the total shutdown of India's economy. They will be most susceptible to economic attack by cheap goods imported in to replace their capacity as certain economies recover faster than ours. For India's national economic security, the administration must not forget to prioritise this segment.

The feedforward damage of not providing relief for Middle India and taxpayers will cripple the economy and leave India exposed to unacceptable declines in its resiliency.

INDIA HAS A MINUSCULE TAXPAYER BASE WHICH ALSO NEEDS SUPPORT AND HOPE

1. **Indian income tax payers**: The CBDT targets to collect Rs. 5.6 lakh crore in income taxes in FY'20, amounting to 2.73% of GDP. India bears one of the highest tax burdens in the world paid by a narrow section of people. In India, out of a population of 137 crore people in FY'19:
    - 5.5 crore file tax returns – 4% of population
    - 3.3 crore pay taxes – 2.4% of population, which means 24 in every 1000 people pay any income tax at all
    - 13.2 lakh people pay 60% of taxes – less than 0.1% of the population

    3.3 crore people with a typical family of 4 amount to 13.2 crore people. This honest and compliant taxpaying base also needs hope and support from the government. They shoulder a very high burden of taxes, and constitute decision-makers who will make investment decisions in the future that can help realign the Indian economy quickly to a high-growth trajectory. Their morale should not be damaged due to being ignored by the administration in times of crisis.

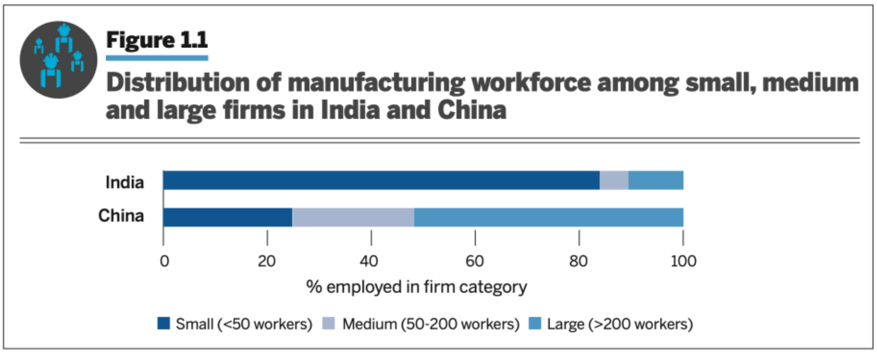
    Contrast this with other major economies where the number of taxpayers per 1000 population is 400-600, whereas in India it is only 24. And many of these people are hit by the lockdown with no relief measures, which means their capacity to pay income tax is diminishing by the day in the lockdown. The G20 countries have scrambled to protect their tax payers and small businesses first – the Indian administration cannot compromise this segment by not reciprocating similarly.

2. **IT/GST Refunds**: A welcome move by FinMin has been to issue pending income tax/GST refunds. The CBDT announced a first wave of refunds to 14 lakh small taxpayers estimated at Rs. 18,000 crores, of which Rs. 10.2 lakh refunds totalling Rs. 4,250 crores is reportedly processed. However, the celling of Rs. 5 lakhs for refund must be removed since this is the citizens' own money and must not be held back by the government, especially in times of crisis.

3. **GST Filers**: While indirect GST is paid by anyone who consumes goods, direct GST is paid by the many small businesses around India. Of the registered 1.2 crore filers, around 80 lakhs file regular returns. Further, of the 5.5 crore IT returns filed, 2.14 crore are under the heading "business". This is a very large and productive sector of the economy. These people have built their own businesses and generate vital employment. If the government does not address this sector, they will be forced to let go of employees. The wave of shut downs in this segment will cripple any plans for recovery post lockdown.

    Many direct GST filers have GST refunds due. It is incumbent upon the administration to process those refunds immediately and give people their own money back urgently so they have liquidity. This will enable them to keep employees on payroll for longer.

4. **Small and Medium Enterprises (SMEs)** – There are approximately 42.5 million registered and unregistered firms that are the biggest job creators in India. NITI Aayog data shows 90% of manufacturing jobs in India are in SMEs. A relief package that provides SMEs with working capital is necessary to maintain payroll.



Source: NITI-Aayog

There has been inadequate response on relief for job creators, MSMEs, and taxpayers from GoI and FinMin. While RBI has increased liquidity with banks, money is not flowing to the MSME sector. This needs policy interventions. This lack of need addressal will decimate job creators and taxpayers by depriving them of any relief during a complete economic lockdown.

The bureaucrats and decision-makers have to be sensitive to the needs of employers and job creators. There is a growing perception throughout the country that the bureaucrats at the centre of economic decision-making are not focused on relief for job creators or Middle India. There is a need to for these bureaucrats to step into the shoes of Middle India, understand how stressed their finances are due to the lockdown, and how important it is to give them relief. People are willing to take the pain and respond to PM Modi's appeal to hold on to payroll, provided they are assured by urgent policy action and retain belief in the system.

Any delay in substantial relief to tax payers, job creators, and MSMEs will be perceived as a complete failure of reciprocation from the administration. An overwhelming majority of these segments are compliant and honest citizens who have followed the directives of the system for decades. Perhaps more crucial than anything else, Middle India is losing hope that the government will secure their economic interests. If there is no urgent relief now, we will break the spine of our country and cause irreparable damage to the collective consciousness of our people.

Further, as the economy comes out of lockdown, the government must immediately look at generating jobs for millions of workers. If job creators are irreparably hurt, this burden will fall solely on the Government and it will be impossible to bear. If immediate focus is not applied here, the bottom-of-the-pyramid 80 crore people will not be able to access employment post-lockdown and will be forced to continue to rely on government benefits and subsidies for at least 2-3 years. The Modi government has done a lot for the poor since 2014, and focused attention during NDA-II to shift workers from agriculture to manufacturing and construction will further accelerate mass employment.

RESOURCES

In the event the government does not have the resources, it can dip into RBI's reserves. The RBI's balance sheet of 30th June 2019 makes for interesting reading. It has $400 billion of Forex reserves valued at Rs. 27.6 lakh crores + Gold of 618 tonnes valued at $24.3 billion converting to Rs. 1.67 lakh crores (90% of market value). The Forex reserves are marked to market at Rs. 68.9. The cost is estimated around Rs. 56. The unrealized gain of around Rs. 5.07 lakh crores are held in the currency + gold revaluation account of Rs. 6.64 lakh crores.

The RBI is fully owned by the Government via an Act of Parliament. GoI can ask RBI to transfer, say, Rs. 3 lakh crores of the unrealized gain of its Forex to the government account by increasing the carrying cost to say Rs. 63.50. With the reserves increasing to $439 billion today and the rupee valued at Rs. 76 to a dollar, it is very probable that the unrealized gains are much higher than as of 30th June 2019.

This Rs. 3 lakh crores can be transferred as non-tax revenue to the government budget, in addition to the regular dividend of Rs. 1 lakh crore this year. Obviously, this must be monetized by the RBI when it enables the government to use this credit. This is better that borrowing in the bond market which has limited resources or borrowing overseas at this time.

This Rs. 3 lakh crore can be used to give relief as detailed below:

- Credit guarantee fund with backstop for first losses at 10% guaranteeing Rs. 5 lakh working capital to MSMEs – Rs. 50,000 crores
- Refunds of IT, GST and 14% guaranteed GST collection to states – Rs. 1 lakh crores
- Payments to NHAI contractors/railway contractors/health sector/other goods and services availed by government but not paid – Rs. 1 lakh crore
- Advance to NHAI and railways to start infrastructure works by making advance payments – Rs. 50,000 crores

Every country in the world is scrambling to secure its national economic interests in this pandemic-struck reality. The Indian administration must not abandon its honest taxpaying, job-creating citizen minority as it addresses other priorities. This Rs. 3 lakh crores from RBI reserves will enables the Indian economy to sustain itself, restart growth, keep existing employment going and give hope to the Indian people.

PM Modi has brought the country together through his direct national addresses. His multiple requests for the country to come together to applaud people on the frontline have led to the largest coming-together of Indians in the times of Independent India. After the lockdown extension, hope can be kept alive by the announcement of an aggressive economic relief package - financed by Rs. 3 lakh crores from RBI reserves - that supports Middle India's frantic effort to hold onto jobs; the absence of which will adversely affect the bottom-of-the-pyramid's ability to find employment post-lockdown. This is "sabka saath" in action and there must be no citizen left behind.

Long Term National Economic Security

There is an unprecedented global convergence today and India must take advantage to secure its long-term national economic interests. A series of large-scale strategic investments will enable India to claim an indisputable hold on a top 3 global economic ranking as a result.

The GOI cannot ignore this generational opportunity to secure India’s long-term interests along critically interlinked parameters—it must tolerate no compromise to its national economic security and invest aggressively to empower its citizens in this new world order.

The GOI has proven leadership in dealing with the health dimension of the COVID crisis. It must also assume an equally serious stance in the economic dimension. India's national economic security must be secured. Due to COVID, FY’21 might be resigned to low growth. If the government does not take bold measures after the March 2020 crisis, FY’22 may also follow this grim trajectory. This is a generational opportunity for India to revive economic growth through large scale investments so that FY’22 through FY’25 and beyond will see accelerated growth.

Bold steps taken over the next five years will realign our economic trajectory for the next decade:

1. National Infrastructure Pipeline 2.0
2. Systematic urbanization of 5000 census towns all over India
3. Labour-intensive industries to provide mass employment and capture export market share
4. Increasing urban mobility and fuel independence via Metro and EV buses
5. Over-dependence of workforce on Agri must shift to manufacturing and construction via a targeted strategy
6. Enable building large manufacturing & construction firms like China through policy interventions
7. Development of human capital - skills development and higher education to meet the needs of all societal groups
8. Healthcare infrastructure including a multidisciplinary hospital for every district increased training of high-quality medical staff and primary health centres for every taluk
9. Startup economy to drive next era of growth
10. Final push to eradicate poverty

The authors also explore 5 ways of availing long-term loans to finance India's Grand Reconstruction. Other nations are already approaching this as a war-time scenario and raising long-term bonds. Their designs are clear—they will spare no efforts to prevent economic disaster and not compromise their national economic security. We must also not spare any efforts to protect India’s economic security and realign India to its $5 trillion GDP target.

A grand reconstruction budget for New India

The COVID-19 pandemic has morphed into a global economic crisis. All activity is grinding to a halt with unemployment on the rise. Stock market value has declined by more than USD 27 trillion. The United Nations predicts that the world economy will go into recession in FY'21 with an anticipated loss of trillions of dollars of global income. IMF has announced a negative-growth forecast. Oil prices have fallen to historic lows. The world order is in flux.

The GOI has taken a bold decision to prioritise the lives of its citizens and face the consequences of the economic fallout. This leadership has undoubtedly helped mitigate the spread of the infection in the country. Many other countries have delayed this decision with debates on compromising economic activity in the face of higher infection risk. Regardless, it is evident that all nations will face an unprecedentedly different global economic paradigm than the one merely two months ago.

Most governments are now delivering unprecedented economic relief programs by raising debt-capital and increasing deficits to provide liquidity and keep citizens going until the pandemic subsides. The GOI must lose no time in taking decisive steps to protect its citizens from the longer-term effects of the epidemic on our economy. It must view this as a generational opportunity to systematically realign the rails of New India. **Bold steps taken over the next five years will reshape the country, facilitate the New India of our dreams and realign our economic trajectory for the next decade.**

Along with a 21-day lockdown, the GOI also announced various economic relief programs. Hopefully, packages to protect job creators, small businesses and direct-impact industries are assembled soon, as discussed here. Including distressed situation loans made during this crisis, the ultimate cost of tackling COVID-19 might amount to INR 10 lakh crores or 5-6% of India's Gross Domestic Product. This may seem extra-ordinary, but it is far lower than other large economies. While the GOI has taken leadership in dealing with the health dimension of this crisis, it must also assume an equally serious stance in the economic dimension.

It is uncertain how much of industry will survive after this lockdown and reduced economic activity, and what the future level of output will be. What is certain is the gig and informal economies, and MSMEs are deeply wounded due to the discontinuity of income and liquidity. They are directly bearing the costs of the shutdown without relief support. Direct-impact industries like aviation, travel, tourism, hospitality, airports, and entertainment have suffered unmitigable damage. This fallout will extend as it will take at least 3-9 months for the economy to stabilize, and people will be cautious about spending on non-essentials after lockdown-induced income (and job) losses.

India's FY'21 growth is expected to be at 2.5-3%. The agriculture sector may continue at 3% growth if the monsoon is normal. Industry may go down to negative growth as it recovers and rebalances labour. Services, averaging ~7% real growth for twenty years, might slow down to 3.5%. An economic analysis shows that only the government sub-sector within services will continue without a blow as taxes and borrowing will finance government spending.

FY'21 might be resigned to low growth; but if the government does not take bold measures after the March 2020 crisis, FY'22 may also follow this grim trajectory. Instead, this is a golden opportunity for India to revive economic growth through large scale investments so that FY'22 through FY'25 and beyond will see accelerated growth. **As many have opined, this is a one-time opportunity for the GOI to invest and create capacity that will firmly establish India as a sustainable and reliable alternative within global supply chains. As a nation, we cannot miss this window to take decisive action and aggressively capture our position in a realigning world order.**

India needs undaunted action by PM Modi at this juncture. We must fearlessly avail 20/30 year long-term loans and bonds raised globally to finance this next decade of growth, with much of it maintained as a special program outside the budget. Sticking to the conventional notion of a 3-3.5% fiscal deficit is inadequate to execute this grand vision of New India. Other nations are already approaching this as a war-time scenario and raising long-term bonds. Their views are clear – they will spare no efforts to prevent economic disaster and compromise national economic security. We must also not spare any efforts to protect India's economic security and realign India to its $5 trillion GDP target.

What action must India take to return to 6.5-7.5% real growth between FY'22-FY'25? The answer is extensive five-year programs such as:

1. **National Infrastructure Pipeline 2.0**: A large-scale five-year infrastructure program is essential to boost the economy, reduce supply chain costs, bolster industry and construction sectors, and increase jobs. The National Highway ministry has an investment program of INR 15 lakh crores over five years. The Railway Ministry has a similar program to improve access and quality, including a part-privatisation strategy. The Finance Ministry has devised an inspired INR 102.5 lakh crore National Infrastructure Pipeline (NIP) with allocations to energy, roads, railways, and others, as shown in Table 1. FM Sitharaman has announced that INR 42.7 lakh crore (41.6%) worth of projects is under implementation, INR 32.7 lakh crores (31.9%) under conceptualisation, and the rest under development and classification.

National Infrastructure Pipeline (INR lakh crores)			
Energy	24.54	Rural	7.72
Roads	19.63	Agri/Food Processing	0.61
Railways	13.68	Higher Education	1.18
Ports	1.01	Schools Education	0.38
Airports	1.43	Health/Family Welfare	1.69
Urban (inc. MRTS)	16.29	Social (exc. Education/Health)	0.31
Telecommunications	3.2	Industrial	3.07
Irrigation	7.72	**Total**	**102.5**

Table 1: Allocation of NIP funding to different sectors. Source: pib.gov.in

The NIP in its current *avatar* is not ambitious enough for New India. Sectors like urban infrastructure and MRTS (INR 16.3 lakh crores), education (INR 1.56 lakh crores), health and family welfare (INR 1.69 lakh crores), industry (INR 3 lakh crores) and others need bolder investment; the current allocation is inadequate. Some increased investment opportunities are analysed below to the tune of INR 33.5 lakh crores.

The fiscal situation of India will be weak in FY'21 with diminished tax collections; new modes of financing for the NIP have to be arranged during FY'21 so implementation can start in FY'22. The existing INR 102.5 lakh crore NIP is a pivotal starting point for the reconstruction of New India. An NIP 2.0 will actually deliver the results in a post-pandemic economy.

2. **Urbanization**: Development and urbanization go hand-in-hand. Urbanization concentrates human activity, leading to specialization, and specialization to improved productivity; enabling greater availability of goods, services, and job opportunities. The village-centric model doesn't work in this new era of specialization-led growth. India is only 34% urban compared to the world-average at 55% and China at 59%. India must urbanize rapidly and more systematically.

   5,000 census towns can be developed all around India to become the new engines of growth. Today, ten large cities are reeling with overpopulation and an inability to cope with immigration, while rural areas provide meagre growth and upliftment opportunities. India must develop at least 5,000 census towns across the country by proactively building infrastructure connectivity (pt 1), mass transit (pt 4), facilities like water, power and sewage, healthcare (pt 8) and education (pt 7) infrastructure, and industrial clusters (pt 3). An extensive housing program for INR 15 lakh crores (of which the government can subsidize INR 5 lakh crores through an extension of PM Awas Yojana) can create low-cost housing for three crore low-income families sold at INR 5 lakh per house in the 5,000 semi-urban centres.

   Labour costs will be cheaper in small towns than in large cities, and workers can easily travel from neighbouring villages; thus finding quality employment prospects close to their villages as is happening in Ranchi today with garments industries. An INR 15,000 salary in a small town fetches 3x what it can in a large city, and many rural workers will opt to stay or commute to work at these industries than migrate to a city as contract labour. A significant reason for women's low workforce participation despite higher levels of education is the inability to migrate and work, unlike men. Women are an untapped productive resource in our country and taking employment prospects to their doorsteps with this massive urbanization plan will unlock this potential.

   An investment of INR 20-50 crores per year is suggested in each of the 5,000 towns averaging INR 25 crores per year per town or 100 crores over four years. This amounts to a minimum of INR 5 lakh crores over four years to transform India's urbanisation. An additional INR 15 lakh crore for housing as discussed at a subsidy cost of INR 5 lakh crores. This investment will pay off handsomely and enable millions to multiply their earning power at the industrial clusters.

   The GOI must believe in the inarguable link between urbanization, higher wage earnings, and the resultant accelerated shift of its citizens out of poverty. This is an opportunity to invest and reap multi-variate benefits that cannot be ignored.

3. **Labour-intensive industries** are imperative to provide quality mass employment prospects and boost India's export capabilities. We can leverage our 137-crore population, just like China did, to establish a comprehensive manufacturing base that caters to global needs. As the world emerges from this crisis, economies will look to diversify manufacturing and supply chains away from China-centric dependence. By planning in advance with special economic zones, industrial clusters, high-speed infrastructure connectivity between the clusters and ports, facilities (power, water, sewage, storage) and tax benefits to job creators, India can position itself as a viable alternative to China.

   An analysis of China's top ten exports in 2018 valued at USD 2.5 trillion (INR 177 lakh crores) gives us an indication of which industries to set up and cater to global demand, and capture market share:

   (% of total exports)
   - Electrical machinery & equipment: INR 47 lakh crores *(26.6%)*
   - Machinery including computers: INR 30.5 lakh crores *(17.2%)*
   - Furniture, bedding, lighting, signs, prefab buildings: INR 6.8 lakh crores *(3.9%)*
   - Plastics, plastic articles: INR 5.7 lakh crores *(3.2%)*
   - Vehicles: INR 5.3 lakh crores *(3%)*
   - Knit or crochet clothing, accessories: INR 5.2 lakh crores *(2.9%)*
   - Clothing, accessories (not knit or crochet): INR 5 lakh crores *(2.9%)*
   - Optical, technical, medical apparatus: INR 5 lakh crores *(2.9%)*
   - Articles of iron or steel: INR 4.65 lakh crores *(2.6%)*
   - Organic chemicals: INR 4.2 lakh crores *(2.4%)*

   India needs at least INR 5 lakh crores over four years to build export-quality industrial estates. This will yield large-scale job creation and long-term internal sustenance for essential manufacturing. India can also claim an indisputable hold on a top 5 ranking in industrial output and exports as a result. The GOI cannot ignore this opportunity to secure India's long-term interests along these critically interlinked parameters – it must tolerate no compromise to its national economic security and invest aggressively to empower labour-intensive industries.

4. **Increasing urban mobility and fuel independence**: India currently has 53 cities with 10 lakh+ populations, of which approximately 7 have populations over one crore. People are increasingly migrating to large cities that are buckling under the strain of insufficient infrastructure. The biggest challenge is urban mobility. People spend 3-4 hours/day in traffic, causing mental stress, physical drain, and reduced quality of life. The lockdown has demonstrated that reduced traffic quickly translates to improved quality of air and decreased pollution. This lesson must be operationalized quickly and yield mass transit infrastructure.

   It is suggested that Metro capacity be rapidly increased to 5,000km from the total sanctioned 1,400km today. This extra 3,600km at an average of INR 300 crore/km will cost about INR 10.8 lakh crores over four years.

Apart from this, electric buses must be commissioned under the Make In India scheme. India needs a minimum of 2 lakh electric buses in our big cities to make urban commute easier at the cost of INR 1 crore per bus for a total of INR 2 lakh crores. The electricity surplus from the grids as well as solar technology can power this, with the added advantage of reduced dependence on fossil fuel imports. This will also spur large-scale battery and EV component manufacturing in the country – an inarguably essential supply chain for the future of mobility globally.

Increased urban mobility will require a total of INR 12.8 lakh crores over four years. The NIP scheme (pt 1) has already allotted base capital towards MRTS and must be expanded.

This is a unique opportunity for the GOI – oil prices are at historic lows and India must build up strategic reserves urgently. However, prices will bounce back and India must not fall into foreign oil dependence as before. We must use this opportunity to invest in EV mass transit and emerge with lower oil dependence. This has a double bottom-line effect of also making our urban agglomerates more efficient and productive – large economies do not see such opportunities align very often. The GOI must take full advantage of this convergence and invest aggressively to protect its citizens' future.

5. **Overdependence on agriculture must shift**: India's biggest economic challenge is that 43% of the workforce depends on agriculture contributing only 17.6% to nominal GVA. 33.5% of the workforce depends on services providing 55% to GVA, and 23.8% depends on the industry, contributing 27.4% of GVA (Table 2). An agricultural dependent earns about INR 55,600 annually compared to INR 1.55 lakhs in industry and INR 2.21 lakhs in services. The income differential is very high at a ratio of 1:3:4. The differential will keep widening as the growth rates for all three sectors are divergent at 3%:5%:7%.

Sector	% GVA	GVA (cr)	Workforce distribution	Dependent population (cr)*	Per-capita GVA (INR)*
Agriculture	17.6%	32,54,345	42.7%	58.54	55,594
Industry	27.4%	50,71,934	23.8%	32.63	1,55,450
Services	55.0%	1,01,67,407	33.5%	45.93	2,21,391
Total	100.0%	1,84,93,686	100.0%	137.09	1,34,902

Table 2: Nominal GVA and sector-dependence analysis for 2019-20.
Source: MOSPI, World Bank, Census, CRS. * denotes authors estimations

The only sustainable way to address this inequity is to accelerate the shift of workers from agriculture to other sectors. Over the last twenty years, roughly 1% shifted every year – from 60% in 1999 to 43% in 2019, per World Bank. We must accelerate this to at least 2% per year amounting to 10% of Indians shifted by 2025. Agricultural production can manage and streamline with a lot fewer people, like China.

GOI cannot miss this opportunity to provide its most vulnerable citizens the opportunity to increase their earning power and long-term financial security. It is critical to invest in NIP 2.0 and accelerate infrastructure development (pt 1), and in labour-intensive manufacturing (pt 3) which are the only two sectors that can absorb crores of low-skilled workers from the transitioning agricultural workforce. A deliberate strategy for urbanization in the 5,000 towns (pt 2) is necessary for this to work as villages cannot cater to growing economic needs anymore.

It is clear that investments by the GOI in each of these three strategies – manufacturing, construction and urbanization – will yield highly beneficial second and third order consequences in jobs and earnings potential. This is further fuel for the urgency with which the GOI must aggressively pursue large-scale investments that will directly benefit its most vulnerable citizens.

6. **Jobs**: India's policy must focus on building massive manufacturing and construction companies. They alone can handle the world's manufacturing needs (pt 3). As seen in Fig 1, more than 50% of China's manufacturing workforce is employed by large firms of 200+ workers. Small firms employ 25% of the workforce and medium firms under 25%. This is the template India must focus on and replicate – the China model has proven resilience at this population scale.

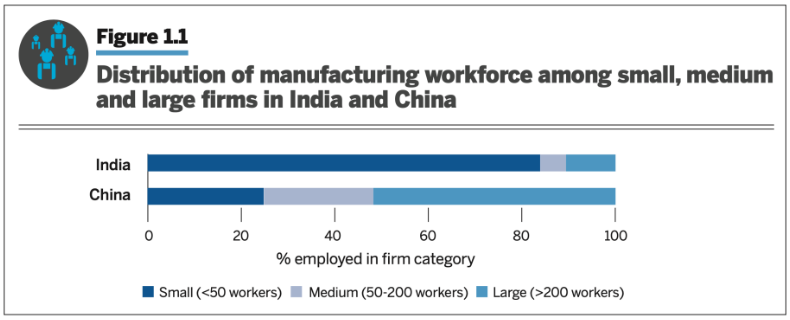


Fig 1: Distribution of manufacturing workforce among firms across scale in India and China.
Source: NITI-Aayog

India currently operates with 80%+ workers in small firms of under 50 workers and only 10% in large firms like Mahindra or Tata. GOI has to focus on enabling the building of large firms to leverage the economies of scale and develop global players. Private business alone does not have the reach or means to execute this; GOI has to be main driver. Similarly, GOI has to invest in infrastructure (pts 1 & 5) to spur construction and help the labour segment earn consistently. The opportunity for wage consistency over 5-10 years in a factory or a construction project is a luxury for workers now; let us make this New India's *modus operandi*.

Apart from investing, GOI's duty to its citizens, both workers and job creators, is a complete policy overhaul to facilitate large manufacturing and construction. India is buckling under the weight of 70 years' worth of archaic tax rules and regimes. It is the sovereign duty of government to simplify this for its citizens.

None of these ideas are novel or unprecedented. What matters now is the serious urgency with which decisive action must be demanded from the administration to remove friction to job creation and secure India's economic interests via bottoms-up and top-down change.

7. **Development of human capital**: As we set up a reinvigorated manufacturing economy, skills development programs are required to train the workers shifting over from the agricultural sector (pt 5). China progressed from labour-intensive industry to light manufacturing, then heavy manufacturing and hi-tech industry. We foresee India will also follow this trajectory but with the added advantage of an established hi-tech industry network. By planning skills development through this loop, India can accelerate economic growth.

   The Union budget currently allocates INR 3,000 crores annually to skills development. It is suggested the annual budget ramp up to INR 15,000 crores amounting to INR 60,000 crores over four years.

   In parallel, higher education needs focused investment to design world-class universities. Our report on Human Capital Development in India (Nov 2019) demonstrates that India has built the soon-to-be largest education system in the world. Rapid brownfield expansion to improve quality, access and affordability is the need of the hour. We currently graduate 40,800 PhDs a year and must ramp up by an additional 50,000 high-quality PhDs annually. To develop human capital on par with the US and China, India needs to invest in state-of-the-art laboratories, specialized PhD programs in keeping with future requirements, and developing world-class curricula to train our young population for a technology-first future. This investment has the added advantage of retaining more students who are today going abroad in search of better opportunities.

   FICCI estimates that an investment of INR 8 lakh crores is required by 2030 to improve quality and increase gross enrolment ratio to 50 (from 26.3 today). The NIP includes about INR 1.18 lakh crores (pt 1). Another INR 3 lakh crores is needed by 2025, and a further INR 4 lakh crores by 2030.

   At this time of crisis, the GOI must re-establish its commitment to its citizens and take their long-term resilience seriously. Such investment is a strong signal that the administration can deliver upon its duty to strengthen our collective capacity and prepare the next generation to be stronger than the last.

8. **Healthcare infrastructure** in India needs reinforcement, as the pandemic has demonstrated. Of 718 districts, at least 500 require a large 500-bed multidisciplinary hospital that can cater to the needs of the community. These hi-tech facilities will also attract doctors and medical staff to work in small towns instead of moving to large cities in search of good hospitals. Building these hospitals at the cost of INR 50 lakh per bed for (500 x 500 beds) could cost INR 1.25 lakh crores over the next four years.

Today, India graduates about 51,000 MBBS, 14,000 PG specialists and 70,000 nurses a year. The number of MBBS seats has increased to almost 80,000 and PG seats to 36,000. The WHO estimates there is a deficit of 6 lakh doctors and 20 lakh nurses in India – which can be remedied with focused investment over 4-5 years. Rapid brownfield expansion of existing colleges can double the graduates to reduce the shortfall.

Medical colleges over 20 years old with a proven track record can be provisioned to increase capacity by 50% over the next five years with government assistance. They have facilities and human capital to produce high-quality medical staff. Similarly, the training capacity for health technicians in radiology, pathology, anaesthesiology, and other critical functions must increase. Doctors in India perform many small tasks that can be handed over to other staff to optimize the utilization of doctors for specific specialized tasks.

We also need primary health centres in every taluk/tehsil. Today, rural citizens travel needlessly for tens of kilometres to access basic healthcare. Primary facilities can cater to 60-70% of their needs. An investment of INR 1 crore per year for each of the 5,650 taluks amounts to a total of INR 22,600 crores over four years.

Unfortunately for India's citizens, the country's best medical students are continuously poached to fill shortfalls in medical staff of more mature economies. This is an intolerable brain- and talent-drain of essential skills that compromises the country's ability to react to crises such as this. Unless there is a coordinated shift in how we build our health infrastructure, the GOI will leave its citizens susceptible to future epidemics and continue to suffer trained staff shortages. The administration can make India the best place to work for her doctors, nurses, and trained medical staff by prioritising such investments and fortifying its systematic response capacity in the interests of its citizens.

9. **Startups to leverage the knowledge-economy**: With 40,000 startups and 33+ unicorns, India is home to the third-largest startup ecosystem, behind only the US and China. They have created a combined value of INR 11.4 lakh crores and employ 7.5 lakhs collectively. Projections indicate that by 2025, India may well have 1,00,000+ startups, employ 32.5 lakh people, and produce 100+ unicorns, with a total market value north of INR 35.5 lakh crores. The rise of startups in India in 2014 was accelerated by PM Modi's strong push to build the world's most sophisticated digital banking and payments system. Now a second push for urbanisation, industrialisation, high-quality infrastructure, and tax regime simplification will enable the next wave.

   As India emerges as a gravitational centre of a burgeoning knowledge economy, it is unfortunate that only 10% of total investments in Indian startups is by Indian capital - a dangerous position. With 90% capital coming in from countries like the US, China, Japan and Singapore, India is on track to becoming a captive digital colony. If we are to command our digital destiny, more Indian capital is required. To accelerate investment into this sector, we suggest that the government increase allocation to INR

50,000 crores via the SIDBI Fund-of-Funds and Funds run by banks like SBI, HDFC and ICICI.

The 2019 NDA election manifesto included a promise of INR 20,000 crore seed capital for startups. In the light of the coronavirus pandemic and the unconditional support lent to the government by many startups during this trying time, we recognise the value of enhancing allocation to INR 50,000 crore. This should enable investment into at least 500 funds; if each fund invests in 25 companies, this will create capacity for 12,500 new startups.

Once the world recovers from the pandemic, it will realise the digital era that we have irreversibly shifted into during the lockdown. People who have been locked in the world over have used digital infrastructure for their every need – payments, food and grocery delivery, communication, health and medicine delivery, teleconsultations, education, entertainment, and more. This has transformed people's habits and will accelerate immigration to the digital dimension. India has the basic building blocks in place to now turbocharge into this new digital reality, fuelled by this INR 50,000 crore investment.

10. **Poverty eradication**: The development and digital push by NDA-I have undoubtedly empowered the poor to weather this crisis, as discussed here. The recent outflow of migrant labour from Delhi has also demonstrated that people migrate long distances in search of work. Staying power and liquidity in hand is low; they live day-to-day. India's poor require minimum income support to sustain themselves in times of crisis.

    It is evident India needs a new approach to eliminate poverty and increase purchasing power by 2025. While the government has many schemes for the poor, the system is unsustainable in times of crisis. The JAM trinity, which has enabled many productivity improvements including Direct Benefit Transfer in India, can be leveraged further and that requires a separate analysis.

With these spend items over NIP's 102.5 lakh crores, an additional INR 33.5 lakh crores (USD 470 billion) is required. This INR 136 lakh crore is India's Grand Reconstruction Budget for FY'22 through FY'25.

Financing India's Grand Reconstruction Budget

India's Grand Reconstruction Budget, above the current budget, will elevate India to a Top 3 economy. It is suggested that India borrow USD 500 billion globally for this purpose.

Internal savings in India is inadequate to fund India's reconstruction. Financial savings through households is only 11% and 7-8% from the corporate sector. Adhering to the 3-3.5% ceiling on fiscal deficit may have served India well in a high-inflation environment. Over the last five years, however, the Modi government has kept inflation below 4%. In this low-inflation environment, the government can afford to boldly invest more and maintain additional borrowing as a special situation development-linked line item.

India must now tap global capital markets to raise long-term debt of USD 500 billion. With India's stellar reputation as a financial stalwart that doesn't default on loans, overseas markets will engage with the opportunity to lend long-term 20/30 year loans to us. If the government is uncomfortable raising debt directly, capital can be raised through parastatals like the National Highway Authority of India, Indian Railway Finance Corporation, National Housing Bank, NABARD, Power Finance Corporation, Higher Education Finance Corporation and others for the respective sectors, and Indian commercial banks for on-lending to infrastructure. These parastatals have raised money in the past and must now avail 20/30 year loans.

Long term debt is optimum, so there is no repayment pressure on the principal for 20 years by which time India might grow to a USD 15-20 trillion economy with the ability to repay these loans with ease. In the meantime, interest can be easily serviced. India’s debt-to-GDP ratio has steadily decreased from 60% in FY’08 to 48% in FY’20, aggressively pursued by the Modi government since FY’15, as seen in Fig 2. Undoubtedly, India is in an optimum position to take on long-term debt. Moreover, the Finance Ministry estimates India’s FY’25 GDP at INR 365.5 lakh crore or USD 5 trillion. The USD 500 billion borrowed is an additional 10% of our projected FY’25 GDP – very respectable for special development debt.

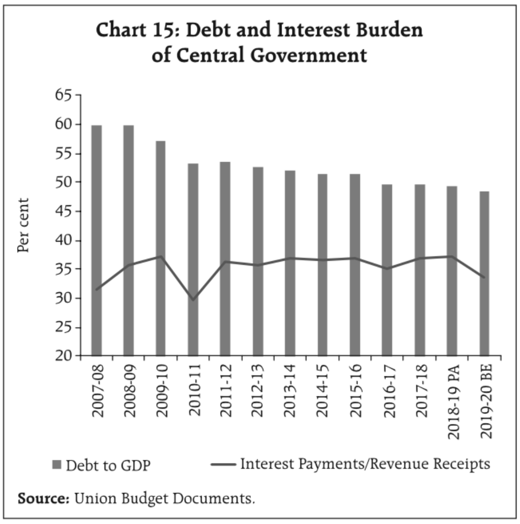


Fig 2: Debt-to-GDP ratio of GOI. Source: RBI

Suggestions on where to raise capital:

1. 20/30 year long-term loans from multilateral institutions like World Bank, Asian Development Bank, Asian Infrastructure Investment Bank, New Development Bank, and others
2. Raising global bonds outside India is better than inviting foreign capital to invest in local bonds. Global bonds will have to be redeemed only on maturity 20 or 30 years down the line. In contrast, foreign-owned domestic bonds can be sold at any time and dollar proceeds redeemed immediately, making them a vastly riskier proposition.
3. Foreign markets with surplus capital like Tokyo. The Japanese have significant capital reserves but not enough high-growth investment opportunities within Japan. The bond market in Japan is predicted to generate negative returns. They are exploring beyond their borders for better opportunities. For example, in March 2020, Japan's

Government Pension Investment Fund increased portfolio allocation to foreign bonds to 25% from 15% (with total AUM of USD 1.45 trillion). Capturing a share of that 10% of USD 1.45 trillion is an excellent opportunity for India.

4. Float 20/30 year bonds in the Indian market with tax-exemption regimes so citizens with savings can partly fund their country's development at 6.5% interest p.a.
5. Pension funds and endowments manage over USD 15 trillion worldwide. The GOI must build a concerted engagement plan with these asset allocators, hold investor summits, and incentivise long-term allocations over the 20/30 year view.

A very bold vision is required to remake India after this crisis. The New India that PM Modi aims to usher in will have world-class infrastructure with extensive investments in human capital, no poverty, and a very highly skilled productive workforce assembled in a short time frame. This calls for an enhanced strategy and large-scale investment for five years.

The additional spending suggested above has to be maintained outside the budget as a special development program over the next 4-5 years to remake India. This investment will increase jobs, decrease poverty to near-zero by 2025, create significant opportunities for young Indians to rewrite their future and make India a USD 5 trillion economy by 2025 on the way to a USD 10 trillion economy by 2030.

Seven post-COVID insights India must operationalize

To streamline and accelerate the Indian economy

The COVID-lockdown has exposed seven key insights that India must operationalize for accelerated economic growth post-pandemic. India may be the only large economy with positive growth in FY'21 and beyond, provided we deploy the right strategies. The response of the Indian government, administration, and state governments to each of these factors will help India take advantage of the rebalanced global order.

INDIA'S PHARMACEUTICAL AND BIOTECHNOLOGY INDUSTRY IS A TREMENDOUS ASSET

India's pharmaceutical industry is a global exporter to many countries. Reportedly, 45% of the US' generics imports are from India. The industry especially shone into prominence during COVID-19. We have become the trusted partner for hydroxychloroquine and paracetamol exports to forty countries amid the pandemic. **Pharmaco-diplomacy is a powerful addition to the nation's arsenal.**

Trust in China's products is declining while trust in India's pharmaceuticals and medical solutions is at an all-time high, providing a global captive market that is ours to capture. GOI can design the required investments, policy changes, and incentives to boost these sectors to cater to the increased demand.

China dominates the global Active Pharmaceutical Ingredient (API) supply chain utilized in making drugs and generics. India must now nurture its API industry and supply chain to reduce dependence on China and support local manufacturers. With these Make-In-India strategies, the pharma-biotech-API industry will contribute tremendously to economic growth over the next decade.

STRATEGIC NATIONAL STOCKPILES AND DATABASE

India does not have a coordinated **Strategic National Stockpile and Database** of critical components and medicines to utilize in a pandemic and other Acts of God, as COVID demonstrates.

We must build strategic stockpiles of critical medicines (antipyretics, analgesics, antibiotics, antivirals, vaccines, antidotes, etc.), and components like first-aid, medical devices, surgical and personal protective equipment. The stocks must be distributed around the country with the central and state governments building reserves, so the next time an act of God hits, we stand better prepared. This program will have a double bottom-line effect as it also stimulates local industry and MSMEs.

We also need a **centralized database** tracking quantities and locations of critical medicines and components in the stockpiles, as well as the manufacturing-supply companies. This requires a dedicated team managing an up-to-date database with a tech-enabled replenishment and upgrade cycle. Further, virology and other testing labs, as well as ICMR hubs, must be expanded nation-wide to build capacity for medical testing. Each Indian state is like a European country and must develop its own rapid-response capabilities.

The Indian defence forces must build their stockpiles of critical components under the Chief of Defence Staff's office for **dual-use**. In the event of biological warfare or bioterrorism, the defence can quickly access these stockpiles. In any threat event, the government can utilize these resources to ensure national security.

MIGRANTS

One of the most striking images of the coronavirus-impact in India was the sheer number of migrants gathered at the Delhi border, risking everything to go back to their villages as the lockdown was announced. Interviews reveal they had inadequate food or savings to stay in a zero-employment lockdown situation.

High internal migration is one of India's most significant economic issues and a consequence of the Great Divergence between the low-growth states in the north-east, and higher-growth states of the south-west. Migrants often have to engage in menial jobs to sustain themselves and don't save much more than back home.

The onus of job creation and state economic growth is on state governments, whose expenditure budgets are higher than ever before. Every citizen must demand that their elected governments utilize the considerable resources to provide employment and increased wage opportunities in their home states.

Every state must develop a database to track its emigrating citizens to provide rapid-response in unprecedented situations like COVID. The National Skills Development Corporation works with Indian companies and startups to track skills development among blue-collar workers. These tech-platforms can be utilized to manage internal migration.

DIGITAL ON THE RISE

People locked in all over India, and indeed the world, have used digital infrastructure for their every need – payments, receiving Direct Benefits Transfer (DBT) from the government, grocery and medicine delivery, teleconsultations, children's education, 24/7 entertainment, and more. When India recovers from the pandemic, we will confirm this to be an irreversible shift in behaviour. The GOI must do everything possible now to build disaster-resiliency into the nation's digital economy.

India, under PM Modi's leadership, has built a sophisticated technology network on the JAM trinity. State-of-the-art electronic transfer mechanisms like UPI and Jan Dhan accounts for Aadhar-enabled citizens have paved the way for world-class products and reforms driven by a stack of open-architecture APIs. **India's digital leap is a premier public-private partnership (PPP) success**. It is vital to invest in the partnership and nurture the digital-first Indian companies.

No other country has reached this unique confluence at the scale India has. China's digital push is offbeat and not easily translatable to the world. Meanwhile, India successfully builds for the world at scale, evident by the IT industry's global dominion and the exponential growth of our digital-enabled startup ecosystem. We must operationalize the insights from the COVID-induced digital leap with a sustained partnership between the government and digital companies and startups.

Focus sectors are:

- **agri-tech** to improve agricultural productivity and output
- **telemedicine** that utilizes digital platforms to optimize the use of our scant medical resources
- **education-tech** that can enable India to leapfrog past brick-and-mortar models straight to large-scale digital platforms
- **digitization of government databases** and records to optimize food security and other benefits, and **more**.

DBT 2.0 FOR POVERTY-ERADICATION

The taxpayer-funded subsidy system is complicated, susceptible to leakages, and in dire need of simplification via DBT 2.0. India provides Rs. 7.5 lakh crores worth of subsidies aggregately by central and state governments in food, fertilizer, power, and others via 450+ schemes.

The DBT program pioneered by PM Modi's NDA-I government has been wildly successful in reducing leakages and middlemen inefficiencies. To date, nearly Rs. 10 lakh crores have been disbursed through DBT with an estimated savings of Rs. 1.7 lakh crores by reducing leakages. Particularly during COVID-lockdown, the DBT architecture has enabled the government to provide immediate cash support to crores of Indians in the bottom-of-the-pyramid who were suddenly cash-strapped.

With the value proposition clear and validated, the government can consider subsuming most/all subsidies into a DBT 2.0 model and reduce the distribution of subsidized commodities. Instead of poor citizens moving from one office to the next trying to access their share of the subsidies from 450+ schemes, they could receive most/all their subsidies as one DBT payment per month. DBT 2.0 could increase purchasing power in the hands of India's most disadvantaged, as analysed here.

GOVERNMENT-BUSINESS CAPITAL FLOW INTEGRATION

With India's premier digital capabilities and a successful DBT program under our belt, the same must now extend to nurturing businesses and job creators. The COVID-lockdown resulting in unprecedented economic discontinuity left many MSMEs and employers in a liquidity crunch. The administration didn't release IT and GST refunds until four weeks into the lockdown. These refunds are the taxpayers' own money and could have been utilized by them through the lockdown to protect their businesses and maintain payroll, as PM Modi appealed to them.

Just like the government has fully integrated into the bottom-of-the-pyramid with DBT, it can integrate with the taxpaying and business community as well. **An overwhelming majority of them are honest, taxpaying citizens with Aadhar, PAN, bank accounts, IT and GST returns, and other business details fully declared.** A business-first system that integrates these details and taxpaying history with an instant UPI-based refund system will enable the government to process refunds instantaneously.

Taxpayers and job creators constitute India's economic backbone; they support the revenues that enable the government to respond to the needs of the bottom-of-the-pyramid quickly. The administration must reciprocate with a transparent digital system to ensure hard-earned capital is not held up unnecessarily.

ELIMINATING UNNECESSARY CAPITAL CONTROLS AND REGULATIONS

Without strong business and innovation structures, there is no economic growth. Ever-increasing tax rates are not the answer to diminishing tax collections - we have faced this negative spiral before as a nation pre-1991. The administration's delayed response in providing relief to the economy's business and innovation backbone during the lockdown is hurting people and reducing hope.

Seventy years of hardline socialist policies have created an almost insurmountable labyrinth of regulations and controls resulting in massive friction while doing business, creating jobs, managing labour, staying compliant, encouraging investment, planning urban and infrastructure development, and interacting with the civil services. This friction is at odds with Ease of Doing Business – driving our opportunity costs, tax burdens, and execution timelines up.

We need a massive drive to reduce regulations and friction points. President Trump cut 30% regulations in the US to accelerate business- and entrepreneurship-led growth; India could cut 50%, modernize its regulatory infrastructure and create a new dynamic based on trust.

CONCLUSIONS

Addressing these seven points could streamline India's economy and pave the way for accelerated growth post-COVID. Moreover, many countries are looking to diversify manufacturing and supply chain away from China. By streamlining our economy and sending active delegations to these countries consisting of representatives from the centre and state governments, industry, and entrepreneurs, India can offer a viable alternative to China. Export-orientation and local fortification will enable our next decade of growth.

INDIA'S COVID-19 RESPONSE REFLECTS ITS TOP-5 GLOBAL ECONOMY POSITIONING

The country has demonstrated leadership by example and must continue the charge

India is today the fifth largest economy in the world in terms of nominal GDP. The US leads at $21 trillion, followed by China at $15 trillion, Japan at $5 trillion, and Germany at $3.86 trillion. India is at $2.96 trillion; we recently overtook the UK currently at $2.86 trillion.

The COVID-pandemic struck soon after India entered the Top-5 economy ranking. The Indian government's responses, first on the health and social fronts, and now on the economic front, are reflective of India's status of a Top-5 economy.

The Indian government boldly prioritized the lives of Indian citizens by calling for a complete lockdown from 25 March, maximizing social distancing and shelter-in-place. The effect is evident when we compare the spread of coronavirus in India versus countries with high caseloads like the US, Italy, UK and Spain. The virus first landed on the shores of all five countries in 10 days between 21 and 31 Jan 2020. Since then, Italy, the UK and Spain have each seen a total number of cases north of 222,000, whereas the number of cases in the US surpassed 1.43 million. In India, the total number of cases stands at 78,810.

Country	India	USA	Italy	UK	Spain
Population	1,387 Mn	331 Mn	60 Mn	67 Mn	46 Mn
First Case Detected	30 Jan 2020	21 Jan 2020	31 Jan 2020	29 Jan 2020	31 Jan 2020
# of Coronavirus Cases	78,810	1,430,348	222,104	229,705	271,095
# of Coronavirus Deaths	2,564	85,197	31,106	33,186	27,104
Total Cases per 1Mn People	57	4,321	3,673	3,384	5,798
Total Cases per 1Mn People	2	257	514	489	580

As at: 14 May 2020, Source: Worldmeters.info

The difference is even starker on a per million population basis. Where the per million counts for the USA (4,321), Italy (3,673), UK (3,384) and Spain (5,798) are high, India stands at 57. This is a clear statistical indicator of India's strong response to the pandemic. ***No longer can we dismiss these numbers as a consequence of inadequate testing***. As soon as the global shortage in diagnostic kits was perceived in mid-March, several Indian companies designed affordable, high-quality testing kits. Many private and government labs around the country were certified and cleared to test. India's testing capacity is now at 1 lakh per day.

Similarly, the number of deaths due to the virus in India is also low at 2,564 translating to 2/million population – compared to the US (257), Italy (514), UK (489) and Spain (580). The lockdown and social distancing may have prevented more deaths in India. The data per million shows the Indian government's moves first to screen incoming international traffic, followed by home quarantine, facilitative quarantining, complete lockdown and shelter-in-place, contact tracing, and medical response have been successful. Considering that India has the second-largest population in the world – 1.38 billion people – this is a tremendous achievement.

Barring some hotspots like Mumbai, India has also successfully set up hospital preparedness routines across the country in anticipation of a higher case trajectory. We have 130,000 hospital beds earmarked for COVID-19 patients with ICU and oxygen support. Reportedly, the utilization rate is less than 1.5%. An additional 645,000 isolation beds are prepared for suspected cases and COVID-patients without complications. We have built capacity in excess while having simultaneously gone into lockdown to curb the spread across the country.

In parallel, India has started one of the most extensive internal manufacturing drives in recent history. When COVID-19 landed on our shores, we realized just how vulnerable our health and economy is because we are import-dependent for every significant component required – diagnostic kits, PPE, N95 masks, respiratory aids and others. In two months, we have turned this around and set a new normal for high-quality, affordable products and necessities. If we retain this momentum for indigenous innovation and local manufacturing, ***India can become an export-oriented economy*** by increasing manufacturing capacity, meeting domestic demand, and then exporting the surplus.

While India is one of the only large economies to go into a complete economic lockdown early on in the fight against COVID, many wondered whether prioritizing lives over livelihood was the correct decision. PM Modi's announcement on 12 May of an Rs. 20 lakh crore economic package to sustain and rejuvenate the Indian economy shows that the government is willing to compromise with neither people's lives nor their livelihood.

Among the G-20 economies, India has the fifth-largest economic relief and stimulus package in terms of GDP % - Rs. 20 lakh crores translating to $265 billion is 10% of our GDP. Japan leads with 21% of GDP or $1.1 trillion, followed by the US ($2.7 trillion at 13.3% of GDP), Australia (10.8%), and Germany (10.7%).

The data is clear – India has responded well to the COVID-pandemic so far:

- In the health dimension, the government prioritized protecting lives early on with a full lockdown and has managed to keep the caseload and death count low.
- On the social side, an early Rs. 1.7 lakh crore package was released to aid 80 crore people in the bottom-of-the-pyramid during the lockdown with food security and DBT income support.
- On the economic front, the announced Rs. 20 lakh crore package is being announced in detail with support for MSMEs, tax benefits, and increased support to farmers and rural workers. The effects on the economy will become apparent in a few weeks.

The pandemic is still running its course, and no one in the world knows for how long or how severe it could even get. As we come out of the lockdown, we have to be prepared to do more on all fronts. The story is far from complete. However, we must remember that India is a vast country, and any comparisons we make with the rest of the world to gauge impact must be on a per million population basis to accurately understand effects.

SOLVING THE MIGRANT CRISIS

The great Indian divergence: Uneven growth dragging India down

One of the biggest collective shocks India faced as the coronavirus pandemic ramped up was the sheer number of migrant workers walking out of Delhi at the start of the lockdown. They risked everything they had to return home, alerting the nation to the sheer scale of migrant labour in India's busy metros. It took a lockdown to reveal these large numbers.

India must ask the question - why do so many people migrate from Uttar Pradesh, Bihar and other states to Delhi or Mumbai where they mostly get jobs as contract labour with meagre compensation. A look at the economic growth of five populous states with low per-capita income against states with the highest reveals stark differences in growth models – the **Great Indian Divergence**.

India's per-capita GDP has grown steadily from Rs. 90,000 in FY'14 to Rs. 1.49 lakhs in FY'20 at 8.8% YoY. While this is a tremendous achievement, a closer look at individual state per-capita incomes shows it varies extensively. States with the highest per-capita GDPs are growing faster and have smaller populations. Some states with the lowest per-capita GDPs have significant populations while growing slower than the India-average. They need to accelerate economic growth to provide employment and good wages to their large populations.

Lowest-performing States	Per-capita GDP				Highest-performing States	Per-capita GDP			
	2013-14	2019-20	Absolute growth	YoY		2013-14	2019-20	Absolute growth	YoY
Bihar	29,330	48,093	64.0%	8.6%	Telangana	1,24,056	2,56,834	107.0%	12.9%
Uttar Pradesh	45,208	69,425	53.6%	7.4%	Karnataka	1,30,850	2,53,321	93.6%	11.6%
Madhya Pradesh	58,361	1,12,408	92.6%	11.5%	Gujarat	1,30,090	2,50,887	92.9%	11.6%
Rajasthan	77,464	1,32,027	70.4%	9.3%	Maharashtra	1,43,332	2,39,117	66.8%	8.9%
West Bengal	72,272	1,34,849	86.6%	11.0%	Tamil Nadu	1,32,416	2,38,956	80.5%	10.3%
Pop-weighted avg.	53,269	87,051	63.4%	8.5%	Pop-weighted avg.	1,33,124	2,43,786	83.1%	10.6%
Combined pop (crore)	55.6	62.5	12.4%	2.0%	Combined pop (crore)	35.3	37.9	7.4%	1.2%
India	90,124	1,49,096	65.4%	8.8%	India Pop (crore)	124.6	137.1	10.0%	1.6%

Table 1: Per-capita GDP of highest- and lowest-performing Indian states.
Source: RBI, Union and State Budget documents, Census, CRS

Some of the poorest states by per-capita GDP are the states with the largest populations – Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, and West Bengal. These five states have a combined population of 62.5 crores – almost half of India's population at 137 crores. These states have a population-weighted average per-capita GDP of Rs. 87,000 in FY'20, growing at

8.5% YoY from Rs. 53,000 in FY'14. Madhya Pradesh and West Bengal are doing better than the other states, in general. Still, growth is nowhere close to where it needs to get to provide adequately for their larger, more impoverished populations. The combined population in these five states is growing at 2% YoY, higher than the India-average at 1.6%; much higher than the combined population of the highest-performing states at 1.2%. High population growth and low economic growth may spell disaster for these states as the south and western states zoom ahead.

Meanwhile, the highest performing states in per-capita GDP are Telangana, Karnataka, Gujarat, Maharashtra and Tamil Nadu. With a combined population of 37.9 crores – just over 1/4th of India's population – and high per-capita incomes, these states are growing faster and leaving behind their northern and eastern counterparts. They are growing, on average, at 10.6% YoY – higher than the India average of 8.8% YoY. Inequity will keep increasing as these states grow faster with their slower-growing populations. India cannot afford to let this Great Divergence in state economic growth continue if we are to grow to our $5Tn and $10Tn goals to become a Top 3 economy.

The Top-5 states have a higher share of services and industry sectors in their economies and are more urbanized. This translates to faster economic growth, better standards for higher education and opportunities for quality mass employment. The lower-performing states are less urbanized, have a higher share of agriculture, with weaker growth, fragmentation, lower college enrolment and fewer opportunities for personal wage growth.

Another significant consequence of the Great Divergence is very high internal migration through the country. It is estimated ten crore people, at the very least, migrate from states with low growth toward states with higher growth and employment opportunities. Unfortunately, the work they find as contract labour in these states doesn't result in higher purchasing power compared to their home states as living costs are exponentially higher. We saw this situation play out very recently when the COVID-induced lockdown threw migrants around the country in a lurch, especially in Delhi and Mumbai. Without job security, savings and staying power, many migrants had to resort to painful ways of returning to their home states.

The only way we solve this Great Divergence is if every state government, particularly those of highly populous ones, focus on economic growth and labour-intensive employment opportunities. Some strategies state governments can consider are:

- Infrastructure development to provide construction jobs at scale
- Higher education to build skilled workforces for high value-add sectors
- Labour-intensive manufacturing to provide mass employment and boost export capabilities
- Systematic shift of workforce from agriculture to construction and manufacturing at 2% YoY.

These strategies are discussed in detail in India's Grand Reconstruction Budget, post-COVID.

Research shows that in today's times, states have larger spend budgets, and more substantial impact on the economic entity they govern than ever before.

A study of central and state expenditures (Table 2) reveals the central government's share of expenditure has steadily decreased from 30% of total spending in FY'16 to 24.5% in FY'19. State aggregate spending is 75.5% of the total. GoI's ability to promote economic expansion and job creation by deploying the necessary capital resources is limited.

Aggregate Expenditures (INR lakh crore)					
Expenditure Items	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)
A. Central Gross	17.9	20.1	21.5	23.2	27.0
B. Transfers from Centre to States	8.2	9.8	10.85	11.95	11.9
C. Central Net (A-B)	9.7	10.3	10.65	11.25	15.1
D. State Net	23	26.4	27.7	34.7	37.7
E. Total Spending (C+D)	32.7	36.7	38.35	45.95	52.8
% Centre (C/E)	29.66%	28.07%	27.77%	24.48%	28.60%
% State (D/E)	70.34%	71.93%	72.23%	75.52%	71.40%

Table 2: Expenditures across state and centre, from 2015 to 2020 (exc. IEBR).
Source: RBI, Union Budget documents

India is not a monolith, and every state needs a unique approach based on its economic composition. With larger budgets, state governments have the resources to provide quality employment and growth opportunities to its citizens. Every citizen must ask their state government to utilize their growing resources to urbanize and build infrastructure, industrial clusters, skills development programs, and higher education capacity with a development-focused agenda. Migrating to other states in search of employment cannot be the end state; being able to live and prosper in one’s own home state must be the objective.

Eliminating the Great Divergence is how India becomes a Top-3 economy faster.

India grows when its heartland develops - UP and Bihar are key to *Atma Nirbhar Bharat*

India's migrant crisis is a consequence of the large economic divergence between northern and eastern states and the more developed states in the south and west.

In turn, surplus labour and lack of skills have resulted in low savings and staying power for poor migrants. With the lockdown and now the gradual lifting of the lockdown, many are returning to their home states in the heartland at great personal risk.

The only long-term solution is high-growth employment opportunities in every state. Otherwise, migration will ensue again in a year or so with a reversion to status quo. Additionally, if the highly populous heartland grows slower than the rest of the country, it will continue to impede the national ambition of step-function change towards a middle-class society. India only grows when its heartland develops.

DEMOGRAPHICS AND ECONOMIC GROWTH

Uttar Pradesh and Bihar are India's most populous states, at an estimated 23.7 crores and 12.3 crores respectively [estimated from CRS data]. Total Fertility Rates (TFR) are also high – UP at 2.74 and Bihar at 3.41 – compared to the 2.18 India-average [Source: NFHS-4 in 2013-15]. ***Both states will continue to have young populations as the rest of India ages faster***. This is both a significant competitive advantage and an economic challenge.

Uttar Pradesh is fifth by state economic output in 2019-20 – at INR 16 lakh crores GDP. However, on a per-capita basis, UP is on the low end at INR 69,425, above only Bihar at INR 48,093 – a consequence of inferior planning and historical bad governance. India's per-capita GDP is INR 1.49 lakhs – three times that of Bihar and double of UP. Bihar needs a focused agenda and strong leadership to bridge the divide to the national average. UP has an industrial legacy that CM Adityanath is revitalizing via long-overdue reforms.

India today has a population of approximately 138 crores, INR 205 lakh crore GDP in 2019-20 and a per-capita GDP of ***INR 1.49 lakh***. If we remove UP and Bihar (together 26% of the population), we arrive at 102 crore population, INR 183.4 lakh crore GDP amounting to ***INR 1.8 lakh*** per-capita. ***The large INR 31,000 per-capita difference demonstrates how important it is to develop these two states***. Otherwise, they will continue weighing India's growth down.

SHIFT FROM AGRICULTURE TO HIGH LABOUR UTILIZATION SECTORS

In both states, the lack of thriving industry and services sectors has created over-dependence on agriculture. India has been shifting workforce out of agriculture at the rate of 1% per year since 2000. In UP and Bihar, this shift must accelerate to 2.5% per year. The excess workforce can be given high-growth opportunities in the following areas:

1. **Labour-intensive manufacturing** – UP and Bihar must set up high labour-utilization industries like garment manufacturing, assembly of automobiles, electronics,

machinery, and others. Distributing industrial clusters throughout will give everyone access to employment opportunities near their villages and towns. With India's push towards high-speed roads and railways, these industrial clusters can be efficiently connected to ports for export markets. Flatted factories can be rapidly built and launched, and ***are a quick way to provide employment to the returning migrants***.

2. **Construction** – State governments can commission large projects for roads, freight corridors, water storage, industrial facilities and flatted factories, tourism, and others. ***Construction can employ many low-skilled and unskilled people, especially the returning migrants***.
3. **Tourism** – Tourism, along with ancillary sectors like air travel, restaurants and hotels, employ crores of people. Uttar Pradesh and Bihar are cradles of Indian civilization and have many archaeological sites that can be preserved and developed into tourist magnets – on par with Rome or Jerusalem. Both states can develop tourism as a major economic sector and provide mass employment.
4. **Healthcare infrastructure** – Each district in these states must have high-grade healthcare facilities with one 500-bed multidisciplinary hospital and a primary health centre in every taluk/tehsil. Each hospital can have an ambulance service to provide rapid response to every citizen in the district. These facilities can provide employment for doctors, nurses, medical staff like radiologists and pathologists, and ward boys and other posts.

AGRICULTURE REVIVAL

UP and Bihar have considerable tracts of fertile land for agriculture production. However, due to fragmentation and excess workforce dependence, the size of the agriculture sector in Bihar was only INR 59,400 crores in 2017-18, growing at a 3-year CAGR of 8.7% [Source: RBI]. In the same period, UP's was INR 2.13 lakh crores in 2017-18 growing at 11% CAGR. Compare this to Madhya Pradesh's agri-sector at INR 2.3 lakh crores growing at 20%, which provides a great model for UP and Bihar to improve Agri-growth.

It is estimated that 25% of the workforce is sufficient for agriculture. When the excess workforce is shifted out, the sector can revive with land consolidation, deployment of technologies like drip irrigation and greenhouses, and digital platforms so farmers can improve quality and command better prices for their produce. Implementation of the proposed *Atma Nirbhar* reforms can enable farmers to double their income. However, this is only possible if the excess workforce is shifted.

URBANIZATION AND INFRASTRUCTURE DEVELOPMENT

Per 2011 census, India was 31% urban whereas UP was 22% and Bihar a mere 11%. In the modern age, development comes from urban areas. Keeping citizens in villages without adequate employment opportunities is unsustainable for personal and economic growth. Instead, census towns can be developed into ***urban growth engines.***

Bihar has a small number of 120 census towns that can all be developed, while UP has 670 of which 500 could be developed. They can be equipped with high-speed connectivity, industrial clusters within 15km of the town, schools and colleges, hospitals, and utilities. A focused urbanization agenda in census towns with the ensuing infrastructure development will have immense feedforward effects for providing mass employment.

HUMAN CAPITAL DEVELOPMENT

21st century growth is driven by the knowledge economy. Without human capital development through skills, vocational training and higher education, we risk leaving entire populations behind.

Bihar's gross enrolment ratio (GER) in higher education is only 13.6 in 2018-19. Considering it has 12 crore people and a high TFR, the state has a substantial under-educated youth population. It is imperative to focus on increasing GER to 30+ by 2030 through rapid brownfield expansion and the use of digital platforms to provide mass e-education. Simultaneously, a large skilling drive to impart manufacturing and other skills can assemble a productive workforce.

Uttar Pradesh is in a better position. With a GER of 25.8 (just below the India-average of 26.3), 16 lakh graduates a year and one of the largest HE systems in India, UP has built a pipeline. The state can now focus on improving graduate quality who may find good jobs within UP if a development-focused agenda is implemented. More than half of UP's graduates are women – providing them with good employment opportunities near their hometowns will double the workforce and make UP a premier example of women empowerment.

In conclusion, ***India cannot grow unless UP and Bihar grow faster than the rest of the country***. Sadly, the 15th Finance Commission's allocations are inadequate for this purpose, as are state revenues. This requires special funding and support from the central government. Developing the heartland will be a massive step towards *Atma Nirbhar Bharat*.

Achieving accelerated state economic growth post-COVID

Karnataka and Gujarat provide effective blueprints

The COVID-19 pandemic is realigning the global world order. Amid oil prices falling to historic lows and world economies looking to diversify manufacturing interests away from China-centric dependence, generational opportunities are now open and India's for the taking. Seizing them will not only help realign to the $5Tn target but also enable India to get a firm hold on a Top 5 ranking in industrial and high value-add output.

State governments, today, have a significant role in driving economic growth. Aggregate state expenditures are increasing compared to the centre, as analysed previously. As the COVID-pandemic ends and states plan to restart their economies, they must consider the following factors:

1. High value-add to the state economy comes from services sectors like IT and financial services, and high-value-added manufacturing like hardware chip systems design, pharmaceutical manufacturing, automobile engineering, electronics manufacturing, and others
2. Harnessing high value-add growth requires a skilled workforce for which states must focus on human capital development
3. The low-skilled or unskilled population is most effectively employed in labour-intensive manufacturing like garments, automobile and electronics assembly, and others. These industries can drive per-capita income, economic growth, and volume-export capabilities of the state.

As states explore post-COVID opportunities for growth, Karnataka and Gujarat provide excellent models in driving economic growth via services and industry sectors, respectively. A well-designed combination of the two states' strategies will be ideal for every state to grow their economy.

Karnataka and Gujarat present a study in contrast. They have almost identical gross state domestic product (GSDP) and growth rates:

- Karnataka is at Rs. 17 lakh crores GSDP, with a 3-year CAGR of 12%, per-capita income at Rs. 2.53 lakhs and an estimated population of 6.24 crores.
- Gujarat is at Rs. 16.7 lakh crores GSDP, growing at 13% CAGR with per-capita income at Rs. 2.51 lakhs and an estimated population of 6.22 crores.

Both economies grew by harnessing economic liberalisation trends post-1991 and are steadily contributing 8.5% each to India's national GDP. Their journeys, however, could not be more different. While Gujarat focused on industrial development and manufacturing, Karnataka's IT industry started driving the state's growth which blossomed into a burgeoning tech ecosystem making Bengaluru a global technological player today.

Services and technology paradigms: Karnataka's economy is dominated by its services sector, contributing 71% to Gross Value Added (GVA) in FY'20. Karnataka has built a strong base to capture high value-add trends in IT/ITeS, biotechnology, financial services, and future growth trends in robotics, 3D printing, chip design and other areas. Karnataka's government must not miss this opportunity to invest heavily in capturing these trends and partnering with the substantial corporate and start-up base to accelerate growth in these areas.

In contrast, Gujarat's economy GVA derives only 37% from services. It is the only large economy with low dependence on services and technology. When automation, mechanisation, and other technological factors kick in, its industry base alone cannot sustain economic growth. Gujarat's government has to invest in technology and high value-add areas to complement its vast industry base, so the economy is ready to harness technological trends when accelerated growth opportunities present themselves.

Industry and manufacturing: The two states share the exact opposite dependence on industry compared to services. Karnataka's industry sector contribution to GVA is a dismal 22% in FY'20 – lowest of India's large state economies. Successive governments have failed to invest in manufacturing and provide tax incentives to private citizens to set up factories. Without this, the large unskilled and low-skilled population in North Karnataka, in particular, have not been able to access quality mass employment opportunities. The Karnataka government must invest in labour-intensive manufacturing like garments, electronics assembly, and others, particularly in North Karnataka. This move will complement its massive services sector and enable more balanced economic growth. Karnataka can also emerge as a global volume-exports player with the right policies, and capture market share from manufacturing moving away from China.

Gujarat, on the other hand, has driven economic growth admirably with its industry sector, which contributes 53% of GVA. It is the only large state economy with a 50%+ GVA dependence on industry. Gujarat is poised to capture market share from companies moving away from China. Investing in technology will enable Gujarat to utilise its strong manufacturing base to upgrade to high-value manufacturing and drive profits up, thus unlocking accelerated and more balanced economic growth.

Urbanisation and infrastructure development: Systematic urbanisation is crucial to economic growth. India's urbanisation in 2011 was 31%, estimated at 34% today by the World Bank. Both Karnataka at 39% and Gujarat at 43% are above the India-average. Its industrial economy drives Gujarat's higher urbanisation, whereas Karnataka's economy is mostly centred around Bengaluru and a few other urban areas. Both states must invest in infrastructure development to facilitate stable economic growth throughout the state instead of the concentration of economic activity in 2-3 big cities.

Developing census towns around the state into urban nodal centres with high-speed infrastructure connectivity, industrial clusters and facilities will have massive feedforward effects. The construction projects alone will provide mass employment in the state, which is required post-COVID to recharge economic growth. Developing backward regions with industrial bases will provide mass employment and enable those populations to contribute to economic growth, thereby driving up per-capita incomes, tax collections, industrial output, and export capabilities.

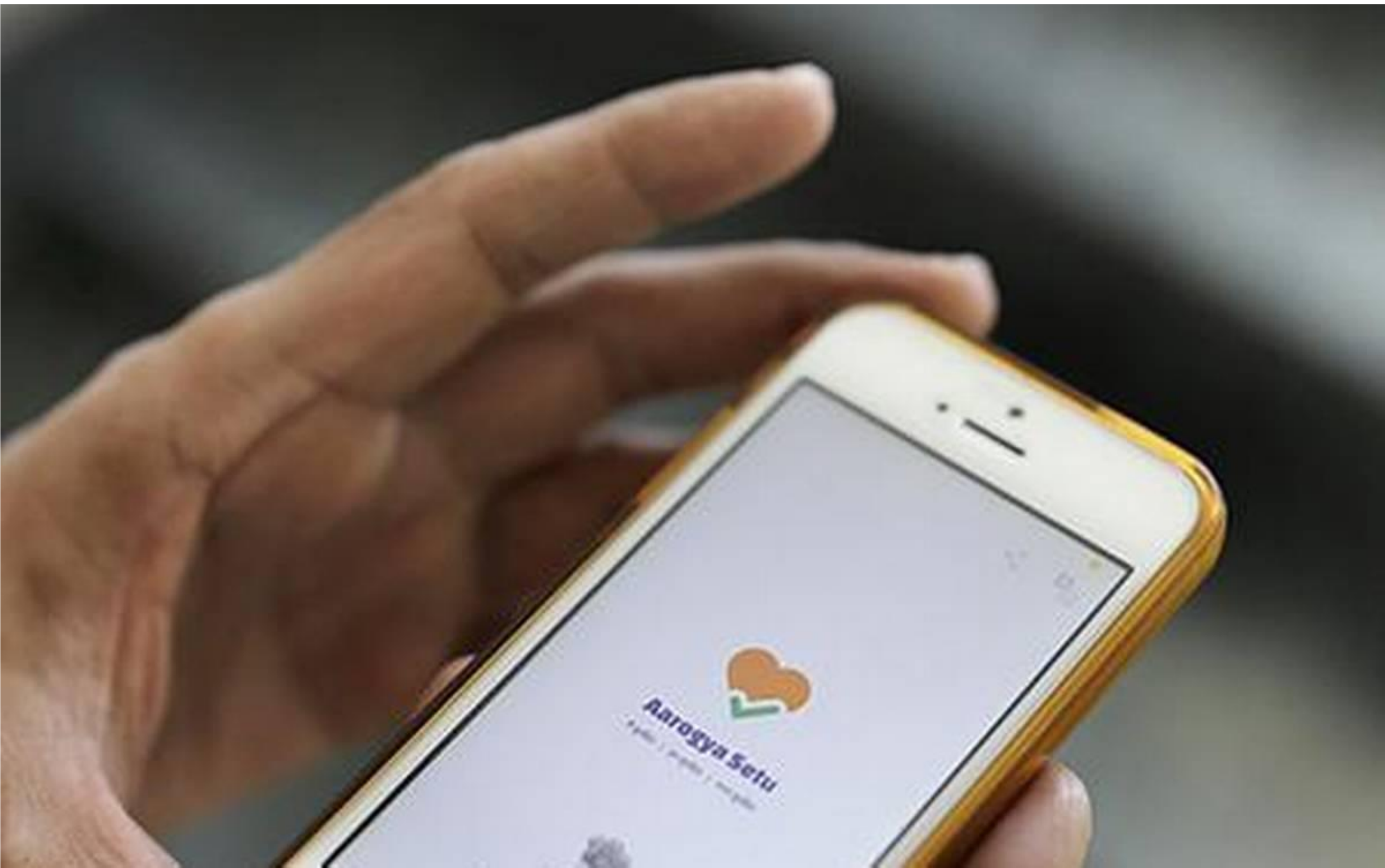
Human capital development: Karnataka and Gujarat both register some of the highest per-capita incomes and economic growth rates in the country. Despite this, both states have inadequately focused on human capital development. Higher education data indicates Gujarat's gross enrolment ratio (GER) is 20.4, lower than the India-average of 26.3. Karnataka's is 28.8 – the only southern state with GER below 32. Of the 20 lakh IT employees in the state, half have immigrated from other states. Low focus on human capital has placed Karnataka's natives in an unfortunate position of being unable to compete for these jobs.

Both governments must focus on human capital development as a means to build their populations into highly skilled and productive workforces to steer their states into a technology-first future and accelerate economic growth.

Both Karnataka and Gujarat have taken unique and highly productive routes to economic supremacy in India. Both states must study the other and implement complementary strategies for faster and more balanced growth. Both offer effective models that other state governments can utilise to design their strategies.

The COVID-19 pandemic and resulting global economic crisis have given every state economy the unprecedented opportunity to take bold decisions and accelerate decadal growth. Capitalising on high value-add sectors like manufacturing and services is key to providing citizens with the opportunity for personal growth. State governments must drive this by making the right investments and policy decisions. Failing to take advantage of these once-in-a-lifetime opportunities cannot be an option for any state, large or small.

TECH-ENABLED GOVERNANCE



India’s pioneering tech-enabled governance model

India continues to leave the rest of the world in awe with its ground-breaking digital adoption for both top-down and bottom-up engagement. We are pioneering technology-led governance. Through the COVID-lockdown, we have found many ways of both utilizing existing databases and building new digital infrastructure to reach citizens in times of peril.

AAROGYA SETHU BREAKS RECORDS

AS broke the world record for the fastest app to reach 50 million downloads. AS took only 13 days to reach this coveted milestone that predicts user engagement. The incredibly addictive Pokémon Go game previously held this record at 19 days, and social media platform Twitter at two years. AS is now at the 110 million downloads mark.

AS’ merits do not lie solely in this record, however. It is a **volunteer-led open-source public-private-partnership (PPP), and this model has come to define India’s tech-enabled governance**. Aadhar, the world’s most extensive one-sweep identification-inclusion program, is a premier volunteer-led PPP as are DigiLocker, UPI, e-KYC in India Stack and other critical platforms. This model is a unique and valuable asset as these are all public goods, not owned by private enterprise, but managed by the government through independent and consultative entities. This is digital democracy in action.

The digital network on AS can redefine public engagement with the government. This is the most comprehensive population network we have mapped onto geographical locations. After COVID-19 passes, citizens must be empowered to raise civic issues on the platform with geo-tag – like potholes or lack of health infrastructure in their district. Unnecessary fears about AS becoming a surveillance app is unwarranted as it can easily be deleted.

INSTANTANEOUS DIGITAL FUNDS DISBURSEMENT

India has been hailed for some of the fastest cash disbursements to tide vulnerable citizens over during the COVID-induced lockdown and stoppage of economic activity. This was possible only because of the vast digital databases of Aadhar-verified bank accounts.

Over the past six years, the NDA government pioneered the use of the JAM (Jan Dhan + Aadhar + Mobile) trinity to disburse INR 11.14 lakh crores worth of direct benefits (DBT) under various schemes. 125.75 crore unique Aadhar cards have been issued. 375 crore documents have been verified via DigiLocker. UPI has changed the face of Indian banking and benefits disbursal because of the instantaneous transfer protocol. With lockdown easing, total UPI transacted value surged back to INR 2.2 lakh crores in May, up 44.4% from April. It is this tech-enabled governance system that India turned to during our darkest hours.

Direct Benefit Transfer: 42 crore beneficiaries have been directly supported during COVID-lockdown, amounting to more than INR 53,000 crores. DBT enabled the government to reach out to farmers, rural workers, BPL families, women, senior citizens, the disabled and other vulnerable groups across the country at a time when the country was in lockdown, face-to-face interaction was dangerous, and travel was unavailable. These two months have validated all of the digital efforts of the last decade, and provide impetus to move more subsidy and income support schemes onto DBT, as analysed previously. PM Modi's foresight to create an extensive digital framework for India must be complimented.

Women JD account holders: The push to empower women through SHGs, Matru Vandana maternity benefits program, Ujjwala Yojana, and other schemes provided the government with a ready list to disburse INR 500 cash support early into the lockdown. As of June 2, INR 20,344 crore was disbursed to women JD account holders, allowing them to support their families.

Farmers and rural workers: The PM-KISAN scheme to provide minimum income support to farmers proved beneficial as GoI front-ended the first cash payment of INR 2,000 each to 8.19 crore farmers out of the total INR 75,000 crores allocated for the year. Similarly, MGNREGA beneficiaries also received increased allocation and per-capita payment. This helped the rural economy tide over during the lockdown and continue agriculture activities, which proved crucial for production continuity and harvesting of the record *rabi* crop cycle.

Gas cylinders: The PMUY has brought dignity and smoke-free cooking to 13 crore new households in the last five years. Of these, 8 crore gas connections were provided free to rural women, and it was this network that was activated during COVID-19. Apart from free cylinders during the lockdown, PMUY beneficiaries received cash support of total INR 8,500 crores.

Construction workers: 2.3 crore construction workers received INR 4,300 crore worth of income support when lockdown cut off their incomes. The media's focus was on the migrants, some of whom were left in a lurch and now need better assistance coming out of the crisis, but they are not the only labour in India. The government ensured that they assisted the labour of whom they had records.

Vulnerable sections: Databases and digital networks also helped GoI assist 2.8 crore senior citizens, widows and disabled persons in advance with a total of INR 2,800 crores. Without the digital infra, it would have been tough to reach out to these sections in time.

EPFO payments: The EPFO database is India's most comprehensive record of formal employment and GoI was able to leverage it to support 59.2 lakh account holders by undertaking both the employer and employee 12% each contribution for three months.

A common thread through all these rapid-action support schemes is the availability of verified bank account information to send the money to, and this is where India's unique value proposition lies.

Continued in the next page…

RIDE THE MOMENTUM

With the incredible validation of India's tech-enabled governance model during the most trying times of COVID-19, now is the time to use the momentum for next-generation empowerment.

Bharat-phone: While India is one of the fastest mobile and internet adoption economies, there are still sections of the population that cannot afford a phone. Increasingly, access to a smartphone is redefining personal growth and inclusion. People who are bereft of one can be identified through the panchayat system, and ***a low-cost Bharat-phone with a data connection*** can be provided to them. Dynamic teams of young citizens can be employed to travel from place to place to promote digital literacy. With India becoming one of the largest mobile assembly regions in the world, large-scale procurement of phones by GoI can be another way to boost the economy post-COVID and provide jobs.

Tablets in government schools and higher education institutions: It is crucial to empower the next generation with digital know-how so they can leverage digital inclusion and access opportunities that today may not be open to their parents. Provision of tablets for every student in government schools and rural colleges will be critical for students to immerse themselves in digital platforms, learn how to use and build them, and leverage them for employment and entrepreneurship.

IT/GST refunds: The same world-class digital infra that is helping GoI reach out to the vulnerable can be repurposed to integrate with taxpayers and businesspeople. A majority of these communities are honest taxpayers and have declared all records and assets. Using a transparent digital system to process instant IT and GST refunds via UPI will change the face of government-business integration. Business discontinuity and liquidity crunch during the economic lockdown demonstrate how vital this integration is.

Migrant labour database: The absence of comprehensive digital records delayed support to the migrants. Heartland states where they mostly originate from had no records of emigration while destination states had no records of labour participation. Just like India has pioneered the use of digital infra to map out population sections like farmers, rural workers, and others, we must now turn our attention to mapping out migrant movement and participation so they too can be fully included in the economy and government support schemes.

A **Chief Data Officer (CDO)** could be appointed to the PMO to oversee the next wave of digital infrastructure in India. There is a need to create more databases, consolidate all data into one India Data Store, use Aadhar to remove duplicates and eliminate leakage of funds, and publish uniform standards for data collection. India has already pioneered technology-enabled governance at scale and can ride this momentum to a fully-integrated digital governance model.

India’s new digital reality post-COVID

The coronavirus pandemic and subsequent lockdown have accelerated India’s adoption of digital platforms. Digital adoption rates have even surpassed the swift pace of the last six years. During the lockdown, people have used apps and digital infrastructure for their every need – payments, receiving Direct Benefits Transfer (DBT) from the government, grocery and food procurement, medicine delivery and teleconsultations, up-skilling and children's education, 24/7 entertainment, communication, work delivery and management, and more. When India recovers from the pandemic, we will confirm this to be an irreversible shift in behaviour where digital platforms might be the first choice in any endeavour.

There are many ways we can capitalize this opportunity for economic growth, improved productivity, and delivery of differentiated services to Indians at scale.

AGRI-TECHNOLOGY

Some of the biggest challenges Indian farmers face are accessing markets and selling produce at competitive prices. Agri-tech digital platforms, and consolidation of Agri-databases, will enable farmers to improve earnings and income. PM Modi’s government aims to double farmer incomes by 2022 and Agri-tech can play a large part in achieving this.

Technology can be leveraged to map out linkages in the market, retail, and supply chain, and to build virtual B2B and B2C marketplaces. Farmers can then access accurate and timely information about seed availability and prices, crop prices, and consumer markets. They can also use digital platforms and databases for information on techniques to improve production, fertilizer utilization, rainfall and weather patterns, and more.

TELEMEDICINE & HEALTHCARE MANAGEMENT PLATFORMS

India faces two major health challenges compared to other large economies – a deficit in the number of trained medical staff per million population and low adoption of digital platforms to manage patient care. The WHO estimates there is a deficit of 6 lakh doctors and 20 lakh nurses in India. Further, doctors often have to perform many routine tasks like data entry, patient management, pharmacy interfacing, ensuring the right gear and equipment are present in the required quantities at the point-of-need, and so on – over and above their medical and caregiving duties.

Outside of large private hospitals, the use of digital platforms to automate many of these tasks is low. With the COVID-19 pandemic, the need for every hospital to be on a patient management system has become apparent – be they government, municipal, speciality, or private. This can also help map out inter-hospital bed vacancies and patient transfers in the next Act of God event.

With such a large rural population and insufficient trained medical staff and rural healthcare facilities, India can rapidly adopt telemedicine capabilities to make up for the gap. E-consultations, which took off during the lockdown, can vastly improve access to healthcare in rural areas. Mobile and internet penetration in rural areas is accelerating, and telehealth can piggyback on this trend. A quick e-consultation can determine whether the person has a simple problem or needs to access a facility for a physical check-up. We may find that 50-60% of cases could be diagnosed in this manner, and the remaining might have to travel for a consultation – largely reducing the healthcare burden in the country.

ED-TECH

Smartphone and internet penetration has exponentially increased in India. With this, we have a tremendous opportunity to improve access to education via large-scale digital platforms. Many highly populous regions in India, like Bihar and Jharkhand, have low levels of education infrastructure but a higher percentage of youth compared to the national average. Today, a majority of these youngsters have a mobile phone with a data connection and are consuming content like never before. Education must take advantage of this shift in behaviour and become easier to access for all.

Just as India leap-frogged landlines straight to mobile, India could leapfrog past brick-and-mortar institution models straight to ed-tech platforms.

Through the lockdown, many education content companies have streamlined their solutions and unlocked new ways of teaching virtually. New methods of certification and gamification of education to make a lasting impact are being consumed now. Moreover, we are seeing a worldwide surge in online or virtual proctoring wherein students can write a test in a remote location, and video monitoring is used to maintain integrity. The convergence of these trends will spell a new era for Indian education.

ENTERTAINMENT AND MEDIA

Digital content consumption has soared during the lockdown in many forms – entertainment, news, audio, and gaming. These trends are worrisome for traditional movie makers and distributors, content creators, print media and others on one hand; on the other, the lockdown has proved a fertile ground for the testing and validation of many new formats.

Digital media consumption has gone through the roof, as evidenced by the rise in subscriptions and viewing time of platforms like Hotstar, JioTV, Netflix, and Prime Video. The indisputable king here is any company with strong digital inventory for the Indian market – no longer are Indians satisfied with reruns of US shows and movies. Entertainment 2.0 is being redefined by the enormous success of web-shows like Little Things or Operation MBBS which has proved that even a niche show about medical college in India can build a considerable subscriber base quickly. Indians are watching more, exploring, building communities around their favourite shows and elevating these actors to stardom. With TV too, we are witnessing the boom of digital-strong strategies like Republic TV – again proving that content creation and audience engagement are crucial drivers for success in this new paradigm.

Print media has been on the decline for some time now, and the lockdown accelerated this into a critical condition. Rs. 14,000 crores worth of advertising revenues, the mainstay of print, is in freefall – leading to large-scale pay cuts and deferments even in India’s biggest media houses. While publishers have been investing in digital strategies over the last decade, it is clear that they have to develop vastly different models now and reconfigure advertising revenue to sustain themselves.

Gaming has risen multifold through the lockdown as everyone is playing on multiple devices to pass the hours. However, it is fully evident India has not invested in building its own games; the most popular games today are still Clash of Clans, Candy Crush, Pokémon and others and built by Chinese companies like Tencent's PUBG. The Indian ecosystem must invest in games for the Indian audience to capitalize on the opportunity.

Regional language markets for audio and video content are still largely under-serviced. Hindi is not India's national language and neither is English; every regional language is its own large segment with a captive audience hungry for regional content. We need differentiated content, more platforms and large investments in each of these target demographics to build a vast Indian media ecosystem that no other country can hope to match in scale or diversity.

DIGITIZATION AND CONSOLIDATION OF GOVERNMENT DATABASES

Today, the GOI and state governments collect terabytes of data on welfare, population and demographics, Aadhar, taxes, jobs and pension (ESI, EPFO and NPS), automobile sales, MUDRA beneficiaries, food security and other subsidy beneficiaries, IT returns, education, and so on, but all under different departments. These data sets can be collated together using Aadhar identification as the fixed parameter. No other country except China has access to such a large data set on which the latest big data analytical tools can be deployed to get insights about India. These insights can then be utilized by the government to make data-backed policy decisions and optimize food security and other benefits.

It is suggested that a **Chief Data Officer (CDO)** be appointed to the Prime Minister's Office (PMO) to oversee digitization, data consolidation efforts and to set standards for data collection by every department. This has created immense value for other developed economies like the US, UK, and Germany. It is time for India to embrace digital at its very highest levels and build a top-down systematised resilience on the digital frontier.

CONCLUSION

Through the pandemic and lockdown, life as we know it has irreversibly changed. A large component of this transformation is the adoption of digital platforms. By capitalizing on this generational opportunity and investing in building world-class, indigenous platforms for a large captive local market, India can accrue innumerable economic and cultural benefits. It is time for our nation to fully take command of India's digital destiny.

DBT 2.0 model for poverty-free India

India has the digital infrastructure, the political will and the economic growth rates to eradicate poverty and extreme deprivation today. The taxpayer-funded subsidy system is buckling under 70 years of socialist bureaucratic policies and overkill, and needs to be replaced with a straightforward, less-bloated framework. PM Modi has already cleaned out part of the system with direct-benefit-transfers (DBT) founded on the India Stack.

A new DBT 2.0 model which subsumes all the subsidies into one is imperative to transfer purchasing power to India's poor and let them live with dignity. **The administration also owes it to India's honest taxpayers to not waste their hard-earned taxes in a leakage-ridden subsidy system**, and instead ensure a complete transfer of the tax-funded subsidies to those genuinely in need.

India's journey with poverty

After economic liberalization in 1991, India has maintained a formidable growth trajectory in driving development, literacy, income, and purchasing power.

Before 1991, negligible development and ever-increasing poverty were the hallmarks of the disastrous economic policies of the Nehruvian era. Nehru actively suppressed Indian capital, established unsustainable capital-intensive projects, and did not develop labour-intensive industries to provide people with employment opportunities and wage growth.

Instead, an increasing number of people were kept dependent on the agriculture sector, which was already decimated by the British Crown's predatory policies before 1947. Even though the First Five-Year Plan provided a useful framework, the agriculture sector was not given a chance to recoup under Nehru - leading to famine, malnourishment and abject poverty. The terms of trade were steeply set against the sector preventing India's farmers from making a decent living. While the world was industrializing and prioritizing skilling and educating their populations, Nehru did neither. As a result, India fell further behind.

Between 1950-80, the world economy grew at 4.5% while recovering from World War-II, other Asian economies like Japan and Korea industrialized and became strong, but India grew at 3.5% (1% lesser than the world); our population grew at 2.5% and per-capita income at 1%. This was derisively called the Hindu rate of growth as if to take attention away from the fact that it was badly-developed socialist state policies that kept India poor. Economic liberalization in 1991 changed India's trajectory as it moved away from socialist policies toward globalization and capital formation.

Another contributory historical reason for India's substantial poverty burden is the lack of focus and spending on primary education and primary health in the Nehruvian era. In contrast, China focused heavily on educating its population including women. Chairman Mao famously said, "Women hold up half the sky" in 1949 and ensured the girl child wasn't left behind. The pathetic state of affairs of women's literacy today at 70% (which only accelerated from 43% after economic liberalization in 1991) is in stark contrast to China's 96%. If our first

Prime Minister had focused on primary-education and -healthcare in the first decade of Independence, like the much despised Mao did, then India would have been a very different place today. We would have had lower population growth rates and a higher standard of living, as studies from around the world show women's education leads to lower fertility.

In 1991, our GDP was INR 6.25 lakh crores. With a population of 83.86 crores in 1991, per-capita income was barely INR 7,500. With the economy opening, India grew at a nominal growth rate of 12.5% YoY from 1991 till 2020, while population growth rates averaged 1.6% YoY during this period. GDP grew from INR 6.25 lakh crores in 1991 to INR 205 lakh crores in 2020. Per-capita income grew from INR 7,500 in 1991 to INR 1.5 lakhs in 2020. This is phenomenal growth and has had a significant impact on the reduction of poverty and deprivation in India. **Our nation is undoubtedly one of the world's premier poverty-lifting success stories after 1991. All Indians and governments post-1991 have to be justifiably proud of this achievement.**

Explosive economic growth has also provided India with the foundation for one of the largest subsidy- and income-support programs for the poor in the world.

The classic definition of poverty by the World Bank and other multilateral institutions is having less than $1.9/day to subsist on. In 1991, the World Bank estimates 47% of India's population fell under this category. Post-1991, the percentage of poor (with <$1.9/day) in the population fell to 22% in 2011. A Brookings Institute report on 'Rethinking global poverty reduction' shows that The World Data Lab, which collates World Bank, IMF and Indian government survey data estimates India's poor, per this definition, at 5 crores in 2019. This is a dramatic decrease from the 2011 estimation of 22% of the population to 4% in 2019. This is a tremendous achievement and significantly driven by NDA-I's development and digital focus.

Since 2014, PM Modi and the NDA-I government have done more for India's poor than any other government in its 5-year term in Independent India, as discussed in our article here. It has provided crores of people with a roof over their head, water in their tap, data connectivity and digital inclusion, road connectivity, increased food security, electricity, LPG cylinders for cleaner cooking, access to education, financial inclusion, affordable healthcare, maternity benefits, and more. Many Indians got access to such basic amenities for the first time in their lives between 2014-19.

NDA-I's digital push enabled by the JAM (Jan Dhan + Aadhar + Mobile) trinity has been instrumental in pushing India towards becoming a middle-income country. With the JAM Stack, PM Modi has cleaned out the system substantially over the last five years. 125.75 crore unique Aadhar cards have been issued - the most massive one-time identification exercise ever carried out in the history of humankind. 375 crore documents have been verified via DigiLocker. A sophisticated technology network now exists by implementing state-of-the-art electronic transfer mechanisms like UPI, and opening Jan Dhan accounts for Aadhar-enabled citizens.

The digital architecture has opened up innumerable ways to push poverty out once and for all and enable every one of India's citizens to fully participate in the economy with bank accounts, digital payments and perhaps the most significant achievement of all – Direct

Benefit Transfer (DBT). To date since 2014, the government has disbursed a whopping INR 9.66 lakh crore directly to the bank accounts of the most vulnerable citizens through DBT.

DBT is a tried and tested method. Its value proposition is clear – to date, the savings enabled by the system by reducing leakages is estimated at INR 1.7 lakh crores. States like Telangana and Odisha are successfully utilizing DBT to provide their citizens benefits tailored to their unique situations, as discussed later in the article.

Here we present a model for poverty-free India that fully utilizes the JAM trinity to modernize the archaic systems India's subsidies programs run on, cut out systemic inefficiencies, and empower India's most vulnerable.

New India needs a bold vision from PM Modi, with poverty eradication at its core as discussed in India's Grand Reconstruction Budget. With the proposed DBT 2.0, absolute eradication of poverty and deprivation is now in sight.

Defining poverty

While the classic World Bank definition of poverty (< $1.9/day to subsist on) is useful to compare the progress of different countries; in India, we want to eradicate poverty and extreme deprivation. This means no citizens must be left wanting for basic necessities.

With this objective, we can also define poverty as a lack of purchasing power. People have purchasing power by leveraging one or more of three things:

1. Skills or vocational training, based on which they can find gainful employment and earn a decent wage
2. Education, by which they can access formal employment
3. Income-generating assets, like land, securities, and others

The lack of income-generating assets, education or higher level of skills leaves people with only one option – unskilled or low-skilled labour for day-to-day existence and reliance on subsidies from the government.

By our calculation below, approximately 68 crore people in India are in this situation today – 43.8% of the population – where without the massive subsidies they receive, they will not be in position to have a decent standard of living. Many of them may have more than $1.9/day but do not have a higher level of skills, education, or income-generating assets; leading to low purchasing power and reliance on government subsidies.

In conclusion, though India's war on poverty and extreme deprivation has been wildly successful, a large section will still need help from the government and taxpayers. We must now focus on improving their purchasing power.

A study of subsidies

Today in 2020 when we face one of the biggest global crises of our lifetimes, India must take the opportunity to study its bloated subsidy system, buckling under the weight of 70 years of multiple schemes and regulations, and streamline it to tackle the challenge of poverty directly. A study of the 2020-21 budgets of the union and aggregate state governments shows the following annual subsidies totalling to approximately INR 7.5 lakh crores.

Annual Subsidies (INR crore)		
Item	Central	States
Food	2,00,000	50,000
Fertilizer	71,309	
MGNREGA	61,500	
LPG/Kerosene	40,915	
PM-KISAN (Farmer DBT)	75,000	50,000
Power		1,00,000
Water/Irrigation		1,00,000
Interest subsidy/loan write-off	21,175	50,000
Total	**3,92,134**	**3,50,000**
Grand Total	7,42,134	

Table 1: Budgeted subsidies by the Indian Central and State governments.
Source: Budget documents of the Union and States

Food subsidies feature prominently in both Central and State budgets – and comes up to a total of INR 2,50,000 crores (excluding Govt borrowing from the National Small Savings Fund). The Central government provides fertilizer subsidies of INR 71,300 crores and allots INR 61,500 crores to MGNREGA for livelihood support of rural workers. Fuel subsidies for LPG and kerosene amount to INR 40,000 crores.

Farmers receive minimum income support via DBT of INR 6,000 per year through the PM-KSNY to a total of INR 75,000 crores annually. States like Karnataka, Uttar Pradesh, Telangana, and others supplement this GoI farmer DBT – totalling to INR 50,000 crore combined. Power and water subsidies are under state government list and run to the tune of INR 1 lakh crore each, all states put together. The central budget accounts for INR 21,175 crores in interest subsidies for farmers, while states provide a loan write-off amounting to INR 50,000 crores.

A grand total of approximately Rs. 7.5 lakh crores is spent on subsidies by the central and state governments combined. This is 3.6% of our GDP in FY'20; a phenomenal amount of money that could be utilized to increase purchasing power in the hand of Indians instead of continuing to rely on 450+ schemes of distribution.

More the schemes and distribution lines, greater the leakages and middlemen inefficiencies. NSO in 2011 shows leakages in food PDS were estimated to be a whopping 46.7%. Other schemes also show high leakages. This is unacceptable. Though leakages have steadily reduced under PM Modi's NDA-I, especially with digital-first strategies like DBT, managing so many schemes is both confusing and unnecessary in today's digital era. Moreover, many undeserving people may be included in the subsidy system and needs revaluation.

The administration must relentlessly pursue a new strategy that simultaneously gets rid of cumbersome and loss-inducing procedures while increasing the purchasing power of India's most vulnerable citizens. Honest taxpayers have selflessly contributed to this system for years and are owed a more efficient utilization of their hard-earned capital.

A study of populations

Data from the census and Civil Registration System indicate that India's population is approximately 137 crores today. To understand who the vulnerable citizens are, the following exercise is indicative. This is only an approximate calculation for study purposes.

We are assuming in our model there are three people on average depending on one income-earner making a typical family of 4. It may be more or less and varies by urban and rural settings, and by state. Further, a fair number of families are double-income households. With the SHG movement and MUDRA schemes, many women in rural areas are also bringing in primary or supplementary income. A detailed data analysis is required by the government to account for all these variables.

Model 1 indicates there are 67.8 crore people in need of support, approximating 17 crore beneficiaries or families at 4 to a family.

Model 1		No. of families (crore)	Number of people (crore)	Notes
A	Population of India	34.3	137.0	
	Industry/Services			
B	People in industry sector	8.2	32.6	23.8% of A
C	People in services sector	11.5	45.9	33.5% of A
D=B+C	Total	19.6	78.5	57.3% of A
	Secure Population			
	Government pensioners	2.0	4.0	
	Govt. employees/parastatals	2.5	10.0	
	EPFO/ESI enrolled	8.0	32.0	
	IT returns filed as business	2.1	8.6	
E	Total secure population	14.6	54.6	
F=D-E	Requiring support in ind/svc.	6.0	23.9	
	Agriculture			
G	People in Agri sector	14.6	58.5	42.7% of A
H	Agri-dependents but no support reqd.	3.7	14.6	Assuming 25.0% of G
I=G-H	Agri-dependent requiring support	11.0	43.9	Inc. farmers under DBT
J=F+I	Total requiring support	17.0	67.8	

Table 2: Model to approximate the number of people in India requiring Government support.
Source: World Bank, Census, CRS, EPFO, ESI, IT Returns

Industry/Services: There are approximately 137 crores (**A**) in India today. World Bank estimates 23.8% of India's workforce depends on industry for a living. Including their dependents by proxy that is 23.8% of the population or 32.6 crores (**B**). Similarly, 33.5% depend on services, amounting to 45.9 crores (**C**). In total, they add up to 78.5 crores (**D**). Four groups are secure and do not require benefits or subsidies and are mostly in industry and services, so we assume this fully for calculation purposes. We will subtract these from (**D**).

Secure population: There are four secure groups known in the system:

1. 2 crore government pensioners (totalling to 4 crores assuming they support one other person).
2. 2.5 crore employees of the governments and parastatals together (assuming one family is 4 people, that amounts to 10 crores).
3. 8 crore enrolled under EPFO and ESI schemes (32 crores with family)
4. 2.1 crore people who file IT returns under the heading business and do not avail EPFO or ESI (8.6 crores with family).

They add up to 14.6 crore, or 54.6 crores with families (**E**). By subtracting these numbers from the total industry/services dependent population (**D**), we have a balance of 32.9 crores (**F**) who require support.

Agriculture/Rural: World Bank estimates 43% of India's workforce is dependent on agriculture. By proxy, assuming 43% of the population (**A**) depends on agriculture, that is 58.5 crores (**G**). In rural areas, approximately 25% of people do not avail food security benefits (**H**). Applying that logic on (**G**), rural people requiring benefits is 43.9 crores (**G-H**) or 11 crore families which includes the 9.21 crore farmer families that get DBT minimum-income support through the PMKSNY.

Total requiring support across India adds up to 67.8 crores (**F+I**) or, on average, 17 crore families. We can perhaps round this down to 15 crore families.

Another way to look at who requires subsidies is tracking food security beneficiaries, detailed below in Model 2.

Model 2		Number (crore)	No. of families (crore)	Notes
A	Population of India	137.0		
	Urban			
B	Population	46.6		34.0% of A
C	Food security benefits	23.3		50.0% of B
	Rural			
D	Population	90.4		66.0% of A
E	Food security benefits	67.8		75.0% of D
F=C+E	Total under benefits	91.1	22.8	

Table 3: Model to approximate the number of people availing food security in India
Source: World Bank, Census, CRS

Starting from 137 crores (**A**) – since India is approximated at 34% urbanization, this translates to 46.6 crore people (**B**) living in the urban areas. Approximately 50% of these avail food security benefits amounting to 23.3 crores (**C**). Meanwhile, 66% of the population is in the rural area – 90.4 crores (**D**), where 75% avail food security benefits – 67.8 crores (**E**). Total population availing benefits are 91.1 crores or, on average, 23 crore families.

There is a difference of 6 crore families between Model 1 and Model 2, possibly because food security and other benefit schemes are based on old data. Some of these schemes have not been changed for decades and need to be cleaned up. Even the latest schemes use the 2011 Census data which, as discussed above, is outdated given the development and digital leap India has made in the past decade. India's GDP has grown from INR 87.45 lakh crores in FY'12 to INR 205 lakh crores in FY'20, while per-capita income has risen from INR 68,322 to INR 1.5 lakhs in the same period. Bureaucrats must discontinue the use of the 2011 Census to make subsidy distribution decisions as this distorts genuine need.

The use of readily available databases like EPFO, ESI, NPS, DBT-JD accounts, and others provide a more accurate picture. The upcoming 2021 census is the perfect opportunity to study which of these 22 crore families (from Model 2) are actually in need and determine whether the number is closer to the 15-17 crore families calculated in Model 1.

A New Centre-State DBT Model

Today, Rs. 7.5 lakh crore worth of subsidies is disbursed through 450+ schemes. This is inefficient, outmoded and a thorough drain on India's resources. Middlemen efficiencies have always plagued India's Public Distribution System, and it is time to take the new digital JAM infrastructure to its logical conclusion by moving to a DBT-first model.

We propose that policymakers subsume most/all subsidies into one scheme, move everything to digital and send beneficiaries their portion of all subsidies via DBT, and reduce the distribution of subsidized commodities like food, fertilizer, and so on. This must also contain the caveat that every five years, there will be a revaluation (using AI/big data analytics) of whether beneficiaries continue requiring this support or whether they have obtained a job or income-generating asset, making them self-sufficient.

This model has to be implemented as a Centre-State partnership where the Central government must sign an MoU with each state. India's states are vastly different across indicators – population and demographics, literacy and education, economic dependence on agriculture, economic growth and per-capita income, and others. Table 4 shows the per-capita GDP growth of India's highest- and lowest-performing states. States on the lower end have a larger share of workforce- and economic-dependence on agriculture and a combined population of 48.36 crores. States on the higher end have advanced industry and services sectors (with higher GVA) and a low combined population of 30.12 crores, which is why there is such a big difference between per-capita incomes of the two groups.

Bihar, with INR 48,000 per-capita income is very different from Telangana, at INR 2.56 lakh, or Maharashtra, at INR 2.39 lakhs. It is essential for the Centre to sign an MoU with each state – to account for the unique demographic and economic conditions of the state's citizens. Each

MoU must yield a thorough study of the population of the state and how many people in urban and rural areas require this income support. Again, the 2021 Census will be crucial in establishing these parameters.

Lowest-performing States	Per-capita GDP				Highest-performing States	Per-capita GDP			
	2013-14	2019-20	Absolute growth	CAGR		2013-14	2019-20	Absolute growth	CAGR
Bihar	29,330	48,093	64.0%	8.6%	Telangana	1,24,056	2,56,834	107.0%	12.9%
Uttar Pradesh	45,208	69,425	53.6%	7.4%	Karnataka	1,30,850	2,53,321	93.6%	11.6%
Jharkhand	55,122	92,574	67.9%	9.0%	Gujarat	1,30,090	2,50,887	92.9%	11.6%
Madhya Pradesh	58,361	1,12,408	92.6%	11.5%	Maharashtra	1,43,332	2,39,117	66.8%	8.9%
India	90,124	1,49,096	65.4%	8.8%					

Table 4: Per-capita GDP of highest- and lowest-performing Indian states.
Source: RBI, Union and State Budget documents, Census, CRS

Farmers will now receive a higher DBT payment that subsumes their fertilizer, water, power, interest, and other subsidies into one. How much they receive will depend upon acreage, crops grown and other parameters. States like Telangana and Odisha have already built DBT models for this, which can be replicated across the country. In this manner, each MoU will study and analyze how to subsume subsidies into one DBT payment.

PM Modi has announced that farmers' incomes will double by 2022 which is now possible by this DBT 2.0 system which subsumes all subsidies into one transfer. Table 5 shows different models for the new DBT system. Even DBT at the lower end of INR 4,000/month yielding INR 48,000/year, is equivalent to Bihar's per-capita income of INR 48,093. DBT of INR 6,000/month yielding INR 72,000/year surpasses Uttar Pradesh's per-capita income of INR 69,425. DBT 2.0 will increase India's per-capita income and bring dignity back into the lives of crores of our fellow Indians.

Direct benefit transfer (DBT) 2.0 Model			
No. of beneficiaries (crores)	Amount/month (INR)	Amount/year (INR)	Total (INR crores)
15	3,000	36,000	5,40,000
15	4,000	48,000	7,20,000
15	5,000	60,000	9,00,000
15	6,000	72,000	10,80,000

Table 5: A new DBT model that subsumes all Indian subsidies into one DBT payment

This new system will transfer money and purchasing power directly in the hands of the people. They will now be empowered to decide what to spend the money on, and that is the real power of the DBT system. They now have the choice whether to buy rice or dal, tomato or potato, private school or government school, bus or train, from the local market or the vegetable cart, and on. These choices may seem trivial to the elite in cities. Still, the power to make these choices and not just take what is being handed to them will make a generational difference to the layperson receiving subsidies today.

Crores of people who today face the tyranny of government bureaucrat officials in charge of public distribution/other subsidy benefits will be liberated under this new system. These officials believe only they have the privileged training and power to allocate resources in society; this thinking is dangerously tyrannical and leads to inefficiency, diminished power in the Indian citizen, and fundamental freedom of choice. For 70 years, the Indian citizen has been made a supplicant, having to beg many officials for their rightful due via different subsidy programs again and again for basic sustenance. The preamble of the Constitution guarantees the Right to Dignity to every Indian citizen. However, through the subsidy system, crores of Indians have been stripped of this dignity.

The subsidy system is designed based on the ideas of state-sponsored programs floated by leftist economists and others who believe that only they have the intelligence and ability to make decisions. In their arrogance, they assume that the common people can't make their own decisions – forgetting that people have survived for thousands of years. They have the will and the intelligence; they only lack the purchasing power. India now has the digital infrastructure, thanks to PM Modi, to fix this once and for all. No longer must Indian citizens bow to the false privilege of tilted bureaucratic choke points to receive their rightful dues.

The time has come for PM Modi, a tall visionary working towards a poverty-free India to enhance a massive DBT program that subsumes the complicated system of subsidies and schemes into one. With this masterstroke, India will move away from a 70-year legacy of inefficient planning while simultaneously empowering our most vulnerable citizens with increased purchasing power. India doesn't lack the resources to execute this – as evident by our massive INR 7.5 lakh crore subsidy program today – but is hampered by a bureaucratic system still tied to a colonial mentality of suppressing the less fortunate. India needs strong political leadership to execute this bold vision and empower the ordinary citizen. With this, India will shine in the 21st-century global order with one of the most successful large-scale poverty eradication programs in history.

India's poor are better empowered to weather COVID

The world is facing an unprecedented crisis today with the coronavirus pandemic. India is staying ahead of the curve by the decisive actions of the government to actively screen international passengers as soon as the first positive Indian case became known on January 30 2020, enforce quarantine measures, the *Janata Curfew* on March 22nd (when PM Modi personally appealed to the general public to self-quarantine for the sake of public health), and now the proactive 21-day lockdown to curb the spread of the disease. So far, PM Modi's actions have served the Indian public very well; with 593 positive cases amongst a 137-crore population (as of 26/3/20).

The impact of the 21-day lockdown – and the subsequent halt of economic activities – will be felt most strongly on the country's poor and disadvantaged, particularly daily wage earners. In an encouraging move, FM Sitharaman has announced an INR 1.7 lakh crore relief package including cash transfers for poor communities and food rations for 80 crore people for the next 3 months. This DBT transfer for the bottom-of-the-pyramid of INR 2,000 per month will prove vital, as discussed in our article on India's required economic relief. The RBI also announced relief measures for the economy, which are beneficial for maintaining financial stability, liquidity in the market and keeping more people on payroll through the lockdown.

It is now pertinent to look at the state of the poor in India since NDA-I started in 2014. Nominal GDP during FY'14 was INR 112.3 lakh crores, amounting to per-capita GDP of about INR 90,124. In FY'20, estimates from the Union Budget demonstrate India is at a nominal GDP of INR 204.4 lakh crores (grown at a nominal CAGR of 10.5% over six years), and per-capita GDP is INR 1.49 lakhs.

Lowest-performing States	Per-capita GDP				Highest-performing States	Per-capita GDP			
	2013-14	2019-20	Absolute growth	CAGR		2013-14	2019-20	Absolute growth	CAGR
Bihar	29,330	48,093	64.0%	8.6%	Telangana	1,24,056	2,56,834	107.0%	12.9%
Uttar Pradesh	45,208	69,425	53.6%	7.4%	Karnataka	1,30,850	2,53,321	93.6%	11.6%
Jharkhand	55,122	92,574	67.9%	9.0%	Gujarat	1,30,090	2,50,887	92.9%	11.6%
Madhya Pradesh	58,361	1,12,408	92.6%	11.5%	Maharashtra	1,43,332	2,39,117	66.8%	8.9%
India	**90,124**	**1,49,096**	**65.4%**	**8.8%**					

Table: Per-capita GDP of highest- and lowest-performing Indian states.
Source: RBI, Union and State Budget documents, Census, CRS

India's top-performing states in per-capita GDP are Telangana, Karnataka, Gujarat, Maharashtra and Tamil Nadu. All these states have grown their nominal GDPs considerably by ramping the services and industry sectors. On the lower end, Bihar has the lowest per-capita GDP at INR 48k. Uttar Pradesh, despite ranking fifth in the country by economic output, ranks low per-capita. Madhya Pradesh has done a decent job with economic output by ramping up agricultural productivity. All the states on the lower end have substantial populations that must be systematically included in the formal sector to drive per-capita GDP up.

The per-capita income parameter has grown well since 2014 across all states. Most importantly, inflation is under control. As seen in the graph, inflation during the NDA-I was much lower than during UPA-II, which means **savings in constant prices have been protected**. While one could argue that the top 10% have benefitted from this growth, it is pretty evident that the bottom-of-the-pyramid too, has seen extensive upliftment from poverty.

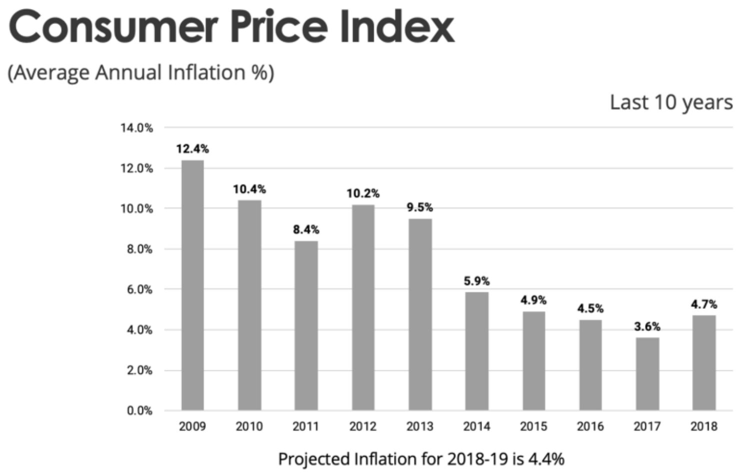


Figure: Average annual inflation % over the last decade.
Source: RBI, 3one4 Capital

The United Nations Development Program's Human Development Reports (UNDP HDR) tracks 101 countries through the newly introduced Multidimensional Poverty Index (MPI). Having followed these countries over a decade, the 2019 Global MPI report notes that India (and Cambodia) "*reduced their MPI values the fastest—and they did not leave the poorest groups behind*." Estimates by World Bank and IMF place the number of India's poor (subsisting on < $1.9/day) at **50 million in 2019 – 3.6% of India's population – compared to the official 2011 figure of 268 million - 22.1% of the population at the time**. PM Modi's focus on ruthlessly eradicating poverty and bringing development to the doorstep of India's most impoverished has succeeded without a doubt.

The NITI-Aayog Aspirational District Program (NAADP) launched under PM Modi's direction has been crucial in ensuring no community is left behind. **NAADP has launched a direct assault on poverty** by identifying 115 districts across the country with the lowest per-capita income and human development indicators. By directing Central and State programs and resources into NAADP, we are witnessing a dramatic improvement in growth, per-capita income, and quality of life in these districts. Elevating the bottom districts to double-digit growth will contribute massively to India's growth also.

So how did NDA-I achieve this? By ensuring every Indian has access to the basic necessities of life:

- A roof over their head – **1.84 crore homes** were built post-2014, a majority of them in the rural areas.

- A toilet in the house - Individual household latrine **(IHHL) coverage is now at 100%**, up from 38.7% in 2014. 10.28 crore latrines have been built, and all 6.03 lakh villages across all states/UTs have been declared ODF.
- Power in their switches – **100% electrification was achieved in 988 days** covering 17,181 villages, up from around 96.7% in 2014. 2.62 crore poor households were electrified, and the work to provide reliable power continues. 36.2 crore LEDs have been distributed for cleaner and more efficient power utilisation.
- Food on the table – **Food security coverage has been extended to all 36 states/UTs** of India from just the 11 states/UTs in 2014 as per the National Food Security Act. Under this Act, the government is supplying 5 kg of food grain each per month to over 80 crore people at a highly subsidised price.
- Gas connection in the kitchen – **13 crore gas connections** were distributed in five years, bringing the total to around 25 crores. 8.03 crore connections have been provided free to rural women, enabling them to cook smoke-free and improving their health dramatically.
- Rural road connectivity – Today **97% of villages are connected with roads**, up from 56% in 2014, with 1.8 lakh km built since FY15
- Access to education – Apart from schools, enrolment in higher education has also jumped from 3.23 crore in 2014 to 3.74 crore in 2019. **More Indians, including women, are aspiring to become graduates.** The Gross Enrolment Ratio of women has risen from 22.0 in 2014 to 26.4 in 2019, overtaking men for the first time last year. It is essential to create more formal jobs for all of them now.
- Mobile phones – TRAI data shows the wireless subscriber base in December 2019 was **1.15 billion**, up from 0.9 billion in 2014. Of this, 507.5 million are in rural areas. Access to cellular has transformed how people in rural areas do business and earn a livelihood.
- Access to the internet and digital platforms – The internet subscriber base, per TRAI, has increased from 251.6 million in 2014 to 661.9 million in March 2019. Apart from this, **1.37 lakh gram panchayats have been connected with optical fibre** for citizens to access their bank accounts and DBT digitally.
- Bank accounts – Through the Jan Dhan Yojana, **38.3 crore bank accounts were opened**. Total deposits have crossed INR 1.18 lakh crores. Over 53% of holders are women.
- Direct Beneficiary Transfer – DBT has enabled the government to **provide INR 9.55 lakh crore over 427 schemes** to date, directly to citizens' Jan Dhan bank accounts. 9.21 crore farmer-beneficiaries are registered on the system.
- Small business loans – Through Mudra, **loans worth more than INR 10 lakh crores** have been disbursed to more than 24 crore beneficiaries, as of February 2020, to start their own businesses and aspire for a better life
- Insurance cover – Since 2014, more than **28 crore people have availed insurance** for accident and disability coverage, life insurance, and so on.
- Farmers – Over **14.24 crore insurance covers** have been provided with increased distress relief for crop damage. 9.21 crore farmers directly benefit from the PM Kisan Samman Nidhi scheme where they receive INR 6,000 per year minimum income support.
- Affordable healthcare – Ayushmann Bharat was launched in September 2018 to provide a health insurance cover of INR 5 lakh/family/year. As of March 2020, over **93**

lakh people have availed medical treatment worth over INR 9,205 crore. The plan is to benefit 50 crore citizens, with 12.4 crore e-cards issued.

- Maternal and child healthcare has dramatically improved through Intensified Mission Indradhanush which **immunised 86.88 lakh pregnant women and 3.38 crore children**, as of June 2019. There has been a substantial decrease in the infant mortality rate (from 36.9 per 1,000 live births in 2014 down to 29.9 per 1,000 in 2018, per World Bank estimates. Similarly, maternal mortality rates have persistently declined YoY too; Union Health Minister Dr Harsh Vardhan announced in November 2019 that "*India is on track to achieving the (WHO) Sustainable Development Goal target for reducing MMR by 2025, five years ahead of timeline of 2030*".
- Maternity benefits - Matru Vandana Yojana has provided maternity benefits worth INR 4,989 crores to 1.35 crore women, as of March 2020.
- Clean water – While piped water supply hasn't reached everyone yet, this is one of the first mandates taken up by the NDA-II government

Source: 5years.mygov, TRAI, AISHE, Economic Times, pmjay.gov,

The data is clear – no Prime Minister in the history of independent India has done more for the country's poor and disadvantaged as PM Modi did in his first five-year term from 2014-2019.

The development performance by PM Modi and NDA-I is unprecedented and is the primary reason he was voted back to power in 2019. The NDA returned with a governance mandate of 353 seats in May 2019, with BJP itself at 303 seats – a thumping majority! In the run-up to the elections last year, the Lutyens media ran a vicious campaign against him, predicting with 100% certainty that he would not win again. They clearly missed how much he had helped the poor rise from abject poverty. **However, the people recognised that they had a Prime Minister who was genuinely concerned about them, who had delivered on his mandate and had fulfilled his commitment to lift them out of poverty.**

The coronavirus epidemic will mark an inflection point in India. Today, we can safely say we are in a significantly better position to face an unprecedented 21-day lockdown compared to 2014 – given that so many Indians have markedly improved security in 2020. This is, of course, subject to the fact that the markets for essential commodities and liquidity are kept open and accessible to citizens, and enough is done to keep MSMEs and employers solvent through supportive relief. A program for income support to the bottom-of-the-pyramid is essential.

It is evident that India's poor today are in a more favourable position to weather crises like a 21-day lockdown and a rapid-transmission pandemic than before, with so many fundamentals improved over the prior half-decade.

We are at an intriguing juncture to rethink how India will face the future. Under PM Modi, we have created an extensive electronic infrastructure which connects most Indians, enables fast digital payments through UPI, delivers direct benefits electronically, and facilitates productivity leaps. With the JAM or India Stack, there has been a dramatic increase in digital transactions, of people on the internet, DBT beneficiaries, the opening of bank accounts and more. This will empower every Indian at a time when the country is physically locked up and face-to-face interaction may be life-threatening. **Without this inclusive electronic network,**

there is no doubt India – and particularly India's poor – would have been worse off. PM Modi's foresight in creating this electronic network and connecting every Indian provides a robust bulwark to withstand a crisis of this magnitude.

The next step is to further utilise this unique next-gen system to re-engineer the delivery of subsidies and help BPL families more efficiently. In parallel, we must invest in human capital development to generate more formal, high-quality jobs. This move will facilitate the transition of the workforce from agriculture to industry and services – thereby accelerating personal prosperity for more people, strengthening the resilience of India's families, cementing our position as a Top 3 economy, and eliminating poverty completely.