Summary of

Economic Survey 2020-21

VOLUME 1

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1. SAVING LIVES AND LIVELIHOODS AMIDST A ONCE-IN-A-CENTURY CRISIS

COVID-19: ONCE IN A CENTURY 'CRISIS'

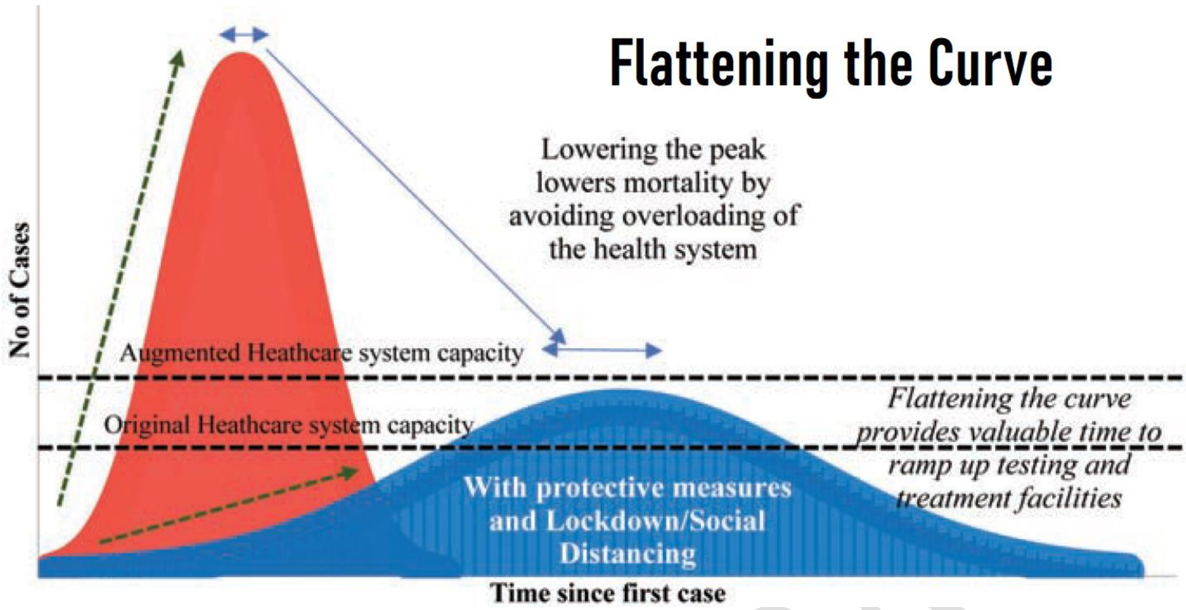
- The novel COVID-19 virus - SARS-CoV-2 was first identified in Wuhan city of China in December 2019. Looking at the exponential rise in the number of cases, WHO declared it as a pandemic on March 11,2020 – within a period of three months of its emergence.
- Within a year, it has infected around 9.6 crore people growing at an average rate of 3.3 per cent per day. The pandemic has accounted for 20.5 lakh death across 220 countries with a global case fatality rate of 2.2 per cent as of 15th January 2020.
- The pandemic and associated lockdown measures triggered a global recession this year. The world economy is estimated to contract in 2020 by 4.3 per cent, as per World Bank, and 3.5 per cent, as per IMF.

The pandemic is once in a 150-year event and is aptly called the 'Great Lockdown'.

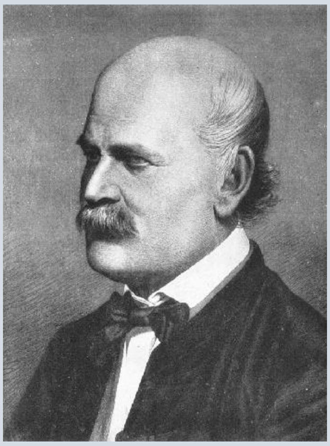
1. The health crisis-induced global recession is in contrast with previous global recessions which were driven by confluences of a wide range of factors, including
    - Financial crises (the Great Depression in 1930-32; 1982; 1991; 2009),
    - Sharp movements in oil prices (1975; 1982), and
    - Wars (1914; 1917-21; 1945-46).
2. This recession is highly synchronized as the fraction of economies experiencing annual declines in national per capita is highest since 1870—more than 90 per cent, even higher than the proportion of about 85 per cent of countries in recession at the height of the Great Depression of 1930-32.
3. The present crisis is unique as it originated in a pandemic that required social distancing and limiting of physical interactions. Thus, inherent to the crisis there was the trade-off between health and human lives, on the one hand, and the economy and livelihoods, on the other hand.

FLATTENING THE CURVE

- Epidemiological research highlights that a key strategy to combat the spread of an epidemic is termed as "flattening the curve."
- The curve refers to the projected number of people who will contract the disease in a given population. The shape of the curve varies according to the rapidity with which the infection spreads in the community.
- There is a "peak" of the disease, where the number of infected individuals reaches a maximum, followed by a decline.
- The 'flattening of the curve' spreads the pandemic over time, enabling more people to receive proper health treatment – ultimately lowering the fatality rate.



How Handwashing began as a Medical Experiment



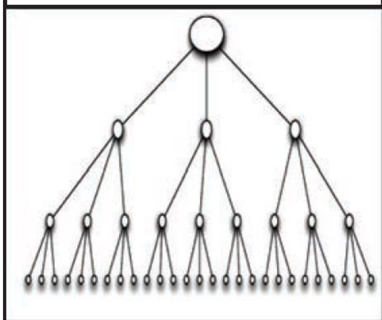
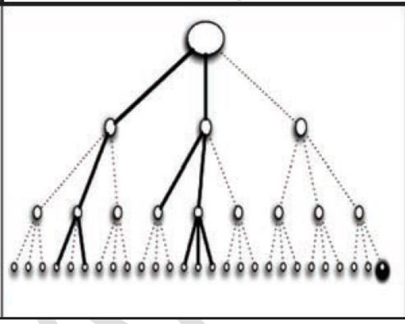
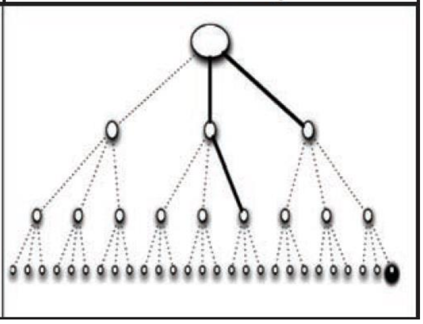
- Nearly 200 years ago, doctors did not wear gloves for surgeries and the concept of germs was not known. The germ theory was proposed by Louis Pasteur in 1885.
- It all started when a young Hungarian physician Ignaz Semmelweis in the obstetrics department of Vienna Hospital is 1846 found, to his surprise, that the mortality rate of his division was sevenfold higher than that of another obstetrics division.
- He then introduced a handwashing policy for all physicians and medical students before they entered the labour room, and within a year, the mortality was brought down to one-sixth of the former number.
- This was the first scientific proof that handwashing helped in preventing infection, though this did not immediately become popular among doctors.
- Today, Ignaz Semmelweis is considered the father of hand hygiene and infection control in hospitals.

RESEARCH-DRIVEN POLICY RESPONSE AMIDST UNPRECEDENTED UNCERTAINTY

Learnings from research in epidemiology and economics, especially the research focused on the Spanish Flu, guided India's policy response. The learnings were as follows:

- The pandemic curve needs to be 'flattened' to spread the pandemic over time and enable more people to receive proper health treatment, thereby lowering the fatality rate ultimately.

- Given the network structures that affect the transmission of the pandemic, higher population can lead to faster spread of the pandemic.
- Denser areas are more vulnerable to faster spread of the virus and this effect is especially strong at the onset of the pandemic.
- Early lockdowns delay the time taken to reach the peak, reduces the magnitude of the peak, and thereby decreases the total mortality burden by providing valuable time to ramp up the health and testing infrastructure.
- Implementing lockdowns earlier in the pandemic and using them more intensely – while costly in the short-run – led to a much sharper economic recovery and reduced mortality as well.
- When faced with enormous uncertainty, policies must be designed with the objective of minimizing large losses by selecting the policy that would be optimal under the worst-case scenario.

Mode of Contagion of an Epidemic		
A Contact Network	High Contagion Probability - the Infection Spreads Widely	Low Contagion Probability, the Infection is Likely to Die Out Quickly
		

INDIA'S HUMANE POLICY RESPONSE: SHORT-TERM PAIN, LONG-TERM GAIN

- Indian policymakers followed an approach similar to the **Barbell strategy in finance –** hedging for the worst outcome initially, and updating its response step-by-step via feedback.
- The clear objective of **'Jaan Hai to Jahan hai'** and to 'break the chain of spread' before it reaches 'community transmission' helped the government face the dilemma of 'lives vs livelihood', pace the sequence of policy interventions and adapt its response as per the evolving situation.
- India was amongst the first of the countries that imposed a national lockdown when there were only 500 confirmed cases.
- The stringent lockdown in India from 25th March to 31st May was necessitated by the need to break the chain of the spread of the pandemic.
- This was based on the humane principle that while GDP growth will come back, human lives once lost cannot be brought back.

Achievements

- India is the only country other than Argentina that has not experienced a second wave.

- It has among the lowest fatality rates despite having the second largest number of confirmed cases. The recovery rate has been almost 96 per cent.
- India, therefore, seems to have managed the health aspect of COVID-19 well.

EFFICACY OF INITIAL LOCKDOWN IN CONTROLLING THE PANDEMIC

Cross-Country Analysis

- Higher initial stringency in countries in March-April, 2020 had a significant impact on controlling the number of confirmed cases and deaths.
- As on date, India has a declining trend in daily new cases which has dropped below 20,000 and lowest Case Fatality Rate (CFR) despite having second largest number of total cases. US is still seeing around 2 lakh daily new cases.

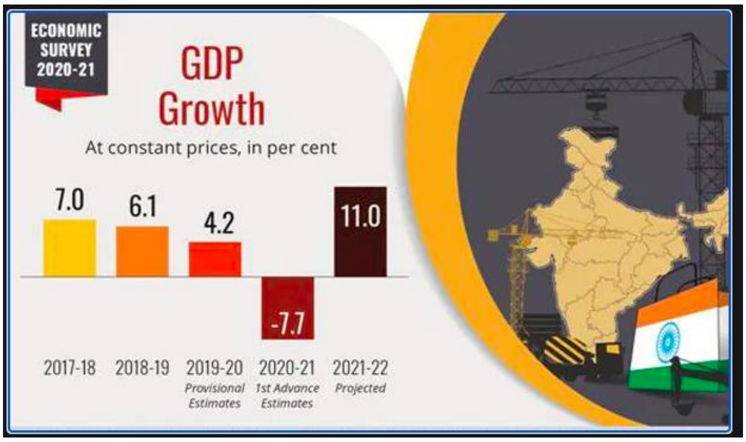
Management of COVID-19 within States in India

- Maharashtra has performed the worst in number of cases and deaths.
- In fact, highly populous, densely populated States like Uttar Pradesh (with a density of 690 persons per square km) and Bihar (with a density of 881 persons per square km) – as against the national average of population density of 382 persons per square km – have managed the pandemic well.
- In terms of deaths, Kerala, Telangana and Andhra Pradesh have managed it effectively.

INDIA: RIDING AGAINST THE WAVE

- India, in fact, has been an outlier in its experience with COVID-19. It reached its first peak in mid-September, after which rising mobility has been accompanied with lower daily new cases.
- Globally, many European countries and US have been facing deadly second and third waves around this time with easing of lockdowns and increasing mobility.
- Most countries had to re-impose intermittent lockdowns while India has been increasingly unlocking.
- The prospect of India facing a strong second wave is receding with the start of the vaccination this year.

V-SHAPED ECONOMIC RECOVERY DUE TO TIMELY STRINGENT LOCKDOWN



- Evidence from the experience of Spanish flu establishes that cities that intervened with lockdowns earlier and more aggressively experience stronger recovery in economic front in the long run.
- Learning from this experience, India implemented an early and stringent lockdown from late March to May to curb the pace of spread of COVID-19.

- With the economy brought to a standstill for two complete months, the inevitable effect was a 23.9 per cent contraction in GDP as compared to previous year's quarter.
- The economy was gradually unlocked since June, 2020 and has experienced a V-shaped recovery since then.

FAR-SIGHTED POLICY RESPONSE FOR ECONOMIC RECOVERY

- The fiscal policy response of the Government of India to the pandemic was strategized with a step-by-step approach.
- The initial approach was to provide a cushion for the poor and section of society and to the business sector (especially the MSMEs) to tide over the distress caused by disruption of economic activity.
- This included
    - The Pradhan Mantri Garib Kalyan Yojana (PMGKY) for ensuring food security through public distribution system,
    - direct benefit transfers to widows, pensioners and women,
    - additional funds for MGNREGS, and
    - debt moratoria and liquidity support for businesses.
- With the easing of movement and health-related restrictions in the third quarter, the government transited in a calibrated fashion to support investment and consumption demand through Atmanirbhar 2.0 and 3.0.

Structural Reforms

- India initiated a slew of multi-sectoral supply-side structural reforms to lend flexibility and resilience to supply chains as a part of the Atmanirbhar Bharat Mission (ANB).
- These reforms primarily focus on strengthening the potential of primary and secondary sectors of the economy to create jobs.
- **The modified definition of MSMEs** facilitates expansion and growth of these enterprises without them fearing the loss of government incentives, thereby avoiding the phenomenon of dwarfs among MSMEs.
- **The historic labour reforms** will benefit MSMEs to increase employment, enhance labour productivity and thereby wages in MSMEs.
- The reforms in agriculture markets will enable creation of **'One India one market' for agri-products.**
- **The proposed structural reforms in the mining sector** aim to increase participation of the private sector in mineral exploration, redefine the norms of exploration for auction of mineral blocks to ensure a seamless exploration-cum mining-cum-production regime.

LOOKING FORWARD

- The V-shaped economic recovery while avoiding a second wave of infections make India a sui generis case in this unique, synchronized global recession.
- India is reaping the "lockdown dividend" from the brave, preventive measures adopted at the onset of the pandemic, which were based on the humane principle advocated eloquently in the Mahabharata that **"Saving a life that is in jeopardy is the origin of dharma."**

2. DOES GROWTH LEAD TO DEBT SUSTAINABILITY? YES, BUT NOT VICE- VERSA!

RELEVANCE OF COUNTER-CYCLICAL FISCAL POLICY

- The Fiscal Policy is assumed to be highly effective in a Crisis ridden economy be it the Global Financial Crisis of 2009 or the ensuing COVID-19 Crisis.
- So, to help the economy recover from crisis situations, in general, fiscal policy must be counter-cyclical to smooth out economic cycles instead of exacerbating them.
- As seen for the United States and United Kingdom, the correlation between private sector and public sector net balances is almost perfectly negative (-0.9). In India, however, fiscal policy has not been counter-cyclical in general.
- Indian Kings used to build palaces during famines and droughts to provide employment and improve the economic fortunes of the private sector.
- Economic theory, in effect, makes the same recommendation: in a recessionary year, Government must spend more than during expansionary times.
- Such counter-cyclical fiscal policy stabilizes the business cycle by being contractionary (reduce spending/increase taxes) in good times and expansionary (increase spending/reduce taxes) in bad times.
- On the other hand, a pro-cyclical fiscal policy is the one wherein fiscal policy reinforces the business cycle by being expansionary during good times and contractionary during recessions.

Fiscal policy (FP) stance	Recession (↓ GDP)	Expansion (↑ GDP)	Outcome
Pro-cyclical	Contractionary FP ↓ Govt. Expenditure or /and ↑ Taxes	Expansionary FP ↑ Govt. Expenditure or/and ↓ Taxes	Deepens recessions and amplifies expansions, thereby increasing fluctuations in the business cycle.
Counter-cyclical	Expansionary FP ↑ Govt. Expenditure or/and ↓ Taxes	Contractionary FP ↓ Govt. Expenditure or /and ↑ Taxes	Softens the recession and moderates the expansions, thereby decreasing fluctuations in the business cycle.

HIGHER FISCAL MULTIPLIERS DURING ECONOMIC SLOWDOWN

Different studies attribute this phenomenon of counter-cyclicality of the fiscal multipliers to different channels. Some of these are:

- **Easing financial constraints:**
    - Fiscal policy is more effective in boosting private consumption during recessions due to the presence of binding liquidity constraints on households.

   - Fiscal multipliers are likely to be higher in recessionary periods because private savings increase through the precautionary motive to save.
- **Enhanced consumer sentiment for future productivity increases:**
   - A spending shock during periods of economic slack leads to a persistent increase in the amount of government investment relative to government consumption during a downturn(which is not the case in normal times).
   - This relative increase in government investment spending provides signals about future increases in output and productivity, and hence are reflected in higher measured confidence. This results in higher impact on consumption and output.

THE (R-G) DIFFERENTIAL AND DEBT SUSTAINABILITY IN INDIA

- The ease with which a government can reduce its debt-to-GDP ratio depends primarily on the interest rate-growth differential (IRGD hereafter) or (r-g).
- More negative the IRGD, the easier (and quicker) it is for the Government to ensure debt sustainability.
- Conversely, if the IRGD is positive, the harder (and slower) it is for the Government to ensure debt sustainability.
- A negative IRGD thus creates an enabling environment for debt sustainability.

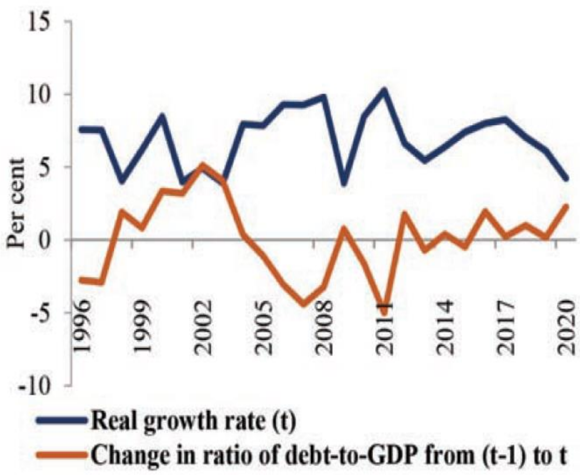
Theory of Debt dynamics

The simple identity for debt dynamics provides an accounting framework to decompose change in the ratio of government debt-to-GDP into its key drivers, namely

1. the difference between the (real or nominal) interest rate charged on the government debt and (real or nominal) growth rates;
2. the debt-to-GDP ratio in the previous period, and
3. the ratio of primary deficit to GDP.

Indian scenario:

- As a norm in India, over the last two and a half decades, GDP growth rates have been greater than interest rates.
- This inequality has thus led to a negative IRGD for most of the years during the last two and a half decades, which, in turn, has caused debt levels to decline.
- Since this inequality reduces the fiscal costs of a debt rollover, it expands the scope for fiscal policy to (i) cater to slowdowns in aggregate demand and (ii) thereby enable growth to foster debt sustainability.



THE IRGD AND DEBT SUSTAINABILITY FOR OTHER ECONOMIES

- Similar to the Indian experience, a strong correlation between IRGD and incremental debt-to-GDP ratio is seen for other countries.
- The years that correspond to negative IRGD are accompanied by a steeper decline in debt levels across the countries.
- India – as one of the high growth economies – is amongst the countries having negative average IRGD, along with other countries such as China, Russia and Singapore.

IN INDIA, GROWTH LEADS TO DEBT SUSTAINABILITY, NOT VICE-VERSA

The argument supporting higher debt leading to lower growth is as follows:

- Higher levels of public debt are accompanied by more taxes in the future to pay for the debt, thereby leading to lower lifetime wealth, which may decrease consumption and savings, eventually resulting in lower aggregate demand and growth rates.
- If higher public debt (i.e. lower public savings) is not accompanied by increase in private savings, it may also lead to lower total savings in the economy.
- This may put upward pressure on the interest rates, resulting in crowding out of investment and thus negatively impacting the growth rates. On the other hand, higher GDP growth leads to lower public debt through the increase in the denominator, i.e. GDP.

The Modigliani-Miller theorem?

- The Modigliani-Miller theorem provides the conceptual bedrock for thinking about debt and capital structure.
- The theorem posits that, under certain ideal conditions, the amount of debt or the capital structure of a firm (or a sovereign by extension) is irrelevant. The theorem employs the concept of "homemade leverage" to arrive at this important conclusion.
- Homemade leverage is a financial concept that holds that as long as investors can borrow on the same terms as a firm, they can artificially duplicate the effects of corporate leverage by creating their own homemade leverage to either nullify or duplicate any debt-equity choice made by the firm.
- Therefore, under ideal conditions, investors would not care between investing in a firm having zero debt and one that chooses to have debt in its capital structure.
- Similarly, under ideal conditions, the investors in a country, which includes the citizens as equity holders via holders of fiat money, would not care about the amount of debt raised by the country.

Indian scenario:

- Evidence over the last two-and-a-half decades demonstrates clearly that in India, higher GDP growth causes the ratio of debt-to-GDP to decline but not vice-versa.
- An examination of the contemporaneous correlation between real GDP growth and ratio of general government debt-to-GDP does not provide clarity about the direction of causation.

Debt Sustainability through higher growth following the Asian Financial Crisis (1997–98)

- During the period 1997-98 to 2002-03, growth slowed down to an average of 5.3 per cent in real terms.
- Despite a fall in growth levels, an expansionary fiscal policy that focused on infrastructure spending was adopted by the Government.
- Government expenditure increased consistently during these years, which led to general government debt reaching record levels.
- This fiscal push imparted the necessary impetus required for the growth to take off and average 8 per cent in real terms over the next six years from 2003-04 to 2008-09.
- High growth in this period brought debt down from the record high levels of 83 per cent of GDP attained in 2003-04 to around 70 per cent of GDP in 2009-10.
- This episode highlights that public debt – when productively streamlined – can enable the economy to reach a higher growth trajectory and, in turn, ensure debt sustainability.

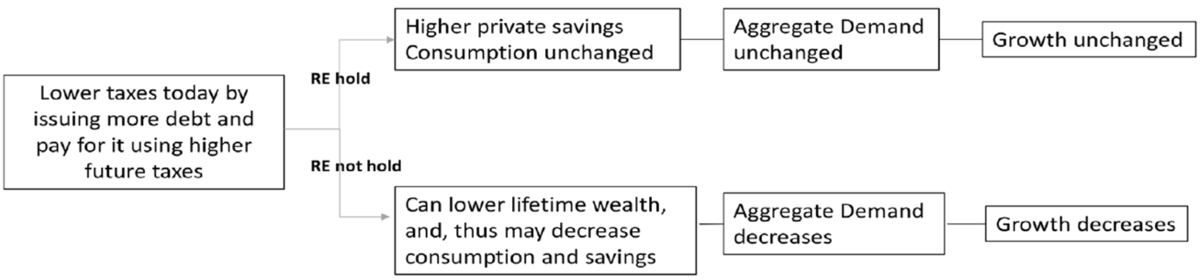
DIRECTION OF CAUSALITY IN OTHER ECONOMIES

- For India and other Emerging Market Economies (EMEs), which have consistently grown their GDP at high rates over the last few decades, the relationship between debt and growth exhibits a clear direction of causality: Higher growth lowers debt-to-GDP ratios but lower debt does not necessarily lead to higher growth.
- The same phenomenon is obtained during the high growth phases for the advanced economies, which have otherwise grown at significantly lower GDP growth rates when compared to India and other EMEs.
- In contrast, across both the high and low growth episodes, in the advanced economies, where GDP growth rates have been low on average over the last few decades, this relationship does not manifest.

CROWDING OUT DUE TO PUBLIC EXPENDITURE?

Ricardian Equivalence Proposition (REP)

- Conceptually, the plausible link from higher incremental debt to lower growth rate is based on potential crowding out of private investment and the Ricardian Equivalence Proposition (REP).
- REP states that forward-looking consumers, who are also assumed to be perfectly rational and perfectly capable, internalize the government's fiscal choices when making their consumption decisions.



Crowding Out?

- The phenomenon of crowding out of private investment is based on the notion that supply of savings in the economy is fixed. Therefore, higher fiscal spending may increase the demand for loanable funds and hence exert an upward pressure on interest rates, thereby discouraging private investment.

- However, for emerging economies such as India, an increase in public expenditure in areas that boost private sector's propensities to save and invest, may enable private investment rather than crowding it out.

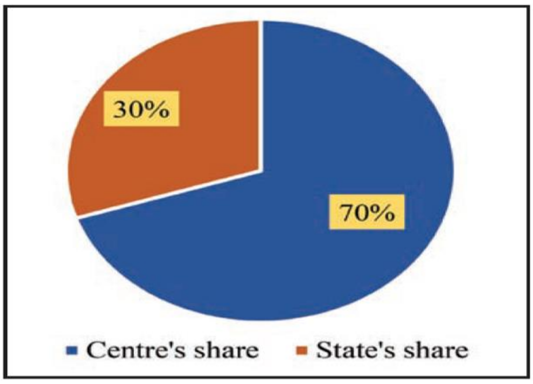
STRUCTURE OF INDIA'S DEBT

Global comparison

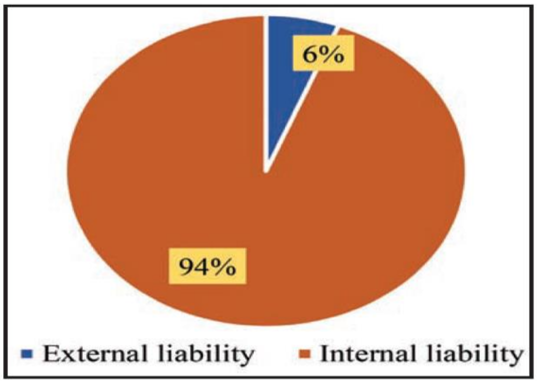
- For India, the government debt level as a proportion of GDP is equal to the median in the group of G-20 OECD countries and in the group of BRICS nations.
- India's overall debt levels as a per cent of GDP are the lowest amongst the group of G-20 OECD countries and also among the group of BRICS nations.
- Moreover, public debt and overall debt level for India has declined since 2003 and has been stable since 2011.

Composition

- Of the total public debt, 70 per cent is held by the Centre.
- The Government's debt portfolio is characterized by very low foreign exchange risk as the external debt is only 2.7 per cent of GDP (5.9 per cent of total Central Government liabilities).



Composition of General Government public debt



Composition of Central Govt. debt

IS INDIA'S CURRENT DEBT SUSTAINABLE?

- As long as the primary deficit is less than a maximum threshold, debt would remain sustainable.
- In a worst case scenario where the real growth is only 4 per cent in the next 10 years, public debt is sustainable.
- Even at high primary deficits, low real growth and high nominal interest rates, India's debt will remain sustainable.

POLICY IMPLICATIONS

- To ensure that the economy remains in good health to avail the full benefit of these significant reforms, the "economic bridge" to the medium and long-term has to be created.

- Only an active fiscal policy – one that recognises that the risks from doing too little are much more than the risks from doing too much – can ensure that this "economic bridge" is well laid out.
- With the IRGD expected to be significantly negative for India in the foreseeable future, pro-cyclical fiscal policies may lead to higher, not lower, debt/GDP ratios.

During economic crises, a well-designed expansionary fiscal policy stance can contribute to better economic outcomes in two ways.

- First, it can boost potential growth with multi-year public investment packages that raise productivity.
- Second, there is a risk of the Indian economy falling into a low wage-growth trap, as has happened in Japan during the last two decades. Implementing the National Infrastructure Pipeline (NIP) via front-ended fiscal spending could generate higher-paying jobs and boost productivity.

Fiscal rules for counter-cyclical fiscal policy

- Fiscal rules are quantitative targets with respect to budgetary aggregates such as deficits, debt, expenditure or revenue, which impose a long-lasting constraint on the fiscal policy.
- Broadly they are referred to as "budgetary institutions", i.e. a set of rules and regulations according to which budgets are prepared, approved and implemented.
- As per IMF, 78 countries had adopted some form of national fiscal rule by the year 2015, as part of the significant reforms in the fiscal framework.
- However, it is important to be cautious since some of these rules may entail a pro-cyclical stance in bad economic times.

3. DOES INDIA'S SOVEREIGN CREDIT RATING REFLECT ITS FUNDAMENTALS? NO!

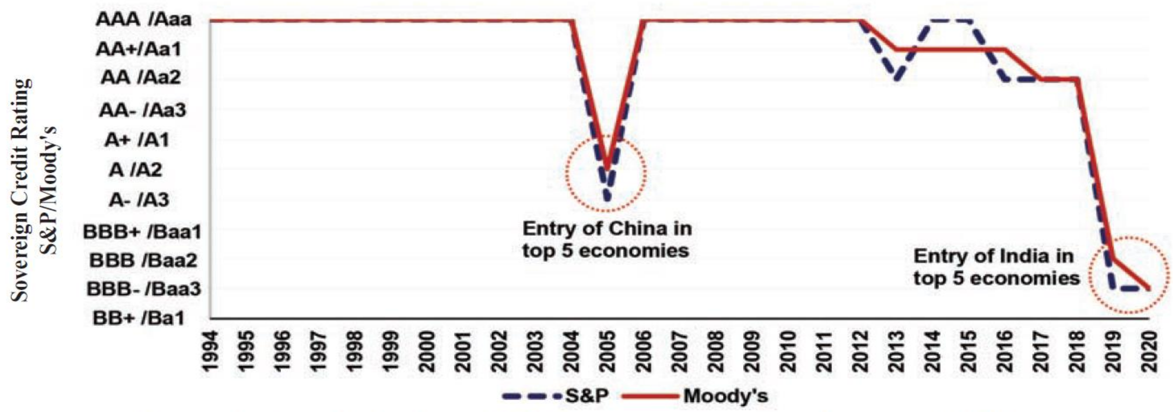
THE BIAS AGAINST EMERGING GIANTS IN SOVEREIGN CREDIT RATINGS

- Never in history has the fifth largest economy in the world been rated a BBB-!

Date	S&P	Moody's	Fitch
June 1998		Ba2*	
October 1998	BB*		
March 2000			BB+*
November 2001			BB*
February 2003		Ba1*	
January 2004			BB+*
January 2004		Baa3	
February 2005	BB+*		
August 2006			BBB-
January 2007	BBB-		
November 2017		Baa2	
June 2020		Baa3	

India's Sovereign Credit Rating (1998-2020)

- Since 1994, the only times that the sovereign credit ratings of the fifth largest economy in current US$ terms has precipitously declined, has been when emerging giants China and India have come to occupy the position.
- A similar trend is seen in PPP current international $ terms. Since 1994, the only times that the sovereign credit ratings of the third largest economy in PPP terms has steeply declined, has been when emerging giants China and India have become the third largest economy.



Sovereign Credit Rating of Fifth Largest Economy (Current US $)

INDIA'S SOVEREIGN CREDIT RATINGS

- This anomaly in sovereign credit ratings has continued for India.
- Currently, India is rated investment grade by three major CRAs – S&P, Moody's and Fitch.
- India's sovereign credit rating downgrades during 1998-2018 are mainly confined to the 1990s on account of the post-Pokhran sanctions in 1998.
- India's sovereign credit ratings upgrades have mainly been witnessed in the second half of 2000s, in recognition of higher economic growth prospects and strengthened fundamentals of the Indian economy.
- During most of the decade of 1990 and early 2000's, India's high rate of economic growth co-existed with a sovereign credit rating of "speculative grade".

What are Sovereign Credit Ratings?

- Sovereign credit ratings seek to quantify issuers' ability to meet debt obligations.
- When favourable, these can facilitate countries access to global capital markets and foreign investment.
- Sovereign credit ratings broadly rate countries as either investment grade or speculative grade, with the latter projected to have a higher likelihood of default on borrowings.
- The threshold of Investment grade is considered to be BBB- for S&P and Fitch and Baa3 for Moody's.

Credit Rating Scale Comparison between some major CRAs

Interpretation	Fitch and S&P	Moody's
Highest quality	AAA	Aaa
High quality	AA+	Aa1
	AA	Aa2
	AA–	Aa3
Strong payment capacity	A+	A1
	A	A2
	A–	A3
Adequate payment capacity	BBB+	Baa1
	BBB	Baa2
	BBB–	Baa3
Likely to fulfill obligations, on going uncertainty	BB+	Ba1
	BB	Ba2
	BB–	Ba3
High-risk obligations	B+	B1
	B	B2
	B–	B3
Vulnerable to default	CCC+	Caa1
	CCC	Caa2
	CCC–	Caa3
Near or in bankruptcy or default	CC	Ca
	C	C
	D	D

DOES INDIA'S SOVEREIGN CREDIT RATING REFLECT ITS FUNDAMENTALS? NO!

- There is evidence of bias in sovereign credit ratings against emerging giants.
- It may be seen that sovereign credit ratings of the fifth largest economy in current US$ terms and that of the third largest economy in PPP $, dip sharply with the entry of China and India in this category.
- Sovereign credit ratings, as a reliable measure of economies' ability to pay, would be expected to be lower for countries with higher short-term debt as per cent of reserves.
- However, this is not the case for India's cohort! India continues to be a negative outlier and is currently rated much below expectation for its level of short-term external debt (as per cent of reserves).

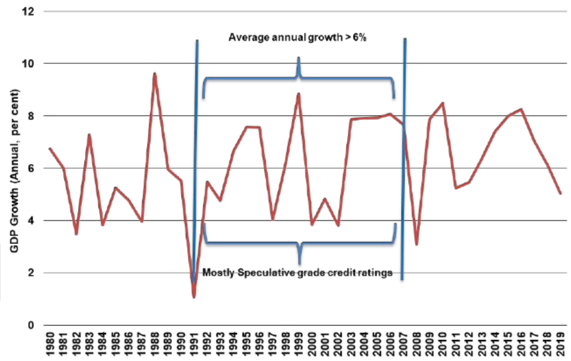
DOES INDIA'S SOVEREIGN CREDIT RATING REFLECT ITS WILLINGNESS AND ABILITY TO PAY? NO!

- Credit ratings map the probability of default and therefore reflect the willingness and ability of borrower to meet its obligations.

- India's willingness to pay is unquestionably demonstrated through its zero sovereign default history.
- Yet, within India's sovereign credit ratings cohort, India is rated much below expectation for its number of sovereign defaults since 1990 (which is zero for India), making it a negative outlier.
- India is again a negative outlier, rated below expectation for the numbers of years since last sovereign default (which is zero for India) within its sovereign credit ratings cohort. Unlike several of its cohort countries, India has never defaulted during the period.

HAVE INDIA'S SOVEREIGN CREDIT RATINGS REFLECTED ITS FUNDAMENTALS IN THE PAST? NO!

- India's negative outlier status w.r.t. its sovereign credit ratings vis-à-vis performance on several parameters remains true not only now but also during the last two decades.
- India has consistently been rated below expectation as compared to its performance on various parameters during the period 2000-20.
- Within its sovereign credit ratings cohort, India has consistently been rated much below expectation for its level of GDP growth rate during the period 2000-20.



India's GDP Growth Annual (Per cent) (1990-2020)

EFFECT OF SOVEREIGN CREDIT RATING CHANGES ON SELECT INDICATORS

- Changes in sovereign credit ratings can affect economies.
- From 1998 till date, India has witnessed four instances of a sovereign credit ratings downgrade and seven instances of a sovereign credit ratings upgrade.
- As ratings do not capture India's fundamentals, it comes as no surprise that past episodes of sovereign credit rating changes for India have not had major adverse impact on select indicators such as Sensex return, foreign exchange rate and yield on government securities.

Summary of Average Changes in Select Indicators during Credit Ratings Downgrades:

- Ratings downgrade, on average, do not appear to have strong negative correlation with Sensex return and exchange rate (INR/USD) in the short, medium and long term.
- G-Sec yields and spread, on average, do not appear to be negatively correlated with ratings downgrades in the medium term.
- Rating downgrades, on average, appear to have a negative correlation with FPI (Equity and Debt) in the long term.

Effect of India's Threshold Sovereign Credit Rating Changes:

- India witnessed one instance of credit rating downgrade from the investment grade to speculative grade during the period 1998-2018. This coincided with the period of international sanctions following the Pokhran nuclear tests in 1998.

- India witnessed three instances of credit ratings upgrade from the speculative grade to the investment grade. These were in mid 2000s, as testament to India's higher economic growth prospects and strong fundamentals.
- Threshold upgrades were correlated with increase in Sensex returns in the medium term and with FPI (Equity and Debt) in the long term.

MACROECONOMIC INDICATORS AS DETERMINANTS OF SOVEREIGN CREDIT RATING CHANGES

- Past episodes of rating changes have no or weak correlation with macroeconomic indicators.
- During 1998-2020 there is no clear pattern between changes in GDP growth and sovereign credit rating changes.
- All sovereign credit ratings upgrades occurred in years that witnessed lower fiscal deficit as compared to the previous year.
- During years of India's sovereign credit rating changes, the average performance of macroeconomic indicators was better than or similar to the previous year. The average performance of macroeconomic indicators further improved or was similar in the year after the sovereign credit rating change.

POLICY IMPLICATIONS

- The Survey found evidence of a systemic under-assessment of India's fundamentals as reflected in its low ratings over a period of at least two decades.
- India's fiscal policy must, therefore, not remain beholden to such a noisy/biased measure of India's fundamentals and should instead reflect Gurudev Rabindranath Thakur's sentiment of a mind without fear.
- In other words, India's fiscal policy should be guided by considerations of growth and development rather than be restrained by biased and subjective sovereign credit ratings.
- Developing economies must come together to address this bias and subjectivity inherent in sovereign credit ratings methodology to prevent exacerbation of crises in future.
- India has already raised the issue of pro-cyclicality of credit ratings in G20. In response, the Financial Stability Board (FSB) is now focusing on assessing the pro-cyclicality of credit rating downgrades.

4. INEQUALITY AND GROWTH: CONFLICT OR CONVERGENCE?

INTRODUCTION

- The Economic Survey 2019-20 argued that ethical wealth creation – by combining the invisible hand of markets with the hand of trust – provides the way forward for India to develop economically.
- An often repeated concern expressed with this economic model pertains to inequality.
- Some commentary, especially in advanced economies post the Global Financial Crisis, argues that inequality is no accident but an essential feature of capitalism.
- The significant reduction in poverty that high economic growth has delivered in India and China presents the most striking challenge to this notion of conflict between economic growth and inequality.
- Could the fact that both the absolute levels of poverty and the rates of economic growth are low in advanced economies generate this conflict?
- If so, could it be that a developing economy such as India can avoid this conflict because of the potential for high levels of economic growth, on the one hand, and the significant scope for poverty reduction, on the other hand?
- This question becomes pertinent especially because of the inevitable focus on inequality following the COVID-19 pandemic.

GROWTH, INEQUALITY, AND SOCIO-ECONOMIC OUTCOMES: INDIA VERSUS THE ADVANCED ECONOMIES

- In the advanced economies, Wilkinson and Pickett (2009), Atkinson (2014) and Piketty (2020) show that higher inequality leads to adverse socio-economic outcomes but income per capita, a measure of economic growth, has little impact.
- However, there is a stark contrast between India and the advanced economies in the correlation of socio-economic outcomes with inequality and income per capita.
- Across the Indian states, it is observed that both inequality and income per capita correlate similarly with socio-economic outcomes.

Are the patterns similar across different types and measures of inequality?

- Inequality of consumption is what matters the most rather than inequality of assets or inequality of income.
- The permanent income hypothesis posits that individuals and households attempt to smooth their consumption over time by borrowing or saving.
- Thus, while the income of an individual varies from year to year, consumption is more permanent as individuals tend to smooth their consumption over time.
- Measures of calculating income do not take into consideration all the available resources that result into well-being. Further, savings and borrowing practices vary across the

income groups as the propensity to save is typically higher among the rich than among the poor.

- Therefore, inequality of income does not reflect the true inequality that individuals and households as consumers encounter.

POVERTY AND INEQUALITY TRADEOFF IN CHINA

- China has made exceptional strides in reducing its extreme poverty rates since 1970s. As per data from China National Bureau of Statistics, the head count ratio of poverty has reduced by 94 per cent from 1980 to 2015 in rural China.
- In contrast, the Gini coefficient of income distribution among rural residents in China rose from 0.241 in 1980 to 0.39 in 2011 or by 62 per cent according to the official estimation.
- The huge fall in poverty came from the poorest quintile increasing their annual income over a long time, while the rise in inequality stemmed from top quintile increasing their income much faster than their poor counterparts.

IS PERFECT EQUALITY OPTIMAL?

- In most cases, inequality of opportunity is much more objectionable than inequality of outcomes, as individuals' opportunities are influenced by endowments that are related to parents and other adults, peers, and a variety of chance occurrences throughout their lifetimes.
- For a developing country such as India, where the growth potential is high and the scope for poverty reduction is also significant, a policy that lifts the poor out of poverty by expanding the overall pie is preferable as redistribution is only feasible if the size of the economic pie grows rapidly.

How do people view inequality: Fairness, self-interest and morality

- *Do people aspire for a perfectly equal society? Experimental evidence suggests that this idea is surprisingly uncertain.*
- *According to various self-interest theories, people will tolerate, support or reject inequality depending on what favours their own position.*

INEQUALITY OR POVERTY?

- Inequality needs to be distinguished from poverty.
- Inequality refers to the degree of dispersion in the distribution of assets, income or consumption.
- Poverty refers to the assets, income or consumption of those at the bottom of the distribution. Poverty could be conceptualised in relative terms or in absolute terms.

Relative poverty

- People feel themselves to be poor, and think others to be poor if they have substantially less than what is commonplace among others in their society. Poverty, in this view, is relative deprivation.
- If the poverty is conceptualized in relative terms, there is no need to distinguish it from inequality. A relative measure of poverty is indeed a measure of inequality.

Absolute poverty

- On the other hand, if poverty is conceptualized in an absolute sense, that is, focusing on the absolute levels of assets, income or consumption of those at the low end of the distribution, then increases in inequality may be accompanied by reduction in poverty.
- **At the level of development that India is currently in, absolute poverty should be of greater concern than inequality.**

RELATIVE IMPACT OF ECONOMIC GROWTH AND INEQUALITY ON POVERTY IN INDIA

- This section examines whether income per capita or inequality impacts poverty the most in India.
- The data for four years (1993, 1999, 2004 and 2011) suggests an overall strong negative relationship, implying that the states with greater income or high per capita Net State Domestic Product (NSDP) experienced low rates of poverty and vice versa. However, such strong relationship is absent between inequality and poverty.
- World Bank (2000) find that India could achieve sustained decline in poverty during 1970s-1990s only when the GDP growth picked up from 3.5 per cent in the initial years.
- Also, rise in the growth of mean consumption was responsible for approximately 87 per cent of the cumulative decline in poverty, while redistribution contributed to only 13 per cent.

SUMMARY AND CONCLUSIONS

- The relationship between inequality and socio-economic outcomes, on the one hand, and economic growth and socio-economic outcomes, on the other hand, is different in India from that observed in advanced economies.
- Unlike in advanced economies, in India economic growth and inequality converge in terms of their effects on socio-economic indicators.
- Economic growth has a far greater impact on poverty alleviation than inequality. Therefore, given India's stage of development, India must continue to focus on economic growth to lift the poor out of poverty by expanding the overall pie.
- This policy focus does not imply that redistributive objectives are unimportant, but that redistribution is only feasible in a developing economy if the size of the economic pie grows.

5. HEALTHCARE TAKES CENTRE STAGE, FINALLY!

INTRODUCTION

- The health of a nation depends critically on 3 important factors related to health care system: Equitable, Affordable & Accountable
- Health affects domestic economic growth directly through labour productivity and the economic burden of illnesses.
- Increasing life expectancy from 50 to 70 years (a 40 per cent increase) could raise the economic growth rate by 1.4 percentage points per year (WHO 2004).
- An increase in public health expenditure from the current levels in India to 3 per cent of GDP can reduce the Out-of-pocket expenditure (OOP) from 60 per cent currently to about 30 per cent. OOP for health increase the risk of vulnerable groups slipping into poverty.

GIVEN SIGNIFICANT MARKET FAILURES, HEALTHCARE NEEDS CAREFUL SYSTEM DESIGN

- **Uncertainty/variability of demand:** The need for health care is driven often by factors that cannot be controlled or predicted. This is also coupled with the nature of demand, which is inelastic especially for emergency care.
- **Information asymmetry:** Buyers of information (patients) rarely know the value of the information until after it is purchased and sometimes never at all. When little information is available on the quality of a product prior to purchase, and the quality of the product is uncertain, quality deteriorates to the lowest level in an unregulated market.
- **Hyperbolic tendencies:** People tend to indulge in risky behavior that may not be in their self-interest. Examples include smoking, eating unhealthy food or delay in seeking care. Individuals also under-estimate health risks and may, therefore, not purchase adequate health insurance.
- **Need for system design in healthcare:** Countries with more fragmented health systems tend to have lower performance as reflected in higher costs, lower efficiency, and poor quality. Therefore, a key role for the government is to actively shape the structure of the healthcare market.

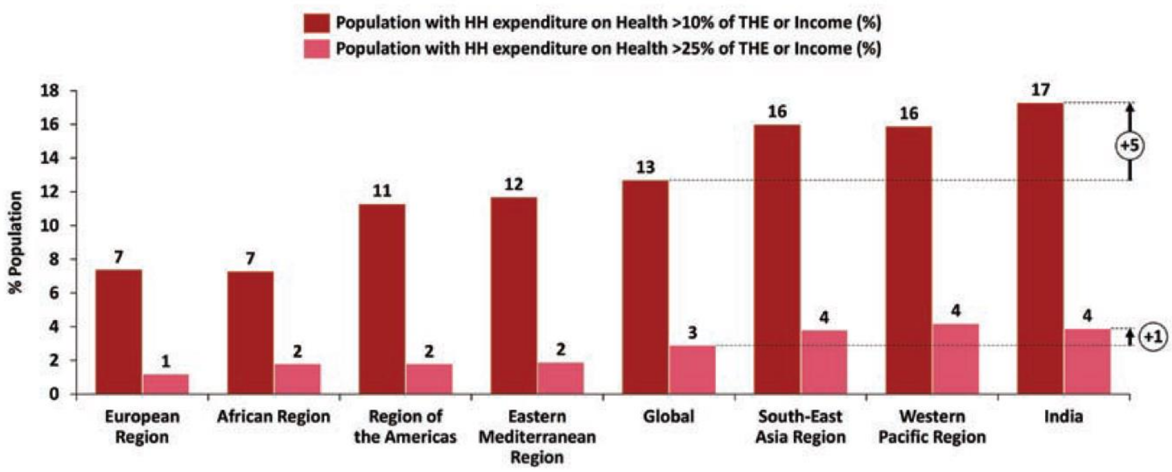
COVID-19 AND INDIA'S HEALTHCARE POLICY

- Following the Covid-19 pandemic, a key portfolio decision that healthcare policy must make is about the relative importance placed on communicable versus non-communicable diseases.
- The Covid-19 pandemic has spread worldwide because it is a communicable disease.
- But as pandemics represent rare events, healthcare policy can become a victim of "saliency bias", which involves over-weighting recent phenomena.
- 71 per cent of global deaths and about 65 per cent of deaths in India are caused by non-communicable diseases.

- Even the infrastructure created by greater healthcare spending in the advanced economies could not deal with the disease burden created by the pandemic.
- As the next health crisis could possibly be drastically different from COVID-19, the focus must be on building the healthcare system generally rather than a specific focus on communicable diseases.

INDIAN HEALTHCARE CURRENTLY

- On quality and access of healthcare, India was ranked 145th out of 180 countries (Global Burden of Disease Study 2016). Only few sub-Saharan countries, some pacific islands, Nepal and Pakistan were ranked below India.
- **Poor health outcomes:** Despite improvements in MMR and IMR, India still needs to improve significantly on these metrics. Countries such as China, Bangladesh, Bhutan, Cambodia, etc. have improved much more on these metrics than India.
- **Low access and utilisation:** At 3-4 per cent, the hospitalisation rates in India are among the lowest in the world; the average for middle income countries is 8-9 per cent and 13-17 per cent for OECD countries.
- **High out-of-pocket health expenditures:** India has one of the highest levels of OOPE in the world. However, the poorest utilising inpatient care and outpatient care has increased from 12.7 per cent to 18.5 per cent and from 15.6 per cent to 18.3 per cent.
- **Low budget allocations for healthcare:** India ranks 179th out of 189 countries in prioritization accorded to health in its government budgets. This prioritisation of health in India is similar to donor-dependent countries such as Haiti and Sudan, and well short of its peers in development.

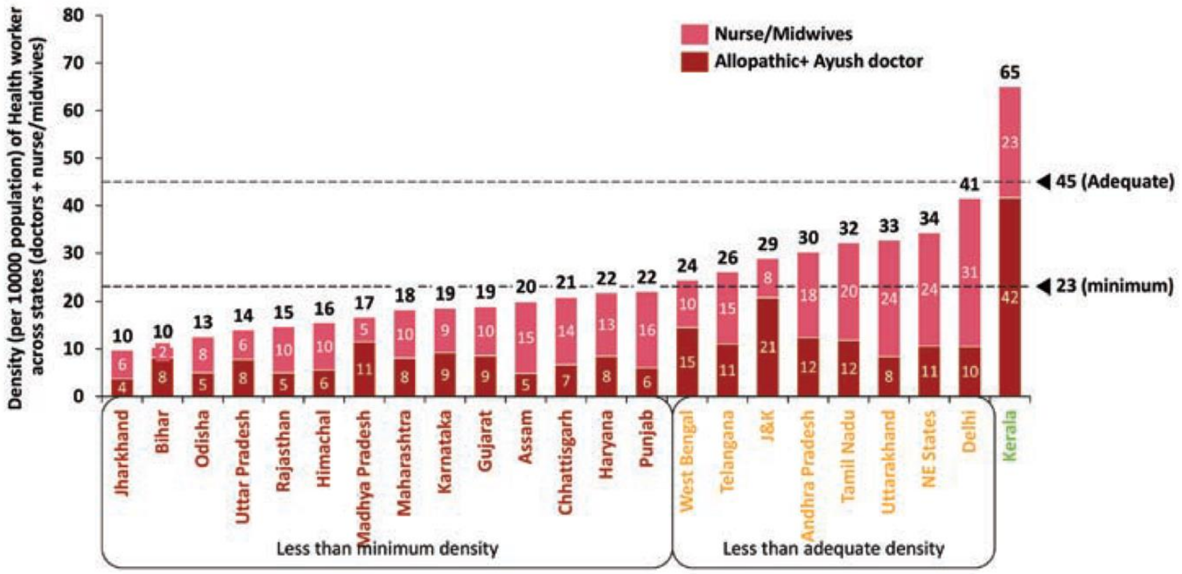


Comparison of Health Expenditure across different regions

Low human resources for health:

- World Health Organization (WHO) identified an aggregate density of health workers to be 44.5 per 10,000 population and an adequate skill-mix of health workers to achieve composite SDG tracer indicators index by 2030.
- The WHO also specified a lower range of 23 health workers per 10,000 population to achieve 80 per cent of births attended by skilled health professionals.
- Although aggregate human resources for health density in India is close to the lower threshold of 23, the distribution of health workforce across states is lop-sided.

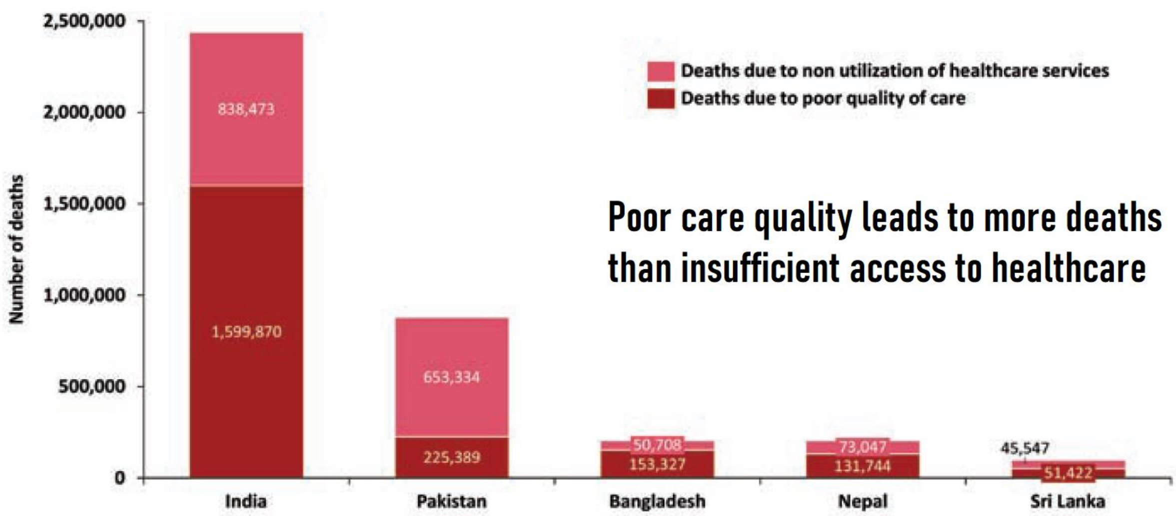
- While Kerala and Jammu and Kashmir have a high density of doctors, states like Punjab, Himachal Pradesh and Chhattisgarh have a larger number of nurses and midwives but a very low density of doctors.
- Andhra Pradesh, Delhi and Tamil Nadu reflect a better balance of doctors and nurses and midwives.



Density of doctors and Nurses/Midwives in different Indian states

UNREGULATED PRIVATE ENTERPRISE IN AN INDUSTRY MARKED BY HIGH LEVEL OF MARKET FAILURE

- Around 74 per cent of outpatient care and 65 per cent of hospitalisation care is provided through the private sector in urban India.
- Unregulated private enterprise can create significant negative effects.
- A large proportion of deaths in India manifests due to poor quality of healthcare than due to insufficient access; this proportion is significantly higher than neighbouring countries and other countries in the world.



- Given the market failures stemming from significant asymmetric information, an unregulated private healthcare system is clearly sub-optimal compared to a system where policies mitigate the problem of asymmetric information.
- Healthcare policymakers should consider creating agencies to assess the quality of the healthcare providers – both doctors and hospitals.
- The Quality and Outcomes Framework (QOF) introduced by the National Health Service (NHS) in the United Kingdom 2004 as well as other quality assessment practices introduced by NHS provide a good example.
- Finally, a sectoral regulator that undertakes regulation and supervision of the healthcare sector must be seriously considered.

INFORMATION ASYMMETRY IN INDIA'S PRIVATE INSURANCE MARKETS

- There is presence of asymmetric information in the Indian private health insurance market.
- The mitigation of information asymmetry would also help lower insurance premiums, enable the offering of better products and help increase the insurance penetration in the country.
- Information utilities that help mitigate the information asymmetry in healthcare sector can be very useful in enhancing overall welfare.

TELEMEDICINE

- Impressive growth has been seen in the adoption of telemedicine in India since the outbreak of the COVID-19 pandemic.
- This coincided with the imposition of lockdown in India and the issuance of the Telemedicine Practice Guidelines 2020 by the Ministry of Health on March 25, 2020.
- eSanjeevani OPD (a patient-to-doctor tele-consultation system) has recorded almost a million consultations since its launch in April 2020.
- The number of telemedicine consultations correlates strongly with the Internet penetration in a state.
- Thus, investing in Internet access, can lead to greater uptake of telemedicine, which in turn can greatly help reduce geographic disparities in healthcare access and utilization.

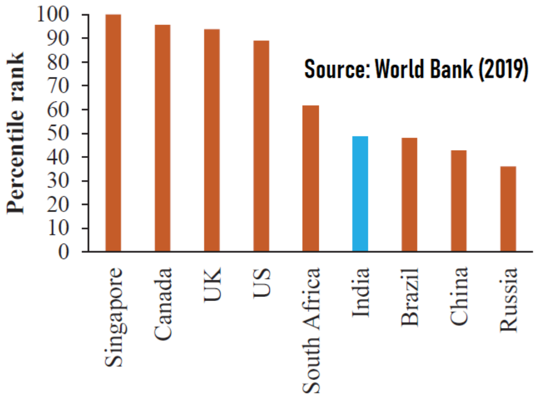
CONCLUSION AND POLICY SUGGESTIONS

- Healthcare policy must not become beholden to "saliency bias", where policy over-weights a recent phenomenon that may represent a six-sigma event.
- Therefore, India's healthcare policy must continue focusing on its long-term healthcare priorities.
- The health infrastructure must be agile. For instance, every hospital may be equipped so that at least one ward in the hospital can be quickly modified to respond to a national health emergency while caring for the normal diseases in usual times.
- Both Central and the State governments need to invest in telemedicine on a mission mode to complement the government's digital health mission and thereby enable greater access to the masses.
- Finally, a sectoral regulator to undertake regulation and supervision of the healthcare sector must be seriously considered.

6. PROCESS REFORMS: ENABLING DECISION-MAKING UNDER UNCERTAINTY

THE PROBLEM OF REGULATORY EFFECTIVENESS

- It is often believed that India's regulatory problems are due to the lack of regulatory standards and poor compliance to process.
- International comparisons, however, show that India ranks better than its peers on having regulatory standards in place and compliance to process.
- The real issue seems to be effectiveness of regulations caused by undue delays, rent seeking, complex regulations and quality of regulation.
- The 'World Rule of Law Index' published by the World Justice Project provides cross country comparison on various aspects of regulatory enforcement.
- The same conclusion can be derived from various World Bank's Regulatory Quality Index and Ease of Doing Business (EoDB) report (2020)
- In the overall EoDB rank, India still lags behind in the sub-categories 'Starting a business' and 'Registering Property' where the country's rank is 136 and 154 respectively.



Cross country comparison of regulatory quality (as of 2019)

- A study by Quality Council of India (done for Economic Survey) shows that the time taken from point of decision of closure to actually the company getting struck off from the Registrar of Companies is 1570 days (i.e. 4.3 years).

Rank	US	UK	Singapore	Canada	Brazil	Russia	China	South Africa	India
Regulatory Enforcement	20	13	3	11	60	73	67	45	74
Government regulations are effectively enforced	20	11	5	12	62	47	63	92	104
Government regulations are applied and enforced without improper influence	16	9	4	8	64	83	63	59	107
Administrative proceedings are conducted without unreasonable delay	33	13	1	17	124	24	23	48	89
Due process is respected in administrative proceedings	18	12	7	5	55	97	98	25	45

Comparison of regulatory standards and regulatory enforcement in 2020 (Source: World Justice Project-2020)

	2015	2020
Regulatory Enforcement overall rank	69	74
Government regulations are effectively enforced	87	104
Government regulations are applied and enforced without improper influence	74	107
Administrative proceedings are conducted without unreasonable delay	75	89
Due process is respected in administrative proceedings	72	45
Number of Countries	102	128

India's rank in various categories of regulatory enforcement (Source: World Justice Project)

THE INEVITABILITY OF INCOMPLETE REGULATIONS

- The problem of over-regulation stems from not recognizing the inevitability of incomplete contracts and regulations in a world of uncertainty.
- Real world contracts are inherently incomplete because of three key reasons that reinforce one another's influence.
    - First, humans are boundedly rational because the future comprises of "unknown unknowns."
    - Second, complexity in framing contracts arises from the difficulties involved in anticipating and specifying all obligations for all parties in full across all possible contingencies.
    - Finally, because of these two features, a third party may be able to observe outcomes ex-post but cannot verify ex-ante decisions unambiguously.
- Thus, a complex, uncertain world makes discretion inevitable where over-regulation, not simpler regulation, leads to excessive and opaque discretion.

Evidence supporting the increase in discretion with over-regulation

- Kanbur & Ronconi (2016) show in their cross-country study on labor laws that the stringency of labour regulation (measured as fine for violation of minimum wage) correlates negatively with the intensity of its enforcement (measured as average medium imprisonment for the same).
- They argue that countries with more stringent labour codes are less likely to enforce them.

THE PROBLEM OF REGULATORY DEFAULT

1) More regulation is added over time regardless of its effectiveness

- Since regulation is a more mechanical, top-down approach, it often becomes the default response of policymakers. This has promoted the culture of 'regulate first, ask question later.'
- Its example in India is the unintended consequences of ever increasing bank regulations which has led to shifting of market activity to "shadow banks" (also called "non-bank financial intermediaries") where the scope for regulatory arbitrage is higher.

2) Discretion is not provided or exercised even when there is a case to do so

- Since regulations are defined, they are easy to measure ex-ante. Bureaucracies will naturally tend to substitute supervision with mechanical regulations and will not exercise discretion even when it is available.
- As an illustration, take the case of public procurement. As per the General Financial Rules (GFRs) guidelines, the Lowest Cost Method, or commonly known as ‘L1’ principle is the most prevalent bidding method used for Goods/Works and Non-Consultancy services.
- Despite so many organizations recommending a need for allowing more discretion in the bidding process on account of technical and quality based parameters, we still mostly use L1. The L1 system persists because of the regulatory default problem.

3) Discretion is questioned with the benefit of hindsight

- Discretion exercised ex-ante in the Initial Public Offering (IPO) of publicly listed companies often gets questioned with the benefit of hindsight when the IPO is oversubscribed and/or the first day gain is large. However, the market value of an unlisted entity is unknown.
- Even after employing the best of valuation techniques, effort, and resources, the actual value of an entity is uncertain until it is traded in the market.

4) Government departments follow default precedent

- Government departments take actions either to tick off boxes in checklist of regulation or follow the default precedent. Thus we see routine appeals made by the government departments against unfavourable judgements in higher courts or tribunals in order to reduce any questioning later on.
- Even though the success rate of litigation that the government enters in is very low, there is a tendency among the policymakers to appeal to the higher authority.

Court/ Tribunal	Petition rate	Success Rate
Supreme Court	87	27
High Court	83	13
ITAT	88*	27

Petition rate and Success rate of the direct taxes (in per cent)

SOLVING FOR DISCRETION

How can supervisors be kept accountable while giving them discretion? Here are three possible ways:

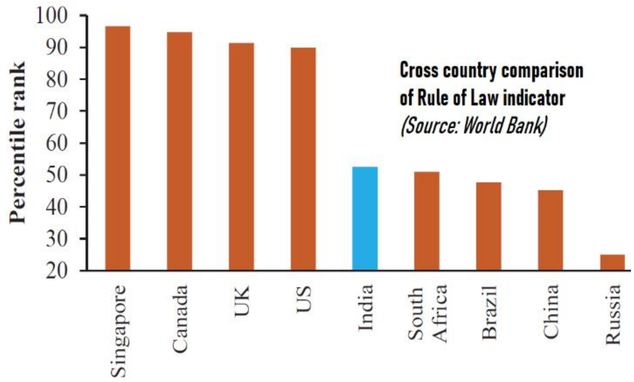
1) Strengthen ex-ante accountability:

- The property rights literature based on incomplete contracts argues for the strengthening of governance in institutions by vesting more power in boards and then holding them accountable ex-ante.
- Instead of relying too much on ex-post audits, which anyway suffer from hindsight bias, ex-ante accountability needs to be entrusted with the boards of institutions.

2) Bring transparency in the decision-making process:

- Transparency, apart from having intrinsic value, is appreciated because it promotes trust in public institutions and makes market efficient.
- The benefits of transparency can be seen from the recent reform in public procurement. The Government in 2016 had set up a dedicated e-market known as Government e Marketplace (GeM) for different goods & services procured or sold by Government/PSUs.

3) Build resilient ex-post resolution mechanism:



- When outcomes are uncertain, it is important to have a resilient ex-post resolution mechanism.
- As per the World Bank' Ease of Doing Buisness report (2020), it takes 1445 days to resolve a commercial contract in India as compared to 589.6 days in OECD high income countries and 120 days in Singapore.
- The performance of India is enforcement of contracts is also seen in its ranking in World Rule of Law Index for 2020, where India ranks 69 out of 128 countries.
- Hence, there is a need for efficient legal systems (i.e., courts & institutions) such as Insolvency & Bankruptcy Code, Debt Recovery Tribunals etc.
- The "Rule of Law" indicator of the World Governance Index reiterates the same story.

Particulars	India Rank out of 128
World Rule of Law Index	69
People can Access and Afford Civil Justice	115
Civil Justice is not subject to unreasonable delay[7]	123
Civil Justice is effectively enforced	102
Alternative dispute resolution mechanism is accessible	88

India's rank in the World Rule of Law Index (2020)

DIRECTION OF ADMINISTRATIVE PROCESS REFORMS

The above approach is visible in recent reforms. Here are two recent examples:

1. Government merged the existing 29 central labour laws into 4 labour codes. The Code on wages was passed in July 2019. In Setember 2020, three bills (i) Industrial Relations Code, 2020, (ii) Code on Occupational Safety, Health & Working Conditions Bill, 2020 (iii) Social Security Code, 2020 were passed in the parliament.
2. To reduce the compliance burden of the BPO industry, government announced new guidelines on OSPs on 5th November 2020. Under the new regulations, the registration requirement for OSPs has been done away with altogether.

Recommendations

- Since Independence, a plethora of autonomous bodies had proliferated. There is a need to prune them consistently not just from a cost perspective but in order to maintain transparency, accountability and efficient supervision.
- Finally, there is a case for enacting Transparency of Rules Act to end any asymmetry of information regarding rules and regulations faced by a citizen.

7. REGULATORY FORBEARANCE AN EMERGENCY MEDICINE,NOT STAPLE DIET!

INTRODUCTION

- To address the economic challenges posed by the Covid-19 pandemic, financial regulators across the world have adopted regulatory forbearance. India is no exception.
- In 2008, anticipating the global financial crisis, RBI introduced the policy of regulatory forbearance.
- It relaxed the norms for restructuring stressed assets - downgrading the asset to non-performing
- status was no longer mandatory and required no additional provisioning.
- This chapter studies the impact of the 2008 forbearance policy on banks, firms, and the economy in general to glean important lessons for the current times.

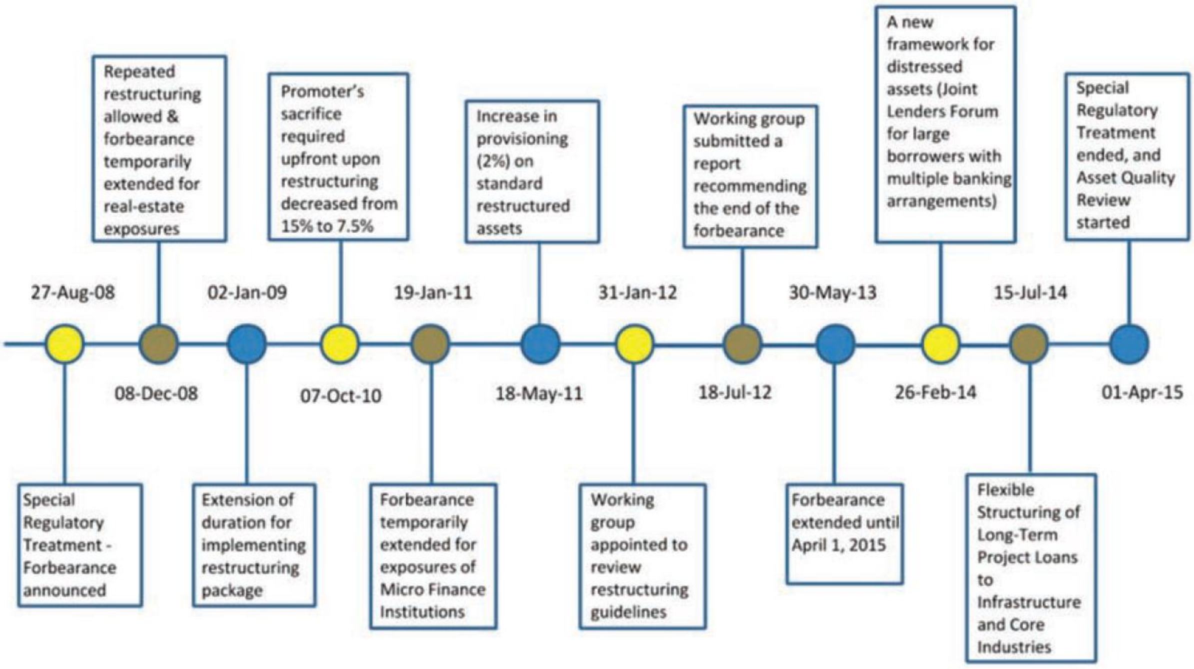
ECONOMIC RATIONALE FOR FORBEARANCE

WITHOUT FORBEARANCE	WITH FORBEARANCE
If the project is viable, the bank would restructure the asset and downgrade it to a Non-Performing Asset (NPA) and provision for the same.	If the project is viable, the bank would restructure the asset. As restructured assets do not require the same level of provisioning as NPAs, inadequate provisions are made.
If the project is unviable, the bank would not restructure the loan and declare the asset as non-performing. Crucially, banks do not gain by restructuring unviable projects in this case.	Capital-starved banks now have an incentive to restructure even unviable projects to reduce provisioning and avoid the consequent hit on capital.

REGULATORY FORBEARANCE PROVISIONS

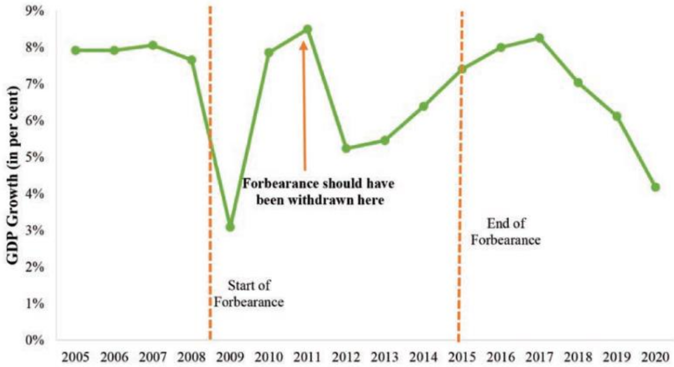
- As per regulations prevalent before August 2008, non-industrial non-SME accounts classified as ‘standard assets’ were to be re-classified as ‘sub-standard assets’ upon restructuring. The new relaxed norms entitled borrowers to retain the same asset classification upon restructuring, subject to a few conditions.
- Since accounts would no longer be classified as sub-standard on restructuring, banks were no longer required to make the general provision on total outstanding for substandard assets.
- The relaxed norms were extended to already restructured loans as well. Note, before 2008, only loans with no prior history of restructuring were considered for restructuring.

Timeline of announcements relating to the forbearance regime of 2008-2015:



THE ORIGINAL SIN: THE SEVEN-YEAR FORBEARANCE!

- The forbearance policies had desired short-term economic effects.
- GDP growth recovered from a low of 3.1% in FY2009 to 8.5% within two years. The growth in total revenue of listed firms also recovered from a low of 4.88% during the crisis to a high of over 20% in 2011.
- The time was therefore ripe to withdraw the forbearance.
- However, the central bank decided to continue with the same. The forbearance continued for five more years till 2015, even when its withdrawal was recommended.
- The share of restructured loans increased from 0.74% in FY2008 to 6.94% in FY2015. On the contrary, the reported gross NPAs of banks increased only modestly from 2.2% in FY2008 to 4.3% in FY2015. Forbearance thus helped banks to hide a lot of bad loans.



Growth rate of Real GDP

- The P. J. Nayak Committee (2014), constituted by RBI, highlighted in its report submitted in May 2014 the twin concerns stemming from the forbearance regime:
  - ever-greening of loans by classifying NPAs as restructured assets and
  - the resultant undercapitalization of banks.
- Once the forbearance policy was discontinued in 2015, RBI conducted an Asset Quality Review to know the exact amount of bad loans present in the banking system.
- As a result, banks' disclosed NPAs increased significantly from 2014-15 to 2015-16. In the absence of forbearance, banks preferred disclosing NPAs to the restructuring of loans.
- Thus, the roots of the present banking crisis go back to the prolonged forbearance policies followed between 2008 and 2015.

COST OF EXTENDED FORBEARANCE VERSUS EARLY RESOLUTION OF BANKING CRISES: INTERNATIONAL EVIDENCE

Early Resolvers

- The countries that reached their peak NPA during 2009 and 2010 (2009-2010) are called "Early Resolvers".
- These countries were likely early enough to recognize the bad loan problem and take the necessary steps to address it.
- Their share of non-performing loans started declining after 2009-10.
- These include countries like the United States, which immediately recognized toxic assets and launched a recapitalization program.

Late Resolvers

- In contrast, "Late Resolvers" correspond to the countries that reached their peak NPAs in 2015-19, i.e. up to a decade post the crisis.
- As shown in the case of India, a delay in taking actions to recognize and resolve bad loans may have caused the NPAs to culminate many years after the crisis.
- NPAs for the late resolvers were more than thrice that for the early resolvers.
- The impact on GDP growth for the late resolvers (-1.7% on average) was significantly worse than that for the early resolvers (-0.8% on average).

Early Resolvers (2009-2010)		Late Resolvers (2015-2019)	
	Peak NPA as % of assets		Peak NPA as % of assets
Brazil	4.21	Argentina	5.75
Canada	1.27	China	2.40
Germany	3.31	India	9.98
Indonesia	3.29	Italy	18.06
Saudi Arabia	3.29	Portugal	17.48
South Africa	5.94	Russia	10.12
United States	4.96	Turkey	5.02
Australia	2.15		
South Korea	0.59		
Average	3.22	Average	9.83

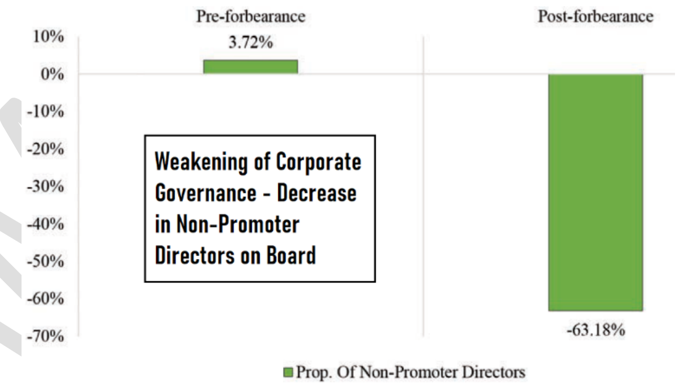
NPA ratio of countries and when that peaked after the Global Financial Crisis

ADVERSE IMPACT OF FORBEARANCE ON BANK PERFORMANCE AND LENDING

- **Undercapitalization of Banks:** The Capital Adequacy Ratio (CAR) was lower by close to 2.5 percentage points for banks with a higher share of restructured loans when compared to banks with fewer restructured assets in 2014-15. Thus, forbearance left several banks undercapitalized.
- **Lending to Zombie Firms:** The forbearance period witnessed an increase in lending to unproductive firms, popularly referred to as 'zombies'.
- **Ever-greening of Loans:** One way of ever-greening loans is lending a new loan to a borrower on the verge of default, near the repayment date of an existing loan, to facilitate

its repayment. Such transactions go undetected as banks are not required to disclose them, unlike restructurings that warrant disclosures.

- **Weakening of Corporate Governance in Borrowers benefitting from forbearance:** The increased influence of the incumbent management resulted in the weakening of the firms' governance which, in turn, had detrimental consequences in the longer run.
- **Deterioration in the Quality of the Board:** Forbearance led to an increase in incumbent management's influence as:
    - the presence of independent directors on boards declined,
    - the propensity of a CEO becoming the chairman increased,
    - having a connected director on board became more likely, and
    - the bank monitoring declined as a lower number of bank-nominated directors occupied board seats.
- **Inefficient allocation of capital by borrowers that benefited from forbearance:** Aided by poor governance, beneficiary firms under the forbearance regime also seem to have misallocated capital in unviable projects.
- **Mis-appropriation of resources in borrowers that benefited from forbearance:** Another likely consequence of strong management influence and declining governance is the increase in private benefits being redirected to the firms' management.
- **Deterioration in performance of borrowers benefiting from forbearance:** There was a significant increase in leverage (15.7%), measured as the ratio of debt to equity, accompanied by a 27.2% decline in the interest coverage for firms restructured during the forbearance regime.



- **Increased defaults by borrowers benefitting from forbearance:** Restructured firms in the forbearance window also witnessed a decrease in their credit ratings. The forbearance regime also accompanied an increase in defaults by restructured firms when compared to a decrease in the same in the pre-forbearance era.

BANK CLEAN-UP WITHOUT ADEQUATE CAPITALIZATION

- Finally, after continuing forbearance for seven years, the RBI withdrew regulatory forbearance starting from April 2015.
- The RBI also decided to conduct a detailed Asset Quality Review (AQR) to know the true status of banks' NPAs. However, the AQR exacerbated the problem as it neither mandated capital raising by banks nor provided a capital backstop even though it was certain that banks' capital would be adversely impacted following the AQR.
- **The crucial difference vis-à-vis bank clean-ups in the rest of the world:**
    - First, the clean-up was undertaken when the country was not undergoing an economic crisis.
    - Second, there was neither a forced recapitalization of the banks nor was an explicit capital backstop provided for.
- **The inadequate clean-up of bank balance sheets:** In most cases, the identified NPAs were smaller in comparison to the loans restructured by the bank.

- **Under-estimation of required bank capital:** The actual capital required by public sector banks significantly exceeded the amount that the RBI seems to have estimated before the AQR.
- **Adverse impact on lending:** As the banks were unable to raise adequate fresh capital after the clean-up, their lending reduced.
- **Decline in Firm's Capital Investment:** Banks' tightening of credit supply negatively impacts healthy borrowers as it forces firms to cut down on their investments and capital expenditures. Thus, the likelihood of stalling of ongoing projects increases.

IMPLICATIONS FOR THE CURRENT FORBEARANCE REGIME

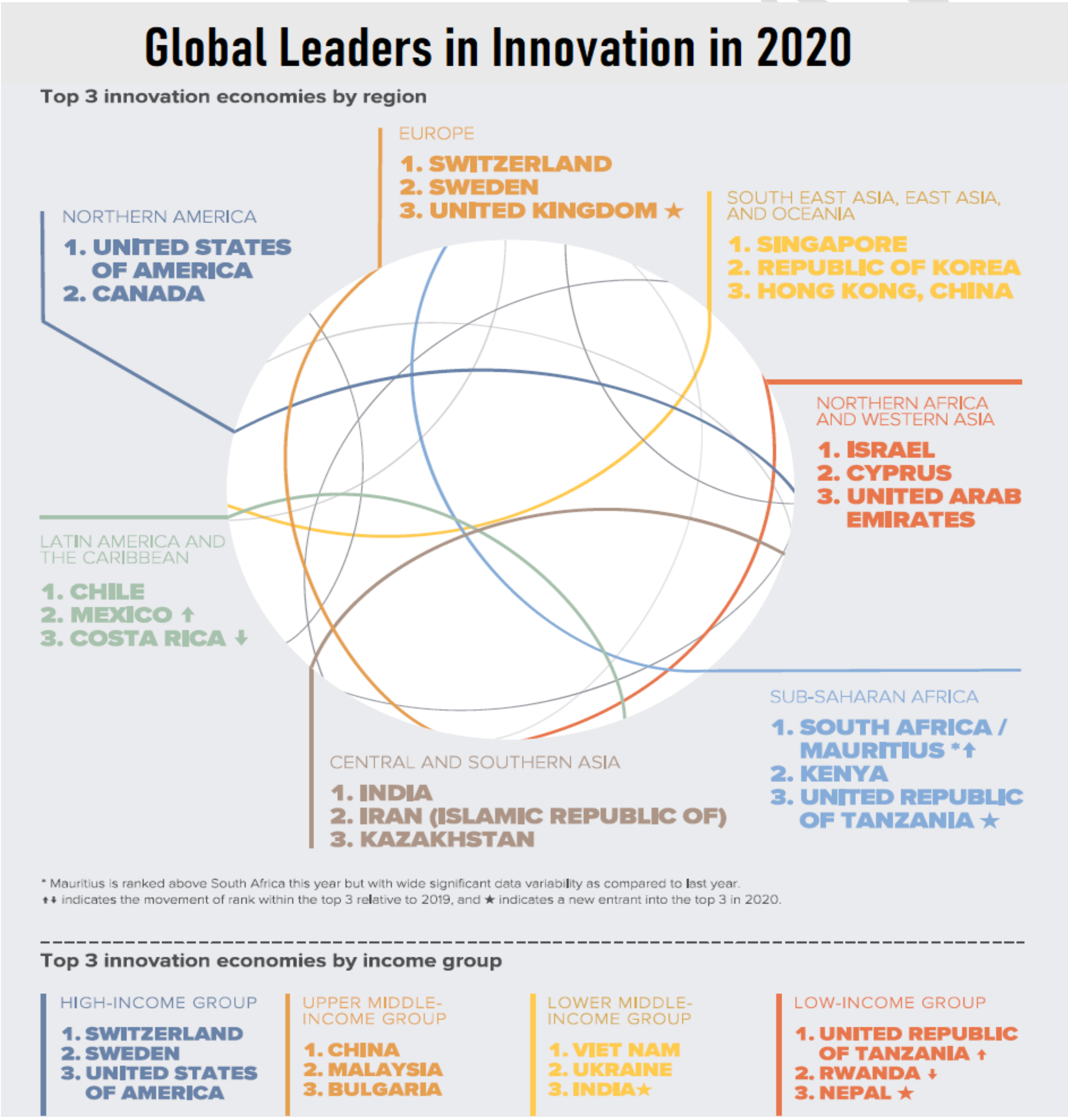
Careful analysis of the regulatory forbearance offers key learnings:

- Forbearance represents emergency medicine that should be discontinued at the first opportunity when the economy exhibits recovery, not a staple diet that gets continued for years.
- A clean-up of bank balance sheets is necessary when the forbearance is discontinued.
- The asset quality review must account for all the creative ways in which banks can evergreen their loans.
- A clean-up exercise should be accompanied by mandatory recapitalization based on a thorough evaluation of the capital requirements post an asset quality review.
- Apart from re-capitalizing banks, it is important to enhance the quality of their governance.
- While the learnings from the previous episode must be employed to avoid a recurrence, ex-post analysis of complex phenomena must be disciplined by the insights highlighted.
- Finally, the legal infrastructure for the recovery of loans needs to be strengthened de facto.

8. INNOVATION: TRENDING UP BUT NEEDS THRUST, ESPECIALLY FROM THE PRIVATE SECTOR

WHY INNOVATION MATTERS

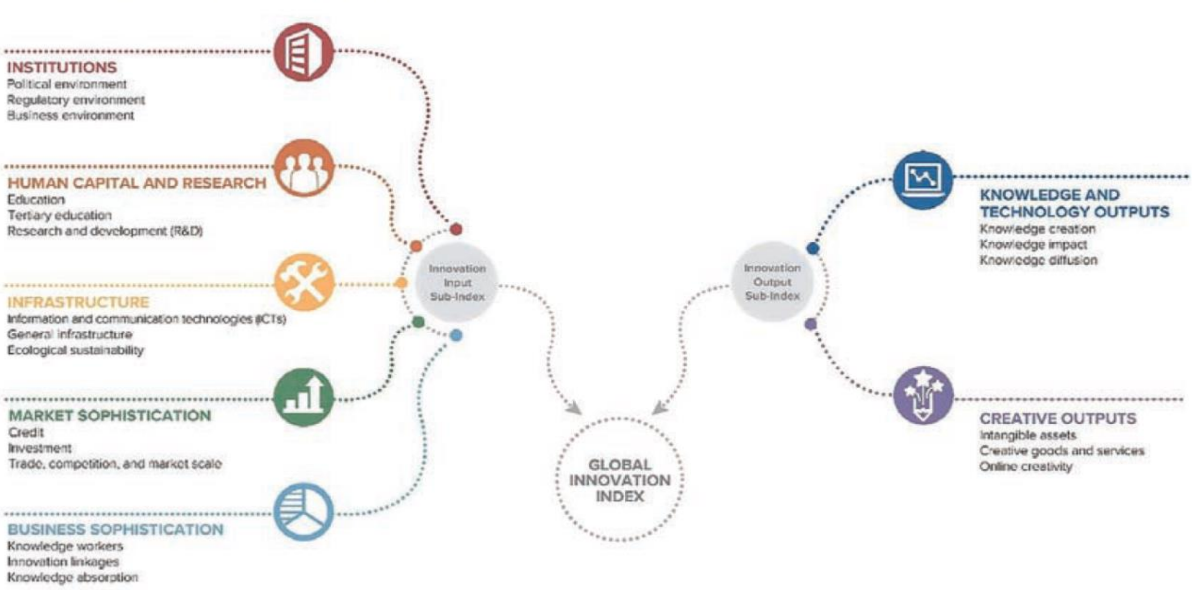
- The relation between innovation and research sector received attention with endogenous growth models.
- Some postulated that R&D activities could make long run growth possible.
- An increase of 10 per cent in R&D investment has been associated with productivity gains ranging from 1.1 per cent to 1.4 per cent.



THE GLOBAL INNOVATION INDEX (GII)

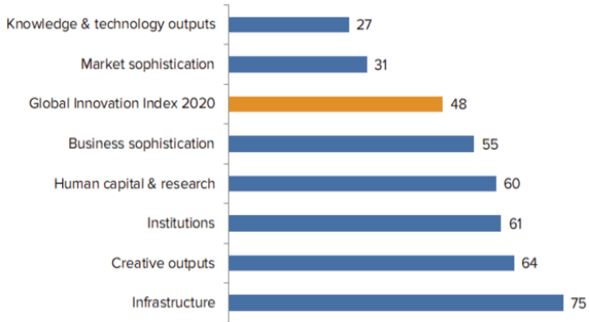
- The GII is co-published by Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations. It seeks to assist economies in evaluating their innovation performance.
- GII has two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars, each consisting of three sub-pillars, further divided into a total of 80 indicators.
- The Innovation Input sub-index and the Innovation Output Sub-Index have equal weight in calculating the overall GII.

Framework of the Global Innovation Index 2020



HOW DOES INDIA PERFORM ON INNOVATION?

- India ranks 48th amongst 131 countries in terms of its innovation performance as measured using the Global Innovation Index (GII) 2020.
- India ranks 45th and 57th on the output and input sub-indices respectively. India entered the top 50 innovating countries for the first time since the inception of the index in 2007.



India's performance on pillars of the Global Innovation Index 2020 (rank)

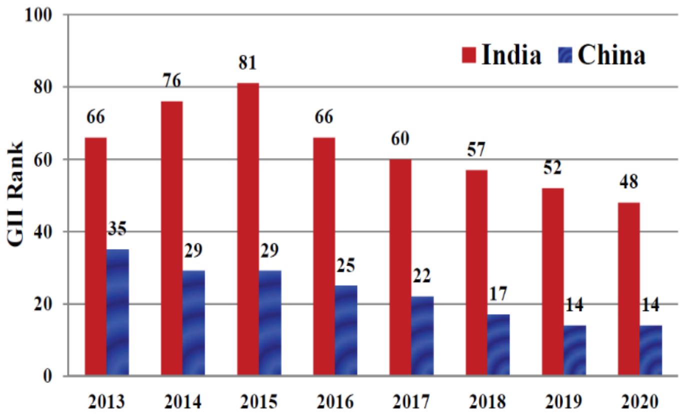
- Along with three other economies – Vietnam, Republic of Moldova and Kenya, India has the rare distinction of being an innovation achiever for ten consecutive years.
- India performed particularly well regionally and in its income category, ranking first in the GII rankings in Central and South Asia, and third amongst lower middle-income group economies.
- India performed best on the knowledge & technology outputs (KTO) pillar (rank 27) followed by Market Sophistication pillar (rank 31). India performed lowest on the Infrastructure pillar (rank 75).

- India ranks tenth in the Knowledge Diffusion sub-pillar of the KTO pillar. India's first rank in the Information and Communications Technology (ICT) services exports as per cent of total trade shows its leadership in the global ICT services industry.

INDIA'S INNOVATION PERFORMANCE VIS-À-VIS TOP TEN ECONOMIES

- Although India has performed above expectation on innovation w.r.t. its level of development, India lags behind most other large economies (top ten in terms of GDP current US$) on most indicators of innovation.
- Although India performs in line with its level of development, India ranks second lowest, after Brazil, on the overall GII.

TRENDS IN INDIA'S INNOVATION PERFORMANCE



GII Performance (2013-20)

- India has consistently improved on GII from rank 81 in 2015 to rank 48 in 2020.
- While India has performed impressively, there is scope for much more improvement. China has improved its rank from 29 to 14 during the same period.
- China embarked on an ambitious R&D roadmap to become an innovation-oriented economy. In 2006, China initiated a 15-year "Medium to Long Term Plan (MLP) for the Development of Science and Technology".

R&D EXPENDITURE IN INDIA

- Although India's Gross Domestic Expenditure on R&D (GERD) is in line with expectation for its level of development, there is much scope for improvement.
- Other top ten economies such as USA, China, Japan, Germany and France have higher than expected GERD for their level of development.
- In India, the Government contributes 56 per cent of GERD while this proportion is less than 20 per cent in each of the top ten economies.
- Yet, India's GERD is much lower than that of the top ten economies because India's business sector contributes a much smaller per cent to total GERD (about 37 per cent) than the business sector in all the other large economies such as China, US, Japan and UK (68 per cent on average).

IS INDIA EFFECTIVELY TRANSLATING INNOVATION INPUTS INTO INNOVATION OUTPUTS?

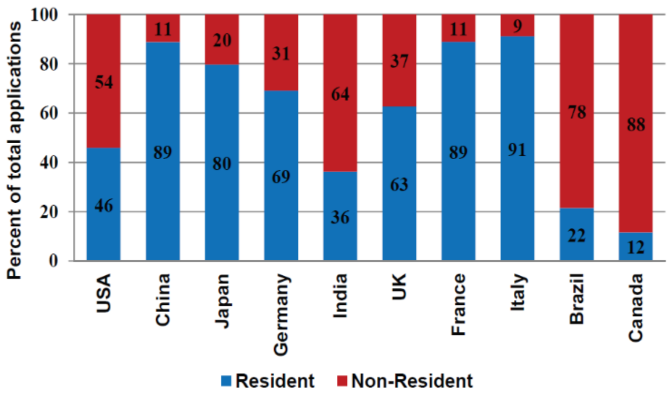
- India is able to effectively translate investments in innovation inputs to produce a higher level of innovation outputs.
- This implies that India stands to gain more from its investments into innovation than many other countries.
- With higher investments, it may be possible that this relationship between innovation inputs and innovation outputs becomes even more favourable for India, and there is greater "bang for the buck" as regards India's investments in innovation.

Which innovation inputs can best explain innovation outputs?

- Improvements in institutions and business sophistication could lead to higher innovation output performance.
- There is potential for higher business sophistication to lead to better performance in knowledge & technology outputs.
- Improvements in institutions and business sophistication could lead to higher creative output performance. Higher income is also expected to lead to better performance in creative outputs.

INDIA'S PERFORMANCE ON PATENTS AND TRADEMARKS

- The total number of patents filed in India has risen steeply since 1999, mainly on account of increase in patent applications filed by non-residents.
- While patent applications filed by residents have increased steadily since 1999, they have risen at a much lower rate than patent applications by non-residents.
- Unlike India, Brazil and Canada, other top ten economies (GDP current US$) have a higher share of patent applications by residents than non-residents (Figure 39). Improving resident share in patents should be a matter of priority to make advancements in innovation.



Patent Applications Filed by Residents and Non-Residents, 2019

IS INDIAN INNOVATION AFFECTED BY ACCESS TO FINANCE?

- India and Brazil rank much below expectation for their level of equity market development in the overall GII, innovation outputs and innovation inputs amongst the top ten largest economies.
- India and Brazil rank much below expectation for their level of debt market development in the overall GII, innovation outputs and innovation inputs amongst the top ten largest economies.

R&D Activities in India

- *India is a highly attractive R&D destination on account of the opportunities offered for outsourcing, highly skilled labour force, low cost labour and R&D activities.*
- *This has led to large scale off-shoring from US firms, especially in the IT industry.*

POLICY IMPLICATIONS

- India needs greater thrust on innovation to catapult itself to a higher growth trajectory and become the third largest economy in GDP current US$ in the near future.

- This requires boosting gross expenditure on R&D from 0.7 per cent of GDP currently, to at least the average level of GERD in other top ten economies (GDP current US$) of over two per cent.
- It also involves significantly scaling up R&D personnel and researchers in the country, especially in the private sector.
- This requires boosting business sector contribution to total GERD from 37 per cent currently, to close to 68 per cent – the average business contribution in GERD of other top ten economies.
- For India to become an innovation leader, its residents' share in total patent applications filed in the country must rise from the current level of 36 per cent.
- India should focus on improving its performance on institutions and business sophistication since higher performance on these dimensions seem to consistently suggest higher innovation outputs performance.

9. JAY HO: AYUSHMAN BHARAT'S JAN AROGYA YOJANA (JAY) AND HEALTH OUTCOMES

INTRODUCTION

Horizon Problem

- Governments may suffer from the "horizon problem" in a democracy, where the time horizon over which the benefits of public goods reach the electorate may be longer than the electoral cycles.
- The myopia resulting from the horizon problem may again lead to under-provisioning of public goods. Therefore, the provision of public goods that generate long-term gains to the economy and the society represents a key aspect of governance in a democratic polity.

Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM-JAY)

- In 2018, Government of India approved the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM-JAY) to provide healthcare access to the most vulnerable sections in the country.
- The households were included based on the deprivation and occupational criteria from the Socio-Economic Caste Census 2011 (SECC 2011) for rural and urban areas respectively.
- The scheme provides for healthcare of up to INR 5 lakh per family per year on a family floater basis, which means that it can be used by one or all members of the family.
- The scheme provides for secondary and tertiary hospitalization through a network of public and empanelled private healthcare providers.
- It also provides for three days of pre-hospitalization and 15 days of post-hospitalization expenses, places no cap on age and gender, or size of a family and is portable across the country.
- It covers 1573 procedures including 23 specialties.
- AB-PM-JAY also aims to set up 150,000 health and wellness centres to provide comprehensive primary health care service to the entire population.

PM-JAY: STATUS AND PROGRESS SO FAR

- As per the latest annual report of PM-JAY released by the National Health Authority (NHA, 2019), the status of implementation is as follows:
  - 32 states and UTs implement the scheme
  - 13.48 crore E-cards have been issued
  - Treatments worth INR 7,490 crore have been provided (1.55 crores hospital admission)
  - 24,215 hospitals empanelled
  - 1.5 crore users have registered on the scheme's website (mera.pmjay.gov.in)

- General medicine has been the overwhelmingly major clinical specialty used since 2018 with its share continuously growing. It is followed by general surgery and obstetrics and gynaecology. These three categories combined made up close to 56 per cent of claims received in October-December 2019.
- Dialysis itself comprises a large chunk (30 per cent) of the 'general medicine' category claims under PM-JAY. This is despite the fact that the Pradhan Mantri National dialysis Programme, which was rolled out in 2016, also provides free dialysis to kidney patients in district hospitals.

PUBLIC GOODS, DEMOCRACIES AND GOVERNANCE

- Access to safe drinking water, sanitation, transport, medical care, and schools is essential both as a direct component of well-being as well as inputs into productive capabilities.
- Since public goods are not adequately provided for by the markets, they must be supplied by the government.
- Despite the importance of the delivery of public goods, governments may suffer from the "horizon problem" in democracies, where the time horizon over which the benefits of public goods reach the electorate may be longer than the electoral cycles.
- Research in political economy shows that democratic rulers are often short-sighted due to the constant political challenge presented through electoral cycles.
- As a result, many democratically elected governments can focus only on short-term gains rather than commit to long-term projects.
- Therefore, the provision of public goods that generate long-term gains to the economy and the society represents a key aspect of governance in a democratic polity.

The impact of health insurance coverage on health outcomes: Thailand's 30 Baht Project

- In 2001, Thailand became the first lower-middle income country to introduce universal health coverage reforms, replacing the old means-tested health care for low income households with a more comprehensive co-payment insurance scheme, called the '30 Baht Project'.
- The 30 Baht scheme was later replaced with UHC with no co-payment While these reforms were criticised to a great extent, they proved popular among the poorer Thais, primarily in the rural areas.
- As a result of its robust healthcare system, Thailand became the first Asian country to eliminate HIV transmission from mother to child in 2016.

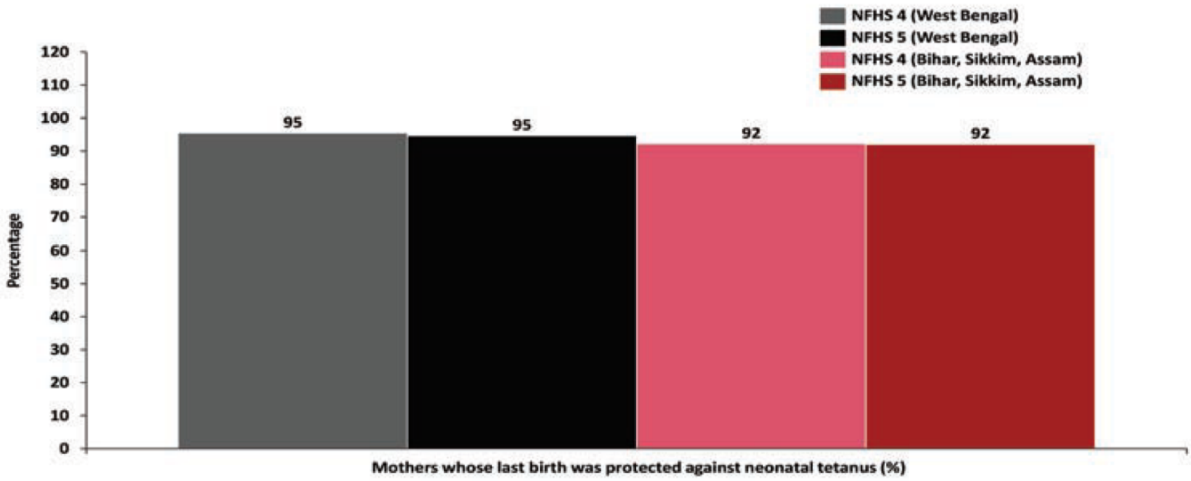
PM-JAY AND COVID-19

- First, dialysis is a common procedure availed under PM-JAY. Its use did not diminish at the onset of Covid-19 or during the lockdown.
- Second, the number of dialysis claims have only been growing. This fact highlights that the National Dialysis Mission could be merged with PM-JAY.
- Third, while access to medical services were classified as essential services during the lockdown, care-seeking exhibited a V-shaped behaviour during the lockdown and unlock phases with the pre-Covid-19 levels being reached in December 2020.

PM-JAY AND HEALTH OUTCOMES: DIFFERENCE-IN-DIFFERENCE ESTIMATES

Comparing West Bengal versus its neighbours (Bihar, Sikkim, Assam)

- The proportion of households that had health insurance increased in Bihar, Assam and Sikkim from 2015-16 to 2019-20 by 89 per cent while it decreased by 12 per cent over the same period in West Bengal.
- From 2015-16 to 2019-20, infant mortality rates declined by 20 per cent for West Bengal and by 28 per cent for the three neighbouring states. Similarly, while Bengal saw a fall of 20 per cent in its Under-5 mortality rate, the neighbours witnessed a 27 per cent reduction.
- Modern methods of contraception, female sterilization and pill usage went up by 36 per cent, 22 per cent and 28 per cent respectively in the three neighbouring states while the respective changes for West Bengal were negligible.
- Various metrics for mother and child care improved more in the three neighbouring states than in West Bengal.

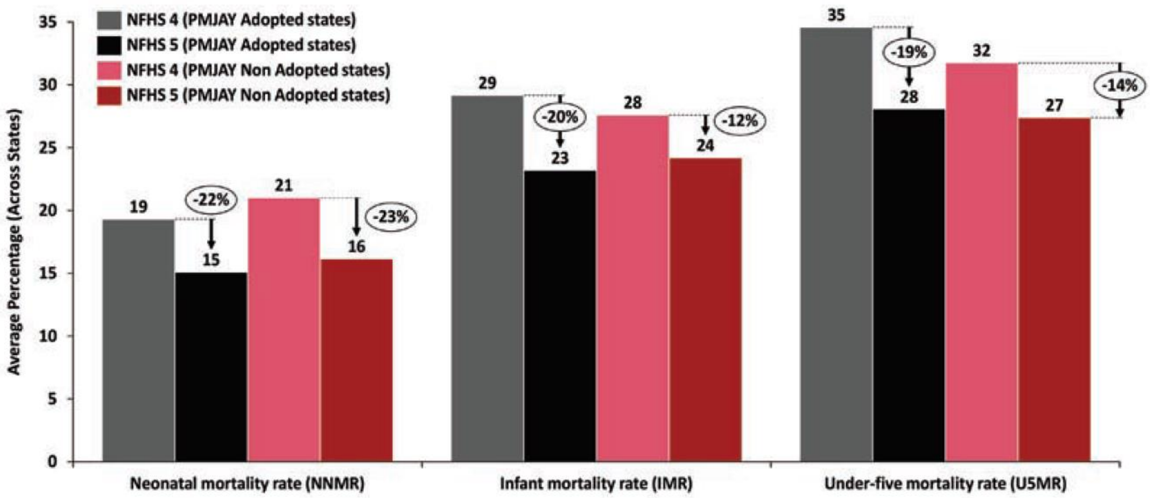


Maternal and Child Health: West Bengal versus Adjoining States (Bihar, Sikkim, Assam)

Comparing all States that adopted PM-JAY versus those that did not

- While the proportion of households with any usual member covered under health insurance or financing scheme increased by 54 per cent from NFHS 4 to NFHS 5 in the states that adopted PM-JAY, it decreased by 10 per cent in the states that did not adopt PM-JAY.
- Among the characteristics of adults, the average proportion of both women and men with 10 or more years of schooling improved similarly across the two groups of states.
- Neonatal mortality rate (NNMR) declined by 22 per cent in the states that adopted PM-JAY in comparison to a 16 per cent decline in states that did not adopt PM-JAY.
- The reduction in Infant mortality rate (IMR) was 20 per cent vis-à-vis 12 per cent in PM-JAY and non-PM-JAY states respectively.
- While the Under-five mortality rate (U5MR) recorded a decline of 19 per cent in PMJAY states, it reduced by 14 per cent in the non-PM-JAY states.
- While the proportion of people ensuring family planning rose across all the states between the two surveys, the increase is much more significant in the states that adopted PM-JAY indicating its effectiveness.

- The improvement in the delivery care indicators, e.g. institutional births, institutional births in public facility, and home births are much higher in the states which did not adopt the PM-JAY.
- The percentage of women who have comprehensive knowledge of HIV/AIDS (per cent) increased remarkably by 13 per cent in the PM-JAY states, vis-à-vis an increase of mere 2 per cent in the non-PM-JAY states.



Infant and Child Mortality Rates (per 1,000 live births): All States

CONCLUDING OBSERVATIONS

- The health outcomes of the states that adopted PM-JAY improved when compared to the states that did not adopt it.
- Even though only a short time has elapsed since its introduction, the effects that are identified by the Survey underscores the potential of the program to significantly alter the health landscape in the country, especially for the vulnerable sections.

10. THE BARE NECESSITIES

INTRODUCTION

- Since the 1950s, when Shri. Pitambar Pant advocated the idea of “minimum needs”, the idea that economic development can be viewed as a process of providing the “bare necessities of life” to citizens has been around in India.
- A family’s ability to access bare necessities – such as housing, water, sanitation, electricity and clean cooking fuel – have therefore been regarded as an important barometer of economic development in academic and policymaking circles.
- The Sustainable Development Goals (SDGs) focus on providing “the bare necessities” to all:
    - Goal 6 focuses on access to clean water and sanitation to all.
    - Goal 7 aims to provide universal access to electricity and clean cooking fuel.

LIST OF GOVERNMENT SCHEMES FOR BARE NECESSITIES

1. Swachh Bharat Mission (SBM)
2. National Rural Drinking Water Programme (NRDWP), now Jal Jeevan Mission (JJM)
3. Pradhan Mantri Awaas Yojana (PMAY)
4. Sahaj Bijli Har Ghar Yojana – Saubhagya
5. Pradhan Mantri Ujjwala Yojana (PMUY)

BARE NECESSITIES INDEX (BNI)

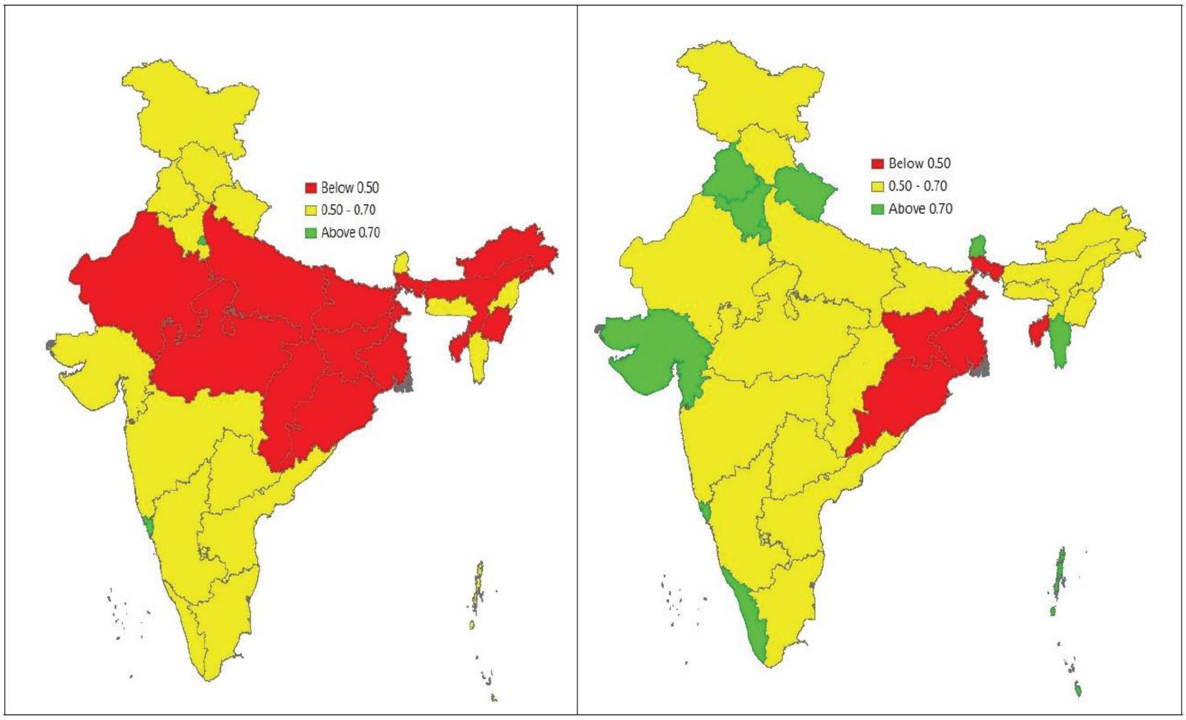
- To measure the progress in the delivery of “the bare necessities”, the Survey developed the Bare Necessities Index (BNI).
- The BNI measures access to “the bare necessities” for households in rural areas, urban areas and at the all India level.
- These necessities are measured using 26 comparable indicators on five dimensions viz., water, sanitation, housing, micro-environment, and other facilities.
- The composite index for the States/UTs for 2012 and 2018 has been created using data mainly from two NSO rounds viz., 69th (2012) and 76th (2018), on Drinking Water, Sanitation, Hygiene, and Housing Condition in India.

OVERALL BNI

- In most of the states, the access to bare necessities for the households in 2018 is significantly better compared to 2012.
- Access to bare necessities in 2018 is the highest in the States such as Kerala, Punjab, Haryana, Gujarat, Uttrakhand, Delhi, Goa, Mizoram and Sikkim while it is the lowest in Odisha, Jharkhand, West Bengal and Tripura.
- The states showing improvement on the access to bare necessities are Haryana, Punjab, Uttarakhand, Gujarat, Kerala, Rajasthan, Uttar Pradesh, Bihar, Madhya Pradesh, Chhattisgarh, and North East states except for Tripura, Nagaland and Meghalaya.

- **In rural India,** the highest access to bare necessities in 2018 is recorded in Punjab, Kerala, Sikkim, Goa and Delhi, while the lowest in Uttar Pradesh, Madhya Pradesh, Bihar, Jharkhand, West Bengal, Odisha, Assam, Manipur and Tripura.
- **In urban India**, no State is showing the lowest level of BNI in 2018.

BNI for India (Rural + Urban) 2012 BNI for India (Rural + Urban) 2018



Improvement in the Bare Necessities Across India (Rural + Urban) from 2012 to 2018

DRINKING WATER ACCESSIBILITY INDEX

- The sub-index for access to drinking water, drinking water accessibility index, is composed of sub-dimensions viz., the principal source of drinking water, distance from source of water, nature of access, and method of taking out water.
- Access to drinking water to households in most of the States has improved in 2018 compared to 2012, in rural as well as in urban areas, (except for Andhra Pradesh in Rural and Andhra Pradesh and Himachal Pradesh in urban areas).

SANITATION INDEX

- Indicators used in the sub-index are percentage of households by access to latrine for exclusive use, the type of latrine viz., piped sewer system, septic tank, twin leach pit, single pit.
- The sanitation access has improved for all States in rural areas and for most of the States in urban areas in 2018 compared to 2012.
- However, inter-State difference in access to sanitation are still large, especially in rural areas.

HOUSING INDEX

- The housing index measures not only the structure of house (in terms of Pucca or Katcha), but also the quality of house in terms of type of dwelling unit (independent or not) and condition of structure (Good or not).
- Access to housing has improved in all States, except urban areas in few States. The inter-State disparities have also declined as the States having low level in 2012 have gained more.
- However, the gaps in the levels across states have been large, especially in rural areas.
- The improvement in access to housing has also been disproportionately greater for the lowest income group when compared to the highest income group.

MICRO-ENVIRONMENT INDEX

- The micro-environment index measures the percentage of households who are living in a dwelling unit with access to drainage, without problems of flies/mosquitoes, and efforts made by local bodies/State government to tackle problem of flies/mosquitoes.
- Micro-environment, as measured by the index, has improved in 2018 for all States, except for Assam in rural and Odisha and Assam in urban areas, as compared to 2012.
- Regional disparities have declined sharply in urban areas in 2018 vis-à-vis 2012, though it was increased in the rural areas.

OTHER FACILITIES INDEX

- 'Other facilities' index captures the availability of kitchen, kitchen with a water tap, good ventilation in house, access to bathroom, attached bathroom, electricity use, the types of wiring used instead of temporary electric wiring, and type of fuel used for cooking (LPG or others).
- Access to Other-facilities for a household has improved for all States in 2018 compared to 2012 for rural as well as in urban areas except for Himachal Pradesh in urban.
- The inter-states disparities in terms of these facilities have also declined, especially in the urban Areas.
- The gaps are still high across the State in rural, between rural and urban in States, between income groups, and between rural and urban in income groups.

HEALTH OUTCOMES

- Bare necessities correlate strongly with health outcomes.
- Swachh Bharat Mission has led to a decrease in diarrhea and malaria cases in children below five years, still births and new-borns with weight less than 2.5 kg.
- The distance and time spent on fetching water from the source is found to affect under-five child Health.
- Access to clean cooking fuel improves child health. Having a separate kitchen improves the indoor environment, thereby yielding health benefits to the household, especially women and children.

EDUCATION OUTCOMES

- Access to bare necessities through its possible linkages can positively impact educational indicators as well.

- **Water hauling**, a daily activity, consumes substantial time and effort of a household. It is found that water hauling activity is negatively associated with the girls' school attendance.
- **Access to latrine** in schools substantially increases enrolment of pubescent-age girls.
- Further, the **electrification's links with education,** which could be through lighting and use of other equipment, are visible in day-to-day life. In fact, there is a strong correlation between electricity consumption per capita and higher scores on the education index across countries.
- The State-wise BNI in 2012 and 2018 correlate positively with the gross enrolment ratio for class 9-10 and class 11-12.

CONCLUSION

- While improvements in access to bare necessities are evident, the disparities in access to bare necessities continues to exist between rural-urban, among income groups and also across States.
- Government schemes, such as the Jal Jeevan Mission, SBM-G, PMAY-G, may design appropriate strategy to address these gaps.
- As civic amenities in urban areas are also provided by the local self-governments, there must be effective convergence in scheme implementation at the Centre-State and local levels.
- For this purpose, a BNI based on large annual household survey data can be constructed using suitable indicators and methodology at district level for all/targeted districts to assess the progress on access to bare necessities.

VOLUME 2

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1. STATE OF THE ECONOMY 2020-21: A MACRO VIEW

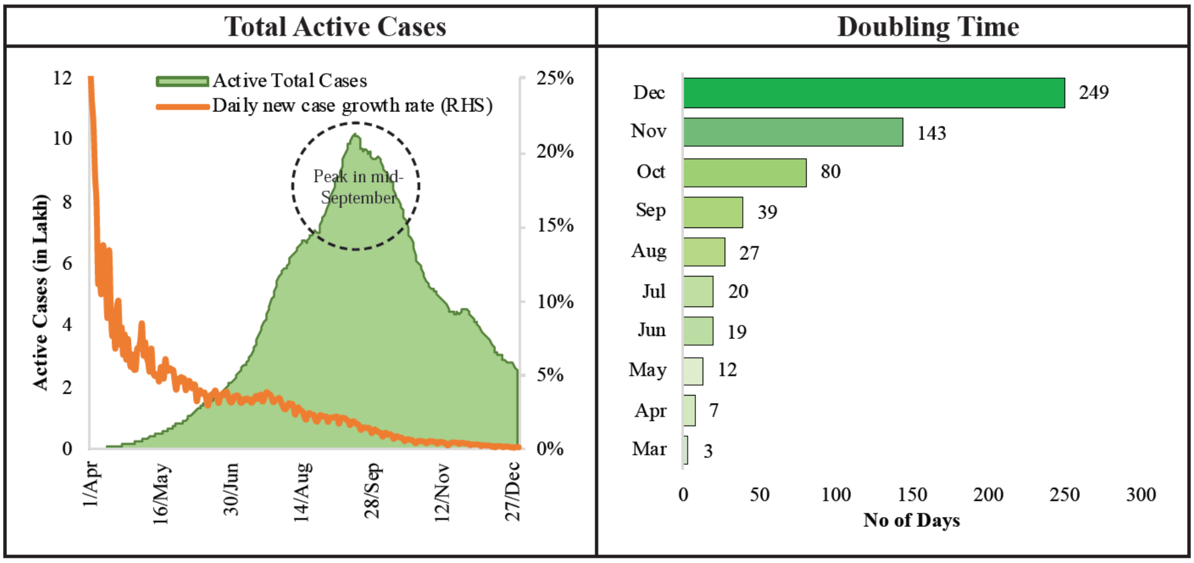
SPREAD OF THE PANDEMIC

- Since its first outbreak in Wuhan, China, COVID-19 has infected all continents, including Antarctica (in December, 2020), and more than 220 countries.
- Advanced Economies (AE) were experiencing their third waves, both in terms of cases and deaths, at the end of the year while Emerging Market and Developing Economies (EMDEs) (excluding China and India) were facing their second waves.

SPREAD OF PANDEMIC IN INDIA

- India imposed a stringent nation-wide lockdown during the initial phase of the pandemic in March-April, 2020, followed by gradual unlocking and phasing out of the containment measures.
- India crossed its peak in mid-September with 11.12 lakh active cases on 17th September, 2020 and 97,860 daily new cases on 16th September, 2020.
- Subsequently, new cases have moved down to less than 16,000 cases per day in January, 2021.
- The confirmed cases in India have touched more than 1.06 crore, representing around 11 per cent of the world's total case load.
- The total death toll in India, as on 31st December, 2020, was 1.48 lakh with more than 50 per cent of the fatalities occurring in western and southern zones of the country.

Spread of COVID-19 in India



RAMPING UP TESTING

- As the first step, India rapidly ramped up its capacity to rapidly scale-up tests.

- In January 2020, India had only one laboratory testing for COVID-19, at the National Institute of Virology, Pune. Today there are more than 2300 laboratories across the country, performing molecular tests for its diagnosis
- Keeping the focus on “Test, Track and Treat”, India has tested nearly 18.5 crore cumulative COVID-19 samples with cumulative test positivity rate at 5.6 per cent, as on 31st December, 2020.

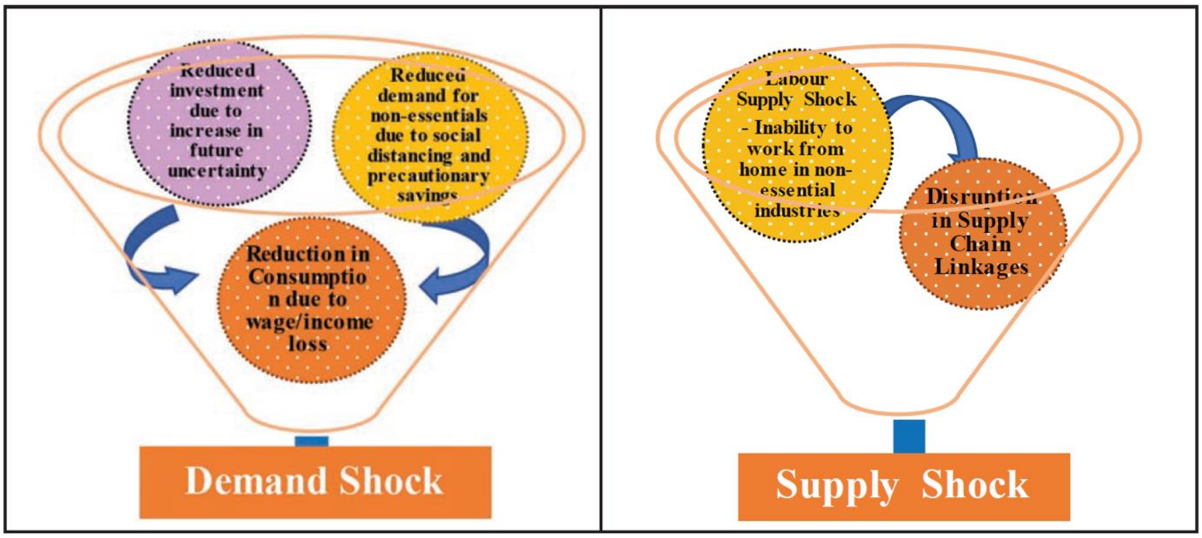
POLICY DILEMMAS UNDERLYING COVID-19

‘Lives Vs Livelihoods’

- The public health measures, adopted to contain the spread, engendered sizeable immediate economic costs as they led to almost full suspension of economic activity, curbed consumption and investment, as well as restricted labor supply and production.
- COVID-19, therefore led the world to the predicament of saving ‘lives’ or ‘livelihoods’ as the steps taken to flatten the infection curve, steepened the macroeconomic recession curve.

Demand-side and Supply-side Shocks

- The pandemic has been a unique economic shock that has triggered both supply and demand side shocks simultaneously across economies around the world.
- Increased uncertainty, lower confidence, loss of incomes, weaker growth prospects, fear of contagion, curtailment of spending options due to closure of all contact-sensitive activities, the triggering of precautionary savings, risk aversion among businesses and resultant fall in consumption and investment – leading to the first order demand shock.
- The supply chain disruptions caused by closure of economic activity and restricted movement of labour lead to the first order supply shocks.



Twin Economic Shocks by the Pandemic

SECTORAL IMPACT OF COVID-19 IN INDIA: UBIQUITOUS, YET IRREGULAR

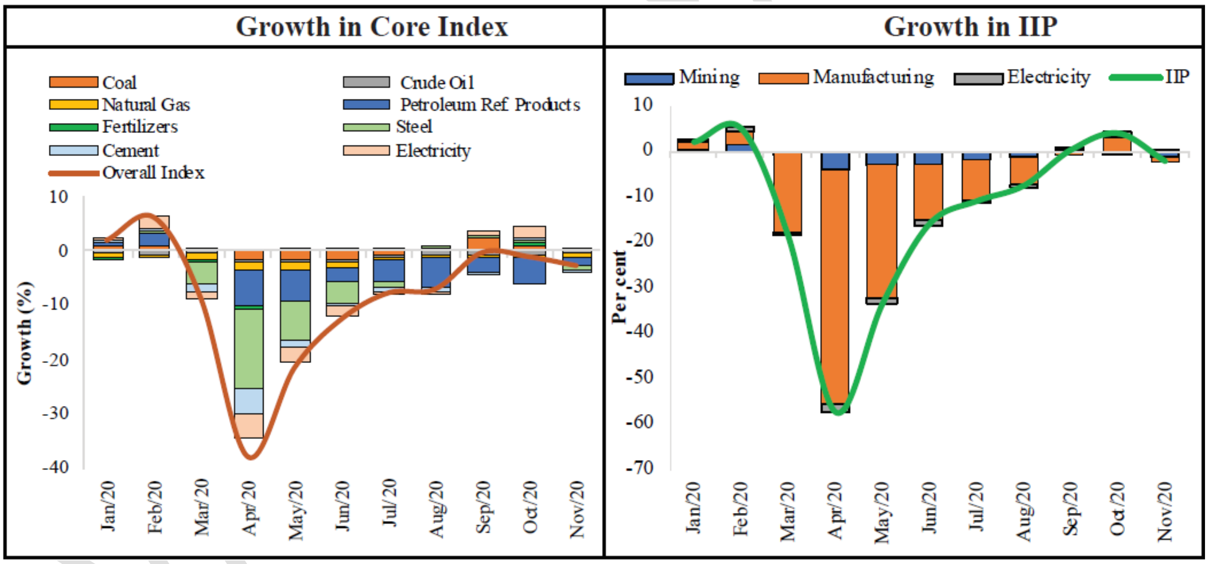
- Agriculture was largely insulated from the lockdown in India as timely and proactive exemptions from COVID-induced lockdowns to the sector facilitated uninterrupted harvesting of rabi crops and sowing of kharif crops.

- However, supply chain disruptions impacted the flow of agricultural goods leading to high food inflation and adverse initial impact on some major agricultural exports.
- The manufacturing sector was hit hard in the first quarter but has since picked up though mining still remains impacted.
- Construction and Services sector were hit the hardest due to the pandemic induced requirements of social distancing and minimising of personal interaction.

DISRUPTION OF GLOBAL ECONOMY BY THE PANDEMIC

- The month of April 2020 became the month of "Global Lockdown" with world economic activity coming to a standstill – leading to a steep fall in output during second quarter of 2020.
- Global output is expected to witness the sharpest contraction in a century, contracting in the range of 3.5 - 4.3 per cent in 2020 as per the estimates provided by IMF and World Bank.
- The cumulative loss to global GDP over 2020 and 2021 is estimated at around USD 9 trillion – greater than the economies of Japan and Germany combined.

INDIAN ECONOMY ON THE PATH OF A RESILIENT V-SHAPED TRAJECTORY



- The economy witnessed a sharp contraction of 23.9 per cent in Q1: FY 2020-21 and 7.5 per cent in Q2: FY 2020-21 due to the stringent lockdown imposed during March-April, 2020.
- Since then, several high frequency indicators have demonstrated a V-shaped recovery.
- The fundamentals of the economy remain strong as gradual scaling back of lockdowns along with the astute support of Atmanirbhar Bharat Mission have placed the economy firmly on the path of revival.
- Agriculture is set to cushion the shock of the COVID-19 pandemic on the Indian economy in 2020-21 with a growth of 3.4 per cent in both Q1 and Q2. **It is the only sector that has contributed positively to the overall Gross Value Added (GVA) in both Q1 and Q2 2020-21.**

- High food prices remained a major driver of inflation in 2020. However, inflation in December, 2020 fell back into the RBI's target range of 4 +/- 2 per cent to reach 4.6 per cent year-on-year as compared to 6.9 per cent in November.
- Government and RBI led liquidity support measures, increase in limits of ways and means advances, and relaxation of rules governing withdrawals from the Consolidated Sinking Fund (CSF) enabled bond markets to absorb pressures of increased government borrowings and added to their buoyancy.
- India remained a preferred investment destination in FY 2020-21.

E-way bills

- E-way bills are a strong leading indicator of revenue collections, supply chain corrections and logistics growth.
- Both volume and value of total E-way bills generated have regained stronger momentum in December with a double- digit growth of 12.3 per cent and 17.5 per cent respectively in December 2020.

INDIA'S STRATEGIC MULTI-PRONGED POLICY RESPONSE TO COVID-19

- To combat COVID-19, India adopted a graded four-pronged pre-emptive, and pro-active strategy consisting of
    1. containment measures,
    2. calibrated fiscal support focussed on essentials during lockdown and demand push during the unlock phase,
    3. financial measures and
    4. structural reforms
- A gradual, smooth transition was paved from 'Jaan Hai to Jahan hai' to 'Jaan bhi aur Jahan bhi'.

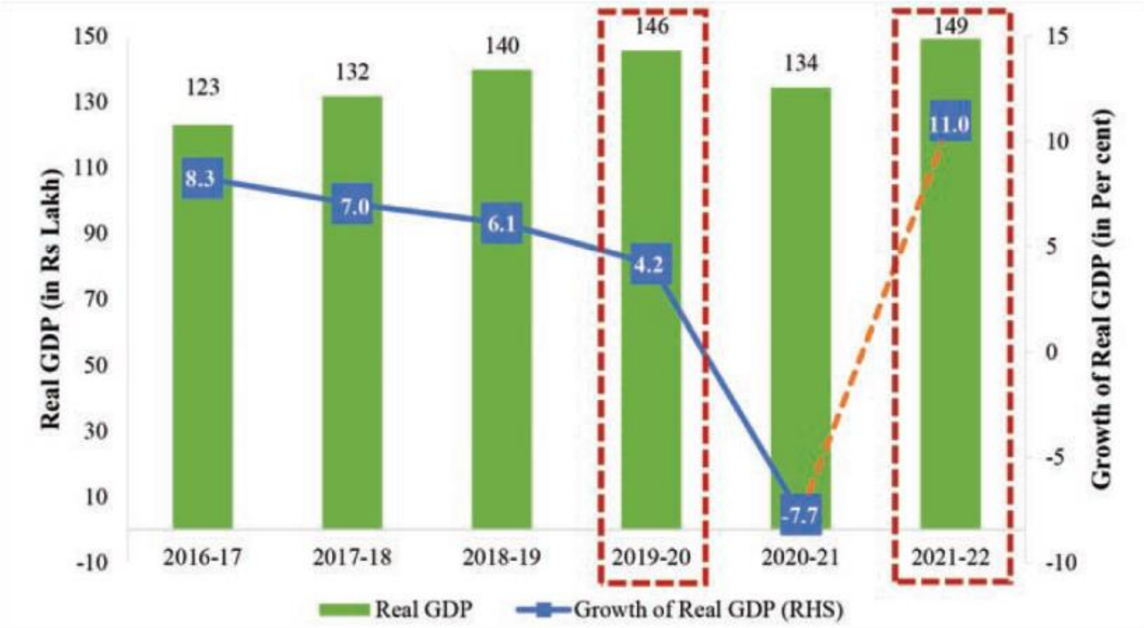
V-SHAPED ECONOMIC RECOVERY

- NSO has estimated a contraction of real GDP by 7.7 per cent in 2020-21 as compared to a growth of 4.2 per cent in 2019-20. This is the fourth contraction in India's GDP since 1960-61.
- The contraction in 1965-66 and 1971-72 coincided with wars and droughts while the year 1979-80 was associated with a severe drought and political instability. A common factor in all these years was a steep fall in agricultural output.
- The year 2020-21, on the contrary, has been bestowed with abundant monsoons leading to the agricultural sector emerging as the silver lining of the economy.
- The advance estimates for FY:2020-21 released by NSO manifest that the economy is expected to stage a resilient V-shaped recovery in H2:2020-21.
- The biggest growth driver is likely to be government consumption that is expected to grow at a strong 17 per cent YoY in second half as against a 3.9 per cent contraction the first half.

OUTLOOK

- After an estimated 7.7 per cent pandemic-driven contraction in 2020-21, India's real GDP is projected to record a growth of 11.0 percent in 2021-22 and nominal GDP by 15.4 per cent.

- These projections are in line with IMF estimate of real GDP growth of 11.5 per cent in 2021-22 for India and 6.8 per cent in 2022-23. India is expected to emerge as the fastest growing economy in the next two years as per IMF.



Projections of Real GDP for 2021-22

2. FISCAL DEVELOPMENTS

INTRODUCTION

- The global economy experienced an unprecedented crisis in the year 2020. The COVID-19 pandemic forced countries to resort to lockdown that had a sudden and intense impact on the economic activity, financial markets and survival of the vulnerable sections of the society.
- Amidst this phase of shock and uncertainty massive fiscal measures, amounting to 12 percent of global GDP, were taken globally to mitigate the adverse impact of the pandemic.
- Fiscal policy, in combination with monetary policy measures, emerged as an effective policy tool in times of crisis.

FISCAL SITUATION

Items	Budget Estimate (In ₹ lakh crore)	April to November (In ₹ lakh crore)			Rate of growth over same period in previous year (April -Nov)		
	2020-21	2018	2019	2020	2018	2019	2020
Total Major Subsidies	**2.28**	**2.19**	**2.35**	**2.02**	**6.3**	**7.3**	**-14.0**
Food Subsidy	1.16	1.42	1.32	1.16	5.3	-7.2	-12.0
Nutrient Based Fertilizers Subsidy	0.24	0.20	0.22	0.16	14.9	11.3	-29.6
Urea Subsidy	0.48	0.33	0.51	0.50	4.6	52.7	-1.8
Petroleum	0.41	0.23	0.30	0.20	8.1	27.7	-31.9

Expenditure on major subsidies

- Fiscal deficit of the Central Government at end November 2020 stood at 135.1 per cent of the BE compared to 114.8 per cent during the same period in 2019-20.
- During April to November 2020, the non-debt receipts have registered a growth of -17.9 percent relative to the corresponding period last year.
- The Gross Tax Revenue (GTR) during the first eight months of 2020-21 was 10.26 lakh crore, 42% of BE, 12.6 per cent lower than in the same period last year.
- Out of the shortfall in GTR of 1.48 lakh crore relative to corresponding period last year, a shortfall of more than 1 lakh crore was attributed to Corporation taxes, shortfall 0.3 lakh crore was due to Personal Income taxes and 0.14 lakh crore was due to the Indirect taxes.
- The shortfall in indirect taxes during April to November 2020 was led by shortfall in customs and GST collections for the Centre.
- The total Government expenditure during April to November 2020 stood at 62.7 per cent of Budget estimate, compared to 65.3 per cent in April to November 2019.

- The revenue expenditure has grown by 3.7 per cent during the first eight months of 2020-21 compared to the same period in 2019-20.
- The monthly accounts data up to November 2020 shows that subsidies registered a negative growth of 14 per cent during the first eight months of FY 2020-21.

FISCAL RESPONSE TO COVID-19 PANDEMIC

- The fiscal policy response of the Government of India to the pandemic was distinct from other countries. Unlike many other countries that chose a front-loaded grand stimulus package for revival of the economy, Government of India adopted a step-by-step approach.
- The approach was to provide a cushion for the poor and vulnerable section of society and to the business sector (especially the MSMEs) in the initial phase of lockdown.
- This included the world's largest food programme, direct transfers to Jan Dhan accounts, as well as government guarantees for credit, postponement of financial deadlines etc.
- With the gradual un-locking of the economy, the focus of the fiscal stimulus has been widened with various measures taken to boost the domestic demand such as ramping up of capital expenditure, Production Linked Incentives and other schemes to revive consumption demand.

Categorization of Ministries

- During the first two quarters of financial year 2020-21, Ministries were classified into three categories.
- Ministries in category 'A' were providing relief or welfare to the public. No expenditure restrictions were placed on these Ministries and in fact enhanced allocations were made available to them.
- Other Ministries which were not directly involved in the pandemic were placed in the category 'B' and allowed to spend 20% of their budget per quarter.
- Ministries with low priority in the pandemic situation were placed in category 'C' and allowed to spend 15% of their budget in each of the first two quarters.

REFORMS IN TAX ADMINISTRATION

Honouring the Honest platform

- The platform for 'Transparent taxation- Honouring the Honest' was launched in August 2020 with an objective to impart greater efficiency, transparency and accountability, and to eliminate physical interface between taxpayers and tax officers.
- The key features of the platform are (i) Usage of technology, data analytics and Artificial Intelligence and (ii) Recognizing taxpayers as partners in nation-building.
- The Platform stands on 3 pillars of tax administration reforms namely, Faceless assessment, Faceless appeal, and Taxpayers' charter.

Faceless Assessment Scheme 2020

- The Faceless Assessment Scheme, 2019 (earlier called the e-assessment Scheme and renamed in August 2020) was based on the idea that automated random allocation of cases across Income Tax teams with dynamic jurisdiction and elimination of face-to-face contact between the income-tax authorities and the taxpayer can lead to an efficient, non-discretionary, unbiased single window system of assessment.

- The scheme establishes a National Faceless Assessment Centre (NFAC) in Delhi, headed by Principal Chief Commissioner of Income Tax, as the sole point of contact between the Department and the taxpayer.

Faceless Appeals Scheme 2020

- Under Faceless Appeals Scheme, 2020, all Income Tax appeals will be finalised in a faceless manner under the faceless ecosystem with the exception of appeals relating to serious frauds, major tax evasion, sensitive & search matters, International tax and Black Money Act.
- The Scheme establishes a National Faceless Appeal Centre (NFApC) as the apex body for conduct of e-appeal proceedings in a centralized manner.

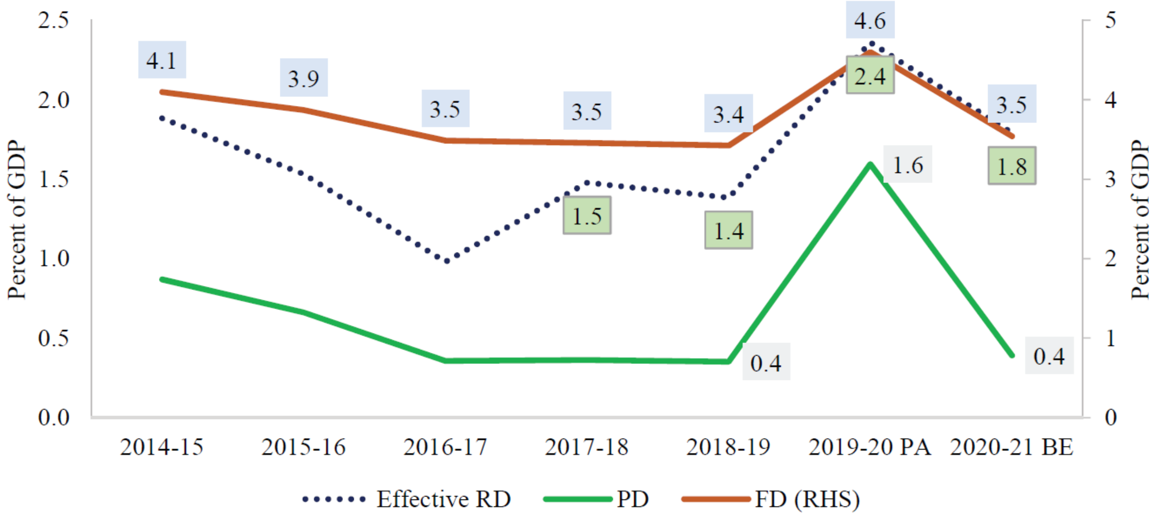
Taxpayers' Charter

- The taxpayer's charter for India comprises of commitments by the Income Tax Deparment and obligations of the taxpayers.

TRENDS IN GOVERNMENT FINANCES: CENTRE, STATES AND GENERAL GOVERNMENT

Central Government Finances

- The Fiscal Deficit for 2019-20 Provisional Actuals stood at 4.6 per cent of GDP, which was 0.8 percentage points higher than the Fiscal Deficit envisaged in 2019-20 RE, and 1.2 percentage points higher than Fiscal deficit in 2018-19.
- The effective Revenue Deficit which captures the shortfall in current receipts over current expenditure also increased by 1 per cent of GDP to reach 2.4 per cent of GDP in 2019-20 PA relative to 2018-19.



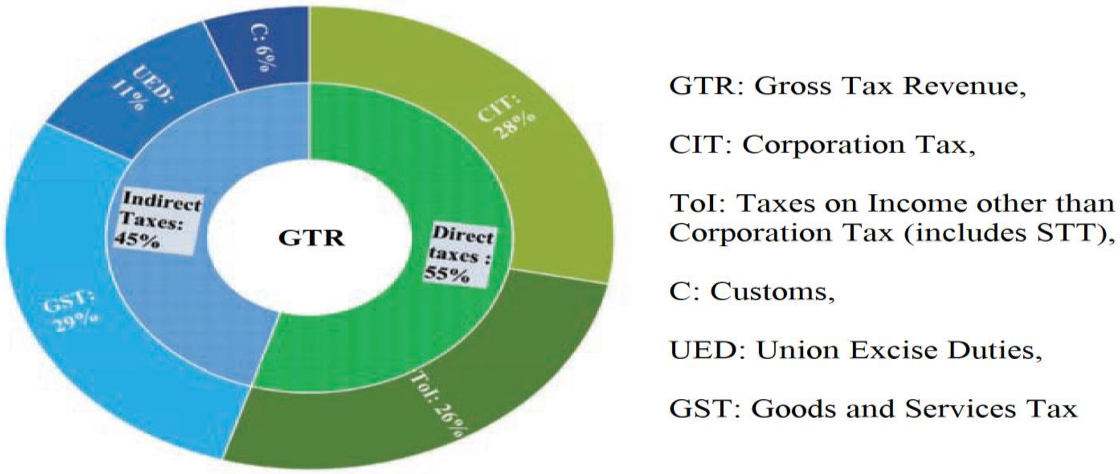
Trends in Deficits

Trends in Receipts

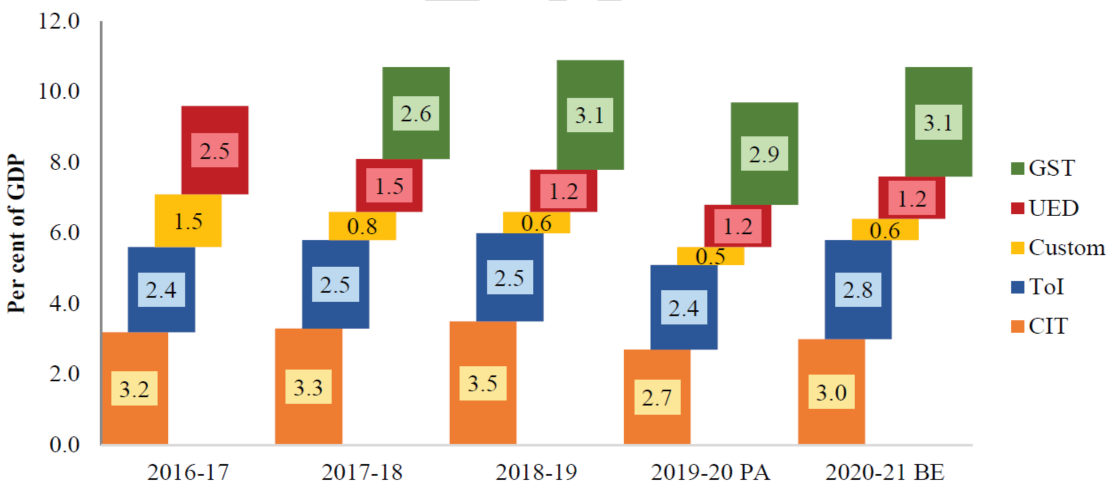
- Central government receipts can broadly be divided into Non-debt and debt receipts.
- The Non-debt receipts comprise of tax and Non-Tax revenue, and Non-debt Capital receipts like recovery of loans and disinvestment receipts.
- Debt receipts mostly comprise of market borrowings and other liabilities, which the government is obliged to repay in the future.

Tax Revenue

- Budget 2020-21 estimated the Gross Tax Revenue (GTR) to be ` 24.23 lakh crore which is 10.8 per cent of GDP. This builds into growth of 12 per cent over the revised estimates (RE) of 2019-20 and 20.6 per cent over 2019-20 PA. The direct taxes, comprising mainly of corporate and personal income tax, constitute around 55 per cent of GTR.
- On the other hand, the indirect taxes were expected to grow at 11.1 per cent vis-à-vis 2019-20 RE and 15 per cent as against 2019-20 PA.



Composition of taxes in Gross Tax Revenue in 2020-21 BE



Taxes as a percent of GDP

Non-Tax Revenue

- Non-Tax revenue comprises mainly of interest receipts on loans to States and Union Territories, dividends and profits from Public Sector Enterprises including surplus of Reserve Bank of India (RBI) transferred to Government of India, receipts from services provided by the Central Government and external grants.
- As against the 2020-21 BE of ` 3.85 lakh crore for Non-Tax Revenue, the actual realization up to November 2020 has been 32.3 per cent of the BE.

Non-debt Capital receipts

- Non-debt Capital receipts mainly consist of recovery of loans and advances, and disinvestment receipts.
- The contribution of Non-debt Capital receipts in the total pool of Nondebt receipts have declined from 6.8 per cent in 2018-19 to 3.9 per cent 2019-20 PA, primarily due to shortfall in disinvestment proceeds.

Trends in Expenditure

- As a percentage of GDP, the anticipated growth of total expenditure in 2020-21 BE over 2019-20 PA is 0.3 per cent of GDP with growth equivalent to 0.15 per cent of GDP each in both Revenue and capital expenditure.
- Revenue Expenditure, which constitutes over 87 per cent of the total expenditure was envisaged to grow at 11.9 per cent in 2020-21 BE over 2019-20 PA.
- The expenditure on major subsidies which was pegged at 1.0 per cent of GDP in 2020-21 BE, accounted for a moderate growth of 2.1 per cent over 2019-20 PA.

Transfer to States

- The Central Government has accepted the recommendations made by the Fifteenth Finance Commission (FC-XV) in its Report for financial year 2020-21, relating to the Post Devolution Revenue Deficit Grant, Grants to Local bodies and Disaster Management Grants for the financial year 2020-21.
- FC-XV recommended Grant-in-Aid amounting to 1.99 lakh crore for transfer to States during 2020-21 for Post Devolution Revenue Deficit Grant, Grants to Local bodies and Disaster Management Grants which is approximately 50% higher than recommended by the FC-XIV for the award year 2019-20.

Central Government Debt

- Total liabilities of the Central Government at end March 2020 stood at 97.05 lakh crore.
- Out of these, 88.67 per cent was public debt and the remaining 10 per cent catered to Public Account liabilities, which include National Small Savings Fund, State Provident Funds, Reserve Funds and Deposits and other Accounts.

State Finances

- As per 2020-21 Budget Estimates of the State Governments, the States' combined own Tax revenue and own Non-Tax revenue were anticipated to grow at 11.8 per cent and 12.1 per cent respectively over 2019-20 RE, higher than the growth displayed in 2019-20 RE.
- On the expenditure side, revenue expenditure and capital expenditure in 2020-21 BE were envisaged to grow at 8.2 per cent and 11.8 per cent respectively over 2019-20 RE.
- The RBI Study on State Finances highlights the decline in actual capital spending relative to BE observed in the states for the last 3 years (2017-18 Actuals, 2018-19 Actuals and 2019-20PA).

Measures taken by the Centre to support the States in times of COVID-19

- Enhanced limit of borrowing for FY2020-21 under Atma Nirbhar Bharat package
- Compensation to the States for loss in GST revenue

- Scheme for Special Assistance to States for Capital Expenditure
- The Central Government by way of a special one-time dispensation had decided to treat COVID-19 as a notified disaster for the purpose of providing assistance under State Disaster Response Fund (SDRF)

General Government Finances

- The General Government finances give an overview of fiscal position of the Government sector as a whole.
- The General Government liabilities as a proportion of GDP exhibit an increasing trend over the last few years.
- A more negative interest-rate growth differential lays the foundation for lower General Government debt as a proportion of GDP.

OUTLOOK

- Based on the trends available for April to November 2020, there is likely to be a fiscal slippage during the year.
- in order to sustain the recovery in aggregate demand, it is expected that the Government may have to continue with an expansionary fiscal stance.
- The expenditure support along with the various key reforms introduced during the year are likely to impart the required momentum to medium-term growth.

4. MONETARY MANAGEMENT AND FINANCIAL INTERMEDIATION

MONETARY DEVELOPMENTS DURING 2020-21

- Repo Rate is the policy rate in India and since March 27, 2020, the **policy repo rate** has been reduced by 115 basis points (bps) from 5.15 per cent to 4.0 per cent so far. The monetary policy responses during the year 2020-21 were necessitated by the extraordinary situation prevailing due to COVID-19.
- In 2020-21 so far, **Reserve money (M0)** recorded a Year on Year (YoY) growth of 15.2 per cent as on January 15, 2021 as compared to 11.4 per cent a year ago.
- In 2020-21 so far (as on January 1, 2021), the YoY growth of **Broad Money (M3)** stood at 12.5 per cent, as compared to 10.1 per cent in the corresponding period a year ago.
- **Money multiplier, measured as a ratio of M3/M0** which was mostly increasing from 1980s onwards up to 2016-17, has however been declining since then. As on March 31, 2020, the money multiplier was 5.5, slightly lower than 5.6 a year earlier.

Effective Date	Repo Rate (per cent)	Reverse Repo Rate (per cent)	Cash Reserve Ratio (per cent of NDTL)	Statutory Liquidity Ratio (per cent of NDTL)	Bank Rate/ MSF Rate (per cent)
06-02-2020	5.15	4.9	4.0	18.25	5.4
27-03-2020	4.4	4.0	4.0	18.25	4.65
28-03-2020	4.4	4.0	3.0	18.25	4.65
17-04-2020	4.4	3.75	3.0	18.0	4.65
22-05-2020	4.0	3.35	3.0	18.0	4.25

Revision in Policy Rates

LIQUIDITY CONDITIONS AND ITS MANAGEMENT

- The systemic liquidity in 2020-21 so far has consistently remained in surplus.
- Reserve Bank undertook several measures to manage the liquidity in the economy starting from February 2020. These measures included:
  - Injection of durable liquidity of more than 2.7 lakh crore through Open Market Operation (OMO) purchases between February 6-December 4, 2020.
  - OMOs in State Development Loans (SDLs) as a special case were also introduced during the current financial year.
  - Targeted Long Term Repo Operations (TLTROs) of up to three years' tenor for a total amount of 1.13 lakh crore for investment in corporate bonds, commercial papers, and non-convertible debentures conducted in February-March 2020.
  - Raising banks' limit for borrowing overnight under the MSF by dipping into their Statutory Liquidity Ratio (SLR) to 3 per cent of NDTL from 2 per cent
  - Special Liquidity Facility for mutual funds for 50,000 crore

DEVELOPMENTS IN THE G-SEC MARKETS

- The 10-year benchmark G-sec yield which was around 6.4-6.5 percent in April 2020 touched a low of 5.73 per cent in mid May 2020.
- A separate route viz., Fully Accessible Route (FAR) for investment by non-residents in securities issued by the Government was notified.

BANKING SECTOR

- Gross Non-Performing Advances (GNPA) ratio (i.e. GNPAs as a percentage of Gross Advances) of Scheduled Commercial Banks decreased from 8.2 per cent at the end-March 2020 to 7.5 per cent at end-September 2020.
- Restructured Standard Advances (RSA) ratio of Scheduled Commercial Banks (SCBs) increased from 0.36 per cent to 0.41 per cent during the same period.
- Overall, the Stressed Advances ratio of SCBs decreased from 8.6 per cent at end-March 2020 to 7.9 per cent at end- September 2020.
- Capital to risk-weighted asset ratio (CRAR) of SCBs increased from 14.7 per cent to 15.8 per cent between March 2020 and September 2020.

MONETARY POLICY TRANSMISSION

- The transmission of policy repo rate changes to deposit and lending rates of scheduled commercial banks (SCBs) has improved since March 2020 reflecting the combined impact of policy rate cuts, large liquidity surplus with accommodative policy stance, and the introduction of external benchmark-based pricing of loans.
- The weighted average lending rate (WALR) on fresh rupee loans declined by 94 bps between March 2020 and November 2020 in response to the reduction of 115 bps in the policy repo rate and comfortable liquidity conditions.

REGULATORY MEASURES IN BANKING SECTOR

1. **Merger of PSBs:** Consolidation among another 10 PSBs, with Punjab National Bank, Canara Bank, Union Bank of India and Indian Bank as anchor banks came into effect from April 1, 2020.
2. **Restructuring of MSME loans:** A one-time restructuring of loans to MSMEs that were in default but 'standard' as on January 1, 2019, was permitted, without an asset classification downgrade.
3. **Large exposure framework:** A bank's exposure under the Large Exposure Framework to a group of connected counterparties was increased from 25 per cent to 30 per cent of the eligible capital base of the bank. The increased limit will be applicable up to June 30, 2021.
4. **Monetary policy transmission – external benchmarking of loans**
5. **Inclusion of co-operative banks as eligible member lending institutions under interest subvention scheme for MSMEs - issuance of guidelines**
6. **Revision in the target for priority sector lending for Urban Co-operative Banks**

NON-BANKING FINANCIAL COMPANIES (NBFC) SECTOR

- Credit growth of NBFCs continued to slow down. Credit growth (YoY) of the NBFC sector was close to 3 per cent in June 2020.

- The external liabilities of NBFCs in the form of secured and unsecured borrowings and public deposits increased by 13.7 per cent on YoY basis in June 2020.
- As against the regulatory requirement of 15 per cent, CRAR for the NBFC sector stood at 22.05 per cent at the end of June 2020, showing improvement over March 2020 when it was 20.62 per cent.

DIGITAL PAYMENTS

- Financial transactions have been seeing high growth over the last few years.
- This financial year has witnessed jumps in both volume and value of digital payments across all categories.
- Overall transactions worth 19.35 lakh crore have been done via UPI and 1.02 lakh crore via RuPay cards in 2020-21 (upto October).

DEVELOPMENTS IN CAPITAL MARKETS

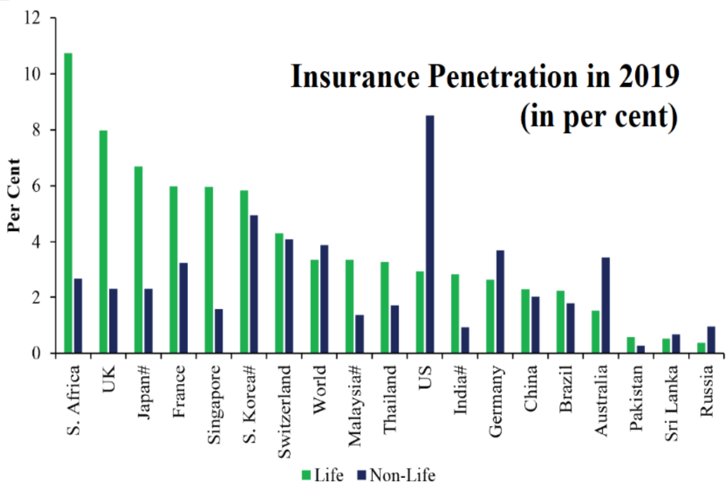
- Bilateral Netting of Qualified Financial Contracts Bill was passed and has become operational since October 1, 2020.
- Prior to this legislation, India did not have a legal framework for bilateral netting. Netting enables two counter parties in a bilateral financial contract to offset claims against each other to determine a single net payment obligation due from one counter party to others.
- Besides aiding the stability of the financial markets, bilateral netting will help in development of corporate debt market in India and freeing the capital in the system.

INVESTMENT BY FOREIGN PORTFOLIO INVESTORS

- There were net inflows to the tune of 2.1 lakh crore on account of the foreign portfolio investors (FPIs) in the Indian capital market during 2020-21 (up to December), as compared to net inflows of 0.81 lakh crore during the same period in 2019-20.

INSURANCE SECTOR

- In India, Insurance penetration which was 2.71 per cent in 2001 has steadily increased to 3.76 per cent in 2019. In contrast, insurance penetration in Asia, i.e., Malaysia, Thailand and China was 4.72, 4.99 and 4.30 per cent respectively in 2019.
- As of 2019, the penetration for Life insurance in India is 2.82 per cent, the penetration for Non-Life insurance is much at 0.94 per cent.



- The insurance density in India which was US$ 11.5 in 2001 reached to approximately US$ 78 in 2019. The comparative figures for Malaysia, Thailand and China in 2019 were much higher at US$ 536, US$ 389 and US$ 430 respectively.

MOVEMENT OF INDIAN BENCHMARK INDICES

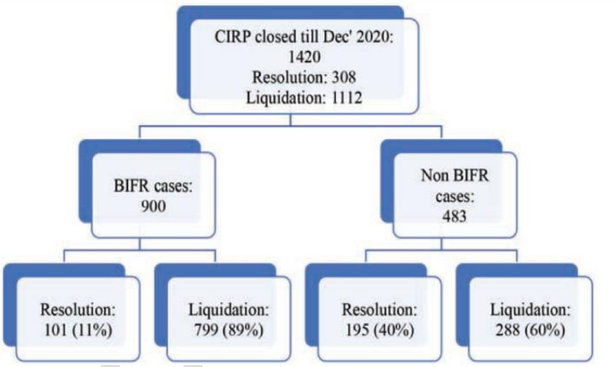
- India VIX, an index circulated by NSE which indicates the degree of fluctuation that can be expected in Nifty 50 index by active traders over the next 30 days has fallen considerably since March 2020, indicating decline in volatility in stock market.

PENSION SECTOR

- The overall contribution under NPS grew by more than 30 per cent.
- The Assets Under Management (AUM) of NPS stands at 4.94 lakh crore as on September 30, 2020, as compared to 3.71 lakh crore at the end of September, 2019, thereby recording an overall growth (YoY) of 33.3 per cent.

INSOLVENCY AND BANKRUPTCY CODE

CIRP outcomes based on BIFR and non-BIFR classification



- Since the inception of the Code in December 2016, 4,117 applications have been admitted as on December 31, 2020. Nearly 23 per cent of the cases admitted were settled or withdrawn after the commencement of Corporate Insolvency Resolution Process (CIRP).
- Out of the 1420 cases for which the CIRP process has been completed, liquidation as an outcome has happened nearly 3.6 times the resolution.
- However, this does not represent an accurate picture of the performance of the Code. This is because 73 per cent (799 cases) of cases undergoing liquidation and 33 per cent of cases (101 cases) undergoing resolution had been brought in from earlier Board for Industrial and Financial Reconstruction (BIFR) regime.

In view of COVID-19, the following measures were undertaken by the government:

- The Government increased the threshold amount of default required to initiate an insolvency proceeding from 1 lakh to 1 crore in end March 2020.
- The Insolvency and Bankruptcy (Amendment) Ordinance, 2020, inserted section 10A to suspend initiation of the CIRP of a corporate debtor (CD) under section 7, 9 and 10 for any default arising on or after March 25, 2020 which was further extended twice for 3 months each on September 25, 2020 and December 22, 2020.

3. EXTERNAL SECTOR

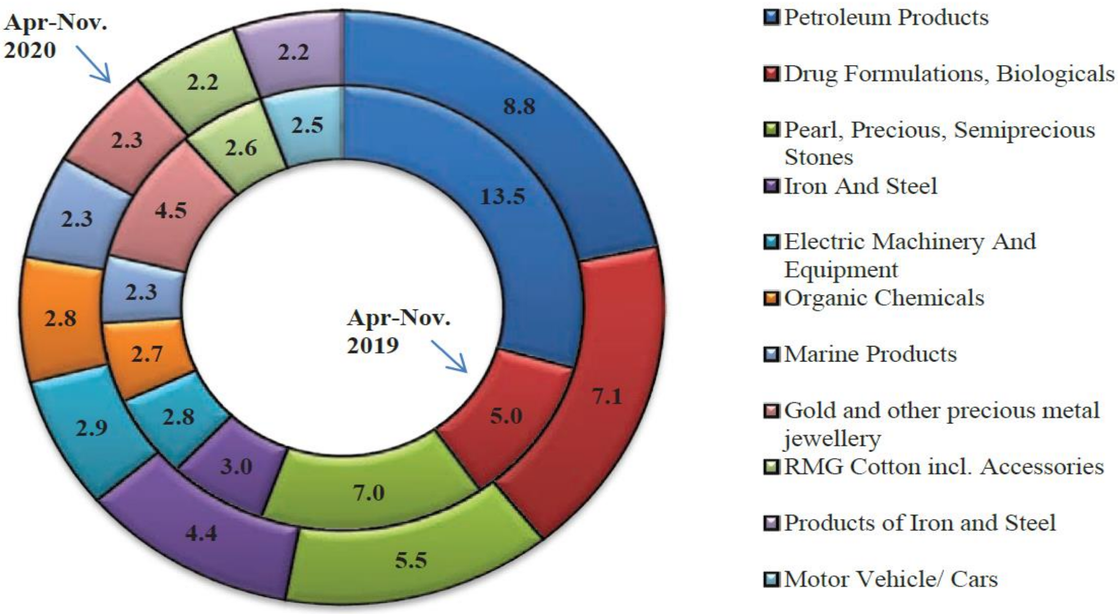
GLOBAL ECONOMIC ENVIRONMENT

- With easing of lockdowns and acceleration in economic activity, a surge in trade was recorded in the months of June and July.
- **WTO, accordingly, revised its forecast in October 2020** to a decline of 9.2 per cent in the volume of world merchandise trade in 2020, followed by a 7.2 per cent rise in 2021.
- **In the October 2020 edition of the World Economic Outlook, the IMF** expected a sharper fall in world output of 4.4 per cent in 2020, but lower contraction in world trade volume of 10.4 per cent in 2020 as against 3.0 per cent and 11.0 per cent respectively predicted in April 2020.

DEVELOPMENTS IN INDIA'S BALANCE OF PAYMENTS (BoP)

Merchandise Trade

- India registered a trade surplus in the month of June, 2020 after a gap of 18 years.
- The trade deficit during the April-December, 2020-21 was US$ 57.5 billion as compared to US$ 125.9 billion in the corresponding period last year.
- India had the most favourable trade balance with USA followed by Bangladesh and Nepal.
- The highest trade deficit is with China followed by Iraq and Saudi Arabia during April-November, 2020-21 and April-November, 2019-20.



Top 10 Export Commodities in April-November 2020 and April-November 2019 [By Share in Per cent]

Merchandise Exports

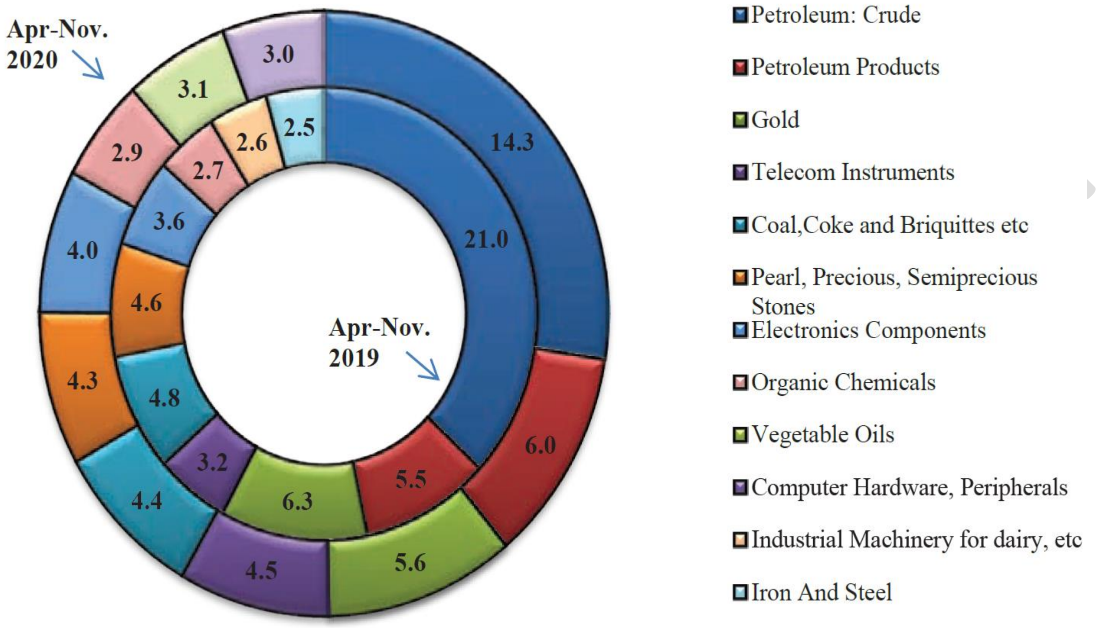
- Total exports during April-December, 2020-21 amounted to US$ 200.8 billion contracted by (-) 15.7 per cent as compared with (-) 2.4 per cent during the same period of the previous year.
- Petroleum, Oil and Lubricants (POL) exports, which constitute about 10-15 per cent of the total exports, have contributed negatively to export performance during the period under review.
- Within Non-POL exports, agriculture & allied products, drugs &pharmaceutical and ores & minerals proved resilient and recorded expansion.
- USA continues to be the largest export market for India in April-November, 2020, while China has occupied the 2nd position.
- Malaysia is a new entrant among the top 10 export destinations, as compared to last year, while Nepal no longer occupies position among the top 10 destinations.

India: Potential to be the "pharmacy of the world"

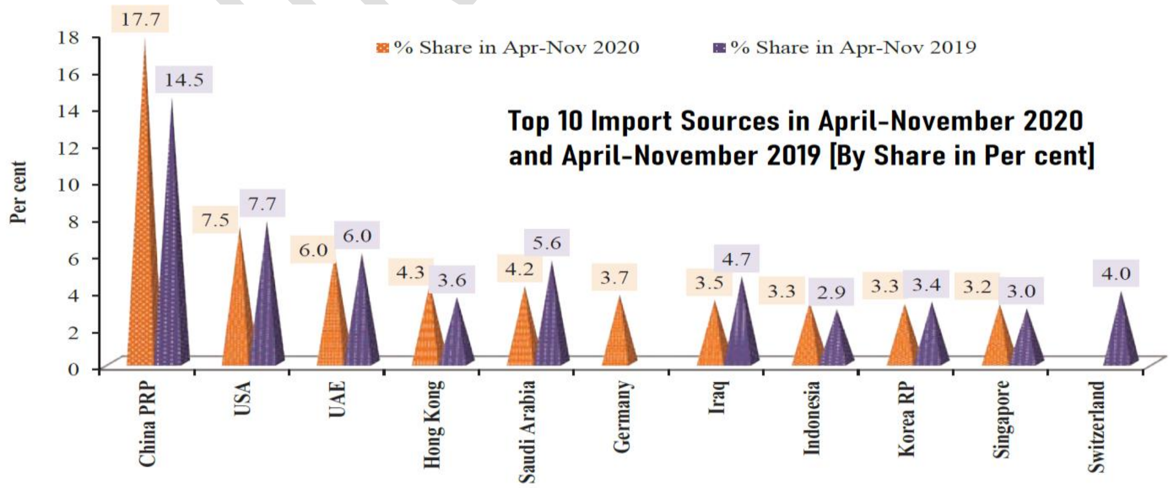
- Indian pharmaceutical industry is third largest in the world, in terms of volume, behind China and Italy and 14th largest in terms of value.
- India almost doubled its share in world pharma exports in a span of ten years from 1.4 per cent in 2010 to 2.6 per cent in 2019.
- India was at 11th position in terms of share in world pharma exports in 2019 with Germany, Switzerland and USA occupying the top three positions.
- India enjoys a consistent and long run Revealed Comparative Advantage (RCA) in its pharmaceutical exports since 2009. However, in a cross-country perspective, India's revealed comparative advantage (RCA) stands at 12th spot.
- Strategy to emerge as the 'pharmacy of the world'
    - Broaden base in terms of markets, as well as product categories
    - Restructure the current regulatory mechanism
    - Greater R&D Expenditure

Comparison of Export Performance of India vs. Bangladesh

- Bangladesh seems poised to emerge as a dominant exporter as its exports posted an impressive compound annual growth rate (CAGR) of 8.6 per cent during 2011-2019, higher than 0.9 per cent for India, and 0.4 per cent for the world.
- As a result, Bangladesh witnessed its share in world exports increase from 0.1 per cent in 2011 to 0.3 per cent in 2019.



Top 10 Import Commodities in April-November 2020 and April-November 2019 [By Share in Per cent]



Merchandise Imports

- The total imports during April-December, 2020 amounted to US$ 258.3 billion contracted by (-) 29.1 per cent, as compared with (-) 7.2 per cent during the same period last year.

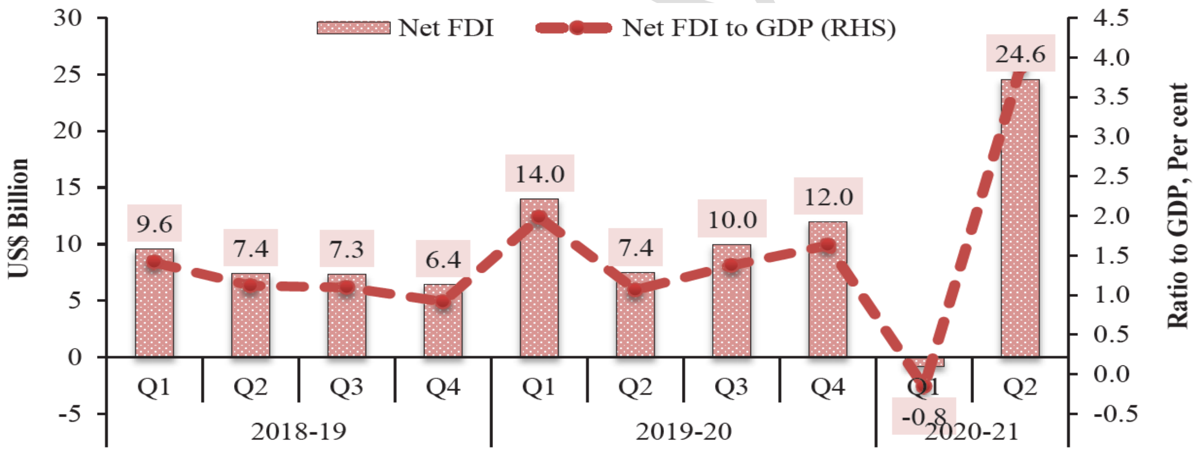
- Crude Petroleum continues to be the highest imported commodity in April-November, 2020, accounting for 14.3 per cent.
- Computer hardware and peripherals is one of the new additions in the list of top 10 import commodities in April-November, 2020.
- Among the top 10 countries for import origin, China continues to be the largest import source for India in April-November, 2020.
- While Switzerland does not appear to be the among the top 10 import sources, Germany is the new addition in the list accounting for 3.7 per cent share of total imports.

Invisibles

- Net services receipts amounting to US$ 41.7 billion remained stable in April-September, 2020 as compared with US$ 40.5 billion in corresponding period a year ago.
- Resilience of the services sector was primarily driven by software services, which accounted for 49 per cent of total services exports.

Current Account of BOP

- India's current account deficit averaged 2.2 per cent of GDP in the last 10 years.
- Reversing this trend, current account balance turned into surplus (0.1 per cent of GDP) in Q4: FY 2019-20 on the back of, among others, a lower trade deficit and a sharp rise in net invisible receipts.



Foreign Direct Investment (FDI)

Capital/ Financial account of BOP

- During April-October, 2020, net FDI flows recorded an inflow of US$ 27.5 billion, 14.8 per cent higher as compared to first seven months of 2019-20.
- computer software and hardware attracted the highest FDI equity inflows of US$ 17.6 billion in April-September, 2020.
- Singapore continues to be the top investing country, in terms of FDI equity inflows, while US
- has taken second position, as against being at 4th spot during corresponding period a year ago.

External Debt

- At end-September 2020, India's external debt was placed at US$ 556.2 billion recording a decrease of US$ 2.0 billion (0.4 per cent) over the level, as at end-March 2020.
- Excluding the valuation loss, due to the depreciation of the US$ vis-à-vis major currencies, the decrease in external debt would have been US$ 8.3 billion.
- ECBs, the largest component of external debt, at US$ 207 billion as at end- September 2020, contracted by 5.8 per cent over the level as at end-March 2020.

Overall BOP

- India, being a developing and emerging market economy, typically runs a deficit on the current account to supplement domestic savings with foreign savings to fund higher investment.
- The current account deficit is usually financed by a capital account surplus. However, since Q4: FY 2019-20, India has been experiencing a current account surplus along with robust capital inflows leading to a BoP surplus.

Foreign Exchange Reserves

- Due to robust capital flows, particularly FDI and FPI, India's foreign exchange reserves rose to an all-time high of US$ 586.1 billion as on January 8, 2021, covering about 18 months of imports.
- As at end-September 2020, India is the fifth largest foreign exchange reserves holder among all countries of the world after China, Japan, Switzerland and Russia.
- The rise in the foreign exchange reserves of the RBI has largely been due to the current account surplus which, in turn, is largely due to contraction in imports rather than increase in competitiveness of exports.

INITIATIVES TAKEN BY GOVERNMENT TO BOOST EXPORTS

Foreign Trade Policy, 2015-2020 was extended for one year i.e., up to 31st March, 2021 to lend continuity to the existing schemes.

Trade Facilitation

- With an aim to reduce trade barriers caused by inefficient and overly burdensome regulatory administrative procedures, the Trade Facilitation Agreement (TFA), negotiated at WTO, came into force on 22nd February 2017.
- A National Committee on Trade Facilitation (NCTF) was, accordingly, constituted in India in August 2016 with the Cabinet Secretary as the Chair.

Remission of Duties and Taxes on Exported Products (RoDTEP)

- Government has rolled out a new WTO compliant scheme, namely Remission of Duties and Taxes on Exported Products (RoDTEP), for all export goods with effect from 1st January, 2021.
- Under this Scheme, duties and taxes levied at the Central, State and local levels, such as electricity duties and VAT on fuel used for transportation, which are not getting exempted or refunded under any other existing mechanism will be refunded to exporters in their ledger account with Customs.

Production-Linked Incentive (PLI) Scheme

- In order to boost domestic manufacturing and exports, the Production-Linked Incentive (PLI) scheme with an outlay of 1.46 lakh crore has been introduced.
- This Scheme aims to give incentive to companies on incremental sales from products manufactured in domestic units.
- Ten champion sectors have been identified under PLI scheme. The Government plans to extend it in future if needed.

Trade Related Logistics

- India's rank has improved significantly in trading across borders parameter of 'Ease of Doing Business' index from 146 in 2018 to 68 in 2020.
- The parameter assesses the time and cost associated with the logistical process of exporting and importing goods.
- The Logistics Performance Index (LPI), released by the World Bank, assesses relative logistics efficiency of countries. On this index, India was ranked 44 out of 160 countries in 2018 vis-à-vis rank of 54 in 2014.
- **Some Infrastructure Initiatives which are at various stages of implementation are:** Bharatmala Pariyojana, Sagarmala, Multi-Modal Logistics Parks, Dedicated Freight Corridors (DFCs) and Trade Infrastructure for Export Scheme (TIES).
- **Some Digital/Technological Initiatives that are under development are:** Logistics Planning and Performance Monitoring Tool (LPPT), India Logistics Platform (iLOG) etc.

INDIA'S ENGAGEMENT WITH WTO

- In the ongoing discussions on WTO reforms, India's proposal seeks to re-affirm the importance of development and promote inclusive growth.
- The broad elements of India's proposal include: (i) Preserving the core values of the Multilateral Trading System; (ii) Resolving the impasse in the Dispute Settlement System; (iii) Safeguarding development concerns; and (iv) Transparency and Notifications.
- During the WTO TRIPS Council meeting, held on 15-16 October, 2020, India and South Africa jointly proposed "Waiver from Certain Provisions of the TRIPS Agreement for the Prevention, Containment and Treatment of COVID-19" for a limited time period.
- In agriculture, India along with many other developing countries, have been demanding a permanent solution on the issue of public stockholding for food security purposes.

WAY FORWARD

- The disruption of global manufacturing value chains due to the COVID-19 pandemic presents a tremendous opportunity for India to become one of the key nodes in the chain.
- Various initiatives undertaken to promote exports, including Production Linked Incentive (PLI) Scheme, Remission of Duties and Taxes on Exported Products (RoDTEP), improvement in logistics infrastructure and digital initiatives would go a long way in strengthening external sector in general and exports in particular.

5. PRICES AND INFLATION

INTRODUCTION

- Overall, headline CPI inflation remained high during the lockdown period and subsequently as well, due to the persistence of supply side disruptions.
- At the global level, inflation remained benign on the back of subdued economic activity as a result of COVID-19 outbreak and sharp fall in international crude oil prices in advanced economies.
- In Emerging Markets and Developing Economies (EMDEs), there was slight fall in inflation on account of weaker economic activity, though there has been uptick in inflation in some economies ending at similar levels as in the previous year.

CURRENT TRENDS IN INFLATION

- Headline inflation based on CPI-Combined (CPI-C) was on a downward path from 2014 to 2018. Though a rising trend was observed since 2019, a moderation in inflation is clearly visible now.
- Rise in core inflation in the current year is mainly on account of miscellaneous group which primarily consists of services.
- WPI inflation declined from 4.3 per cent in 2018-19 to 1.7 per cent in 2019-20 and further to (-) 0.1 per cent in 2020-21 (Apr-Dec). It remained negative from April to July 2020 and stood at 1.2 per cent in December 2020. The decline in WPI inflation in the current year is mainly on account of fuel & power.

BASE REVISION OF CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS (CPI-IW)

Refinements in CPI-IW base updation 2016

	Old series	New series
Base	2001=100	2016=100
Coverage of States/UTs	25	28
Coverage of Centres	78	88
Coverage of Markets	289	317
Working Class families covered in the base year survey	41040	48384
Number of Items	392	463
Compilation of Indices	Arithmetic Mean of price relatives	Geometric Mean of price relatives

- CPI-IW is a price index released by the Labour Bureau to measure the impact of price rise on the cost of living for working class families spread across certain select industries.
- The base year of CPI-IW has been revised from its earlier 2001 to a more recent base year of 2016.

- The new series of CPI-IW covers the industrial workers from the existing seven sectors viz. Factories, Mines, Plantation, Railways, Public Motor Transport Undertakings, Electricity Generating & Distributing Establishments and Ports & Docks.
- The new series has a wider coverage in terms of sample size, number of centres, markets/outlets, items etc.

All India group weight distribution for different series of CPI-IW

Groups	Weights (%)		
	1982	2001	2016
Food & Beverages*	57.0	46.2	39.17
Pan, Supari, Tobacco & Intoxicants	3.15	2.27	2.07
Fuel & Light	6.28	6.43	5.5
Housing	8.67	15.27	16.87
Clothing & Footwear**	8.54	6.57	6.08
Miscellaneous	16.36	23.26	30.31
General Index	100.00	100.00	100.00

*Food and Beverages was Food Group during previous series.
**Clothing and Footwear was Clothing, Bedding and Footwear during previous series.

INFLATION TREND: MOMENTUM AND BASE EFFECT

- Inflation trends are usually interpreted using the twelve-month change in the index to eliminate the effect of seasonal fluctuations.
- However, one challenge with using the YoY change in inflation is that it does not distinguish between recent price changes and price changes a year before.
- When changes in the CPI in the base month have a considerable effect on changes in YoY inflation, this is referred to as base effect. Base effects are therefore the contribution to changes in the annual rate of measured inflation from abnormal changes in the CPI in the base period.

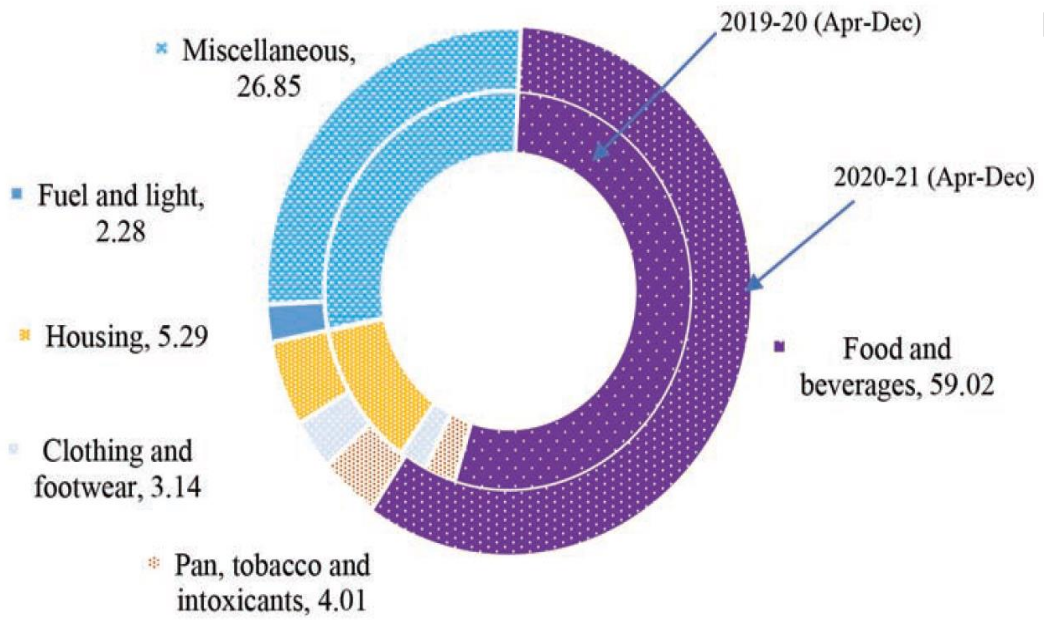
DRIVERS OF INFLATION: THE PRODIGIOUS IMPACT OF FOOD INFLATION

- During 2019-20 (Apr-Dec) as well as 2020-21 (Apr-Dec), the major driver of CPI-C inflation was the food and beverages group, though its contribution has increased to 59.0 per cent in 2020-21 (Apr-Dec) compared to 53.7 per cent in 2019-20 (Apr-Dec).
- Miscellaneous group was the second largest contributor to inflation, contributing to 26.8 per cent of overall inflation.
- Among the sub-groups in miscellaneous group, transport and communication contributed the most followed by personal care and effects.
- The contribution of food sub-groups to CFPI shows that ‘vegetables’, ‘meat & fish’, ‘oils & fats’ and ‘pulses &products’ were the major contributors to food inflation in the current year.

Thalinomics: Cost of a plate of food in 2020-21

- The Economic Survey, 2019-20 Volume-I put forth a novel concept of a thali in the Chapter titled “Thalinomics”: The Economics of a Plate of Food in India.

- Using the methodology prescribed in the chapter the NSO has compiled the Thali index using the data collected by NSO for CPI-C.
- In 2020-21(Jun-Dec, 2020), the most expensive Veg thali in the rural areas was in Andaman & Nicobar Islands (Rs. 38.7) while the cheapest in rural areas was in Uttar Pradesh (23.1).
- In terms of Non-Veg thali during the same period, the most expensive was in Arunachal Pradesh (48.5) while cheapest was in Chandigarh (29.9) in rural areas.
- In 2020-21(Jun-Dec, 2020), the most expensive Veg thali in the urban areas was in Andaman & Nicobar Islands (40.0) while the cheapest was in Madhya Pradesh (24.0).
- In terms of Non-Veg thali during the same period, the most expensive was in Mizoram (52.4) while cheapest was in Haryana (28.0) in urban areas.



Contribution of groups to overall CPI-C inflation in 2019-20 (Apr-Dec) and 2020-21 (Apr-Dec) in per cent

HEADLINE INFLATION OR CORE INFLATION AS TARGET FOR MONETARY POLICY

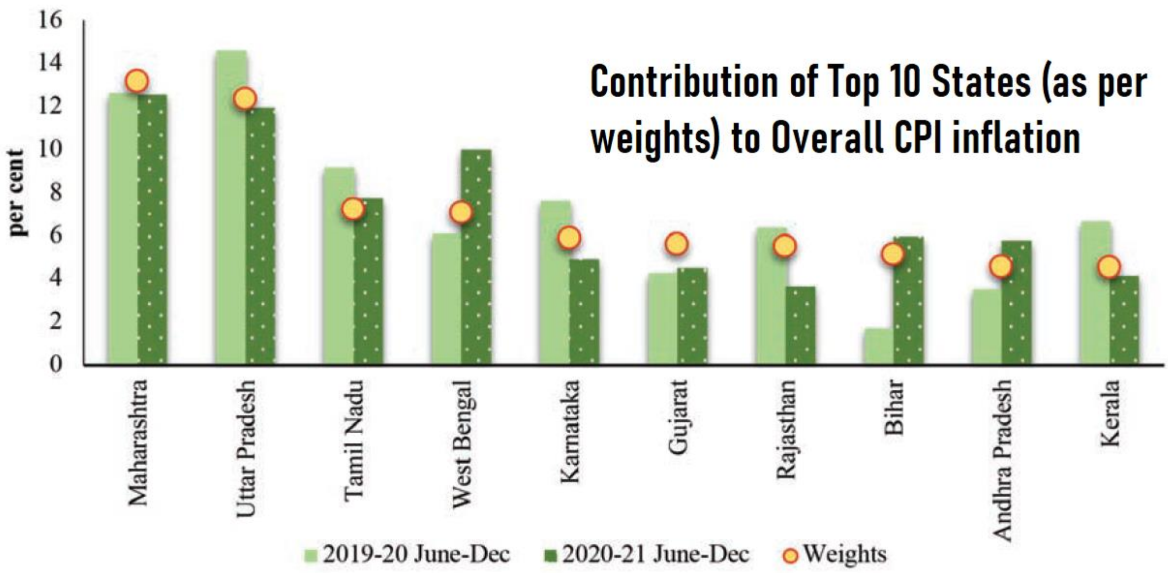
- Core inflation (inflation in the price index excluding food, fuel and other volatile components) has been viewed by many as the better measure of inflation for monetary policy purposes.
- This is because food and fuel price shocks are transitory as well as mainly supply driven and therefore not a monetary phenomenon.

INFLATION EXPECTATIONS

- As per the business inflation expectations survey of Indian Institute of Management (IIM) Ahmedabad, one year ahead inflation expectations for CPI-C inflation slightly rose from 4.0 per cent in February 2020 to 4.4 per cent in October 2020.
- Inflation expectations survey of households conducted by RBI also pointed to a slight rise in inflation expectations from 9.1 per cent in March 2020 to 9.7 per cent in November 2020.

INFLATION IN STATES

- CPI-C inflation increased in most of the states in the current year.
- In 17 States/UTs, overall inflation is below the all-India average in the current year with Delhi having the lowest inflation, followed by Dadra & Nagar Haveli.
- States in the North Eastern region as well as those in the East, experienced relatively higher inflation in rural areas. These states also experienced high urban inflation.



GLOBAL COMMODITY PRICES

- The YoY growth in global commodity prices, except prices of precious metals and fertilizers, saw a decline from their levels in December 2019, between January and April 2020 owing to COVID-19 induced restrictions around the world.
- Energy prices have seen some rebound since the pandemic owing to production cuts by OPEC+ countries, though they continue to be below levels of the previous year.
- Gold prices saw sharp spike in prices during 2020. Gold prices rose as investors turned to gold as a safe haven investment amid COVID-19 induced economic uncertainties.

REGULATION OF DRUG PRICES

- **National Pharmaceutical Pricing Authority (NPPA)** is an independent regulator for pricing of drugs and to ensure availability and accessibility of medicines at affordable prices.
- During COVID-19 pandemic NPPA invoked extraordinary powers in public interest under Drug Price control Order, 2013 and National Disaster Management Act to cap the price of Liquid Medical Oxygen (LMO) and the Oxygen Inhalation (Medicinal gas) for six months.
- During the pandemic period, the government constituted an **Inter-Ministerial Empowered Committee** to make recommendation for the export of drugs/items requested by foreign governments especially drugs like Hydroxychloroquine (HCQ) and Paracetamol.

NHB RESIDEX

- The Housing Price Indices (HPIs) are a broad measure of movement of residential property prices observed within a geographic boundary.
- The National Housing Bank (NHB) RESIDEX captures two housing price indices viz. HPI@ Assessment Prices and HPI@ Market Prices - Under Construction Properties based on the data available for 50 cities with quarterly updation.
- The Composite HPI@Assessment Prices which stood at 83 in June 2013 has moved up to 112 in the quarter ending September 2020.

MEASURES TO CONTROL INFLATION

1. Price Stabilization Fund (PSF) Scheme is being efficiently implemented and has succeeded in achieving its objective of stabilizing prices of pulses and offered significant benefits to all stakeholders.
2. Government has taken a decision that all Ministries/Department having schemes with nutrition component or providing food/ catering/hospitality services would utilize pulses from the central buffer.
3. Government has decided that procurement at MSP would be under Price Support Scheme of Department of Agriculture.
4. Government of India has entered into a MoU with Mozambique to ensure assured supply of pulses (Tur and other pulses) in India.
5. Government of India maintains buffer stocks of onion under PSF for making appropriate price stabilizing market interventions.

6. SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE

INTRODUCTION

- The year 2020 was supposed to be the year by which developed country Parties were to fulfil the goal of jointly mobilizing US$ 100 billion a year for climate finance, an essential component of the commitments made by the developed countries, which has remained elusive.
- The postponement of COP 26 to 2021 also gives less time for negotiations and other evidence based work to inform the post-2025 goal.

INDIA AND THE SDGs

- In 2020, the highlight of India's SDG initiatives has been the Voluntary National Review (VNR) presented to the United Nations High-Level Political Forum (HLPF) on Sustainable Development which is the highest international platform for review and follow-up of the SDGs under the auspices of the United Nations Economic and Social Council.
- NITI Aayog presented India's second VNR to the HLPF in July 2020, which highlighted the country's accomplishments and the way forward on its journey towards achieving the SDGs.
- The VNR Report also presented the Indian model of SDG localisation, perspectives from various stakeholder consultations, strategies of integrating businesses with the implementation of SDGs, and ways to strengthen the means of implementation.
- The 'Report of the Committee on Business Responsibility Reporting' which was released in 2020. Business Responsibility and Sustainability Report (BRSR) frameworks outlined in this report emanate from the National Guidelines on Responsible Business Conduct (NGRBC) which are aligned to the SDGs, and the United Nations Guiding Principles on Business & Human Rights (UNGPs).

LOCALIZATION OF THE SDGs

- Localising SDGs involves the process of adapting, planning, implementing and monitoring the SDGs from national to local levels by relevant institutions and stakeholders.
- The SDG India Index and Dashboard, designed and developed by NITI Aayog, is the principal tool to measure and monitor SDG performance at the national and sub-national levels.

SDG Localisation: From Global to Local to Meet the Goals

SDG RELATED INTERVENTION OF THE CENTRE GOVERNMENTS DURING THE PANDEMIC

- Several reforms measures have been brought in such as in agricultural labour and MSME reforms which will directly or indirectly impact the SDGs.
- The period of the pandemic has seen coordinated efforts of both the Centre and the State Governments in preserving and creating livelihoods, ensuring that food and nutritional requirements are met and that the health facilities are augmented

CLIMATE CHANGE

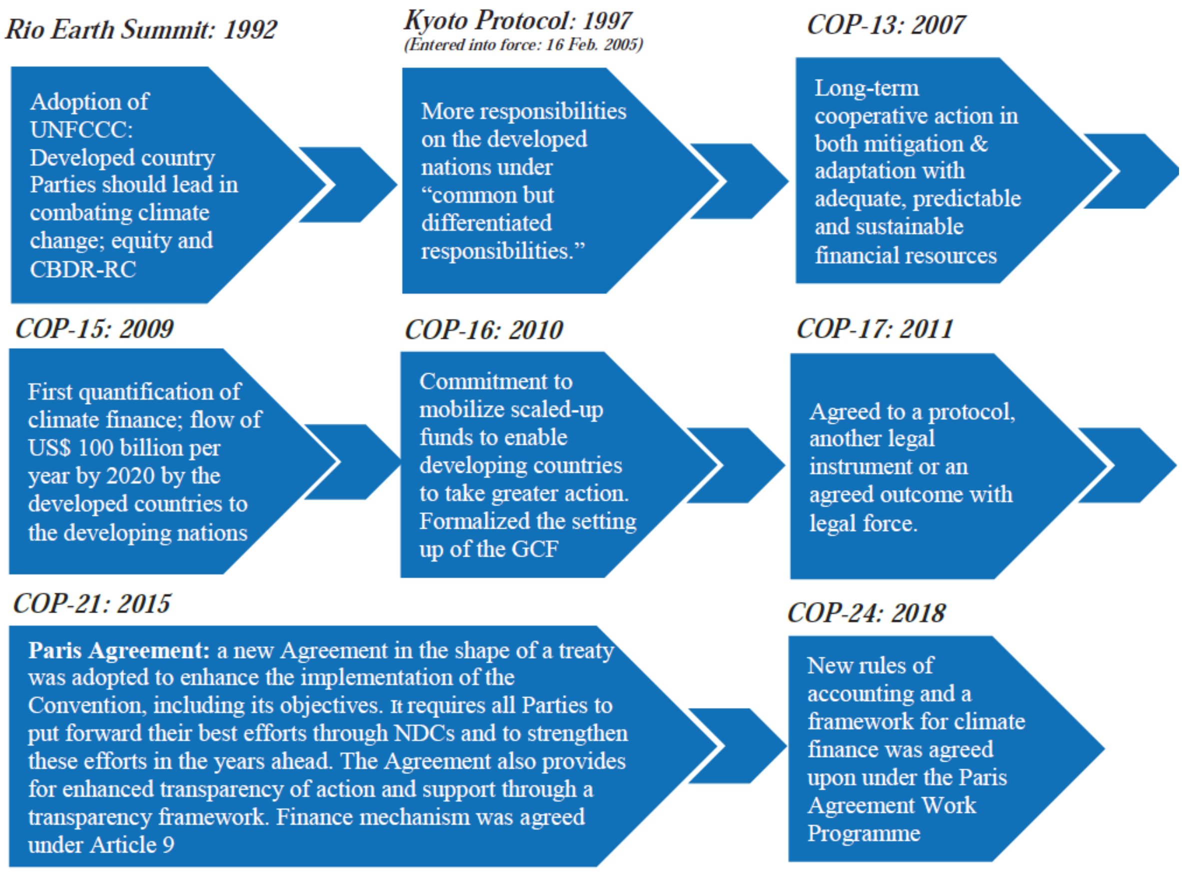
- **In its Nationally Determined Contribution (NDC), India has sought to**
  - reduce the emissions intensity of its GDP by 33 to 35 per cent below 2005 levels by the year 2030;
  - achieve 40 per cent of cumulative electric power installed capacity from non-fossil fuel sources by 2030; and
  - enhance forest and tree cover to create additional carbon sink equivalent to 2.5 to 3 billion tons of carbon dioxide by 2030.
- **India's National Action Plan on Climate Change (NAPCC)** was launched in 2008. It has through 8 National Missions focussed on advancing the country's climate change related objectives of adaptation, mitigation and preparedness on climate risks.
- **The Government launched the Jawaharlal Nehru National Solar Mission (JNNSM)** in 2010 with the aim to
  - deploy 20,000 MW of grid connected solar power by 2022 to be achieved in 3 phases,
  - 2,000 MW of off-grid solar applications including 20 million solar lights by 2022 and
  - 20 million sq. m. solar thermal collector area.
- Subsequently, Government had revised the **target of grid connected solar power** projects from 20,000 MW by the year 2021-22 to 100,000 MW by the year 2021-22 under the National Solar Mission in 2015.
- **Climate Change Action Plan (CCAP)** a Central Sector Scheme, was approved in 2014. Two important components of the CCAP scheme are the
  - National Carbonaceous Aerosols Program (NCAP) and
  - Long-Term Ecological Observatories (LTEO).
- The Government is implementing **Faster Adoption and Manufacturing of (Hybrid&) Electric Vehicle in India (FAME India)** scheme w.e.f 1st April, 2015 to encourage progressive induction of reliable, affordable and efficient electric and hybrid vehicles.

S. No	Application segment	Cumulative Target for Phase I (2010-13)	Cumulative Target for Phase 2 (2013-17)	Cumulative Target for Phase 3 (2017-22)
1	Solar collectors	7 million sq meters	15 million sq meters	20 million sq meters
2	Off grid solar applications	200 MW	1000 MW	2000 MW
3	Utility grid power, including roof top	1,000-2000 MW	4000-10,000 MW	20000 MW

Phase wise distribution of Targets under JNNSM

MULTILATERAL NEGOTIATIONS ON CLIMATE CHANGE

- **25th Session of the Conference of Parties (COP 25):** It recalled the commitment made by the developed country Parties to the goal of mobilizing jointly US$ 100 billion per year by 2020 to address the needs of the developing country Parties.
- **26th Session of the Conference of Parties (COP 26):** Due to COVID-19 pandemic, the COP 26 has now been postponed to 2021. COP 26 is expected to reach consensus on Article 6 (market and non-market mechanisms) and governance of Warsaw International Mechanism for loss and damage.



Rio Summit 1992 to COP 24: A brief history of decisions taken

ALIGNING FINANCE WITH SUSTAINABILITY

Measures taken to augment financing for sustainable development

- National Voluntary Guidelines for Responsible Financing2 was finalized in 2015.
- In 2015, the RBI included lending to social infrastructure and small renewable energy projects within the priority sector targets.
- The 'Voluntary Guidelines on Corporate Social Responsibility'5 were issued in 2009 to mainstream the concept of business responsibility.
- The revised guidelines were released as the National Guidelines on Responsible Business Conduct (NGRBC) in March 2019.
- SEBI constituted a Working Group (WG) on Social Stock Exchanges in September 2019.

- In 2017, to give push to Green Bonds issuances in India, SEBI issued guidelines14 on green bonds including listing of green bonds on the Indian stock exchanges.

Investing in Resilience for Sustainable Development

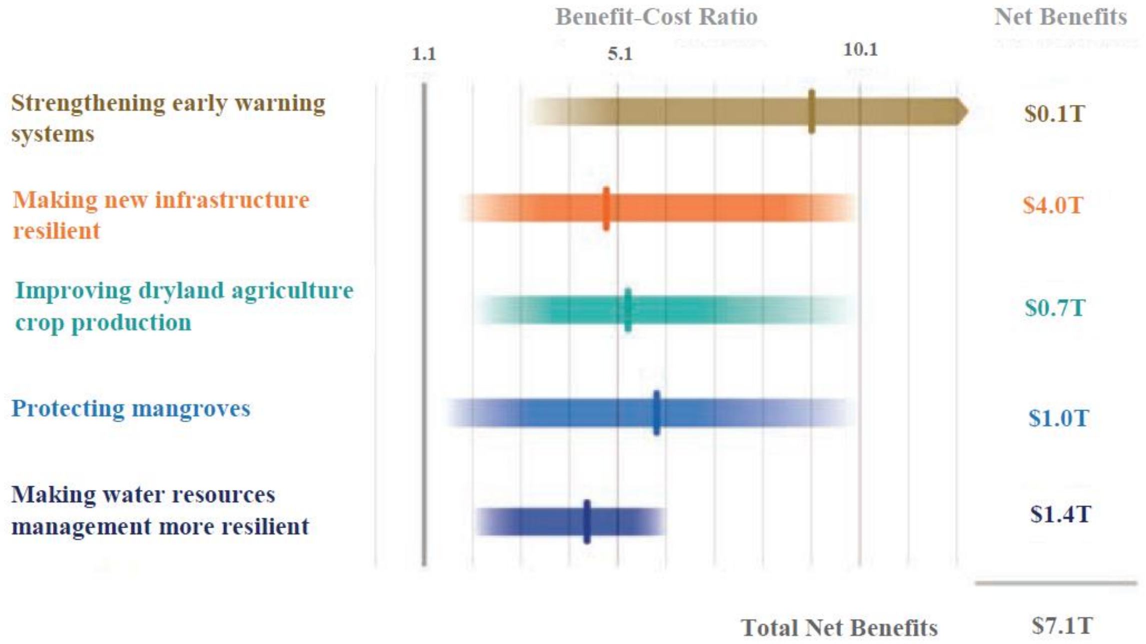
- As per the Global Climate Risk Index, in 2018, India lost US$ 37 billion due to climate events.
- International Labour Organisation's study concludes that India would lose 5.8 per cent of its working hours by 2030 due to heat stress.
- These losses underscore the need for investment in building resilience.

Climate Risk Insurance

- Climate risk insurance is an important tool for providing security against loss of livelihoods and of assets as a consequence of disasters.
- The example of the Karnataka State Natural Disaster Monitoring Centre's Varuna Mitra which has not only benefitted 3.5 lakh farmers through its weather advisories but also provides data to insurers at panchayat scale to improve pay-outs to farmers is a case in point.

Developmental Schemes and Protection of Environment-Need for Convergence

- The Global Commission on Adaptation (GCA) in its flagship report concluded that investing US$ 1.8 trillion globally in five areas from 2020 to 2030 could generate US$ 7.1 trillion in total net benefits, as overall rate of return on such investments is high with benefit-cost ratios ranging from 2:1 to 10:1 and higher.
- These 5 areas are: strengthening early warning systems, making new infrastructure resilient, improving dryland agriculture crop production, protecting mangroves and making water resources management more resilient-



Benefits and Costs of Illustrative Investments in Adaptation

INDIA'S INITIATIVES AT THE INTERNATIONAL STAGE

International Solar Alliance (ISA)

- International Solar Alliance (ISA) has recently launched two new initiatives – a 'World Solar Bank' and 'One Sun One World One Grid Initiative' - of global import that are poised to be instrumental in bringing about solar energy revolution globally.
- ISA organized the First World Solar Technology Summit (WSTS) in September 2020.

Coalition for Disaster Resilient Infrastructure (CDRI)

- It was launched in September 2019 at the UN Climate Action Summit.
- As of December 2020, 19 countries and 4 multilateral organizations have become members of the Coalition. The CDRI is co-chaired by India and the United Kingdom (UK).

CONCLUSION AND WAY FORWARD

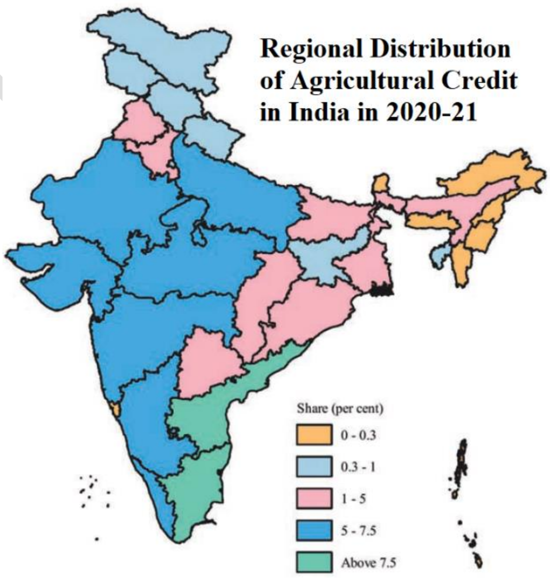
- India is on its track to successfully decoupling its economic growth from GHG emissions. As per the second BUR submitted to UNFCCC in 2018, India's emission intensity of GDP reduced by 21 per cent in 2014 over the level of 2005.
- To ensure the use of cleaner automobile fuel, India has also leapfrogged from BS-IV to BS-VI emission norms on 1st April,2020, earlier than the initial date for adoption in 2024.
- The effort of the International Solar Alliance in solar energy revolution is noteworthy and it has brought to fruition the 'One Sun One World One Grid' vision laid down by the Hon'ble Prime Minister of India.
- The enhanced new and additional financial resources, technological support and support in capacity building should be mobilized and delivered to strengthen the on-going climate actions in developing nations like India.

7. AGRICULTURE & FOOD MANAGEMENT

MAJOR ANNOUNCEMENTS FOR AGRICULTURE UNDER THE ATMA NIRBHAR BHARAT ABHIYAN

- 1 lakh crores Agri Infrastructure Fund
- 10,000 crores scheme for Formalisation of Micro Food Enterprises (MFE)
- 20,000 crores for fisherman through Pradhan Mantri Matsya Sampada Yojana (PMMSY)
- National Animal Disease Control Programme
- Animal Husbandry Infrastructure Development Fund - 15,000 crores
- From 'TOP' to TOTAL
- Reforms in Essential Commodities Act, Agriculture Marketing and Agriculture Produce Pricing and Quality Assurance
- PM Garib Kalyan Ann Yojana
- One Nation One Ration Card Scheme

OVERVIEW OF AGRICULTURE



- **Gross Value Added in Agriculture:** The share of agriculture and allied sectors in Gross Value Added (GVA) of the country at current prices is 17.8 per cent for the year 2019-20.
- **Growth in Agriculture & Allied Sectors:** During 2020-21, while the GVA for the entire economy contracted by 7.2 per cent, growth in GVA for agriculture maintained a positive growth of 3.4 per cent.
- **Gross Capital Formation (GCF)** in the agriculture and allied sector as a proportion to GVA has been showing a fluctuating trend from 17.7 per cent in 2013-14 to 16.4 per cent in 2018-19, with a dip to 14.7 per cent in 2015-16.
- **Production of Crops:** In the year 2019-20 (as per fourth advance estimates), total food grain production in the country is estimated at record 296.65 million tonnes which is higher by 11.44 million tonnes than the production of food grain of 285.21 million tonnes achieved during 2018-19.
- **The agricultural credit flow** target for the year 2019-20 was fixed at 13,50,000 crores and against this target the achievement was 13,92,469 crores.
- **Minimum Support Price (MSP):** The Union Budget for 2018-19 had announced that MSPs would be kept at the level of 1.5 times of the cost of production. On the basis of

the above-mentioned principle, Government recently increased the MSPs for all mandated kharif and rabi crops for 2020-21 season.

- **Pradhan Mantri Fasal Bima Yojana (PMFBY):** The scheme was made voluntary for all farmers, post its revamp in February 2020. Further the States have also been provided flexibility to rationalize the sum insured so that adequate benefits can be availed by farmers.

International Trade in Agricultural Commodities

- In 2019-20, India's agricultural and allied exports amounted to approximately 252 thousand crores.
- The major export destinations were USA, Saudi Arabia, Iran, Nepal and Bangladesh.
- The top agriculture and related products exported from India were marine products, basmati rice, buffalo meat, spices, non-basmati rice, cotton raw, oil meals, sugar, castor oil and tea.
- While India occupies a leading position in global trade of aforementioned agri-products, its total agri-export basket accounts for a little over 2.5 per cent of world agri-trade.

PM-KISAN

- The Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) Scheme was launched in 2019 to provide income support to all landholder farmer families across the country with cultivable land, subject to certain exclusions.
- Under the Scheme, an amount of 6000 per year is released in three instalments of 2000 each directly into the bank accounts of the beneficiaries.

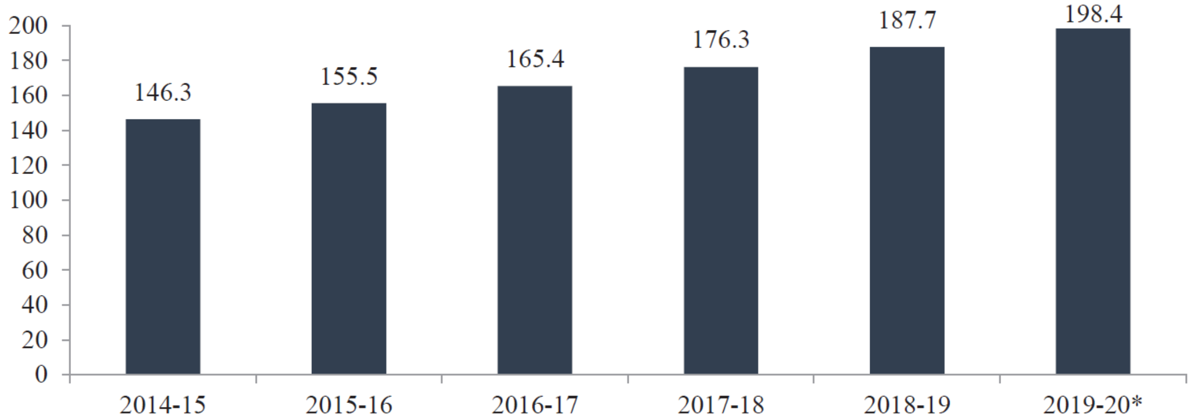
ALLIED SECTORS: ANIMAL HUSBANDRY, DAIRYING & FISHERIES

- Livestock sector grew at CAGR of 8.24 per cent during 2014-15 to 2018-19.
- As per the estimates of National Accounts Statistics (NAS) 2020, the contribution of livestock in total agriculture and allied sector GVA (at constant prices) has increased from 24.32 per cent (2014-15) to 28.63 per cent (2018-19).
- Livestock sector contributed 4.2 per cent of total GVA in 2018-19.
- **Milk:** India continues to be the largest producer of milk in the world. Milk production in the country has increased from 146.3 million tonnes in 2014-15 to 198.4 million tonnes in 2019-20.
- **Egg Production:** According to FAOSTAT production data (2019), India ranks 3rd in egg production in the world. The egg production in the country has increased from 78.48 billion in 2014-15 to 114.38 billion in 2019-20.

Recent Initiatives In The Livestock Sector

- As a part of the Atma Nirbhar Bharat Abhiyan stimulus package, a 15000 crores **Animal Husbandry Infrastructure Development Fund (AHIDF)** has been set up. The AHIDF will incentivize investments by individual entrepreneurs, private companies including MSME, farmers producers organizations (FPOs) and Section 8 companies to establish
    - dairy processing and value addition infrastructure,
    - meat processing and value addition infrastructure, and
    - animal feed plant.

- The Government has approved an ambitious scheme **"National Animal Disease Control Programme (NADCP) for control of Foot & Mouth Disease (FMD) and Brucellosis"** for vaccinating all cattle, buffalo, sheep, goat and pig population against FMD and all bovine female calves of 4-8 months of age against brucellosis.



Trend of Milk Production in India (Million Tonnes)

Fisheries

- India is the second largest fish producing country in the world and accounts for 7.58 per cent of the global production.
- Pradhan Mantri Matsya Sampada Yojana (PMMSY) was launched in May, 2020 as a part of Atma Nirbhar Bharat Package by Government of India
- The Government of India in October 2018 approved the establishment of a dedicated Fisheries and Aquaculture Infrastructure Development Fund (FIDF) at 7522 crores.

FOOD PROCESSING SECTOR

- During the last 5 years ending 2018-19, food processing industries (FPI) has been growing at an average annual growth rate of around 9.99 per cent as compared to around 3.12 per cent in agriculture and 8.25 per cent in manufacturing at 2011-12 prices.
- The sector constitutes as much as 8.98 per cent of Gross Value Added (GVA) in manufacturing in 2018-19 at 2011-12 prices.

New Initiatives in Food Processing Sector

- Under the Atma Nirbhar Bharat Abhiyan, Ministry of Food Processing Industries (MoFPI) has launched a new Centrally Sponsored Scheme, **Prime Minister-Formalisation of Micro Food Processing Enterprises (PM-FME)** with a total outlay of 10,000 crores over the period 2020-2025.
- **Operation Greens**
    - MoFPI is implementing a central sector scheme "Operation Greens – A scheme for integrated development of Tomato, Onion and Potato (TOP) value chain" to provide support to farmers when prices of agri produce is low.
    - Under Atma Nirbhar Bharat Abhiyan, this scheme has been extended from **tomato, onion and potato (TOP) crops to the other notified horticulture crops (Total)** for a period of six months.

FOOD MANAGEMENT

- To address the issue of anaemia and micro-nutrient deficiency and to promote nutrition security in the country, a centrally sponsored pilot scheme on **"Fortification of Rice & its Distribution under Public Distribution System"** was approved for a period of 3 years beginning in 2019-20.
- The main objective of the "Integrated Management of Public Distribution System (IM-PDS)" scheme is to introduce nation-wide portability of ration card under National Food Security Act (NFSA) through **'One Nation One Ration Card' System.**
- The Food Corporation of India (FCI) on the instructions from the Government sells excess stocks out of Central Pool through **Open Market Sale Scheme (Domestic) [OMSS (D)]** in the open market from time to time at predetermined prices.
- The Government has set **10 per cent blending target for mixing ethanol with petrol** by 2022 & 20 per cent blending target by 2030.

RECENT AGRICULTURAL REFORMS

The President gave his assent on September 27, 2020 to three reforms related to agriculture sector—

1. **The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020:** The reform grants freedom to farmers and buyers to transact in agricultural commodities even outside notified APMC mandis ensuring competitive alternative trading channels to promote efficient, transparent and barrier-free interstate and intra-state trade.
2. **The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020:** It seeks to provide for a national framework on contract farming that protects and empowers farmers in their engagement with agri-business firms, processors, wholesalers, exporters or large retailers for farm services and sale of future farming produce at a mutually agreed remunerative price in a fair and transparent manner.
3. **The Essential Commodities (Amendment) Act, 2020:** It seeks to remove commodities like cereals, pulses, oilseeds, edible oils, onion and potatoes from the list of essential commodities. The reform ends the era of frequent imposition of stock-holding limits except under extraordinary circumstances.

8. INDUSTRY AND INFRASTRUCTURE

INTRODUCTION

Announcements under the Atmanirbhar Bharat Abhiyan

- New definition of MSME: Low threshold in the MSME definition have created a fear among the MSMEs of graduating out of the benefits. Hence, the government has revised the definition of MSME by raising the investment limit.
- Packages for Power Sector- 90,000 crores liquidity injection for DISCOMs
- Treat COVID-19 as an event of 'Force Majeure' under Real Estate (Regulation and Development) Act (RERA).
- Government to announce a new coherent policy—where all sectors are open to the private sector while public sector enterprises (PSEs) will play an important role in defined areas

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Industry	3.3	3.8	7.0	9.6	7.7	6.3	4.9	0.9	-9.6
Mining	0.6	0.2	9.7	10.1	9.8	4.9	-5.8	3.1	-12.4
Manufacturing	5.5	5.0	7.9	13.1	7.9	6.6	5.7	0.0	-9.4
Electricity*	2.7	4.2	7.2	4.7	10.0	11.2	8.2	4.1	2.7
Construction	0.3	2.7	4.3	3.6	5.9	5.0	6.1	1.3	-12.6

Rate of Growth of GVA in Industry and Its Components (Per cent)

TRENDS IN INDUSTRIAL SECTOR

Index of Eight-Core Industries and Index of Industrial Production (IIP)

- The eight-core industries that support infrastructure, such as coal, crude oil, natural gas, refinery products, fertilizers, steel, cement, and electricity have a total weight of nearly 40 percent in the IIP.
- The eight-core index recorded its all-time low growth of (-) 37.9 due to COVID-19 led nation-wide lockdown (April-2020).

Gross Capital Formation in the Industrial Sector

- The rate of growth of Gross Capital Formation (GCF) in industry registered a sharp rise from 1.2 per cent in FY18 to 17.5 per cent in FY19, showing a substantive improvement in GCF in the sector.

Credit to the Industrial Sector

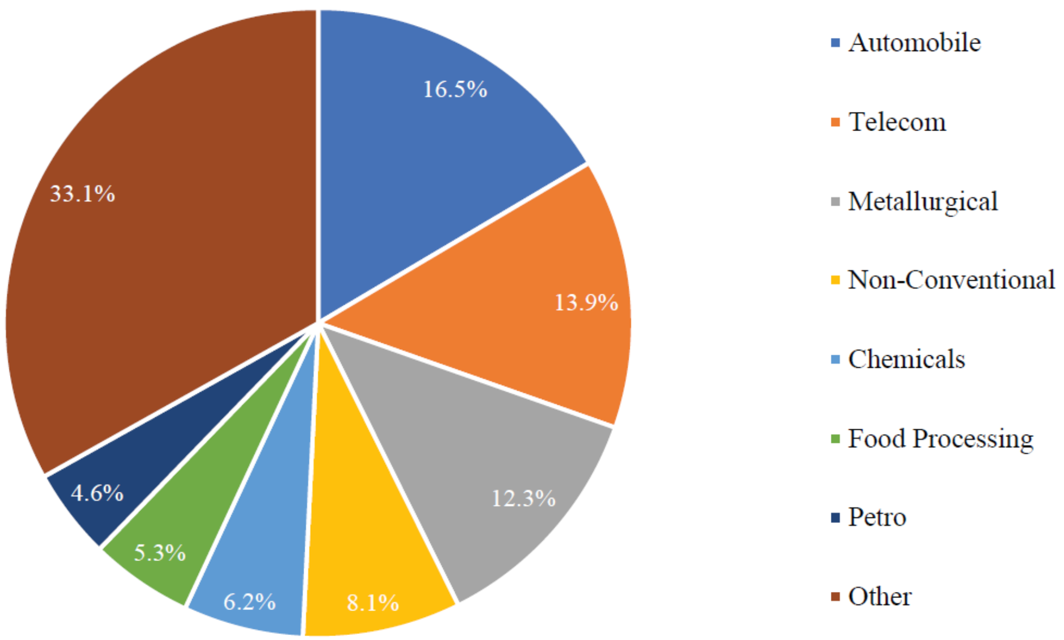
- Gross bank credit to the industrial sector, on a YoY basis, recorded (-) 1.7 growth in October-2020 as compared to 3.4 per cent growth in October-2019.

Performance of Central Public Sector Enterprises (CPSEs)

- Under the aegis of the Atmanirbhar Bharat Mission, the government has proposed to rationalise the participation of the CPSEs in commercial activities.
- It has been argued that the existence of the CPSEs should only be in the 'strategic sectors'. Accordingly, the number of PSEs in the strategic sector will ideally be limited to four– others would either be merged or privatized or brought under holding companies.
- Further, the CPSEs in the non-strategic sectors would be privatized as per guidelines issued.

Foreign Direct Investment (FDI)

- The FDI equity flows have been on the upswing since FY13. During FY20, total FDI equity inflows were US$49.98 billion as compared to US$44.37 billion during FY19.
- The similar number for FY21 (up to September-2020) was US$30.0 billion.
- The bulk of FDI equity flow is in the non-manufacturing sector leading to a reduction in the share of manufacturing in the FDI flows.

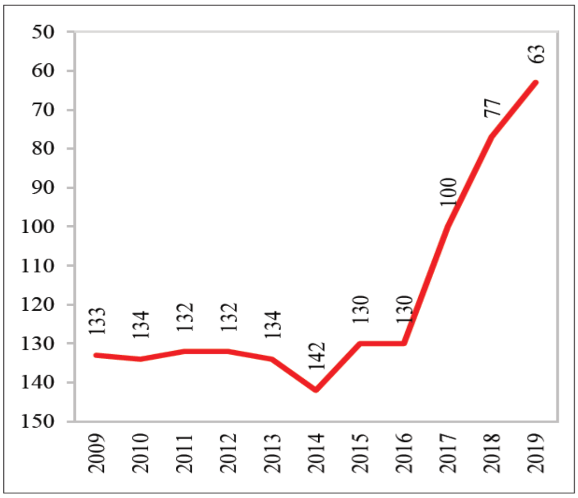


Share of specific manufacturing industries in total manufacturing FDI Equity Flows in FY20

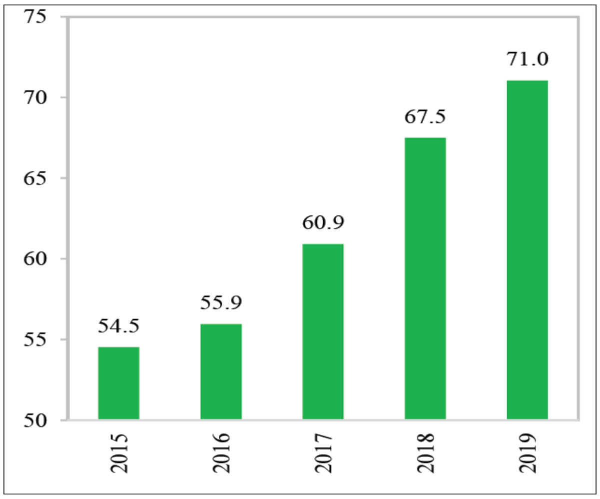
Start-up India

- Government had announced the "Startup India, Stand-up India" initiative. The action plan is based on the three pillars "Simplification and Handholding", "Funding Support and Incentives", and "Industry-Academia Partnership and Incubation".
- As on December 23, 2020, GoI has recognized a total of 41061 startups and 4,70,000 jobs have been reported by more than 39,000 startups.
- Initiative Taken by GoI to Support Startups in India
  - **Startups Intellectual Property Protection (SIPP) scheme**
  - **The Fund of Funds for Startups (FFS)** with a total corpus of Rs. 10,000 crores was established.

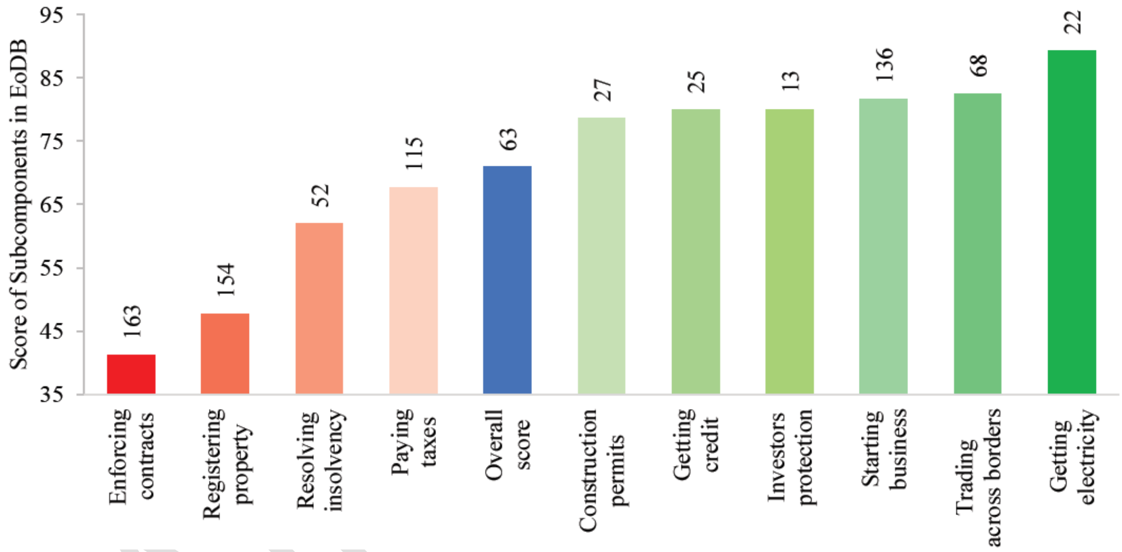
EASE OF DOING BUSINESS

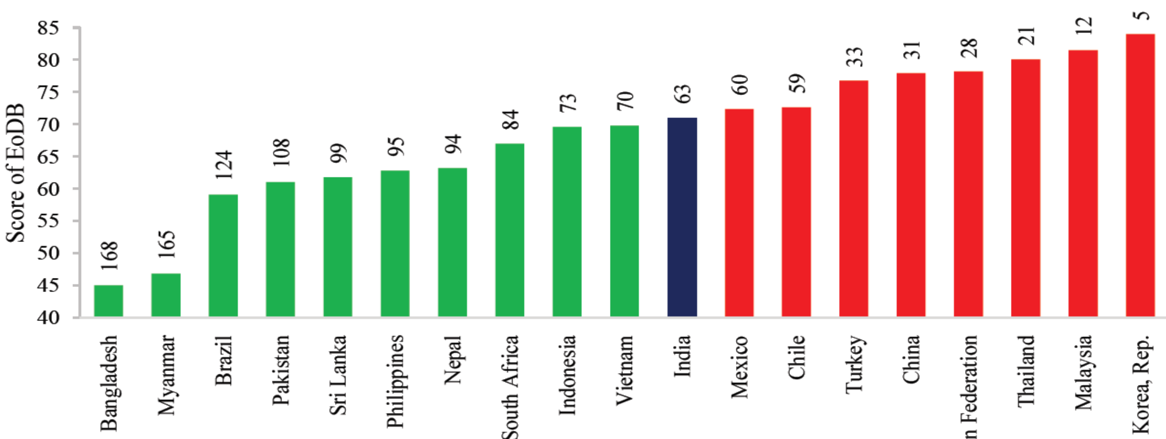


India's Rank in Ease of Doing Business



India's Score in Ease of Doing Business (DB17-20 methodology)





Note: Bars represent the overall score in EoDB-2019 and the numbers at the top of bar represent the rank in EoDB-2019.

- As per the Doing Business Report (DBR), 2020, the rank of India in the Ease of Doing Business (EoDB) Index for 2019 has moved upwards to the 63rd position amongst 190 countries from a rank of 77 in 2018.
- India has improved its position in 7 out of 10 indicators.
- The DBR, 2020 acknowledges India as one of the top 10 improvers, the third time in a row, with an improvement of 67 ranks in three years. It is also the highest jump by any large country since 2011.

SECTOR WISE ISSUES AND INITIATIVES

Steel

- The National Steel Policy, 2017 (NSP-17) aims at achieving a crude steel capacity of 300 million tonnes (MT) and a finished steel capacity of 230 MT with a per capita consumption of 158 kg by 2030-31.
- India is the second-largest producer of crude steel only after China. India is also the second largest consumer of steel.

Coal

- Coal accounts for 55 per cent of the country's energy needs.
- **Measures Taken by GoI in the Coal Sector**
    - **Creating carbon sink:** About 54500 ha land has been brought under green cover by planting 132 million trees - estimated carbon sink of 2.7 lakh tonnes of CO_2 equivalent/year. Plan to cover 20000 ha of additional area by plantation of around 50 million trees by 2030.
    - **Two Coal Bed Methane (CBM) Projects** with considerable potential for carbon footprint reduction are in the pipeline
    - Several amendments were brought into the Coal Mines (Special Provisions) Act, 2015 through the **Mineral Laws (Amendment) Act, 2020** enacted on 13.03.2020.

Textile and Apparels

- The sector is the second-largest employment generator in the country, next only to agriculture.
- The GoI is implementing several schemes such as the Amended Technology Upgradation Fund Scheme (ATUFS), Scheme for Integrated textiles park (SITP) and a scheme called Samarth.

Micro, Small & Medium Enterprises (MSME)

- Several corrective and supportive measures have been taken to bring the sector on track.
- The first among those is the revision of the investment criteria in the MSME definition.
- In addition, several other interventions have also been taken like the Champions Portal and launch of Udyam registration portal on July 1, 2020, which aims at reducing transaction time and cost for entrepreneurs and promote ease of doing business.
- 'CHAMPIONS' stands for Creation and Harmonious Application of Modern Processes for Increasing the Output and National Strength.

Earlier MSME Classification

Criteria: Investment in Plant & Machinery or Equipment			
Classification	**Micro**	**Small**	**Medium**
Manufacturing	Investment less than ₹ 25 lakhs	Investment greater than ₹ 25 lakhs & less than ₹ 5 crores	Investment greater than ₹ 5 crores & less than ₹ 10 crores
Service	Investment less than ₹ 10 lakhs	Investment greater than ₹ 10 lakhs less than ₹ 2 crores	Investment greater than ₹ 2 crores & less than ₹ 5 crores

Revised MSME Classification

Composite Criteria: Investment And Annual Turnover			
Classification	**Micro**	**Small**	**Medium**
Manufacturing & Services	Investment less than ₹ 1 crores and Turnover less than ₹ 5 crores	Investment greater than ₹ 1 crores & less than ₹ 10 crores and Turnover greater than ₹ 5 crores & less than ₹ 50 crores	Investment greater than ₹ 10 crores & less than ₹ 20 crores and Turnover greater than ₹ 50 crores & less than ₹ 100 crores

INFRASTRUCTURE

Road Sector

- The share of the transport sector in the GVA for FY19 was about 4.6 per cent of which the share of road transport contributed roughly 67 per cent.
- With 63.86 lakh kms of rural-urban roads and national-state highways, India is next only to the United States of America that has a road network of 66.45 lakh km.

Civil Aviation

- From the third largest domestic aviation market, it is expected to become the third largest overall (including domestic and international traffic) by the year FY25.

Port and Shipping

- In India, around 95 per cent (68 per cent) of total volume (value) of international trade is transported by sea.
- The Sagarmala program has identified 500+ projects under four pillars— 211 port modernization projects, 200 port connectivity projects, 32 port-led industrialization projects, and 62 coastal community development projects.

Railways

- Indian Railways (IR) with over 67,580 route kms, is the third-largest network in the world under single management.
- The Union Budget 2020-21 made an announcement to run the Kisan Rail services to provide better market opportunity by transporting perishables and agri-product.
- The GoI has allowed the private players to operate in the Railways sector through the PPPmode under the "New India New Railway" initiative.

Telecom Sector

- The telecom sector plays an important role in implementation of JAM-trinity (Jandhan Aadhar Mobile) based social sector schemes and other pro-development initiative of the GoI.
- The wireless telephony constitutes 98.3 per cent of all subscriptions whereas the share of landline telephones now stands at only 1.7 per cent.
- The overall teledensity in India stands at 86.6 per cent at the end of November-2020, whereas teledensity in rural and urban areas are 59.1 per cent and 139.0 per cent respectively.
- The number of internet subscribers (both broadband and narrowband put together) stood at 776.45 million at the end of September-2020 as compared to 636.73 million in March-2019.

Petroleum and Natural Gas

- India is the third-largest energy consumer in the world after USA and China.
- With a share of 5.8 per cent of the world's primary energy consumption, the Indian energy consumption basket is primarily dominated by Coal and Crude Oil.

Power

- Commendable progress has been made in the generation and transmission of electricity in India.
- The total installed capacity has increased from 3,56,100 MW in March-2019 to 3,70,106 MW in March 2020.
- Further, the generation capacity increased to 3,73,436 MW in October-2020 and comprised of 2,31,321 MW of thermal, 45,699 MW of hydro, 6,780 MW of nuclear, and 89,636 MW of renewables and others.

Mining Sector

- India produces as many as 95 minerals which include 4 hydrocarbon energy minerals (coal, lignite, petroleum & natural gas), 5 atomic minerals (ilmenite, rutile, zircon, uranium, and monazite), 10 metallic, 21 non-metallic, and 55 minor minerals.
- **Policy Initiatives in Mineral Sector**
    - The MMDR Act was amended in January-2020 to provide for, inter-alia, transfer of all valid statutory clearances vested with the old lessee to the new successful bidder up to a period of two years for all brownfield mines, so that there is no disruption in production and supply of raw material in the industry.
    - The GoI is in the process of setting up "Aluminium Import Monitoring System" (AIMS) & Copper Import Monitoring System (CIMS) to monitor the import of aluminium & copper in the country.

Housing and Urban Infrastructure

- According to Census 2011, India's urban population was 37.7 crores, which is projected to grow to about 60 crores by 2030.
- PM Street Vendor's Atmanirbhar Nidhi (PM SVANidhi) was launched as part of the Atmanirbhar Bharat Abhiyan for providing micro-credit facility to the street vendors to restart their businesses post COVID-19 lockdowns.

- To provide impetus to innovative technology for housing construction, the Hon'ble Prime Minister laid foundation stones of Light House Projects (LHPs) on 1st January, 2021.

WAY FORWARD

- The year after the crisis (FY22) will require sustained and calibrated measures to facilitate the process of economic recovery and to enable the economy to get back to its long-term growth trajectory
- The FY21 can be summarized in the lines of Saint Francis of Assisi ***"Start by doing what's necessary, then do what's possible, and suddenly you are doing the impossible"*** because as Albert Einstein said, ***"In the midst of every crisis, lies great opportunity."***

9. SERVICES

IMPACT OF COVID-19 ON SERVICES SECTOR

- India's Services sector witnessed a significant set-back during the COVID-19 pandemic mandated lockdown.
- Owing to its contact-intensive nature, the sector contracted by nearly 16 per cent during the first half of the financial year 2020-21.
- This decline was led by a sharp contraction in all sub-sectors particularly 'Trade, hotels, transport, communication & services related to broadcasting', which contracted by 31.5 per cent in First Half of FY 2020-21.

Signs of recovery

- However, there are now signs of steady recovery. With the ongoing vaccination drive, the contact intensive service sectors can expect to witness revival.
- Services purchasing managers' index, rail freight traffic, and port traffic have bottomed out and are rising steadily now, showing a V-shaped recovery.

FDI INFLOWS INTO SERVICES SECTOR

- India improved its position from 12th in 2018 to 9th in 2019 in the list of the world's largest FDI recipients according to the latest World Investment Report 2020 by United Nations Conference on Trade and Development (UNCTAD).
- Services sector, being the largest recipient of FDI in India, witnessed a strong growth during April-September 2020.
- Despite the disruptions being witnessed globally, FDI inflows into India's services sector grew robustly by 34 percent YoY during April-September 2020 to reach US$ 23.6 billion.

TRADE IN SERVICES SECTOR

- India has a significant presence in the services sector exports. It remained among the top ten trading countries in commercial services in 2019 accounting for 3.5 per cent of world services exports.
- Net services export receipts amounted to US$ 41.67 billion in H1 of FY2020-21 as compared with US$ 40.47 billion a year ago.
- India's services export growth moderated to 2.5 per cent in 2019-20 from 6.6 per cent in 2018-19 as receipts primarily on account of transportation, insurance and communication services.
- India's services imports exhibited sharper decline of 13.95 per cent in H1 of FY2020-21 in comparison with services exports.

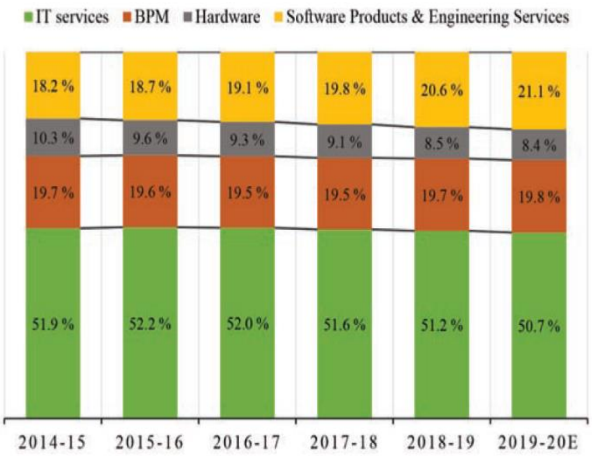
SERVICE SECTOR SHARE AT THE STATE AND UT LEVEL

- The services sector accounts for more than 50 per cent of the Gross State Value Added (GSVA) in 15 out of the 33 states and UTs.

- In eight states, services sector accounts for more than 60 per cent of GSVA.
- Chandigarh and Delhi stand out with a particularly high share of services in GSVA of over 85 per cent while Sikkim's share remains the lowest at 27.02 per cent.

IT BPM SERVICES

- Over the last decade, the Indian IT-BPM Industry grew by 102 per cent reaching US$ 190.5 billion in revenues in 2019-20. It also added 1.8 million employees, up 70 per cent over the last 10 years.
- Over the last six years, IT services has constituted the majority share (over 50 per cent) of the IT-BPM sector, with about US$ 97 billion in revenues in 2019-20.
- Indian start-up ecosystem: India is home to 38 unicorns at present, as per the NASSCOM Tech Start up Report 2021. The US and China have 243 and 227 unicorns, respectively.
- Out of the total US$ 146.55 billion in exports of the IT-BPM sector in 2019-20,
    - IT services contributed US$ 79.1 billion, accounting for 54 per cent of the exports.
    - BPM and Software Products & Engineering services accounted for the remaining 46 per cent with each accounting for a roughly equal share of about 23 per cent.



Sub-Sector Breakdown of IT-BPM Sector in 2014-15 to 2019-20

Customer Centric | Customer + Collaboration

Dimensions	1990	2000	2010-2015	2016-2020
Services	One client, one solution	Enterprise Services	Enterprise Solutions	Digital Enterprise products & solutions
Service Delivery	Custom, People Driven	Industrialised capacity & Method-driven	Capacity & IP driven	Platforms & Automation
Technology	Mainframe to Client Server	Y2K, dotcom enablement	Cloud, virtualisation, Mobile computing	Digital Tech (AI, ML/NLP, IoT, Blockchain)
Pricing	Input-based, Fixed Costs	Output-based, Fixed Costs or Gain share	Pay-per-use	Outcome-based
Deal structure	Deals relating to CAD/M & Maintenance	Multiple vendors, Large size, Long duration	Small deal wins, Short duration, End-to-end	Structured deals, Internet focused transactions
Resources	Staff-augmentation	Fixed Capacity	Non-linear	Humans+Machines, Domains & Tech Experts
Time to Deploy	Years	Months	Weeks or Days	Continuous Releases

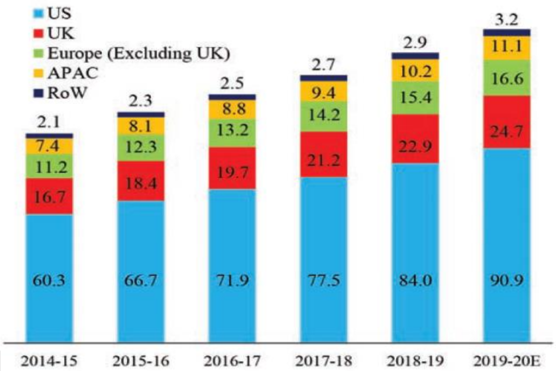
Evolution of the business model for IT-ITeS (Source: NASSCOM)

Reforms

- In 2021, a number of significant structural reforms have been undertaken to drive innovation, technology adoption and efficiency in the IT-BPM sector, including
    - Consumer Protection (E-commerce) Rules, 2020 and
    - simplification of the Other Service Provider (OSP) guidelines of the Department of Telecom (which reduce the compliance burden of the BPO industry and enables to 'Work from Home' (WFH)).

Country-wise distribution of export revenues

- USA remained the biggest recipient of exports, amounting to US$ 91 billion, accounting for 62 per cent of total IT-BPM exports (excluding hardware) in 2019-20.
- This is followed by UK, being the second largest export market for IT-BPM services amounting US$ 24.7 billion but with a much smaller share of around 17 per cent.
- Europe (excluding UK) and Asia-Pacific account for 11.4 per cent and 7.6 per cent of the export earnings of India, respectively.



Geographic Break-up of India's IT-BPM Exports (US $ billion) (Excluding Hardware and e-commerce)

TOURISM SECTOR

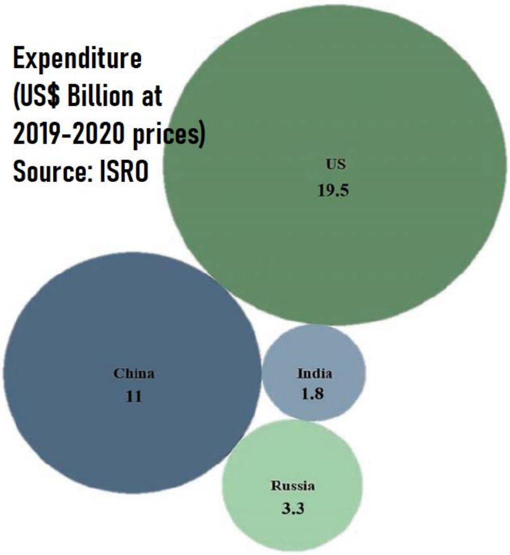
- As per the **World Tourism Barometer of the United Nation's World Tourism Organization,** international arrivals fell by 72 per cent globally over the first ten months of 2020 due to COVID-19, making it the worst year on record in the history of tourism.
- To evacuate Indians stranded abroad after the breakout of the Covid-19 pandemic and the resultant lockdowns across the world, **Vande Bharat Mission** was launched. Under this, the government established Transport Bubbles with countries to repatriate its citizens.
- India ranked **23rd in the world in terms of international tourist arrivals in 2019**, falling slightly from the 22nd position in 2018.
- India accounts for 1.23 per cent of world's international tourist arrivals over 2 per cent of the world's tourism foreign exchange earnings.

- **Foreign tourists from the top 10 countries visiting India are from** Bangladesh, USA, UK, Australia, Canada, China, Malaysia, Sri Lanka, Germany and Russia.
- Among the foreign tourists, **57.1 per cent tourists visited for leisure,** holiday and recreation, 14.7 per cent for business purposes, and 12.7 per cent was Indian diaspora.
- **The top five states attracting domestic tourists** in 2019 are Uttar Pradesh, Tamil Nadu, Andhra Pradesh, Karnataka, and Maharashtra.
- **The top five states attracting foreign tourists** in 2019 are Tamil Nadu, Maharashtra, Uttar Pradesh, Delhi and West Bengal.

- India introduced the e-Tourist Visa regime in 2014 which was further liberalized in 2016, renaming it to **e-Visa scheme** with five sub-categories i.e. 'e-Tourist Visa', 'e-Business Visa', 'e-Medical Visa', 'e-Conference Visa' and 'e-Medical Attendant Visa'.
- **India ranked 34th in Travel and Tourism Competitiveness Index,** improving significantly from its rank of 65 in 2013.
- Tourism contributed 5 per cent share to India's total GDP in 2018-19. It also supports almost 13 per cent of total employment in India.

SPACE SECTOR

- India spent about US$ 1.8 billion on space programmes in 2019-20.
- However, the country still lags behind the major players in the space sector, such as USA, which spent about 10 times more than India in the space sector in 2019-20 (Figure 7), and China, which spent about 6 times more.
- India has launched around 5-7 satellites per year in the recent years. On the other hand, USA, Russia and China dominate the satellite launching services with 19, 25 and 34 satellites respectively in 2019.



Commercialization and attracting private investment in the space sector

- With the long term vision of making the country self-reliant and technologically advanced, the Government in June 2020, opened up the Space sector enabling the participation of Indian private sector in the entire gamut of space activities.
- New Space India Limited (NSIL), a Central Public Sector Enterprise under Department of Space, has been mandated to transfer the technologies emanating out of Indian space programme and enable Indian industry to scale up high-technology manufacturing base.
- Government of India has also established Indian National Space Promotion and Authorisation Centre (IN-SPACe) for promoting industries and attracting investment in space sector.
- Further, ISRO would be sharing its infrastructure, transfer technology know-how for production and spin-off. These measures would help India become a manufacturing hub of space assets.
- As per industry estimates, there are more than 40 start-ups working in India with funding, teams and structure on space and satellite projects complimenting the efforts of government.
- As per Satellite Industry Association Report (2020), the global space economy in 2019 was pegged at US$ 366 billion, growing by about 1.7 per cent over 2018. The commercial satellite industry is accounting for nearly 75 per cent of global space business.
- PwC estimates that the Indian space economy is valued at US$ 7 billion, which is around 2 per cent of the global space economy.

Country	2015	2016	2017	2018	2019
USA	20	22	29	31	19
Russia	29	19	20	20	25
China	19	22	18	39	34
European Space Agency	9	9	9	8	6
India	5	7	5	7	6
Japan	4	4	7	6	2
Others	3	2	2	3	10
Total	89	85	90	114	102

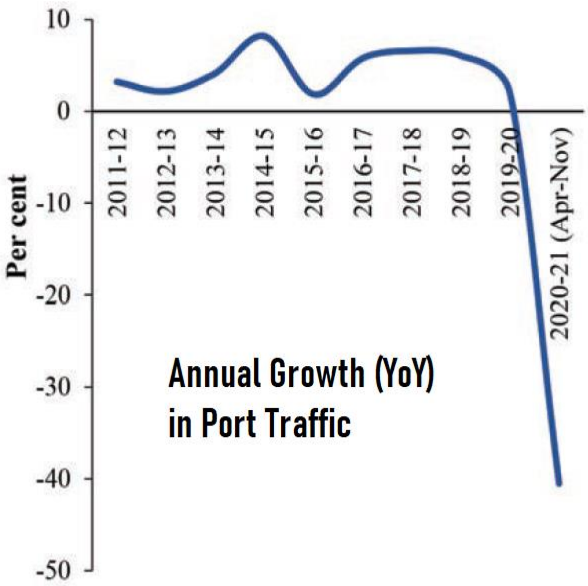
Number of Satellite Launches by Country (Source: ISRO)

PORTS, SHIPPING AND WATERWAYS SERVICES

- Ports handle around 90 per cent of export-import cargo by volume and 70 per cent by value in India.
- Ports including Deendayal (Kandla), Paradip, JNPT, Vishakhapatnam, and Chennai had the highest cargo capacities as of March 2020.
- India has a 1 per cent share in world fleet as on January 2020. The total numbers of ships owned by Indian companies stood at 1,431 in 2019-20, up from 1,210 in 2014-15.
- To harness the coastline, 14,500 km of potentially navigable waterways, Government has started Sagarmala Programme to promote port-led development in the country.

Growth in port traffic

- A consistent growth of around 6 per cent was maintained in overall port traffic between 2015-16 and 2018-19.
- It decelerated to 1.98 per cent in 2019-20 before falling sharply in 2020 owning to the lockdown in the wake of COVID-19 pandemic.



Turnaround time of ships

- The turnaround time of ships, which is a key indicator of efficiency of the ports sector, has declined from 4 days in 2014-15 to 2.62 days in 2020-21 (April-September).
- The shipping turnaround time is lowest at the Cochin port and the highest at the Mormugao port. Paradip port has shown biggest improvement in reducing turnaround time.
- As per the latest UNCTAD data, the median ship turnaround time globally is 0.97 days, suggesting that India has room to further improve upon the efficiency at ports.

10. SOCIAL INFRASTRUCTURE, EMPLOYMENT AND HUMAN DEVELOPMENT

INTRODUCTION

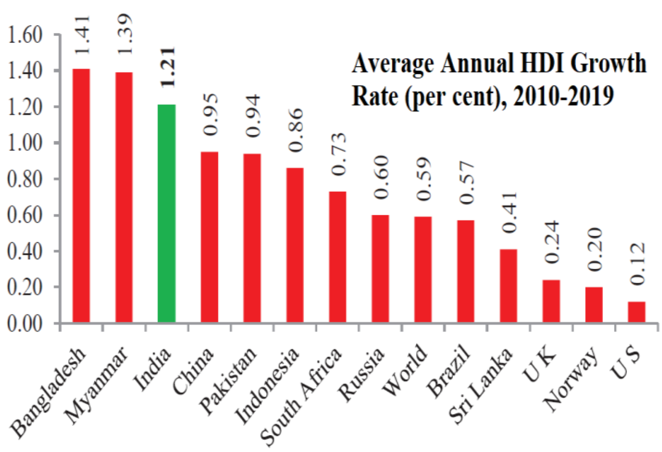
- The Government announced the first relief package of 1.70 lakh crores under 'Pradhan Mantri Garib Kalyan Yojana (PMGKY)' in March, 2020 and comprehensive stimulus cum relief package of 20 lakh crore under 'Atma Nirbhar Bharat Abhiyan' in May, 2020.
- Development and welfare schemes being implemented by the Government over the years together with these relief measures enabled the country to endure the impact of the COVID-19 pandemic.

TRENDS IN SOCIAL SECTOR EXPENDITURE

- The expenditure on social services (education, health and other social sectors) by Centre and States combined as a proportion of GDP increased from 6.2 to 8.8 per cent during the period 2014-15 to 2020-21 (BE).
- This increase was witnessed across all social sectors.
- For education, it increased from 2.8 per cent in 2014-15 to 3.5 per cent and for health, from 1.2 per cent to 1.5 per cent during the same period.
- Relative importance of social services in government budget, as measured in terms of the share of expenditure on social services out of total budgetary expenditure, has also increased to 26.5 per cent in 2020-21 (BE) from 23.4 per cent in 2014-15.

HUMAN DEVELOPMENT

- India's rank in Human Development Index (HDI)1 was 131 in 2019, compared to 129 in 2018, out of a total 189 countries according to UNDP Human Development Report, 2020.
- The decline in HDI ranking by two points in 2019 as compared to 2018 is relative to other countries.
- By looking at the sub-component wise performance of HDI indicators, India's 'GNI per capita (2017 PPP $)' has increased from US$ 6,427 in 2018 to US$ 6,681 in 2019, and 'life expectancy at birth' has improved from 69.4 years in 2018 to 69.7 years in 2019, respectively.
- However, the 'mean years of schooling' and 'expected years of schooling' remained unchanged in 2019 compared to 2018.
- However, considering the value of Planetary pressures adjusted HDI (PHDI), India was positioned 8 ranks better than HDI rank.



- The value of HDI for India has increased from 0.579 in 2010 to 0.645 in 2019.

Year	1990	2000	2005	2010	2015	2017	2018	2019
Life expectancy at birth	57.9	62.5	64.5	66.7	68.6	69.2	69.4	69.7
Expected years of schooling[b]	7.6	8.3	9.7	10.8	12.0	12.3	12.2	12.2
Mean years of schooling[b]	3.0	4.4	4.8	5.4	6.2	6.5	6.5	6.5
GNI per capita[a]	1,787	2,548	3,217	4,182	5,391	6,119	6,427	6,681
HDI value	**0.429**	**0.495**	**0.536**	**0.579**	**0.624**	**0.640**	**0.642**	**0.645**

Trends in India's HDI Value and its Sub-components

QUALITY EDUCATION FOR ALL

- As per U-DISE 2018-19, the physical infrastructure of more than 9.72 lakh government elementary schools has improved significantly. Out of these, 90.2 per cent have girls' toilet, 93.7 per cent have boys' toilet, 95.9 per cent have provision of drinking water facility etc.
- While India has attained a literacy level of almost 96 per cent at the elementary school level, it is still behind in achieving 100 per cent literacy. As per National Sample Survey (NSS), the literacy rate of persons of age 7 years and above at the All India level stood at 77.7 per cent

National Education Policy (NEP) 2020

- Universalization of education from pre-school to secondary level with 100 per cent Gross Enrolment Ratio (GER) in school education by 2030.
- To bring 2 crore out of school children back into the mainstream through universalization of access and expanding the open schooling system.
- The current 10+2 system to be replaced by a new 5+3+3+4 curricular structure corresponding to ages 3-8, 8-11, 11-14, and 14-18 years, respectively
- Class 10 and 12 board examinations to be made easier to test core competencies rather than memorized facts.
- School governance is set to change, with a new standards framework based on online selfdeclaration in the public domain for both public and private schools.
- Emphasis on foundational literacy and numeracy, and no rigid separation between academic streams, extra-curricular, vocational streams in schools.
- Vocational Education to start from Class 6 with Internships.
- Teaching up to at least Grade 5 to be in mother tongue/regional language, wherever possible. No language will be imposed on any student.
- Assessment reforms with 360-degree Holistic Progress Card, tracking student progress for achieving learning outcomes
- A new and comprehensive National Curriculum Framework for school education, Early Childhood Care & Education, Teacher Education and Adult Education.
- By 2030, the minimum degree qualification for teaching will be a 4-year integrated B.Ed. degree.

Initiatives for school going students during COVID-19 pandemic

1. PM eVIDYA:The four PM e-Vidya components of school education are -

   a. One nation, one digital education infrastructure
   b. One class, one TV channels through Swayam Prabha TV Channels
   c. Extensive use of Radio, Community radio and Podcasts
   d. Initiatives For the differently-abled
2. Swayam MOOCs for open schools and pre-service education
3. Funding support for digital initiative
4. National Repository of Open Educational Resources (NROER)
5. PRAGYATA guidelines on digital education was developed
6. The 'Manodarpan' initiative for psychosocial support

SKILL DEVELOPMENT

- The level of skill acquirement remains low, as only 2.4 per cent of the workforce of age 15-59 years have received formal vocational / technical training and another 8.9 per cent of the workforce received training through informal sources.
- Out of the 8.9 per cent workforce who received non-formal training, the largest chunk is contributed by on-the-job training (3.3 per cent), followed by self-learning (2.5 per cent) and hereditary sources (2.1 per cent) and other sources (1 per cent).

Policy Reforms under Skill Development Initiatives

1. Operationalizing Unified Skill Regulator
2. Pradhan Mantri Kaushal Vikas Yojana 3.0 (PMKVY 3.0)
3. Integration of Vocational and Formal education both at school and higher education:

STATUS OF EMPLOYMENT

Category	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2017-18									
Labour Force	25.48	8.67	34.15	13.25	3.57	16.82	38.73	12.24	50.97
Employment	23.91	7.70	31.61	12.39	3.15	15.53	36.29	10.85	47.14
Unemployment	1.57	0.97	2.54	0.86	0.42	1.29	2.44	1.39	3.83
2018-19									
Labour Force	25.77	8.77	34.54	13.60	3.68	17.28	39.37	12.45	51.82
Employment	24.37	8.46	32.83	12.64	3.31	15.96	37.01	11.77	48.78
Unemployment	1.40	0.31	1.71	0.96	0.37	1.33	2.36	0.68	3.04

Estimates of Labour Force, Employment, and Unemployment for year 2017-18 and 2018-19

- The size of labour force in 2018-19 was estimated at about 51.8 crore persons: about 48.8 crore employed and 3.0 crore unemployed.
- The size of the labour force increased by about 0.85 crore between 2017-18 and 2018-19.
- Out of these, 0.46 crore were from urban sector and 0.39 crore were from rural sector.
- Number of unemployed persons declined by about 0.79 crore between 2017-18 and 2018-19, largely in the category of females, and in rural sector.

Sector analysis

- Industry-wise estimates on workforce shows that the largest, about 21.5 crore persons are employed in 'Agriculture', which is still the largest employer with 42.5 per cent of workforce.
- Next important industry is ‘other services’ where about 6.4 crore persons (13.8 per cent) were engaged.
- 'Manufacturing' and ‘Trade, hotel & restaurants’ each employed about 5.9 crore persons with the share of nearly 12.1 per cent and 12.6 per cent respectively, while ‘Construction’ sector employed about 5.7 crore persons in 2018-19 with share of 12.1 per cent.

Changing Nature of Work: Gig and Platform Workers

- During the period of COVID-19 induced lockdown, the increasing role of the gig economy was evident with significant growth of online retail business.
- The lockdown period also saw employers preferring 'Work from home' of their employees, cutting down on staff strength and engaging freelancers or outsourcing tasks to reduce overhead costs as well as to hire skilled services.
- For the first time, these class of workers have been brought under the ambit of the newly introduced Code on Social Security 2020 by defining them exclusively in the category of unorganized worker for providing social security benefits.

GENDER DIMENSION OF EMPLOYMENT

- Labor force participation rate (LFPR) of females in the productive age (15-59 years) was 26.5 per cent in 2018-19, as compared to 80.3 per cent for males (rural+urban).
- While 54.7 per cent of urban women were employed in the regular wage/salaried category, about 59.6 per cent of rural females were not only self-employed but 37.9 per cent among them were helpers in household enterprises.

Level of education	Unpaid domestic services for household members	Unpaid caregiving services for household members
Not literate	296	126
Below primary	301	126
Primary	304	131
Upper primary/middle	308	131
Secondary and above	295	146

Average Time (in minutes) Spent in a Day per Female participants of Different Levels of Education

HEALTH

- Health indicators shows, Total Fertility Rate (TFR) has reduced sharply from 3.6 in 1991 to 2.2 in 2018.
- Maternal Mortality Ratio (MMR) was 113 per 1,00,000 live births for the period 2016-2018 and Under Five Mortality Rate (U5MR) was 36 per 1000 live births in 2018.
- **Child health outcomes:** The Phase-I of National Family Health Survey-5 (NFHS-5), shows that immunization coverage for children has increased for all 10 States under analysis except for Kerala.

Achievements in Fight Against COVID-19

- **A Fit Health Worker Campaign** was launched at Auyshman Bharat-Health & Wellness Centres (AB-HWCs) to enable the screening and early detection of non-communicable diseases in the Frontline-Health care workers.
- **The 'PMGKP Insurance Scheme for Health Workers Fighting COVID-19'** was announced on 30th March 2020.
- **Covid-19 Vaccine:** The world's largest COVID-19 immunization programme commenced on 16th January 2021 through the two indigenously manufactured vaccines viz; COVISHIELD and COVAXIN.

WATER AND SANITATION

Swachh Bharat Mission-Grameen (SBM-G)

- Under SBM-G, rural sanitation coverage has made an incredible leap in the target achievement from 39 per cent in 2014 to 100 per cent in 2019 with more than 10 crore toilets built since 2014.
- Phase-II of SBM(G) from 2020-21 to 2024-25 is being implemented with a total outlay of 1,40,881 crores focusing on Open Defecation Free (ODF) sustainability and Solid & Liquid Waste Management (SLWM).

Jal Jeevan Mission (JJM): Goals

- Goal of JJM is to enable every rural household get assured supply of potable piped water at a service level of 55 litres per capita per day (lpcd) regularly on long-term basis by ensuring functionality of the tap water connections
- To provide FTWC to every rural household by 2024 with a total outlay of 3.60 lakh crore in partnership with States.

RURAL DEVELOPMENT

- **The steps to strengthen the Mahatma Gandhi NREGA** 'inter-alia' include electronic Fund Management System (eFMS), implementation of Software for Estimate Calculation Using Rural rates for Employment (SECURE), JanMANREGA- a mobile application system, eSaksham- a digital learning platform etc.
- **Deen Dayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM)** aims at mobilizing about 9-10 crore households into SHGs and link them to 'sustainable livelihoods opportunities by building their skills and enabling them to access formal sources of finance.
- **Pradhan Mantri Gram Sadak Yojana (PMGSY)** has completed two phases and third phase has been launched with the target allocation of 1.25 lakh km all-weather road connectivity.
- **Garib Kalyan Rojgar Abhiyan (GKRA)** was launched in June, 2020 for a period of 125 days with a focus on 25 works in 6 States. The Abhiyan was a convergent efforts between 12 different Central Ministries/Departments. The major objectives of the initiative include the provision of livelihood opportunities to returning migrants and similarly affected rural citizens.