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ECONOMIC SURVEY 2020-21

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ECONOMIC SURVEY SUMMARY 2020-21

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VOLUME I

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

Theme

The Covid-19 pandemic engendered a once-in-a-century global crisis in 2020 – a unique recession where 90% of countries experienced a contraction in GDP per capita. India's response to COVID-19 pandemic stemmed from the **humane principle** that **Human lives lost cannot be brought back while GDP growth will recover from the temporary shock** caused by the pandemic. To implement its strategy, India imposed the most stringent lockdown at the very onset of the pandemic. Survey demonstrates the benefits of this strategy in this chapter.

COVID-19: Once In A Century 'Crisis'

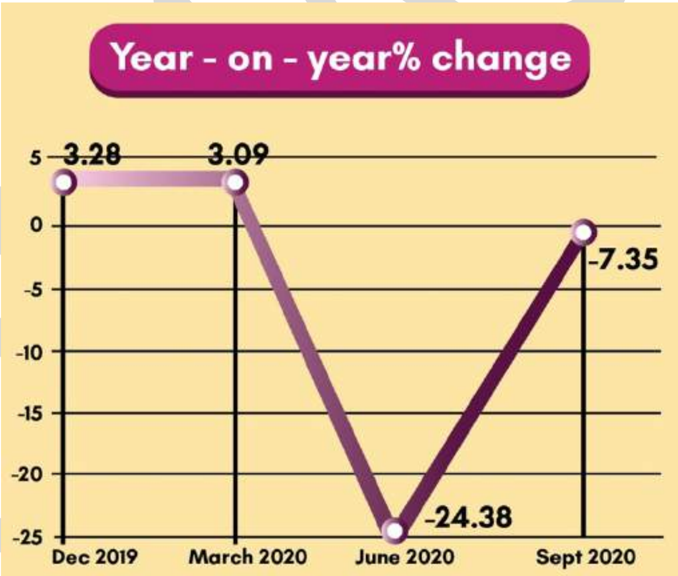
- COVID-19 virus - SARS-CoV-2 - first identified in Wuhan city of China in December 2019. The virus has posed an unprecedented challenge for policy making, globally and nationally. The **pattern and trends in spread of the virus across major countries showed that confirmed cases spread exponentially once community transmission began**. Various non-pharmaceutical interventions (NPIs) – such as lockdowns, closure of schools and non-essential business, travel restrictions – were, therefore, adopted by countries across the globe. The **pandemic and associated lockdown measures led to a de facto shutdown of a significant portion of the global economy, thereby triggering a global recession. The crisis World is facing is unique in a number of ways.**
  - Firstly, 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).
  - Secondly, pandemic is once in a 150-year event with an **unprecedented impact with all regions in the world projected to experience negative growth in 2020**. It is aptly called the 'Great Lockdown'
  - Thirdly, COVID crisis presented a **trade-off between lives and livelihoods, in the short run**.
- **Earlier,** Like COVID-19, the Spanish flu (1918-19) was highly contagious. **Evidence comparing the containment policies of 21 cities during the 1918 H1N1 influenza pandemic** shows that **implementing lockdowns earlier in the pandemic produced significantly higher rates of growth in manufacturing output and employment** from 1919 to 1923 than did slower activation or less intense use of lockdowns.

India's Humane Policy Response

- India was amongst the first of the countries that imposed a national lockdown when there were only 500 confirmed cases.
  - This was based on the **humane principle that while GDP growth will come back, human lives once lost cannot be brought back.**
    - ✓ Failing to impose restrictions on the free movement of individuals during the pandemic would have **exposed the population to a contagious threat, thereby leading to deaths in enormous numbers.**
    - ✓ However, the **economic impact of the lockdowns and closure of economic activity would have adversely impacted the 'livelihoods' of people**.
- The **40-day lockdown period was used to scale up the necessary medical and para-medical infrastructure** for active surveillance, expanded testing, contact tracing, isolation and management of cases, and educating citizens about social distancing and masks, etc.
  - This strategy was **also tailored to India's unique vulnerabilities to the pandemic** i.e., high population density, large vulnerable elderly population, overburdened health infrastructure etc.
- The strategy was motivated by the Nobel-Prize winning research by Hansen & Sargent (2001) **that recommends a policy focused on minimising losses in a worst-case scenario when uncertainty is very high.**

- Survey **has analyzed if the policy response across countries was effective in controlling the spread of the pandemic and associated fatalities across countries**. Survey's cross-country analysis demonstrates that the **intense lockdown helped India to effectively manage** both the spread of COVID-19 and the fatalities.
    - To assess this, the counterfactual is estimated, i.e., what would have been the natural caseload and associated fatalities purely based on the population, population density and the demographics of the population.
    - In India, COVID-19 **reached its first peak in mid-September**, after which rising mobility has been accompanied with lower daily new cases. Globally, m**any European countries and US have been facing deadly second and third waves around this time** with easing of lockdowns and increasing mobility.
- After the **nation-wide lockdown was gradually eased**, S**tates were advised to impose restrictions as per the spread of the pandemic in the State**; thus, the stringency of lockdown varied across States over time.
    - Survey finds that **higher initial stringency in States during the period June to Augusthas a significant impact in controlling the spread in cases and deaths**

V-Shaped Economic Recovery Due To Timely Stringent Lockdown



- The pandemic induced lockdowns **led to local, regional, and global supply disruptions hitting economic activity** – rendering a 'first order' supply shock. This, in turn, has led to a demand shock through
    - **disruptions in the labour market**, which affect household income, and
    - **through the precautionary motive to save**, which stemmed from the uncertainty amidst the health crisis.
- **India implemented an early and stringent lockdown from late March to May** to curb the pace of spread of COVID-19, this results 23.9% 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.
- Indian policymakers recognized that the l**ockdown would adversely impact economic activity and disrupt livelihoods**. The fiscal policy response to the pandemic was, **accordingly, strategized with a step-by-step approach.**
- During the first two quarters of FY:2020-21, the **Government ensured that funds for essential activities** were available despite a sharp contraction in revenue receipts. 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.
    - Government adopted the measures such as **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, the **government transited in a calibrated fashion to support investment and consumption demand through Atmanirbhar 2.0 and 3.0**. The **timing of stimulus was tuned to the absorptive capacity of the economy**, which was affected by the lockdown.
    - The calibrated stance of the Government is corroborated by the trend in average balances in Pradhan Mantri Jan-Dhan Yojana (PMJDY) accounts.
        - ✓ **Average balance in these accounts increased during the April-June quarter** – indicative of the precautionary savings by the accountholders.

- ✓ However, as the economy revived, the **balances have shown a fall pointing towards increasing expenditures on consumption.**
- The Indian policymakers also recognized that the '**supply' shock induced by the lockdown would disrupt the productive capacity of the economy. This capacity would need to be strengthened to meet the pent-up demand once it resumes – any mismatch would lead to macro-economic instabilities**.
- Therefore, India announced several **structural reforms to expand supply** in the medium-long term and avoid long-term damage to productive capacities (see box)
  - o India is the only country to have **undertaken structural reforms on the supply-side at the initial stages of the pandemic.** This far-sighted policy response will generate **productivity gains in the medium to long term.**
- These **reforms primarily focus on strengthening the potential of primary and secondary sectors of the economy to create jobs.**
  - o The **primary sector in India (agriculture and mining sectors) contributes around 16% of Gross Value Added (GVA)** while it employs around 43% of the workforce
  - o **Secondary sector provides expanded opportunities for formal employment** with enhanced incomes, income stability and social security provisions.
- A **public investment programmecentred around the National Infrastructure Pipeline** is likely to accelerate this demand push and further the recovery.
- India is witnessing a V-shaped recovery with a **stable macroeconomic situation aided by a stable currency, comfortable current account, burgeoning forex reserves, and encouraging signs in the manufacturing sector output.**

Major Structural Reforms

Deregulation and Liberalization of Sectors	
Agriculture	• **Farmers' Produce Trade and Commerce** (Promotion and Facilitation) Act, 2020 • **Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020** • **Essential Commodities (Amendment) Act, 2020**
MSMEs	• **New MSME definition** covering almost 99 per cent of all firms enabling MSMEs to grow in size and create jobs • **Removal of artificial separation between manufacturing and service** MSMEs
Labour	• **Enactment of four labour codes** namely, Wage Code, Industrial Relations Code, 2020, Code on Occupational Safety, Health & Working Conditions Code, 2020 & Social Security Code, 2020 • **'One labour return, one licence and one registration'**
Business Process Outsourcing (BPO)	• Several requirements, which **prevented companies from adopting 'Work from Home' and 'Work from Anywhere' policies have been removed**
Power	• **Tariff Policy Reform:** DISCOM inefficiencies not to burden consumers, Progressive reduction in cross subsidies, Time bound grant of open access, etc. • Privatization of Distribution in UTs
Public Sector Undertaking (PSU)	• PSUs in only strategic sectors • Privatization of PSUs in non-strategic sectors
Mineral Sector	• Commercial Mining in Coal Sector • Removal of distinction between captive and merchant mines • Transparent auction of mining blocks • Amendment to Stamp Act, 1899 to bring uniformity in stamp duty across States • Introduction of a seamless composite exploration-cum-mining-cum-production regime
Strengthening Productive Capacity	
Industry	• **Production Linked Incentive (PLI) Scheme** for 10 identified sectors • **National GIS-enabled Land Bank system** launched
Space	• Level playing field provided to **private companies in satellites, launches and space-based services**

	• **Liberal geo-spatial data policy** for providing remote-sensing data to tech-entrepreneurs
Defence	• **Corporatization of Ordnance Factory Board** • **FDI limit** in the Defence manufacturing under automatic route to **be raised from 49% to 74%** • **Time-bound defence procurement process**
Strengthening Productive Capacity	
Education	• **PM-eVidya** to enable multi-mode and equitable access to education • **Manodarpan initiative** for psychosocial support
Social Infrastructure	• Scheme for Financial Support to Public Private Partnerships (PPPs) in **Infrastructure Viability Gap Funding (VGF) Scheme extended till 2024-25**
Ease of Doing Business	
Financial Markets	• Direct listing of securities by **Indian public companies in permissible foreign jurisdictions** • Provisions to **reduce time line for completion of rights issues by companies** • Private companies which list NCDs on stock exchanges not to be regarded as listed companies
Corporates	• Including the provisions of Part IXA (Producer Companies) of Companies Act, 1956 in Companies Act, 2013 • **Decriminalization of Companies Act defaultsinvolving minor technical** and procedural defaults • Power to create **additional/ specialized benches for NCLAT** • **Lower penalties for all defaults for Small Companies**, One-person Companies, Producer Companies & Start Ups • Simplified Proforma for Incorporating Company Electronically Plus (SPICe +) introduced
Administration	• National platform for recruitment: **National Recruitment Agency** to conduct a Common Eligibility Test • Revised guidelines on **Compulsory retirement to remove ineffective or corrupt officials** through Fundamental Rule 56(j)/(I) and Rule 48 of CCS (Pension) Rule • **Faceless tax assessment** and a 12-point taxpayer's charter • **Fast track Investment Clearance** through Empowered Group of Secretaries

Glossary	
V-shaped recovery	• A V-shaped recovery **means that the economy bounces back quickly to its baseline before the crisis**. Growth continues at the same rate as before. • This is **one of the most optimistic recovery patterns because it implies that the downturn did not cause any lasting damage** to the economy.

CHAPTER AT A GLANCE

- India's response to COVID-19 pandemic stemmed from the humane principle that:
  - **Human lives lost cannot be brought back**
  - **GDP growth will recover from the temporary shock** caused by the pandemic
- To implement its strategy, **India imposed the most stringent lockdown at the very onset of the pandemic.**
- Survey's cross-country analysis demonstrates that the **intense lockdown helped India to effectively manage** both the spread of COVID-19 and the fatalities.
- The pandemic induced lockdowns **led to local, regional, and global supply disruptions hitting economic activity** – rendering a 'first order' supply shock. This, in turn, has led to a demand shock **both through disruptions in the labour market, which affect household income, and through the precautionary motive to save, which stemmed from the uncertainty amidst the health crisis.**
- With the easing of movement and health-related restrictions, **the government transited in a calibrated fashion to support investment and consumption demand through Atmanirbhar 2.0 and 3.0.**
- India also announced several **structural reforms to expand supply** in the medium-long term and avoid long-term damage to productive capacities.
- The economy was gradually unlocked since June, 2020 and has experienced a **V-shaped recovery since then.**

CHAPTER 1

Quiz: Testing your remembering skills & Understanding skills

Q1. 'Common Eligibility Test' is conducted by which of the following Government organisations?

a) National Testing Agency
b) University Grants Commission of India
c) National Recruitment Agency
d) Staff Selection Commission

Q2. 'SPICe +', an e-form launched by Government of India, is related to:

a) Auction of Coal mining blocks
b) Defence procurement process
c) Incorporation of a Company
d) Environmental clearance

Q3. Consider the following statements about 'primary sector' in India:

1. The primary sector in India contributes around 16% of Gross Value Added (GVA).
2. More than half of the workforce in India is employed in the primary sector.

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Q4. Which of the following measures is/are part of the 'Pradhan Mantri Garib Kalyan Yojana (PMGKY)' package announced by the Government of India?

1. Ensuring food security through public distribution system
2. Direct benefit transfers to widows, pensioners and women
3. Additional funds for MGNREGS
4. Debt moratoria and liquidity support for businesses

Select the correct answer using the code given below.

a) 1 only
b) 4 only
c) 1, 3 and 4 only
d) 1, 2, 3 and 4

Q5. The pandemic and associated lockdown measures led to a de facto shutdown of a significant portion of the global economy, thereby triggering a global recession. In the past, global recessions have been driven by which of the following factor/factors?

1. Financial crisis
2. Sharp movement in oil prices
3. War

Select the correct answer using the code given below.

a) 1 and 3 only
b) 1, 2 and 3
c) 2 only
d) 1 and 2 only

Q6. Which of the following statements best describes a 'V shaped recovery'?

a) Recovery in which the economy, after falling, struggles around a low growth rate for some time, before rising gradually to usual levels.

b) Recovery in which the economy fails to regain the level of earlier growth trend even after several years.

c) Recovery in which the economy bounces back quickly to its baseline growth before the crisis.

d) Recovery in which the economy quickly rises after an economic crash and overshoots the previous trend path

Q7. Consider the following statements about 'precautionary savings':

1. **Uncertainty amidst the COVID-19 health crisis gave rise to precautionary motive to save among Indian citizens.**
2. **Decline in average balance in Pradhan Mantri Jan-Dhan Yojana (PMJDY) accounts is indicative of the precautionary savings by the accountholders.**
3. **Precautionary savings can lead to demand shocks in an economy.**

Which of the statements given above is/are correct?

a) 1 only

b) 3 only

c) 1 and 3 only

d) 1, 2 and 3

Self-Assessment: To practice Question for Answer Writing skills

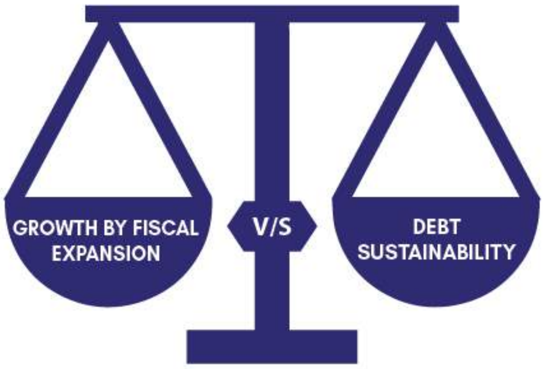
Q1. Highlighting the uniqueness of the challenge faced by India at the onset of the COVID-19 pandemic, assess the efficacy of the response of the government in containing the spread of Covid-19.

Q2. Give a brief account of various reforms measures taken by India in response to slowdown in the economy caused due to pandemic induced lockdown.

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

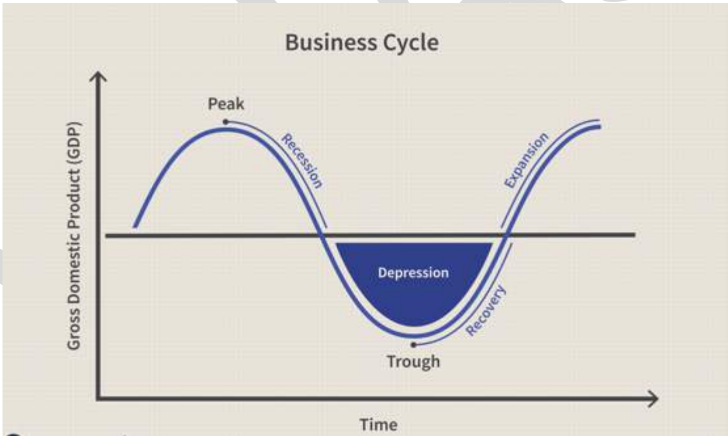
Theme

In the realm of Fiscal Policy, there is a persistent dichotomy between 'fiscal spending to drive growth' and 'fiscal austerity to manage overall debt'. This dichotomy has assumed centerstage with the outbreak of COVID-19. Government's across the globe are facing the dilemma of encouraging growth by fiscal expansion and simultaneously ensuring debt sustainability. In this context, the chapter tries to analyze the relationship between growth and debt sustainability and subsequently highlights the debt profile of India and a possible way forward through this debate.



Business Cycles and Associated Policy Stances

The Business cycle, also known as the economic cycle or trade cycle can be broadly referred to as **fluctuations of GDP along its long-term growth trend.**

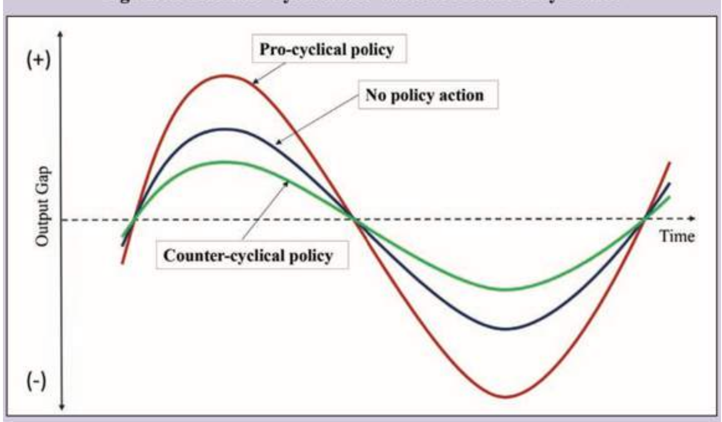


The position of a country on this economic cycle serves as a key determinant of the fiscal policy. The Survey argues that, in general, fiscal policy must be counter-cyclical to smooth out economic cycles instead of exacerbating them.

While counter-cyclical fiscal policy is necessary to smooth out economic cycles, **it becomes critical during an economic crisis.** Following can be cited as key advantages of following a counter-cyclical fiscal policy-

- **Fiscal multipliers**, which capture the aggregate return derived by the economy from an additional Rupee of fiscal spending, are **unequivocally greater during economic crises** when compared to economic expansion. This is because-
    - **Economic crisis creates a binding liquidity constraint on households** i.e., lowers their disposable income. In this context, increased government expenditure eases the liquidity situation of the households and leads to consequent increase in consumption levels.
    - **During an economic crisis, credit becomes expensive** thus weakening investment and consequently growth. Fiscal expansion increases market liquidity, thus making credit cheaper and stimulating investment and growth.
    - 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:** 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.

Figure A: Business Cycle under Various Fiscal Policy Stance



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.

- **Enhances confidence in stability of the economy:** Governments adopting counter-cyclical fiscal policy are able to credibly exhibit their commitment to sound fiscal management. As a result, rational agents in the economy would expect the economy not to fluctuate as much and therefore their private actions would reinforce this, in turn enabling stronger macroeconomic fundamentals.

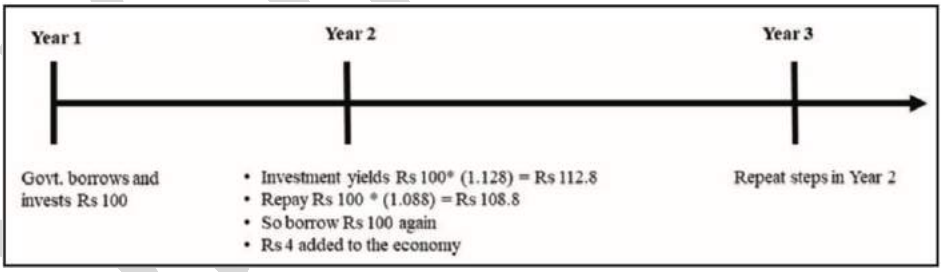
For India, in the current scenario, when **private consumption**, which contributes to **54 per cent of GDP is contracting**, and **investment, which contributes to around 29 per cent is uncertain**, the relevance of counter-cyclical fiscal policies becomes paramount.

The (r-g) Differential and Debt Sustainability in India

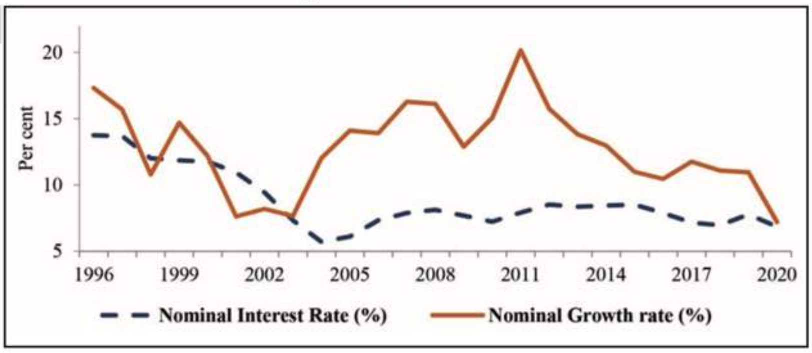
The (r-g) differential (or Interest Rate Growth Differential (IGRD)) refers to the **difference between nominal rate of interest (r) in an economy and the nominal rate of growth(g).** Debt on the other hand refers to public debt of a country which includes debt from domestic as well as foreign sources.

The economic survey makes following observations with regard to the relationship between IRGD and debt sustainability:

- The debt-to-GDP ratio depends on three key parameters, namely the **IRGD**, the **debt-to-GDP ratio in the previous period** and **the ratio of primary deficit-to-GDP.**
- As long as primary deficit is a constant fraction of GDP, IRGD is sufficient statistic for estimating the debt sustainability i.e., **the ease with which a government can reduce its debt-to-GDP ratio depends primarily on the IRGD.** More negative the IRGD, the easier (and quicker) it is for the Government to ensure debt sustainability (illustrated through this infographic assuming that the nominal growth rate is 12.8% whereas nominal interest rate is 8.8%).



2a: During the Last 25 years, i > γ is a Norm, Except for a Short Period During the Asian Financial Crisis



- **As a norm in India**, over the last two and a half decades, **GDP growth rates have been greater than interest rates.** This has 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.
  - This scenario expands the scope for fiscal policy to **(i) cater to slowdowns in aggregate demand and (ii) thereby enable growth to foster debt sustainability.**
- **The variability in the GDP growth rates in India is higher** than variability in interest rates. This implies that changes in IRGD are mostly attributable to changes in growth rates rather than the changes in interest rates. Thus, it is a higher growth that provides the key to the sustainability of debt for India.

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. Following observations have been made for other countries-

- Cross country evidence also suggests that, within countries, **growth rates vary far more across time than interest rates.**
- Since 2003**, India's IRGD has been negative and the lowest for the major OECD economies.**

In India, Growth Leads to Debt Sustainability, Not Vice-Versa

With regard to correlation between growth and debt sustainability, the survey has made following observations-

- When comparing growth rate of a given year and debt-to-GDP ratio of the subsequent year, it was observed that increasing growth rate is positively correlated with decrease in debt-to-GDP ratio for the subsequent year. This implies that **change in growth rate has a causal effect on debt sustainability.**
- On the other hand, when comparing debt-to-GDP ratio of a given year and growth rate of the subsequent year, the relationship was statistically insignificant. This implies that **change in debt sustainability has no perceptible impact on growth rates.**

The evidence therefore shows the direction of causality between the two variables: **higher growth leads to lower public debt in India, but not vice-versa.**

Debt Sustainability through higher growth following the Asian Financial Crisis

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

When the GDP growth rate is low, no such causal relationship manifests between growth and public debt. This is seen through the following summary of the results-

- **For India and other 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.**

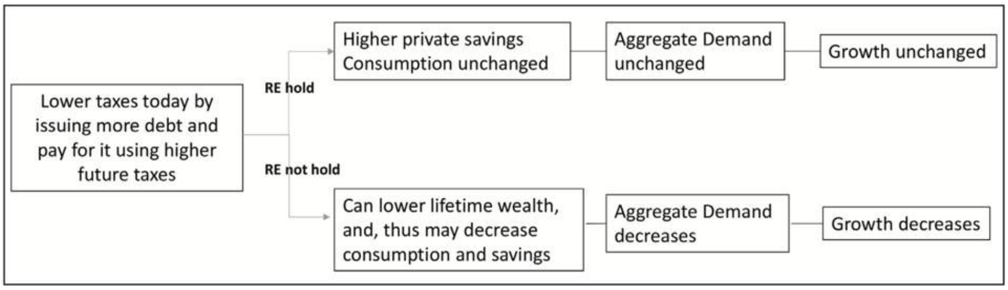
Ricardian Equivalence Proposition (REP)
REP states that forward-looking consumers, who are also assumed to be perfectly rational and perfectly capable, internalize the government's fiscal choices when making their consumption decisions.

This difference is extremely important to highlight because the **implications for fiscal policy – especially during the current crisis – are starkly different** for India when compared to policies that mimic those followed by advanced economies.

Crowding Out Due to Public Expenditure?

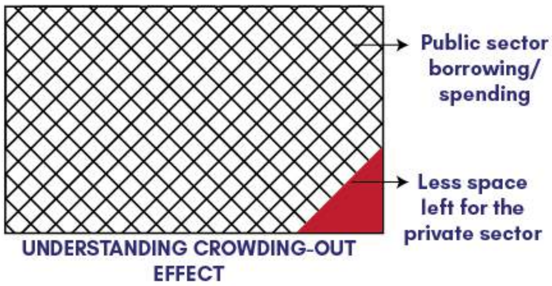
The crowding out effect is an economic theory that argues that rising public sector spending drives down or even eliminates private sector spending.

The survey highlights that a possible link from higher incremental debt to lower growth rate is based on **potential crowding out of private investment** and the **Ricardian Equivalence Proposition (REP).**



Although, the application of REP rests on a number of assumptions including (i) the representative citizen pays taxes; (ii) taxes are non-distortionary and are collected as a lump-sum; (iii) perfect capital markets with no borrowing constraints; (iv) future flows of income and future tax liabilities are certain; (v) representative citizen is infinite living, rational and forward looking.

However, it is seen that REP may or may not hold in economies due to strict assumptions made by it. Both economic scenarios are highlighted in the infographic.



Crowding out?

With regard to application of aforementioned crowding out phenomenon in India, the survey has made following observations:

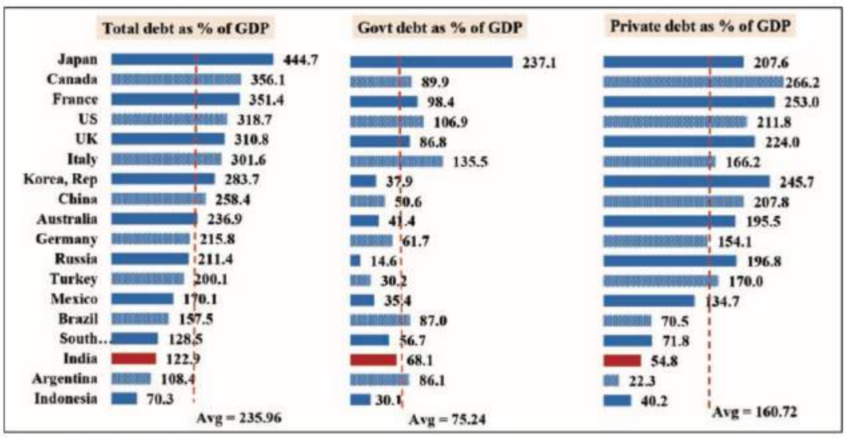
- The **phenomenon of crowding out of private investment** is based on the **notion that supply of savings in the economy is fixed**. Therefore, higher fiscal spending may increase the demand for loanable funds and hence exert an upward pressure on interest rates, thereby discouraging private investment.
    - But it is observed that for emerging economies **supply of savings is not fixed but expands with income growth.** This happens because developing economies generally operate below full capacity, and the supply of savings may grow from greater government spending through demand creation and thereby greater employment.
- 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.**
    - For instance, if the public expenditure is directed to sectors where the fiscal multipliers are large – for instance for building infrastructure – **such spending may significantly crowd in private investment as well.**

Consistent with these arguments against crowding out, studies find **no evidence of crowding out of private investment due to public investment over the last three decades in India post-liberalization.**

Structure of India's Debt

Following can be cited as the key characteristics of India's overall debt as a percent of GDP:

Figure 17: Debt-to-GDP ratio for India amongst the Rest of the world (2018)



Source: IMF Debt database

- **India's public debt-to- GDP has been significantly low** compared to high global debt levels. For instance, **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.**

- **Public debt and overall debt** level for India has **declined since 2003** and has been stable since 2011.
- The Government's debt portfolio is having **very low foreign exchange risk as the external debt is only 2.7 per cent of GDP**.
- Also, **small share of floating rate debt** (floating rate debt of Central Government is less than 5 per cent of public debt) tends to limit rollover risks and insulates the debt portfolio from interest rate volatility.

Figure 19: Composition of General Government public debt

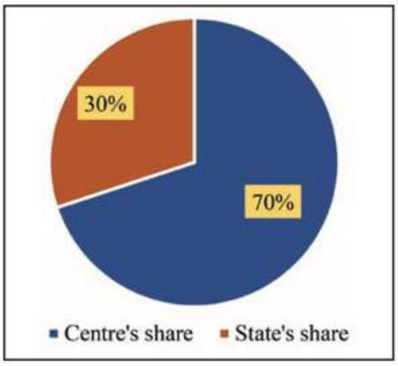
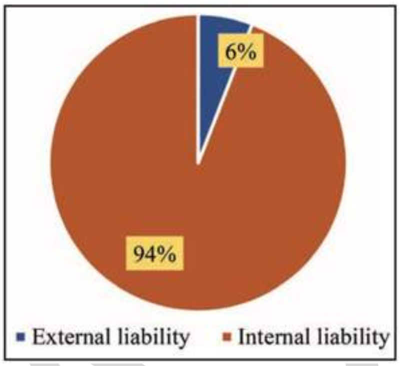


Figure 20: Composition of Central Govt. debt



Scenario Analysis: Is India's Current Debt Sustainable?

In the forward-looking analysis, the survey suggests that even in the worst-case scenario where growth is anemic over the medium-term, its impact on debt sustainably gets moderated by supportive monetary policy. Thus, even in the extremely worst-case scenarios (estimated as 4 percent growth for the next 10 years), **IRGD is expected to remain negative for India, thereby ensuring sustainability of debt.**

Policy Implications

For India, a practical approach in this scenario would be to provide **wriggle room for fiscal policy to be counter- cyclical** by setting the trigger as a two-quarter slowdown in GDP growth of 3.5 per cent when compared to the average GDP growth over the previous 20 quarters.

Glossary	
Wealth Effect	The wealth effect is a behavioral economic theory suggesting that **people spend more as the value of their assets rise.** The idea is that consumers feel more financially secure and confident about their wealth when their homes or investment portfolios increase in value.
Rollover risk	Rollover risk is a risk **associated with the refinancing of debt.** Rollover risk is commonly faced by countries and companies when a loan or other debt obligation (like a bond) is about to mature and needs to be converted, or rolled over, into new debt.

CHAPTER AT A GLANCE
This Chapter establishes clearly that **growth leads to debt sustainability in the Indian context** but not necessarily vice-versa. This is because the **interest rate on debt paid by the Indian government has been less than India's growth rate by norm.**
Similar relationship is difficult to establish in advanced economies which generally operate with lower growth rates.
As the **IRGD is expected to be negative in the foreseeable future for India**, a fiscal policy that provides an impetus to growth will lead to lower, not higher, debt-to-GDP ratios.
The Survey's clarifies that its call for a **more active, counter-cyclical fiscal policy is not a call for fiscal irresponsibility.** It is a call to break the intellectual anchoring that has created an asymmetric bias against fiscal policy.

CHAPTER 2

Quiz: Testing your remembering skills & Understanding skills

Q1. Consider the following statements about 'Interest Rate Growth Differential (IGRD)'

1. **IGRD is the difference between nominal rate of interest in an economy and the nominal rate of growth.**
2. **More positive the IRGD, the easier it is for the Government to ensure debt sustainability.**
3. **India has never had a negative IRGD during the last two and a half decades.**

Which of the statements given above is/are correct?

a) 1 only
b) 1, 2 and 3
c) 3 only
d) 1 and 3 only

Q2. The term 'Ricardian Equivalence Proposition (REP)', mentioned in the Economic Survey 2020-21, is related to:

a) Debt sustainability of a sovereign government
b) Consumptions decisions of consumers
c) Stability of Business cycle
d) Income inequality

Q3. With reference to fiscal policies adopted by the Governments, consider the following statements:

1. **In a pro-cyclical fiscal policy, government reduces public spending or increases taxes during expansionary times.**
2. **In a counter-cyclical fiscal policy, government increases public spending or reduce taxes during recession.**
3. **Counter-cyclical fiscal policy decreases fluctuations in the business cycle.**

Which of the statements given above is/are correct?

a) 2 and 3 only
b) 1 only
c) 1 and 3 only
d) 1, 2 and 3

Q4. Consider the following statements:

1. **The phenomenon of crowding out of private investment is based on the notion that supply of savings in the economy is fixed.**
2. **In emerging economies supply of savings can expand with growth in income.**
3. **An increase in public expenditure always leads to decrease in private investment.**

Which of the statements given above is/are correct?

a) 1, 2 and 3
b) 3 only
c) 1 only
d) 1 and 2 only

Q5. Which of the following statements best describes the concept of 'Wealth Effect'?

a) **Private savings increase with the rise in household incomes and value of personal assets.**

b) Economic advantages of wealth passed down through generations limits social mobility of certain vulnerable sections.
c) Rise in per capita incomes in wealthy nations is accompanied by rise in income and wealth inequality.
d) Consumers spend more as the value of their assets rise.

Q6. Consider the following statements regarding 'Fiscal multipliers':
1. They capture the aggregate return derived by the economy from an additional rupee of fiscal spending.
2. They are greater during economic expansion as compared to recessionary periods.
3. They are influenced by extent of liquidity in the market.

Which of the statements given above is/are correct?
a) 2 and 3 only
b) 1 and 3 only
c) 1 only
d) 1, 2 and 3

7. With reference to state of India's Debt, consider the following statements:
1. India's overall debt levels as a per cent of GDP are the highest among the group of BRICS nations.
2. Public debt level for India has declined since 2003 and has been stable since 2011.
3. In Government of India's debt portfolio, the share of external debt is substantially higher than inter nal debt.

Which of the statements given above is/are correct?
a) 1 only
b) 2 only
c) 1 and 3 only
d) 1, 2 and 3

Self-Assessment: To practice Question for Answer Writing skills

Q1. Why there is a persistent dichotomy exists between "fiscal spending to drive growth" and "fiscal austerity to manage overall debt"? Also discuss how counter cyclical fiscal policy helps in this regards.

Q2. Bring out relation between Interest Rate Growth Differential (IGRD) and Debt sustainability, discuss how growth lead to debt sustainability in India and not vice-versa.

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

Theme

The chapter highlights the **bias against emerging economies in sovereign credit ratings**. It compares sovereign ratings of different countries on several parameters like GDP growth rate, inflation etc. and concludes that there is **systemic under-assessment of India's fundamentals** reflected in its low ratings. It identifies implications of this and gives policy suggestions.

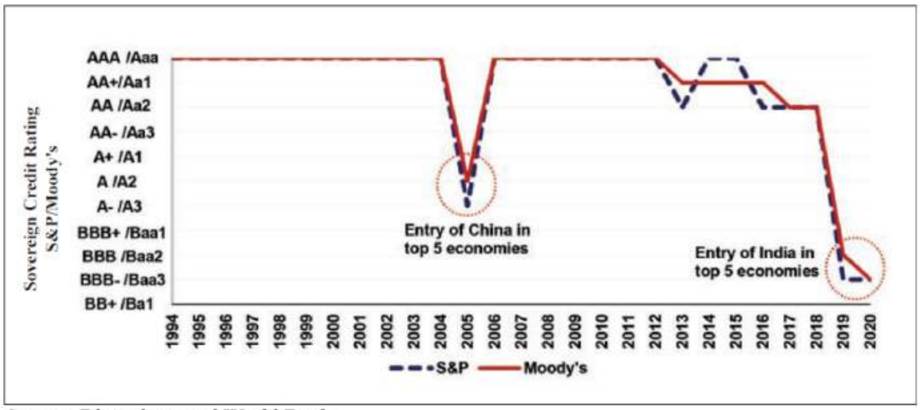
The Bias Against Emerging Giants in Sovereign Credit Ratings

- Never in the history of sovereign credit ratings has the **fifth largest economy in the world been rated as the lowest rung of the investment grade** (BBB-/Baa3). China and India are the only exceptions to this rule – China was rated A-/A2 in 2005 and now India is rated BBB-/Baa3 (see fig.).
- 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.
- CRAs find it **more difficult to upgrade poor countries relative to rich countries**, for any given improvement in ability and willingness to repay debts.
- There is "**home bias" in sovereign credit ratings by CRAs**. The respective home country of CRAs, countries with linguistic and cultural similarity, and countries with higher home-bank exposures received higher ratings than justified by their political and economic fundamentals.

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. Three key credit ratings agencies (CRAs) are S&P, Moody's and Fitch.
- 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.
- India is currently rated BBB-/Baa3 by S&P/ Moody's.

Figure 1: Sovereign Credit Rating of Fifth Largest Economy (Current US $)



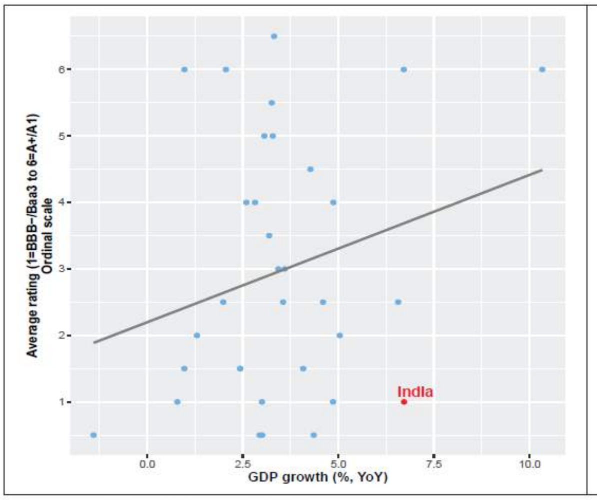
Source: Bloomberg and World Bank

Does India's Sovereign Credit Rating Reflect Its Fundamentals?

- While a positive correlation between sovereign credit ratings and GDP growth rate is observed across countries, India is clearly a **negative outlier i.e., it is currently rated much below expectation for its level of GDP growth.**

- Also, a **negative correlation is observed between sovereign credit ratings and Consumer Price Index (CPI)** inflation. However, India is rated much below expectation for its level of CPI inflation.
- Similarly, India is a **clear outlier on several parameters (see image).**
- Moreover, the **outlier status remains true not only now but also during the last two decades**. During **most of the 1990s and mid-2000s**, India's sovereign credit rating was speculative grade despite Indian economy growing at an average rate of over 6%.

Figure 5: Sovereign Credit Ratings and GDP Growth Annual (Per cent)

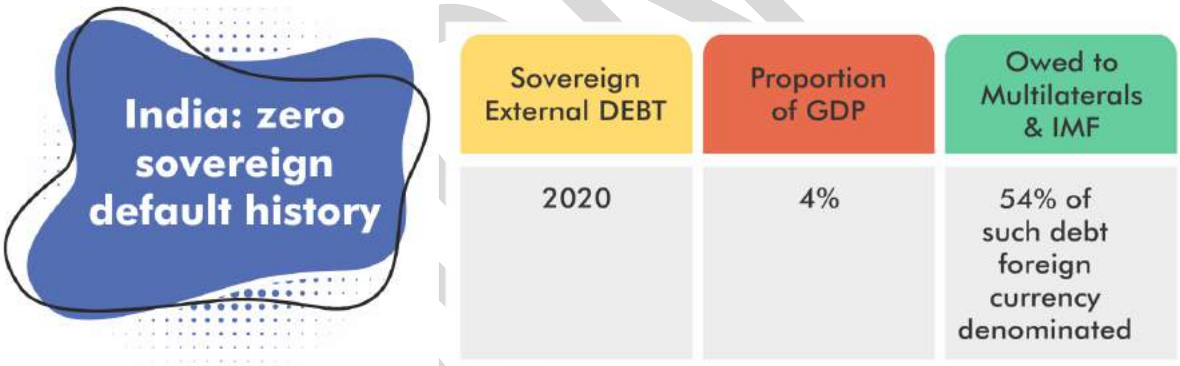


Source: Bloomberg and IMF

Does India's Sovereign Credit Rating Reflect Its Willingness and Ability to Pay?

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, India is **rated much below expectation** for its number of sovereign defaults since 1990, making it a negative outlier.
- India's **sovereign external debt as per cent of GDP** stood at a 4% (September 2020). Moreover, 54% of India's sovereign external foreign currency denominated debt was owed to multilaterals and IMF, **which is not expected to impact credit rating assessments**.



- India's **forex reserves stood at US$ 584.24 as of January, 2021**, greater than India's total external debt (sovereign and non-sovereign) of US$ 556.2 bn as of September 2020 (DEA). Despite this, India has **consistently been rated much below expectation** for its level of short-term external debt during the period 2000-20.

Effect of Sovereign Credit Rating Changes on Select Indicators

- **Effect of ratings downgrade**:
  - **Do not have strong negative correlation** with Sensex return and exchange rate (INR/USD) in the short, medium and long term.
  - **G-Sec yields and spread are not negatively correlated** with ratings downgrades in the medium term.
  - Rating downgrades **have a negative correlation with FPI** (Equity and Debt) in the long term.
  - When a country's sovereign debt is downgraded, all debt instruments in that country may have to be downgraded. **Commercial banks downgraded to sub investment grade will find it costly to issue internationally recognized letters of credit** for domestic exporters and importers, isolating the country from international capital markets.
  - There is evidence of **procyclicality of credit ratings contributing to financial market instability** in emerging economies.

  - CRAs **downgraded East Asian crisis countries more than what would have been justified** by these countries' worsening economic fundamentals. This adversely affected the supply of international capital to these countries.
- **Effect of ratings upgrade:**
  - In the long term, Sensex return, Exchange rate (INR/USD), FPI (Equity and Debt) are positively correlated with **ratings upgrade.**
  - **FPI Equity increased by 303% the next year** of ratings upgrade, and average FPI Debt increased at an average rate of 578% the next year of ratings upgrade (table 3).

Macroeconomic Indicators as Determinants of Sovereign Credit Rating Changes (During 1998-2020)

- During **years of India's sovereign credit rating changes**, the average performance of macroeconomic indicators (GDP growth, fiscal deficit, general government debt, overall debt, inflation and current account deficit) was **better than or similar to the previous year**. The average performance of these indicators **further improved or was similar** in the year after the sovereign credit rating change.
- However, 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.

Policy Suggestions

- 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.
- The **pro-cyclical nature of credit ratings and its potential adverse impact on economies**, especially low-rated developing economies must be expeditiously addressed.
- Ratings agencies should be **forced to substantially increase transparency**, including publishing a separate breakdown of the 'objective' and 'subjective' components of ratings, the minutes of the rating committees, and the voting records".

Glossary	
Procyclical	Procyclical describes a **state where behaviour and actions of a measurable product** or service (credit rating in this case) move in tandem with the cyclical condition of the economy. Economic indicators can have one of three different relationships to the economy: procyclic, countercyclic (indicator and economy move in opposite directions), or acyclic (indicator has no relevance to the health of the economy).

CHAPTER AT A GLANCE
• **There is a systemic bias against emerging economies in sovereign credit ratings.**
• **India's Sovereign Credit Rating do not reflect its fundamentals.**
• **Across several parameters like GDP growth, inflation, India is clearly a negative outlier i.e., it is currently rated much below expectation for its level of indicators.**
• **India's Sovereign Credit Rating does not Reflect Its Willingness and Ability to Pay. India has its zero sovereign default history and India's forex reserves are greater than India's total external debt (sovereign and non-sovereign).**
• **Credit ratings downgrades have impact on parameters like FPI inflow, access to international capital markets, instability in emerging economies etc.**
• **There is no clear pattern between changes in GDP growth and sovereign credit rating changes.**
• **Suggestions** ○ **Fiscal policy should be guided by considerations of growth and development, developing economies must come together to address this bias and subjectivity, Ratings agencies should be forced to substantially increase transparency.**

CHAPTER 3

Quiz: Testing your remembering skills & Understanding skills

Q1. Consider the following statements about 'Sovereign Credit Ratings (SCR)':

1. **SCR seek to quantify issuers' ability to meet debt obligations.**
2. **Favourable SCR can facilitate countries access to global capital markets and foreign investment.**
3. **Speculative grade of SCR are projected to have a lower likelihood of default on borrowings.**

Which of the statements given above is/are correct?

a) 1 and 2 only
b) 1, 2 and 3
c) 3 only
d) 1 and 3 only

Q2. With reference to external debt of India, consider the following statements:

1. **India's sovereign external debt as per cent of GDP stood at around 4% in 2020.**
2. **More than half of India's sovereign external foreign currency denominated debt was owed to multilaterals and International Monetary Fund.**
3. **In January, 2021, India's total external debt, sovereign and non-sovereign, exceeded India's forex reserves.**

Which of the statements given above is/are correct?

a) 2 and 3 only
b) 1 only
c) 1 and 2 only
d) 1, 2 and 3

Q3. With reference to changes in Credit Ratings, consider the following statements:

1. **Upgrade of Sovereign Credit Ratings (SCR) can lead to increase in Foreign Portfolio Investment in a country.**
2. **Downgrading of ratings commercial banks can make it costly for them to issue internationally recognized letters of credit for domestic exporters and importers.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Q4. The terms 'BBB-/Baa3' and 'A-/A2' are associated with:

a) IP address
b) Construction Output
c) Harmonised Consumer Price
d) Sovereign Credit Ratings

Self-Assessment: To practice Question for Answer Writing skills

Q1. Do you agree with the view that there is a bias against emerging economies in sovereign credit ratings? Discuss with special emphasis on India.

Q2. Highlight the rationale behind sovereign credit ratings. Discuss the effects of the changes in the sovereign credit rating on economies such as India.

CHAPTER 4: INEQUALITY AND GROWTH: CONFLICT OR CONVERGENCE?

Theme

In the currently prevalent model of capitalism, it is argued that there is a persistent trade-off between inequality and growth. This chapter tries to examine this trade-off for both developing and developed countries and understand how they are related to the poverty. Based on this analysis, the Survey tries to suggest a course of action for India, given its socio-economic situation.

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. But this way forward did not account for the potential inequality that may arise with growth.

Growth, Inequality, And Socio-Economic Outcomes: India Versus The Advanced Economies

The survey analyses the relationship of growth and inequality with socio-economic outcomes like health, education, life expectancy etc., for both Indian states and advanced economies. The analysis has showcased following differences between India and advanced economies-

- **Increase in both inequality and per capita income** (used as a proxy of growth) is **positively correlated with index of health outcomes in India.** However, across the advanced economies, inequality correlates negatively with the index of health and social outcomes while income per capita correlates positively.
    - Similar pattern of relationship is found indicators- index of education, life expectancy, infant mortality and crime.
- Neither inequality nor income per capita among Indian states correlate strongly with drug usage; however, inequality correlates strongly with drug usage in the advanced economies.

Although, effects of inequality and income per capita remain similar across the Indian states and the advanced economies.

Also, further analysis within the Indian states suggests that **inequality and income per capita correlate similarly with socio-economic outcomes across the Indian states** and the **results remain consistent across different types and measures of inequality and different time periods.**

Is Perfect Equality Optimal?

The Survey argues that **perfect outcome equality may not be desirous** psychologically as it may indirectly can reduce individuals' incentives for work, innovation and wealth creation.

Also, 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.

Inequality or Poverty?

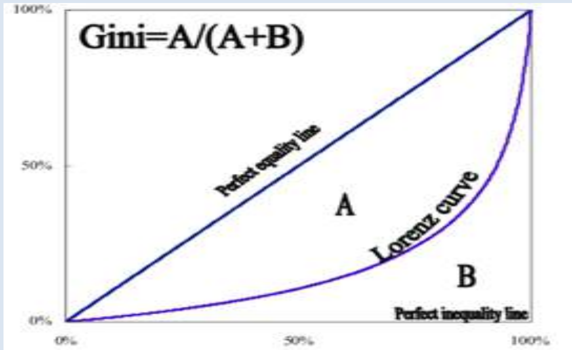
Inequality refers to the degree of dispersion in the distribution of assets, income or consumption. On the other hand, Poverty refers to the assets, income or consumption of those at the bottom of the distribution.

After considering several theories (including Rawl's theory) and experiments on poverty, the Survey advocates that as long as the poor have "adequate" incomes, an increase in the incomes of the rich need not benefit the poor to be considered just. The results thus suggest that **(absolute) poverty should be of greater concern than inequality.** In this context and with the level of development that India is currently in, the **focus on poverty alleviation through growth must be central to India's economic strategy.**

Relative Impact of Economic Growth and Inequality on Poverty in India

While comparing the effects of economic growth on poverty and inequality on poverty, the survey has observed that- The states with greater income or **high per capita NSDP experienced low rates of poverty** and vice versa. However, **such strong relationship is absent between inequality and poverty.**

These findings are also consistent with the historical evidence. A World Bank study in 2000 stated 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.**

Glossary		
Gini Coefficient	Gini coefficient is a measure of the distribution of income across a population. It is often used as a gauge of economic inequality, measuring income distribution or, less commonly, wealth distribution among a population. The coefficient ranges from 0 (or 0%) to 1 (or 100%), with 0 representing perfect equality and 1 representing perfect inequality.	

CHAPTER AT A GLANCE
By examining the correlation of inequality and per-capita income with a range of socio- economic indicators, the Survey highlights that both economic growth **– as reflected in the income per capita at the state level –and** inequality have similar relationships with socio-economic indicators for India.
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.
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.
The Survey clarifies that it 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.

CHAPTER 4

Quiz: Testing your remembering skills & Understanding skills

Q1. With reference to Gini coefficient, consider the following statements:

1. **It is a measure of the distribution of income across a population.**
2. **0 value of the coefficient represents perfect inequality.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Q2. Consider the following statements:

1. **Increase in both inequality and per capita income is positively correlated with index of health outcomes in India.**
2. **Inequality and income per capita correlates similarly with socio-economic outcomes across the Indian states.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Q3. Consider the following statements:

1. **Inequality refers to the degree of dispersion in the distribution of assets, income or consumption.**
2. **Poverty refers to the assets, income or consumption of those at the bottom of the distribution.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Q4. Consider the following statements:

1. **India saw sustained increase in poverty during 1970s-1990s.**
2. **In India, states with greater experience low rates of poverty.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Self-Assessment: To practice Question for Answer Writing skills

Q1. Given the socio-economic situation of India, explain what should be suitable course of action for economic growth and development?

Q2. Examine the relationship between economic growth and inequality and highlight their effects on poverty.

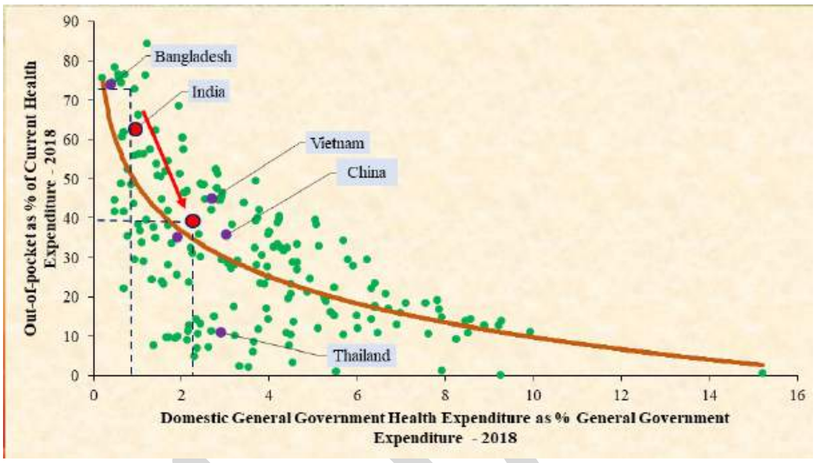
Q3. In the Indian context, sustained economic growth is the right method to alleviate poverty and curtail inequality. Discuss.

Q4. The rewards of economic growth in India has been reaped by a few on the cost of majority others, fuelling inequality in the country. Do you agree?

CHAPTER 5: HEALTHCARE TAKES CENTRE STAGE, FINALLY!

Theme

Chapter signifies importance of the importance of the healthcare sector and its inter-linkages with other key sector of the economy. Survey highlight **5 key aspects in this chapter:**



- **Health infrastructure must be agile** to enable India to effectively respond to future pandemics. At same time, **healthcare policy must not become beholden to "saliency bias"**, where policy over-weights a recent phenomenon that may represent a six-sigma event (rare event) that may not repeat in an identical fashion in the future.
- **Telemedicine needs to be harnessed to the fullest** by especially investing in internet connectivity and health infrastructure.
- **Emphasis on National Health mission (NHM) should continue** in conjunction with Ayushman Bharat**,** as NHM has played a critical role in mitigating inequity in healthcare access
- **An increase in public spend from 1% to 2.5-3% of GDP** can decrease the Out-Of-Pocket Expenditures from 65% to 30% of overall healthcare spend.
- **Policymakers need to design policies that mitigate information asymmetry in healthcare,** which creates market failures and thereby renders unregulated private healthcare sub-optimal.

Survey further shows that there is a need for citizens to have access to an equitable, affordable & accountable healthcare system highlighting about the Indian Healthcare system in context of recent COVID pandemic.

Healthcare system and Economy relationship

Health affects domestic economic growth directly through labour productivity and the economic burden of illnesses. The relationship can be showed as follow:

- **Increased prioritization of healthcare budgets** crucially impacts how much protection citizens get against financial hardships due to **out- of-pocket payments (OOP) made for healthcare.**
- **Life expectancy in a country correlates positively** with per-capita public health expenditure. For example: Increasing life expectancy from 50 to 70 years (a 40% increase) could raise the economic growth rate by 1.4 percentage points per year.
- **Maternal mortality correlates negatively** with increases in per-capita public health expenditure.

Given significant Market Failures, Healthcare needs careful system design

Survey shows that healthcare systems do not self-organise using the force of free markets because of three key inherent and unchanging characteristics:

i. uncertainty/variability of demand;
ii. information asymmetry;
iii. hyperbolic tendencies.

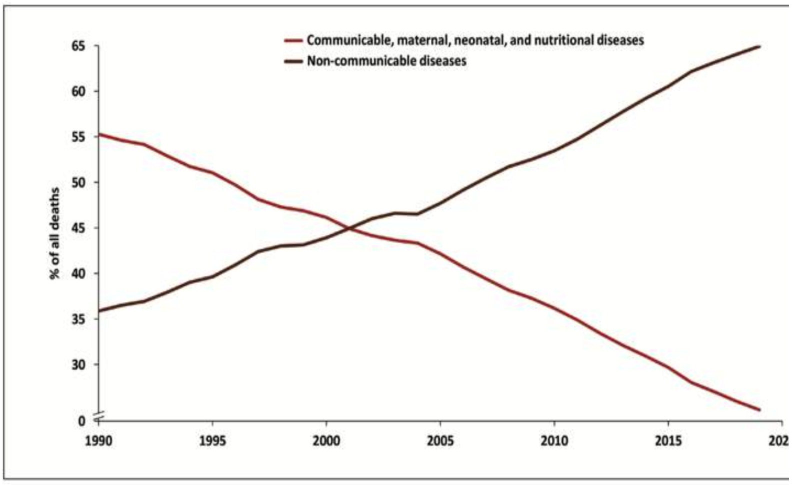
- **Uncertainty/variability of demand:** Uncertainty lies in the fact that the need for health care is driven often by factors that cannot be controlled or predicted. This is also coupled with the nature of demand, which is inelastic especially for emergency care.

- **Information asymmetry**:
  - In healthcare markets, buyers of information (patients) **rarely know the value of the information** until after it is purchased and sometimes never at all. For example, when individuals avail of a healthcare service like dermatology (i.e., skin care), they may be able to readily evaluate the outcome. Whereas for some services such as preventive care and/or mental health, patients may never know for sure whether their provider did a good job.
  - **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.

Communicable diseases vs Non-communicable diseases

- 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 (NCDs).**

Figure 4 (Panel a): Proportion of communicable and non-communicable diseases in India



Source: Global Burden of Diseases (2019)

- COVID-19 pandemic has spread worldwide because it is a communicable disease whereas 71% of global deaths and about **65% of deaths in India are caused by NCDs.**
  - Between 1990 and 2016, **the contribution of NCDs increased 37% to 61% of all deaths.**
- Faced with such a devastating pandemic, **even the infrastructure created by greater healthcare spending in the advanced economies could not deal** with the disease burden created by the pandemic.
- A positive correlations was observed between **total number of cases and deaths with respect to health expenditure per capita** implying better health infrastructure.
- **So, better health infrastructure is no guarantee that a country would be able to deal better with devastating pandemics like COVID-19.**
- 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.**

- **Hyperbolic tendencies:** People tend to indulge in risky behavior that may not be in their self-interest for example: smoking, eating unhealthy food, delay in seeking care, etc. Such individual behavior may not only be sub- optimal for the individual but also create **negative externalities for the entire healthcare system through higher costs and poorer outcomes.**

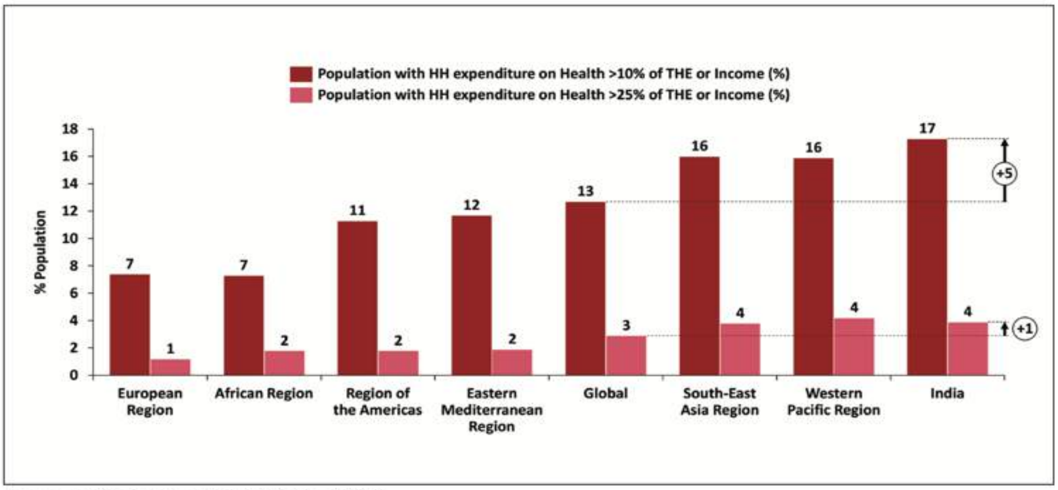
Hence, any active system design of healthcare must be mindful of these above inherent characteristics. Countries with more fragmented health systems tend to have lower performance as reflected in higher costs, lower efficiency, and poor quality. Therefore, in addition to providing healthcare services and financing healthcare, a **key role for the government is to actively shape the structure of the healthcare market.**

Indian Healthcare currently

Health status of any country crucially depends on the **available health infrastructure in general and human resources for health.**
Despite improvements in healthcare access and quality, **India continues to underperform in comparison to other Low and Lower Middle Income (LMIC) countries**. 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.

<table>
<tr><td>Poor health outcomes</td><td colspan="2">Despite improvements in Maternal mortality ratio (MMR) and Infant mortality rate (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.</td></tr>
<tr><td>Low access and utilisation</td><td colspan="2">At 3-4 % the hospitalisation rates in India are among the lowest in the world; the average for middle income countries is 8-9% and 13-17% for OECD countries (OECD Statistics). Low hospitalisation rates reflect lower access and utilisation of healthcare in India.</td></tr>
<tr><td>High out-of-pocket health expenditures (OOPE)</td><td colspan="2">• India has one of the highest levels of OOPE in the world.

Figure 7: Comparison of Health Expenditure across different regions

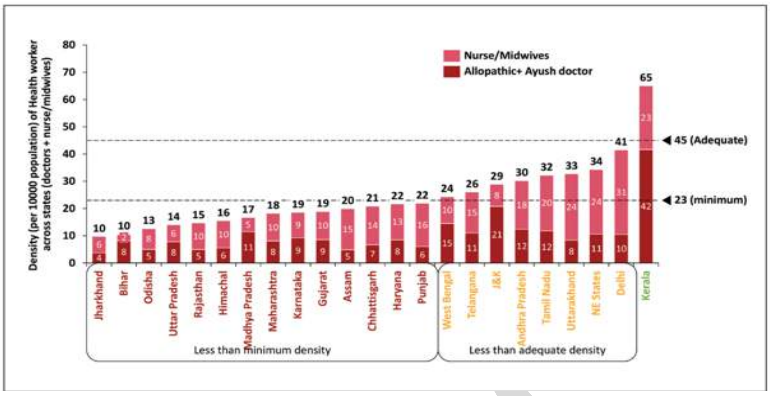


Source: World Health Statistics 2020
• However, recent data show that the distribution of the public subsidy has improved in favour of the poor, more clearly in maternity and child healthcare.
• In recent times, the percentage of the poorest utilising prenatal care through public facilities has increased from 19.9% to 24.7% from 2004 to 2018, and there is a similar increase in the percentage of the poor accessing institutional delivery as well as post-natal care.</td></tr>
<tr><td>Low budget allocations for healthcare</td><td colspan="2">• As health is a state subject in India, spending on healthcare by states matters the most when examining government healthcare spending. According to National Health Accounts, 2017, 66% of spending on healthcare is done by the states.
• India ranks 179th out of 189 countries in prioritization accorded to health in its government budgets (consolidated union & state government).
• The state expenditure on healthcare is highly variable across states and is not fully explained by the income level of the state.
  o While healthcare spending per capita increases with the GSDP per capita, healthcare spending as a per cent of GSDP decreases with the GSDP per capita. Thus, the richer states are spending a lower proportion of their GSDP on healthcare.
  o The states that have higher per capita spending have lower out-of-pocket expenditure, which also holds true at global level. Hence, there is need for higher public spending on healthcare to reduce OOP.
• An increase in public spending to 2.5-3% can substantially reduce OOP from the current level of 60% to 30%. Therefore, the richer states should especially target increasing the healthcare spending as a per cent of GDP to 2.5-3%.</td></tr>
<tr><td rowspan="2">Low human resources for health</td><td>According to WHO</td><td>Status in India</td></tr>
<tr><td>• 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</td><td>• Skill mix (doctor/nurse-midwives ratio) is far from adequate.
• State-level variations in the density of health workers and the skill mix reflects that 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.
• 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.</td></tr>
</table>

index by 2030.

- **Lower range of 23 health workers per 10,000 population** to achieve 80 % of births attended by skilled health professionals.

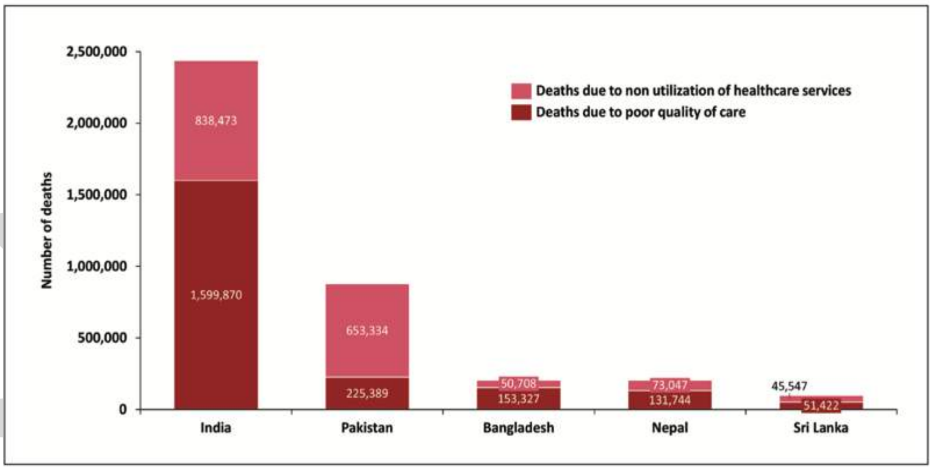
Figure 13: Density of doctors and Nurses/Midwives in different Indian states



Unregulated private enterprise in an industry marked by high level of market failure

- While the share of public institutions has increased both in hospital and outpatient cares, the **private sector dominates in total healthcare provision in India**.
- Around 74% of outpatient care and 65% of hospitalisation care is provided through the private sector in urban India.
- **Quality of treatment in the private sector may not be significantly better** than that in the public sector in India.
- However, the significant **market failures that stem from information asymmetries** in the healthcare sector were highlighted above. Therefore, **unregulated private enterprise can create significant negative effects.**
    - For example: **Mortality rate for neonatal procedures is much higher in private hospitals** than in public hospitals, 3.84% and 0.61% respectively.

Figure 16: Poor care quality leads to more deaths than insufficient access to healthcare



- Finally, given the information asymmetries that make unregulated private enterprise sub- optimal in healthcare, a **sectoral regulator that undertakes regulation and supervision of the healthcare sector must be seriously considered.**

Policy Suggestions

- 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.
- In conjunction with Ayushman Bharat, the **emphasis on National Health mission (NHM) should continue,** as NHM has played a critical role in mitigating inequity in healthcare access.
- **An increase in public spend from 1 per cent to 2.5-3% of GDP** – envisaged in the National Health Policy 2017 – can decrease the OOPE from 65% to 30% of overall healthcare spend.
- As a bulk of the healthcare in India is provided by the private sector, it is critical for policymakers to **mitigate information asymmetry in healthcare**, which creates market failures and thereby renders unregulated private healthcare sub-optimal. Therefore, information utilities that help mitigate the information asymmetry can be very useful in enhancing overall welfare.

- The **Quality and Outcomes Framework (QOF) introduced by the National Health Service (NHS)** in the United Kingdom 2004 provide a good example in this context.
- Addressing this information asymmetry **can also help lower premiums**, enable the offering of better products and help **increase the insurance penetration in the country.**

- **Data from the National Digital health mission** can be utilised even within the framework of data privacy with the aid of artificial intelligence and machine learning algorithms **to mitigate information asymmetry with respect to the patients.**

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 and Family Welfare (MoHFW)**.
- **eSanjeevani OPD (a patient-to-doctor tele-consultation system)** has recorded almost a million consultations since its launch in April 2020. Similar **growth was also reported by Practo,** which mentioned a 500% increase in online consultationsin just three months.
- Number of telemedicine consultations **correlates strongly with the Internet penetration in a state**.
- Specifically, **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

The recent COvID-19 pandemic has emphasised the importance of healthcare, whereby a healthcare crisis transformed into an economic and social crisis. Considering the same and in striving to achieve the SDG target of Universal Healthcare Coverage, India must take steps to improve healthcare accessibility and affordability in the country.

India's healthcare policy must continue focusing on its long-term healthcare priorities. Simultaneously, to enable India to respond to pandemics, **the health infrastructure must be agile.**

Glossary	
Out- of-pocket payments (OOP)	• They are defined as **direct payments made by individuals to health care providers** at the time of service use. • This **excludes any prepayment for health services,** for example in the form of taxes or specific insurance premiums or contributions etc.
Free markets	• A free market is a type of economic system that is **controlled by the market forces of supply and demand,** as opposed to one regulated by government controls.
National Health Mission (NHM)	• It is a flagship programme of the Ministry of Health and Family Welfarewith its two Sub-Missions, **National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM).** • It **supports States /UTs to strengthen their health care systems** so as to provide universal access to equitable, affordable and quality health care services.
eSanjeevani	• It is a platform independent, browser-based application **facilitating both doctor-to-doctor and patient-to-doctor tele-consultations**.

Chapter at a Glance
• **The recent COVID-19 pandemic has emphasised the importance of healthcare sector and its inter-linkages with other key sectors of the economy.**
• **Health affects domestic economic growth directlythrough labour productivity and the economic burden of illnesses.**
• **In addition to providing healthcare services and financing healthcare, a key role for the government is to actively shape the structure of the healthcare market.**
• **India continues to underperform in healthcare access and quality.**
• **Sectoral regulator that undertakes regulation and supervision of the healthcare sector must be seriously considered.**
• **National Health mission (NHM) has played a critical role in mitigating inequity as the access of the poorest to pre-natal and post-natal care as well as institutional deliveries has increased significantly.**
• **An increase in public spend from 1% to 2.5-3% of GDP – as envisaged in the National Health Policy 2017 – can decrease the OOPE from 65% to 30% of overall healthcare spend.**
• **Telemedicine needs to be harnessed to the fullest by investing in internet connectivity and health infrastructure.**

Quiz: Testing your remembering skills & Understanding skills

Q1. With reference to health workers in India, consider the following statements:

1. **The total density of health workers is estimated to be less than 50 per 10,000 population in India.**
2. **As per 7th Schedule of Constitution, Health is a subject in State List.**
3. **India has lowest levels out of pocket expenditure in the world.**

Which of the statements given above is/are correct?

a) 1 and 2 only
b) 2 only
c) 1 and 3 only
d) 1, 2 and 3

Q2. With reference to National Health Mission, consider the following statements:

1. **It is a flagship programme of Ministry of Health and Family Welfare.**
2. **It supports the states to strengthen their health care systems.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Q3. 'eSanjeevani' is

a) Web-based comprehensive telemedicine solution
b) Weather monitoring app developed by India Meteorological Department
c) Protective gear for health-workers
d) None of the above

Q4. With reference to Economic Survey 2020-21, consider the following statements:

1. **Increased prioritization of healthcare budgets protects citizens against financial hardships.**
2. **Life expectancy in a country correlates positively with per-capita public health expenditure.**
3. **Maternal mortality correlates negatively with increases in per-capita public health expenditure.**

Which of the statements given above is/are correct?

a) 1 only
b) 1 and 2 only
c) 2 and 3 only
d) 1, 2 and 3

Q5. With reference to s Non-communicable diseases (NCDs), consider the following statements:

1. **Less than 30% of all deaths in India are caused due to NCDs.**
2. **Between 1990 and 2016, the contribution of NCDs to all deaths has decreased sharply.**

Which of the statements given above is/are correct?

a) 1 only
b) 1 and 2 only
c) 2 and 3 only
d) 1, 2 and 3

Self-Assessment: To practice Question for Answer Writing skills

Q1. Despite improvements in healthcare access and quality, India continues to underperform in compari son to other Low and Lower Middle Income (LMIC) countries. Suggest some measures to address these issues and strengthen healthcare in India.

Q2. The role of government should not be undermined in a sector like healthcare which is prone to market failure due to its inherent asymmetries. Discuss.

CHAPTER 6: PROCESS REFORMS: ENABLING DECISION-MAKING UNDER UNCERTAINTY

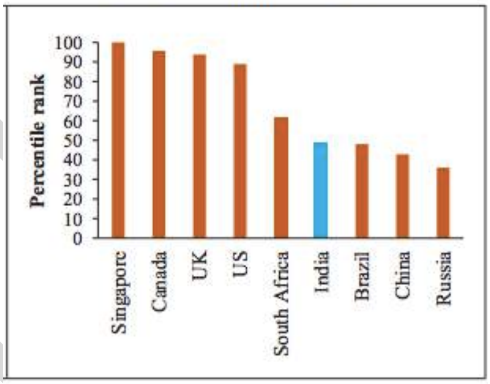
Theme

This chapter analyses the issue of over regulation in India and its resultant impact on policy level decision making in India. Through the learnings, the chapter has suggested measures to balance regulatory mechanisms with transparency that helps in enabling efficient decision making for the government.

The problem of regulatory effectiveness

- The survey has highlighted that **India's regulatory problems are not because of the lack of regulatory standards and poor compliance but due to the lack of quality and effective enforcement of regulations.**
  - As per the World Justice Project's **'World Rule of Law Index'** India's ranking has improved significantly in the category of 'following due process in administrative proceedings' (from 75 in 2015 to 45 in 2020) but it is low (>90) in the categories of Effective enforcement of regulations and Timeliness of Administrative proceedings.
  - Similarly, **India's low rankings in the sub-categories 'Starting a business' and 'Registering Property' in World Bank's Ease of Doing Business (EoDB) report**, are also due to the high number of procedures as well as the time and cost consumed to complete each procedure.

Figure 2: Cross country comparison of regulatory quality (as of 2019)



- Various evidences also show that **India over-regulates the economy which results in undue delay in the critical decision-making processes.**
  - A study by Quality Council of India shows that the **time taken for voluntary liquidation of a company (not involved in any litigation or dispute) in India is 1570 days** (i.e. 4.3 years), in comparison to 1 year in Singapore, 1-2 years in Germany and 15 months in UK.

The Inevitability of Incomplete Regulations

- The survey argues that the **root cause of the problem of over-regulation** is an approach that attempts to account for every possible outcome without recognizing the inevitability of incomplete contracts and regulations in a world of uncertainty.
- As a result, **complex rules and regulations leads to excessive and opaque discretion** by the supervising authorities because of the multiple ways in which they can be interpreted.

The Problem of Regulatory Default

Regulations can be easily measured through criteria and checklist while it is difficult to quantify the amount and quality of supervision. Regulators and decision-makers thus naturally tend to substitute supervision with mechanical regulations and does not exercise discretion even when it is available. This has led to the following major issues:

- **Increased regulatory arbitrage:** More regulations added over time lead to their ineffectiveness. For instance, increasing bank regulations has led to shifting of market activity to "shadow banks" (also called "non-bank financial intermediaries") which is less-regulated and less transparent.
- **Wastage of resources and time:** Too much of regulations lead to **government departments follow default precedent in order to reduce any questioning later on**. For instance, routine appeals are made by the government departments against unfavourable judgements in higher courts or tribunals even though the success rate of litigation is very low at 27%.

Solving for discretion

The survey has suggested that there is no substitute for active supervision and discretion and thus, there is a **need to create simple regulation and complement the same by providing flexibility** and discretion to the supervisor. For this, following ways need to be explored:

- **Strengthening ex-ante accountability:** Instead of relying too much on ex-post audits, which suffer from hindsight bias, ex-ante accountability needs to be entrusted.
- **Bringing transparency in the decision-making process:** The discretion in the system needs to be balanced with the transparency in decision making to promote trust in public institutions and create efficient markets.
- **Building resilient ex-post resolution mechanism:** Reforming the legal structure to have an efficient ex-post mechanism for dispute resolution and contract enforcement.
    - At present, the cost of litigation in India is around 31 per cent of the claim value which is significantly higher than in OECD countries (21 per cent) and Bhutan (0.1 per cent) as per the World Bank' Ease of Doing Business report (2020).
- **Reducing Complexity:** 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. This is in line with government's idea of 'Minimum Government and Maximum Governance.
- **Enacting Transparency of Rules Act** to end any asymmetry of information regarding rules and regulations faced by a citizen.

Initiatives taken by the governments to improve India's regulatory ecosystem

- **Bringing transparency in the decision making process:** Government e Marketplace (GeM) portal for public procurement set up in 2016 has resulted in atleast 15-20% reduction in the prices of products than previously. Also, it being an open platform, citizens can continue to monitor it real time.
- **Rationalisation of institutional architecture to reduce complexity:**
    - Closure of All India Handloom Board, All India Handicrafts Board, Cotton Advisory Board and Jute Advisory Board.
    - Merger of four film media units into the National Film Development Corporation (NFDC) Ltd.
- **Ex-post resolution mechanisms** through Insolvency and Bankruptcy Code (IBC), Debt Recovery Tribunals etc.
- **Reducing regulatory compliance burden through:**
    - Recent merger and codification of the existing 29 central labour laws into 4 labour codes.
    - Liberalising the regulations for BPO sector.

Glossary	
World Justice Project	It was found in 2006 as an initiative of the American Bar Association and became an independent Non-Profit organisation in 2009. The data published by World Justice Project is used by World Bank in its World Governance Indicators.
Regulatory Quality Index	• It captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. • Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5. • This is a part of Worldwide Governance Indicators (WGI) of World Bank.
Quality Council of India	• It was set up jointly by the Government of India and the Indian Industry represented by the three premier industry associations i.e. Associated Chambers of Commerce and Industry of India (ASSOCHAM), Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI). • It aims to establish and operate national accreditation structure and promote quality through National Quality Campaign. • It is governed by a Council of 38 members with equal representations of government, industry and consumers. • Chairman of QCI is appointed by the Prime Minister on recommendation of the industry to the government. • The Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, is the nodal ministry for QCI.

CHAPTER AT A GLANCE
• Problems with India's regulatory ecosystem **are not the lack of regulatory standards and poor compliance but the lack of quality and effective enforcement of regulations.**
• India over-regulates the economy **and the root cause of over-regulation is an approach of accounting for every possible outcome without recognizing the inevitability of incomplete contracts and regulations in a world of uncertainty.**
• Over-regulation leads to complex rules and regulations **resulting in excessive and opaque discretion and undue delay in the critical decision making processes.**
• The practice of substituting supervision with the mechanical regulations **results in increased regulatory arbitrage and wastage of critical resources.**
• **There is a** need to create simple regulation and complement the same by providing flexibility **and discretion through measures like** ex-ante accountability, ex-post resolution mechanisms, transparency rules act etc.
• Various initiatives are taken by the Indian government **to improve regulatory ecosystem such as GeM portal for public procurement, IBC and DRTs, codification of Labour Laws etc.**

CHAPTER 6

Quiz: Testing your remembering skills & Understanding skills

Q1. "World Rule of Law Index" is released by which of the following ?

a) Amnesty International
b) International Court of Justice
c) The Office of UN Commissioner of Human Rights
d) World Justice Project

Q2. With reference to Quality Council of India, consider the following statements:

1. **It aims to establish and operate national accreditation structure and promote quality through National Quality Campaign.**
2. **Chairman of QCI is appointed by the Prime Minister on recommendation of the industry to the government.**
3. **The Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, is the nodal ministry for QCI.**

Which of the statements given above is/are correct?

a) 1 and 2 only
b) 2 and 3 only
c) 1 and 3 only
d) 1, 2 and 3

Q3. Which of the following Initiatives taken by the government help to improve India's regulatory ecosystem?

1. **Launch of Government e Marketplace (GeM) portal**
2. **Closure of All India Handloom Board and All India Handicrafts Board**
3. **Merger and codification of the existing 29 central labour laws into 4 labour codes.**

Select the correct answer using the code given below.

a) 1 and 2 only
b) 2 and 3 only
c) 1 and 3 only
d) 1, 2 and 3

Q4. Consider the following pairs:

Index/Report	Organisation
1. Ease of Doing Business (EoDB) report	World Bank
2. Regulatory Quality Index	NITI Aayog

Which of the pairs given above is/are correctly matched?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Q5. Consider the following statements:

1. **The cost of litigation in India is significantly lower than in OECD countries.**
2. **The time taken for voluntary liquidation of a company in India is more than 10 years.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Self-Assessment: To practice Question for Answer Writing skills

Q1. An effective regulation ecosystem requires a right mix of regulation and discretion. In this context, discuss how the supervision can be kept accountable while giving discretion?

Q2. The issues of India's administrative processes derive less from lack of compliance to processes or regu_ latory standards, but from overregulation. Discuss.

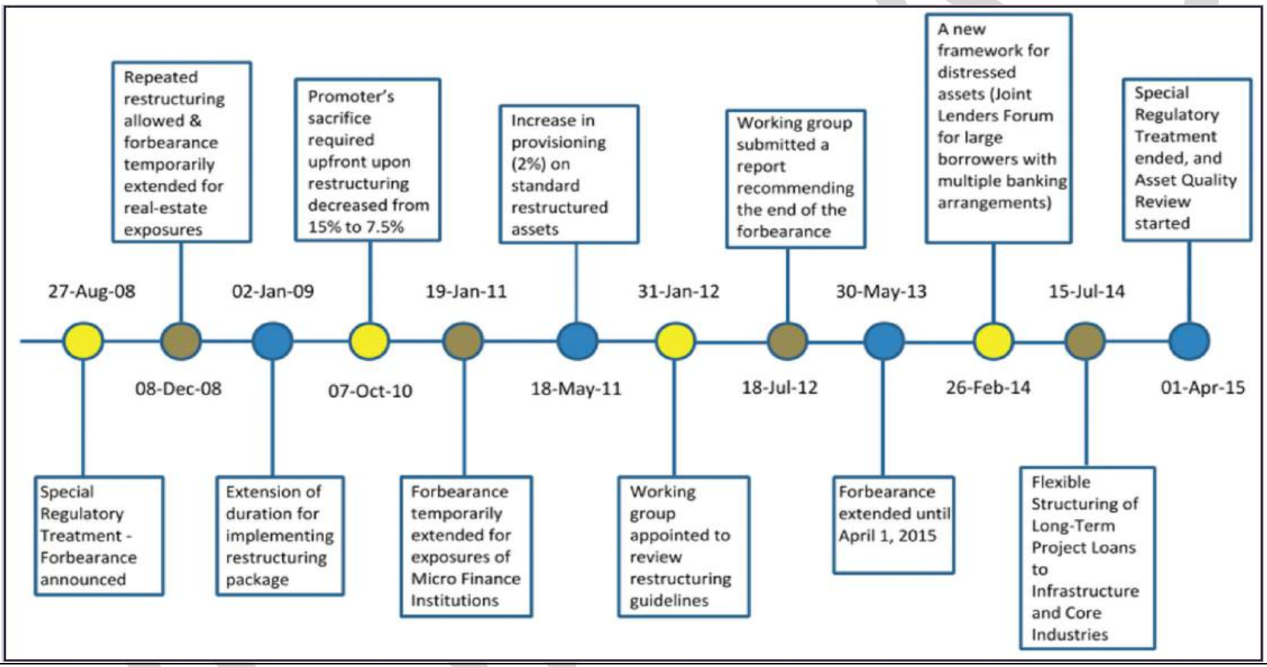
CHAPTER 7: REGULATORY FORBEARANCE: AN EMERGENCY MEDICINE, NOT STAPLE DIET!

Theme

This chapter studies the policy of regulatory forbearance that was adopted following the 2008 Global Financial Crisis (GFC), which lasted till Financial Year (FY) 2015, and the impact of this forbearance policy on banks, firms, and the economy in general. Through this analysis, the chapter offers key learnings for the current regime of regulatory forbearance following the COVID crisis.

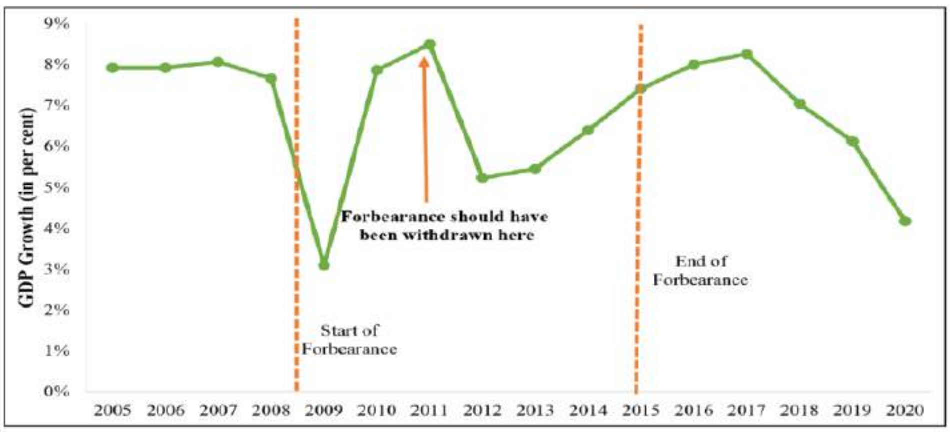
Regulatory Forbearance

- Regulatory forbearance for banks involved **relaxing the norms for restructuring assets**, where restructured assets were no longer required to be classified as Non-Performing Assets (NPAs) and therefore did not require the levels of provisioning that NPAs attract.
- Forbearance **prevents spillover of the failures in the financial sector to the real sector**, thereby avoiding a deepening of the crisis.
- Below is a timeline of announcements relating to the forbearance regime of 2008-2015:



The Original Sin: The Seven-Year Forbearance

Figure 1: Growth rate of Real GDP



Source: NSO

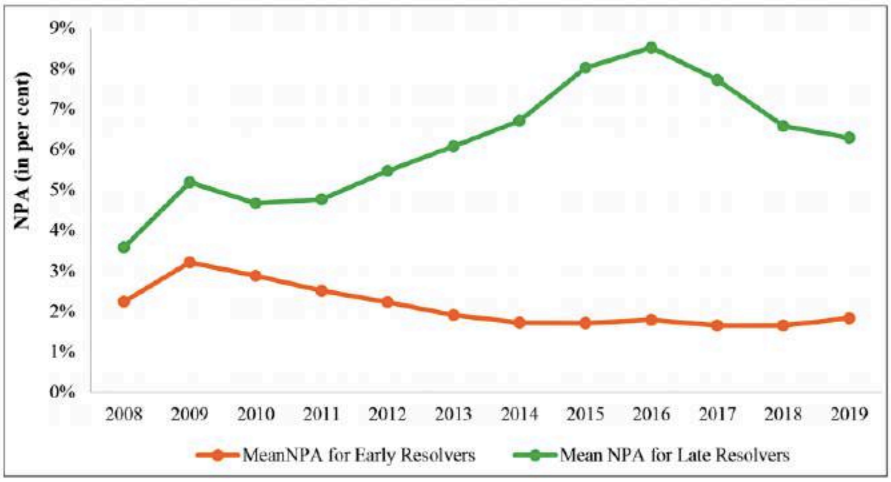
- The roots of the present banking crisis go back to the prolonged forbearance policies followed between 2008 and 2015.
- The forbearance policies, started in 2008, had desired short-term economic effects reflected by recovered GDP growth (3.1% in FY 2009 to 8.5% in FY 2011) and marked improvement in other economic indicators such as exports, the Index of Industrial Production (IIP), total revenue of listed firms and bank credit.

- The withdrawal of the forbearance was recommended in 2011. However, RBI decided to continue with the same for five more years till 2015, after which it conducted an **Asset Quality Review**.
- A prolonged policy of regulatory forbearance allowed banks to undertake higher restructuring and risky lending; and delay recognition of actual NPAs.
- A delay in taking actions to recognize and resolve bad loans may have caused the NPAs to culminate many years after the crisis.

Cost of Extended Forbearance versus Early Resolution of Banking Crises: International Evidence

- The countries that reached their peak NPA during 2009 and 2010 are called "Early Resolvers", like the United States, Australia, Saudi Arabia etc. and those that reached their peak NPAs in 2015-19, are called "Late Resolvers", like India, China, Portugal etc.
- In comparison to early resolvers, late resolvers ended up with much higher peak NPAs and significantly worse impacts on GDP growth.

Figure 11: NPA trends for Early Resolvers vs Late Resolvers



Adverse Impact of Forbearance on Bank Performance and Lending

- **Undercapitalization of Banks**: A policy of prolonged forbearance has the effect of **overstating the actual capital,** since banks can restructure troubled loans without qualifying them as substandard assets and report the same capital adequacy ratio (CAR). Thus, forbearance let undercapitalized **banks operate without raising fresh capital** to meet the regulatory threshold for CAR and encouraged banks to **start repaying "excess" capital to the shareholders**, including the government in the case of public sector banks, as dividends. More dividend payments and less capital infusion exacerbated undercapitalization of banks with higher restructuring.
- **Lending to Zombie Firms**: The regulatory forbearance led to an increase in risky lending to unproductive low-solvency and low-liquidity firms (referred to as "zombies"). This trend can be attributed to the **distorted incentives of the bank owners and management** due to the phenomenon of '**Forbearance-induced risk-shifting'.**

Forbearance-induced risk-shifting

- **Forbearance incentivizes banks** (especially undercapitalized banks)**to take risks by restructuring stressed assets even if they are unviable**, since it allows them to declare fewer NPAs and avoid the costs due to loan provisioning. Also, the unlikely case of firm revival would cause no reduction in capital.
  - In the absence of forbearance, banks need to recognize stressed assets which would impact equity holders as they get no return on their investments and are forced to recapitalize to maintain sufficient capital adequacy.
- However, if the risks fail the cost would be borne by the depositors, bondholders, and/or the taxpayers. This **shifts the risk of lending to risky firms away from equity holders to depositors and taxpayers**.
- In public banks, forbearance distorts banks' incentives, particularly in two ways-
  - Forbearance provides incumbent managers an opportunity to **window-dress their balance sheets**, show good performance during their tenure, and thereby enhance post-retirement career benefits.
  - Banks' management may **use forbearance as a shield to cover up outright corruption and nepotism**. The events with the Punjab National Bank or recent allegations of deceit against former bank CEOs corroborate this possibility.

- **Ever-greening of Loans**: With the hope of their existing loans getting repaid, banks engaged in different forms of ever-greening of loans. They extended new loans to existing borrowers on the verge of default and to healthy borrowers of a distressed group, who could ultimately divert the loans to other distressed firms within the group (**proxy zombie lending**).

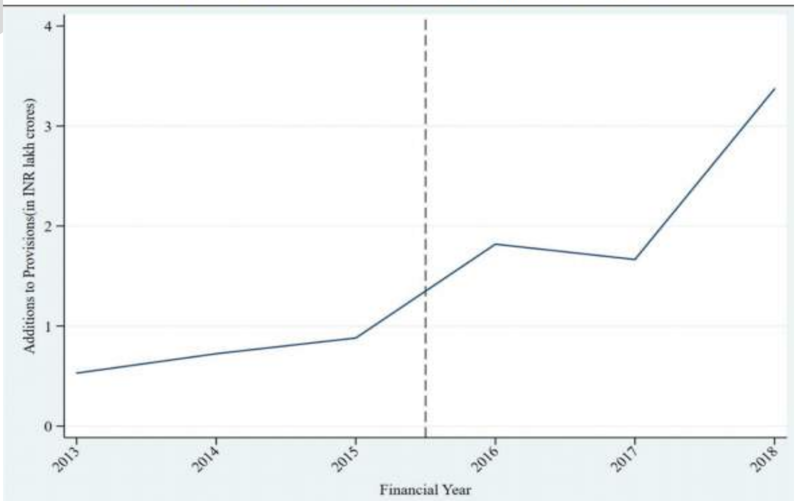
- Thus, the forbearance resulted in increased lending to firms with poor fundamentals and inefficient projects due to which the industrial sector's increased credit growth from 2008-09 to 2014-15 failed to translate into a higher investment rate and capital asset creation.

- **Weakening of Corporate Governance in Borrowers benefitting from forbearance**: Under the forbearance policy, **firm managers' ability to get loans restructured**, plausibly even unviable ones, through formal or informal connection with bankers, **strengthened their influence within the firm**. Thus, it became difficult for the firm's board to overthrow such managers even if they were otherwise inefficient, resulting in the weakening of the firms' governance.
  - Thus, the forbearance regime saw a significant increase in credit supply to corporates with poor operating metrics, strong management influence and declining governance. Due to this, the borrower firms benefitting from forbearance witnessed following issues:
    - ✓ **Deterioration in the Quality of the Board**: Incumbent management's influence in the Board increased as: (i) the presence of independent directors declined, (ii) the propensity of a CEO becoming the chairman increased, (iii) having a connected director on board became more likely, and (iv) the bank monitoring declined as a lower number of bank-nominated directors occupied board seats.
      - Independent or non-promoters directors are specifically required to uphold the interests of minority shareholders and are supposed to act as watchdogs against the likelihood of firms management indulging in unhealthy practices that may personally benefit the promoters.
    - ✓ **Inefficient allocation of capital**: Firms seem to have **misallocated credit supply in unviable projects** and increased credit supply was not used productively by firms.These firms in the forbearance window witnessed additional stalling.
    - ✓ **Mis-appropriation of resources:** There was an increase in private benefits being redirected to the firms' management at the cost of minority shareholders.
      - In the Indian context, related party transactions (RPTs) were possibly utilized to camouflage the expropriation of firm resources, as RPTs to key personnel increased by around 34% among firms whose loans were restructured during the forbearance regime.
    - ✓ **Deterioration in performance**: The restructured firms on average, turned loss-making as their profitability, measured as profits as a proportion of firms assets, declined sharply (over 138%); leverage, measured as the ratio of debt to equity, increased significantly (by 15.7%); and the interest coverage declined (by 27.2%).
    - ✓ **Increased defaults**: Firms witnessed a decrease in their credit ratings (by 7.7%) and on average, started defaulting more. The proportion of restructured firms that became defaulters increased by 51% in the forbearance period.

Bank Clean-Up Without Adequate Capitalization

The RBI decided to conduct a detailed Asset Quality Review (AQR) to know the true status of banks' NPAs after withdrawal of regulatory forbearance in 2015. 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.

Figure 25: Inadequate identification of hidden bad assets under the AQR: Sharp rise in provisioning a year after completion of the AQR



- **The crucial difference vis-à-vis bank clean-ups in the rest of the world**: India's AQR differed from the typical bank clean-ups carried out in other major economies such as Japan, the European Union, and the U.S.in two key aspects:-

- It was undertaken when the country was not undergoing an economic crisis. Given the economic stability, RBI assumed that markets would supply the required capital to banks once their books are cleaner.
- There was neither a forced recapitalization of the banks nor was an explicit capital backstop provided for. RBI initiated the AQR under the presumption that the extent of additional loan provisioning required due to the clean-up would not generate needs for a severe recapitalization of the banks.

- **The inadequate clean-up of bank balance sheets:** AQR exercise failed to recognize subtle ever-greening and may have been unable to curb distortionary lending. The recent events at Yes Bank and Lakshmi Vilas Bank corroborate that the AQR did not capture ever-greening carried out in ways other than formal restructuring.
- **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. Capital additions in both private and public banks were vastly insufficient to offset the additional provisions due to the AQR and they were left significantly undercapitalized after the clean-up.
- **Adverse impact on lending**: As the banks were unable to raise adequate fresh capital after the clean-up, their lending reduced. Also, the second wave of under-capitalization caused by the AQR created perverse incentives to lend even more to the unproductive zombie borrowers.
- **Decline in Firm's Capital Investment**: The firms more exposed to the AQR- affected banks could not entirely replace their credit supply from other financial institutions. Thus, these firms became financially constrained and reduced their capital expenditures, leading to ongoing projects being stalled.

Implications for the Current Forbearance Regime

To address the economic challenges posed by the Covid-19 pandemic, financial regulators across the world, including in India, have adopted regulatory forbearance as emergency measures. The chapter offers following key learnings for the current regime of regulatory forbearance-

- **Regulatory Forbearance should be discontinued at the first opportunity when the economy exhibits recovery**: Policymakers should lay out thresholds of economic recovery at which such measures will be withdrawn, which should be communicated to the banks in advance.
- **Forbearance should be accompanied by restrictions on zombie lending** to ensure a healthy borrowing culture.
- An **AQR exercise must be conducted immediately after the forbearance is withdrawn** and must account for all the creative ways in which banks can ever green their loans.
- **Clean-up exercise should be accompanied by mandatory recapitalization** based on a thorough evaluation of the capital requirements post an AQR.
- **The quality of bank governance should be enhanced** to avoid distortionary lending practices like evergreening and zombie lending following the current round of forbearance.
    - The regulator may consider imposing penalties on bank auditors if ever-greening is discovered, creating incentives for the auditor to conduct the financial oversight more diligently.
- **Ex-post inquests must recognise the role of hindsight bias** and not make the mistake of equating unfavourable outcomes to either bad judgement or malafide intent.
- **The legal infrastructure for the recovery of loans needs to be strengthened**. The judicial infrastructure for the implementation of Insolvency and Bankruptcy Code (IBC) – comprised of Debt recovery tribunals, National Company Law Tribunals, and the appellate tribunals must be strengthened substantially.

Glossary	
Zombie Firms/ Groups	• Zombies are typically identified using the interest coverage ratio, the ratio of a firm's profit after tax to its total interest expense. Firms with an interest coverage ratio lower than one are unable to meet their interest obligations from their income and are categorized as zombies. A business group is classified as a zombie if the interest coverage ratio of the entire group is less than one.

Ever-greening of Loans	• The process of Ever-greening of loans involves 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.

CHAPTER AT A GLANCE
During the Global Financial Crisis, forbearance helped borrowers' tide over temporary hardship caused due to the crisis and helped prevent a large contagion.
However, the forbearance continued for seven years though it should have been discontinued in 2011, when GDP, exports, IIP and credit growth had all recovered significantly.
This resulted in unintended and detrimental consequences for banks, firms, and the economy: • Consequences for banks and lending practices**- Undercapitalization, enhanced lending to zombie firms, ever-greening of loans.** • Consequences for firms and economy**- Borrower firms benefitting from forbearance witnessed weakening of corporate governance, deterioration in the quality of Boards, inefficient allocation of capital, mis-appropriation of resources, deterioration in economic performance and increased defaults.**
The RBI decided to conduct a detailed Asset Quality Review (AQR) **to know the true status of banks' NPAs after withdrawal of regulatory forbearance in 2015.**
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 after the AQR.
Thus, the AQR led to inadequate clean-up of bank balance sheets as it failed to recognize subtle ever-greening; under-estimation of required bank capital; reduced lending to good borrowers while increasing lending to zombie borrowers; and decline in firm's capital investment.
Key learnings **for the current regime of regulatory forbearance-** • **It should be discontinued at the first opportunity when the economy exhibits recovery.** • **Forbearance should be accompanied by restrictions on zombie lending.** • **An AQR exercise must be conducted immediately after the forbearance is withdrawn.** • **Clean-up exercise should be accompanied by mandatory recapitalization.** • **The quality of bank governance should be enhanced to avoid distortionary lending practices.** • **The legal infrastructure for the recovery of loans needs to be strengthened.**

CHAPTER 7

Quiz: Testing your remembering skills & Understanding skills

Q1. In context of 'policy of regulatory forbearance' consider the following statements:

1. **It was adopted following India's New Economic Policy in 1991 known Liberalisation, Privatisation and Globalisation model (LPG).**
2. **Policy was withdrawn in year 2011 after recovery of GDP and improvement in exports.**
3. **India has adopted policy of regulatory forbearance to address the economic challenges posed by the Covid-19 pandemic.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 and 3 only
c) 3 only
d) 1, 2 and 3

Q2. How prolonged policy of regulatory forbearance after 2008 Global Financial Crisis, impacted bank performance and their lending?

1. **Led to Optimum capitalization of Banks.**
2. **Reduced lending to unproductive and low solvency firms.**
3. **Resulted in Ever greening of loans.**

Which of the statements given above is/are correct?

a) 1 only
b) 1 and 2 only
c) 3 only
d) 1, 2 and 3

Q3. The term 'Zombie Firm' mentioned in economic survey 2020-21 refers to

a) Firm having ratio of its profit after tax to its total interest expense less than one.
b) Firm that do not have any active business operations or significant assets in their possession.
c) Firm having ratio of a its profit after tax to its total interest expense more than one.
d) Banking firms having capital to risk weighted assets ratio of less than 8%.

Q4. How the policy of regulatory forbearance can impact the borrowing firms?

1. **Increase in credit supply to corporates with poor operating metrics.**
2. **Decrease in credit ratings for firms due to increased defaults.**
3. **Increased influence of incumbent management.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) 2 and 3 only
d) 1, 2 and 3

Q5. Which of the following can be results of 'Forbearance-induced risk-shifting' during implementation of 'policy of regulatory forbearance'?

1. **Restructuring of stressed assets even if they are unviable.**
2. **Window-dressing banks' balance sheets to show good performance.**
3. **Using forbearance as a shield to cover up corruption and nepotism.**

Which of the statements given above is/are correct?

a) 1 and 2 only

b) 2 only

c) 3 only

d) 1, 2 and 3

Self-Assessment: To practice Question for Answer Writing skills

Q1. The prolonged forbearance policies following the Global Financial Crisis engendered the recent bank ing crisis. Critically analyse the statement. Also, mention the steps which can be taken to tackle the issue.

Q2. Asset Quality Review conducted by RBI in 2015 has adversely impacted the lending capacity of the banks. Comment.

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

Theme

This chapter presents **India's improved ranking on Global Innovation Index (GII)** and also highlights areas with scope of improvement. A comparison of India and top 10 economies, w.r.t **contribution of Government and business sector to gross expenditure on R&D, is also presented.** To further improve innovation ecosystem chapter suggests ramping up investment in R&D and argues against reliance on Jugaad innovation.

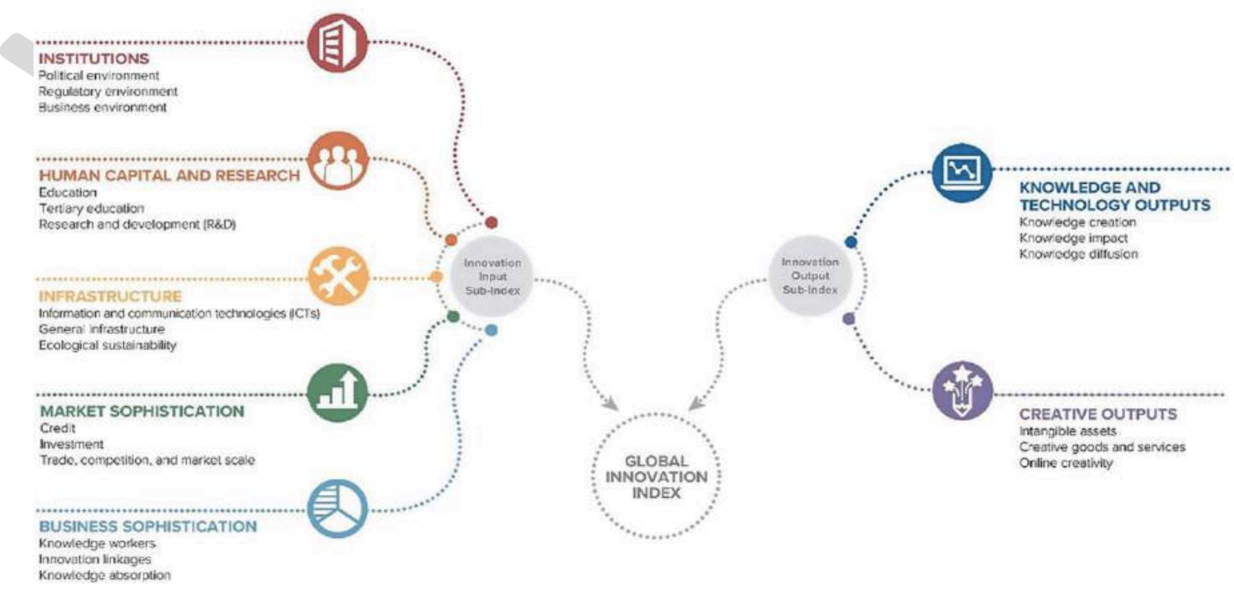
Why innovation matters?

- Earlier the Solow model (1956) highlighted that **output per worker mainly depends on savings, population growth and technological progress.**
- However, new growth theory endogenizes **technological progress and suggests several determinants of the same.** These include human capital; search for new ideas by profit-oriented researchers; infrastructure; and improving quality of existing products.
- Research showed that **small enterprise R&D activities brought large returns to the national economy** through new technologies.
- An increase of **10% in R&D investment has been associated with productivity gains ranging from 1.1% to 1.4%.**
- There is a **positive correlation between past innovation performance and current GDP per capita.** India has performed below expectation for its past innovation performance in terms of recent GDP per capita.

Global Innovation Index (GII)

- GII seeks to **assist economies in evaluating their innovation performance.**
- GII is co-published by Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO), a specialized agency of United Nations.
- **GII has two sub-indices:** the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars.
- **The Innovation Input sub-index has five pillars**: Institutions; Human Capital and Research; Infrastructure; Market Sophistication; Business Sophistication.
- **The Innovation Output Sub-Index has two pillars** Knowledge and Technological outputs and Creative outputs.

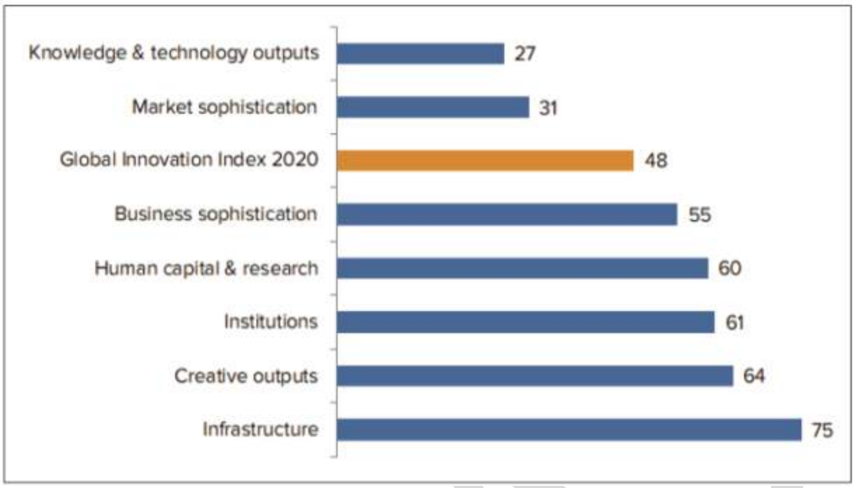
Framework of the Global Innovation Index 2020



How does India perform on innovation?

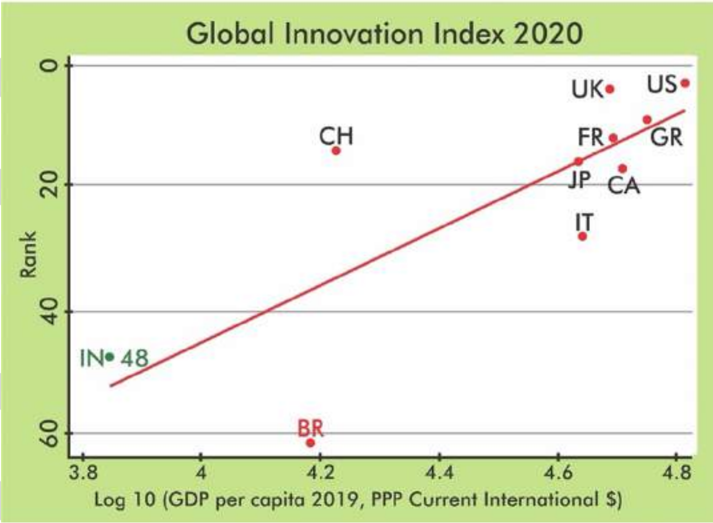
- **India entered the top 50 innovating countries** for the first time since the inception of GII in 2007, by improving its rank from 81 in 2015 to 48 in 2020.
- India **ranks first in Central and South Asia**, and third amongst lower middle-income group economies.
- India is **ranked second lowest, after Brazil, on innovation outputs and innovation inputs amongst top 10 economies.**

Figure 4: India's performance on pillars of the Global Innovation Index 2020 (rank)



- India is a **positive outlier on most pillars and sub-pillars of the GII** w.r.t. its level of development. This status of positive outlier can't be attributed to its population as there is no clear pattern of correlation between innovation performance and population.
  - However, **India is a negative outlier in terms of its GDP,** i.e. India seems to be underperforming in innovation w.r.t. the size of its GDP.
- **Scope for improvement:**
  - India performed **below expectation in primary & secondary education sub-pillar** (under Human Capital & Research) mainly because of India's poor performance in pupil-teacher ratio in secondary education.
  - India's **poor performance in knowledge workers sub-pillar** (under Business Sophistication) can be mainly attributed to its fewer females employed with advanced degrees.

Performance of Top 10 Economies on GII



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.
- Globally, there is a **positive correlation between the level of development and GERD as per cent of GDP and business sectors' participation** in total GERD while **government sector's participation in GERD is negatively correlated** with development.
  - India's **GERD at 0.65% of GDP is much lower** than that of the top 10 economies (1.5-3% of GDP) primarily because of the disproportionately lower contribution from the business sector.
  - Also in India, **Government contributes 56% of GERD** while this proportion is less than 20% in each of the top ten economies.
  - **Business sector in India contributes much less to GERD** (about 37%) when compared to businesses in each of the top ten economies (68% on average).
- Indian **government sector contributes the highest share of total R&D personnel (36%) and researchers (23%)** amongst the top ten economies (9% on average).

- Indian business sector's contribution to the total R&D personnel (30%) and researchers (34%) in the country is the second lowest amongst the top ten economies (over 50% on average).

India's performance on patents and trademarks

- Total number of patents filed in India has risen steeply since 1999, mainly on account of **increase in patent applications filed by non-residents.**
    - Unlike India, Brazil and Canada, other top ten economies have a higher share of patent applications by residents than non-residents.
- **Indian residents contribute only 36% of patents filed in India** as compared to 62% on average in the top ten economies.
- Unlike patents, the total **number of trademark applications** filed in India has risen steeply since 1999 mainly **on account of increase in trademark applications filed by residents**.

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, lowcost labour and R&D activities.**
    - This has led to large scale off-shoring from US firms, especially in the IT industry and that "companies such as IBM, Intel, and GE conduct cutting-edge R&D in India.
- The **economic growth and increasing income levels in India have made the Indian market attractive,** and local R&D activities have been on the rise, particularly in the automotive market.
- Also, India has had **a generous tax incentive structure to boost R&D** in the country as compared to several other top ten economies.

Is Indian innovation affected by access to finance?

- India and Brazil **rank much below expectation for their level of equity as well as debt market development** in the overall GII, innovation outputs and innovation inputs amongst the top ten largest economies.
- Given that most of these large economies are more innovative than India and equity market development facilitates greater high-technology innovation, this potentially indicates that innovation in India needs to become more high-tech intensive.

Non-Resident Indians and Innovation

- **Around six per cent of US-resident inventors** listed at the European Patent Office in 2009 **had an Indian name and surname.**
- Large-scale out-migration of skilled workforce and students from India is not necessarily bad news for India's innovation aspirations.
- This could potentially result in **return of higher-skilled workforce in future**.
- However, this would require an **enabling environment that facilitates re-entry into the Indian job-market and high-tech research opportunities.**

Policy Implications

- 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.
    - This requires **boosting GERD from 0.7% of GDP** currently, to at least the average level of GERD in other top ten economies of over 2%.
    - It also involves significantly **scaling up R&D personnel and researchers in the country, especially in the private sector.**
    - India's **business sector needs to significantly ramp up its GERD** to a level commensurate to India's status as the fifth largest economy in GDP current US$.
    - 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.

Glossary	
Solow Growth model	• Solow Growth Model is an exogenous model of economic growth that analyzes changes in the level of output in an economy over time as a result of changes in the population.
Gross domestic expenditure on R&D	• It is defined as the total expenditure (current and capital) on R&D carried out by all resident companies, research institutes, university and government laboratories, etc., in a country. o It includes R&D funded from abroad, but excludes domestic funds for R&D performed outside the domestic economy.

CHAPTER AT A GLANCE
• **India entered into the top 50 countries in GII for the first time. Also India ranks first in Central and South Asia, and third amongst lower middle-income group economies.**
• **But India's performance is lowest amongst other largest economies, lacking on following accounts:** o **Lowest GERD contribution.** o **Government sector contributes a disproportionate large share in total GERD.** o **Lowest business sector's contribution to GERD.** o **Business sector's contribution to total R&D personnel and researchers also lags behind.**
• **Total number of patents and Trademarks filed in India has risen steeply since 1999. However, in patent increase is mainly due to applications filed by non-residents and in trademarks due to applications filed by residents.**
• **There is a need for India's business sector to significantly ramp up investments in R&D considering liberal tax incentives for innovation and better access to equity market in India.**
• **India can expect higher improvement in innovation output by improving its performance on institutions and business sophistication innovation inputs.**

CHAPTER 8

Quiz: Testing your remembering skills & Understanding skills

Q1. The Global Innovation Index (GII) is published by which of the following agency?

a) World Intellectual Property Organization (WIPO)
b) World Trade Organisation (WTO)
c) United Nations Development Programme (UNDP)
d) United Nations Industrial Development Organization (UNIDO)

Q2. Consider the following statements about India's performance in the 'Global Innovation Index':

1. **For the first time in 2020 India entered the top 50 innovating countries since inception of Global Innovation Index.**
2. **Currently, India is ranked at lowest on innovation outputs and innovation inputs amongst top 10 economies.**
3. **India ranks first in Central and South Asia.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) 1 and 3 only
d) 2 and 3 only

Q3. With reference to the research and development expenditure in India:

1. **India's gross domestic expenditure on research and development (GERD) is at 3% of Gross Domestic Product (GDP).**
2. **More than half of the gross domestic expenditure on research and development (GERD) in India is contributed by Government.**
3. **Business sector in India contributes less than government to gross domestic expenditure on research and development (GERD).**

Which of the statements given above is/are correct?

a) 1 only
b) 2 and 3 only
c) 1, 2 and 3
d) None of the above

Q4. Which of the following factors is/are responsible to make India an attractive destination for Research and Development activities?

1. **Skilled and low-cost labour**
2. **Increasing income levels**
3. **Generous tax incentive structure**

Select the correct answer using code given below.

a) 1 and 3 only
b) 2 only
c) 3 only
d) 1, 2 and 3

Q5. With reference to research and development in India, consider the following statements:

1. **Indian government sector contributes less than 50% of total R&D personnel.**
2. **Total number of patents filed in India have decreased steeply since 1999.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Self-Assessment: To practice Question for Answer Writing skills

Q1. Discuss the extent to which investment in innovation translates into output in India. What do you suggest should be the policy imperatives to ensure the same?

Q2. Highlighting India's performance along innovation, discuss the importance of strengthening an innovation ecosystem for an economy like India.

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

Theme

This chapter demonstrates strong positive effects on healthcare outcomes of the Pradhan Mantri Jan Arogya Yojana (PM-JAY) – the ambitious program launched by Government of India in 2018 to provide healthcare access to the most vulnerable sections.

The analysis in the chapter attempts to estimate the impact of PM-JAY on health outcomes by undertaking a difference-in-difference analysis by comparing states that implemented PM- JAY versus those that did not.

Public goods

- Public goods are **non-rival and non-excludable**, market failures predominate in the provision of such goods.
- Public goods are **not adequately provided for by the markets,** they must be supplied by the government.
- Therefore, provisioning for public goods and ensuring their supply represents one of the most important functions of a government.
- 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.

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

As **healthcare represents a critical public good**, successive governments have committed to achieve universal health coverage (UHC). In 2018, Government of India approved the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM-JAY) as a **historic step to provide healthcare access to the most vulnerable sections in the country**.

- 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.
- It 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.
- Beneficiaries includes approximately 50 crore individuals across 10.74 crores poor and vulnerable families, which **form the bottom 40% of the Indian population.**
- The households included are based on the **deprivation and occupational criteria from the Socio-Economic Caste Census 2011 (SECC 2011)** for rural and urban areas respectively.
- 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, 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

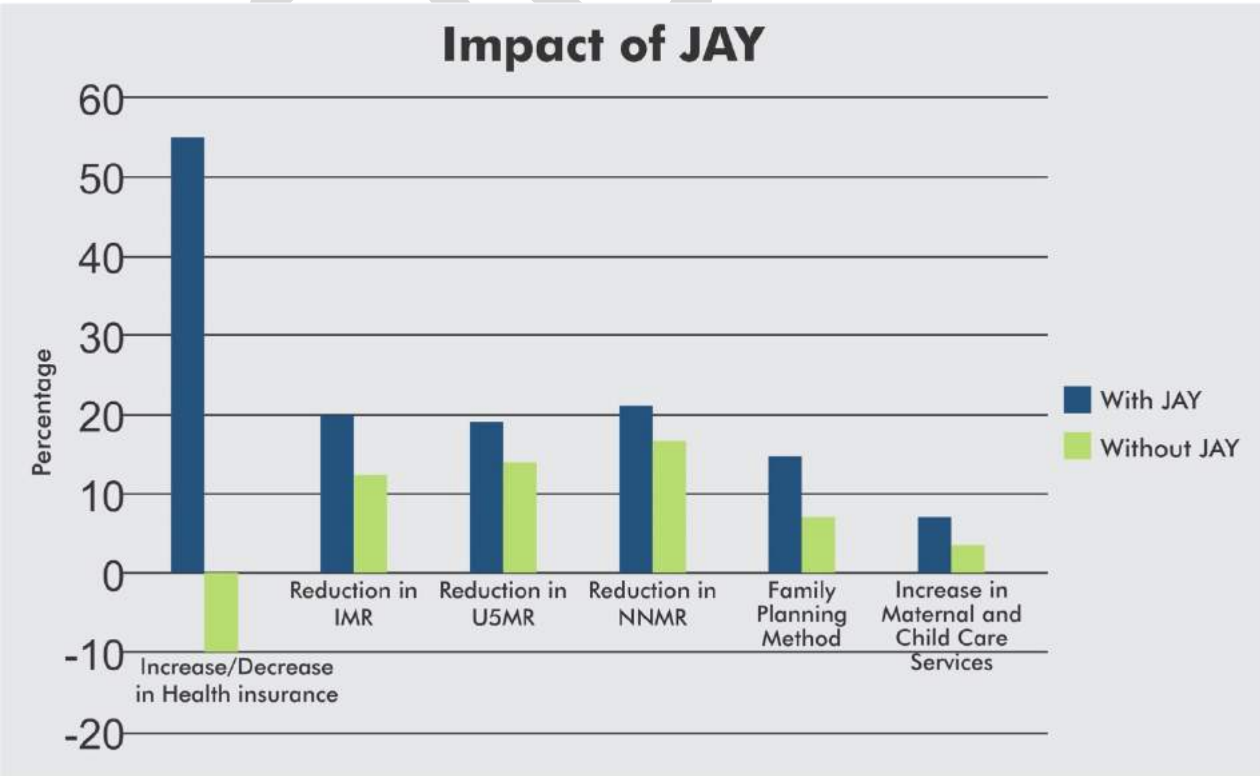
PM-JAY AND COVID-19

- PM-JAY is being **used significantly for high frequency, low cost care such as dialysis** and continued to be utilised without disruption even during the Covid pandemic and the lockdown.
- General medicine – the overwhelmingly major clinical specialty accounting for over half the claims - **exhibited a V-shaped recovery after falling during the lockdown** and reached pre-COVID-19 levels in December 2020.

PM-JAY and Health Outcomes

The evidence provided in this chapter shows **strong positive effects of PM-JAY on healthcare outcomes** despite the short time since introduction of the programme. Health indicators are measured by National Family Health Survey-4 (NFHS 2015-16) and the National Family Health survey 5 (NFHS 2019-20) to undertake this analysis. This analysis shows the following:

Health indicator	All States that adopted PM-JAY versus those that did not
Health insurance	The proportion of households with health insurance increased by 54% for the states that implemented PM-JAY while **falling by 10% in the states that did not adopt PM-JAY.**
Infant Mortality Rates (IMR), Under-5 mortality rate (U5MR), Neo-Natal Mortality Rates (NNMR)	• The reduction in IMR was 20% vis-à-vis 12% in PM-JAY and non-PM-JAY states respectively. • **While the U5MR recorded a decline of 19% in PM- JAY states**, it reduced by 14% in the non-PM-JAY states. • NNMR declined by 22% in the states that adopted PM-JAY in comparison to a 16% decline in states that did not adopt PM-JAY.
Family planning method	Proportion of people currently using any method of **family planning rose by 15% in the PM-JAY adopted states** and only by 7% (less than half) in the other states
Maternal and child care services	• The impact of the PM-JAY on maternal and child health is concerned, the **benefits vary significantly across distinct indicators**. • The proportion of mothers whose last birth was protected against neonatal tetanus increased by 2% in the PM-JAY states while remaining constant in the non-PM-JAY states. • On the contrary, the proportion of women with registered pregnancies for which they received a Mother and Child Protection (MCP) card registered an increase of 7% in the PM-JAY states in comparison to 5% in the non-PM-JAY states.
Overall	• **PM-JAY is likely to have led to greater health awareness,** better delivery of healthcare services and improved maternal and child care outcomes. • The health outcomes of the states that adopted PM-JAY **improved when compared to the states that did not adopt it.** • Relative to states that did not implement PM-JAY, states that adopted it **experienced greater penetration of health insurance, experienced a reduction in infant and child mortality rates, realized improved access and utilization of family planning services**, and greater awareness about HIV/AIDS. • **Survey infers that PMJAY impacted health outcomes positively.**



CHAPTER AT GLANCE

- This chapter demonstrates strong positive effects on healthcare outcomes of the Pradhan Mantri Jan Arogya Yojana (PM-JAY). This is despite the short time since the introduction of the program.
- Survey analysed the impact of PM-JAY on two categories of states i.e. all States that adopted PM-JAY versus those states that did not adopt PM-JAY.
    - The analysis shows that states that adopted PM-JAY experienced greater penetration of health insurance, experienced a reduction in infant and child mortality rates, greater awareness about HIV/AIDS etc as compared to states that did not implement PM-JAY.
- PM-JAY enhanced health insurance coverage. PM-JAY is likely to have led to greater health awareness, better delivery of healthcare services and improved maternal and child care outcomes.
- The health outcomes of the states that adopted PM-JAY improved when compared to the states that did not adopt it.
- Survey infers that PMJAY impacted health outcomes positively.

SUMMARY OF ECONOMIC SURVEY

CHAPTER 9

Quiz: Testing your remembering skills & Understanding skills

Q1. With reference to the 'Public goods' consider the following statements:

1. **Public goods are non-rival and non-excludable.**
2. **Only market can adequately provide and ensure supply of public goods.**
3. **Healthcare is considered as a critical public good.**

Which of the statements given above is/are correct?

a) 1 only
b) 1 and 3 only
c) 3 only
d) 1, 2 and 3

Q2. Which of the following statement is not correct about Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM-JAY)?

a) Scheme does not place any cap on age and size of a family.
b) Scheme is non-portable in nature and beneficiaries can access to empaneled healthcare provider only in state/UT of residence.
c) Households under scheme are included on the basis of deprivation criteria from the Socio-Economic Caste Census 2011 for rural areas.
d) Households under scheme are included on the basis of occupational criteria from the Socio-Economic Caste Census 2011 for urban areas.

Q3. Consider the following statements with reference to latest annual report by the National Health Authority on the status of implementation of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM-JAY):

1. **Only 32 states and UTs have implemented the scheme.**
2. **More than 35 crore E-cards have been issued to individual beneficiaries under scheme.**
3. **Currently, more than 50,000 hospitals are empanelled under scheme.**

Which of the statements given above is/are correct?

a) 1 only
b) 1 and 2 only
c) 2 and 3 only
d) 3 only

Q4. Consider the following statements with reference to analysis of States with and without Pradhan Mantri Jan Arogya Yojana (PM-JAY):

1. **The proportion of households with health insurance increased in the states that implemented PM-JAY.**
2. **States that implemented PM-JAY shown reduction in infant mortality rate (IMR), while increase in non-PM-JAY states.**
3. **Both States that implemented PM-JAY and non- PM-JAY States shown rise in proportion of people using any method of family planning.**

Which of the statements given above is/are correct?

a) 1 and 2 only
b) 1 and 3 only
c) 2 and 3 only
d) 1, 2 and 3

Q5. Consider the following statements about Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM-JAY):

1. It is family floater basis scheme to provide healthcare of up to INR 5 lakh per family per year.
2. It provides for secondary and tertiary hospitalization only through empaneled public healthcare providers.
3. Scheme aims to set up 150,000 health and wellness centres to provide comprehensive primary health care service to the entire population.

Which of the statements given above is/are correct?

a) 1 only
b) 1 and 3 only
c) 2 only
d) 2 and 3 only

Self-Assessment: To practice Question for Answer Writing skills

Q1. Critically analyse the impact of PM-Jan Arogya Yojana on the Health Outcomes.

Q2. Healthcare is a critical public good, elaborate. In that context discuss the impact of health insurance over the health outcomes of a nation.

CHAPTER 10: THE BARE NECESSITIES

Theme

Access to "the bare necessities" such as housing, water, sanitation, electricity and clean cooking fuel are a sine qua non (an essential condition) to live a decent life. This chapter **examines the progress made in providing access to "the bare necessities" by constructing a Bare Necessities Index (BNI) at the rural, urban and all India level**. Using the BNI, this chapter **summarizes the progress made in providing access to bare necessities for ensuring a healthy living.**

Introduction

- The bare necessities include housing, water, sanitation, electricity and clean cooking fuel as these are jointly consumed by all the members of a household.
  - **Access to these saves time for a household**, which they can utilise in productive activities such as education and learning.
    - ✓ 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, **there is a strong correlation between electricity consumption per capita and higher scores on the education index** across countries
  - Access to clean drinking water, safe sanitation and clean cooking fuel also **have direct linkages with infant mortality and under-5 mortality rate and health of the members in the household.**
    - ✓ **Access to clean cooking fuel improves child health.** Studies have found a significant trend for higher infant mortality among households that cooked with a greater proportion of biomass fuel.
    - ✓ **Access to the piped water and sanitation is critical in reducing the child mortality substantially**. The distance and time spent on fetching water from the source is found to affect under-five child health and increase the risk of illness
    - ✓ Also, Economic Survey 2018-19 showed that **Swachh Bharat Mission 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**.**
- In order to **improve access to "the bare necessities," successive governments have made constant efforts.**

Government Schemes for Bare Necessities

Scheme	Objective	Targets and achievements
Swachh Bharat Mission-Rural and Urban	• Objective of SBM-Rural was to **attain Open Defecation Free (ODF) India by 2nd October, 2019 by providing access to toilet facilities to all rural households** in the country. • Objective of SBM-Uuban is to achieve **100 per cent Open Defecation Free (ODF) status and 100 per cent scientific processing of the Municipal Solid Waste (MSW)** being generated in the country.	• Under SBM, more than 10 crore toilets built across rural India. • to sustain the gains made under the programme in the last five years, **phase II of SBM(G) from 2020-21 to 2024-25 is being implemented focusing on ODF sustainability and Solid & Liquid Waste Management (SLWM) through convergence between different verticals of financing and various Schemes of Central and State Governments** such as 15th Finance Commission grants to local bodies, MNREGS, Corporate Social Responsibility (CSR) funds etc. • **Since its launch in 2014, SBM-U**, more than 66 lakhs individual household toilets and over 6 lakhs community/ public toilets constructed, far exceeding the Mission's targets

		• 4,327 Urban Local Bodies (ULBs) have been declared ODF so far. • The Mission is **now focusing on holistic sanitation through its ODF+ and ODF++ protocols with a total of 1,319 cities certified ODF+ and 489 cities certified ODF++ as on date**. • In the area of **solid waste management, 100 per cent of wards have complete door-to door collection.** • Further, out of 1,40,588 Tonnes Per Day (TPD) waste generated per day, 68 per cent (i.e., 95,676 TPD) is being processed.
Pradhan Mantri Awaas Yojana (PMAY)	• PMAY intends to provide housing for all in urban and rural areas by 2022.	• Under **PMAY (Urban), as on 18th January, 2021, 109.2 lakh houses have been sanctioned out** of which 41.3 lakh have been built to the beneficiaries under PMAY(U) since inception of the scheme in June, 2015. • Target number of houses for construction under PMAY (Gramin) is 2.95 crore in two phases i.e. 1.00 crore in Phase I (2016-17 to 2018-19) and 1.95 crore in Phase II (2019-20 to 2021-22). ○ Since 2014-15, construction of approx. 1.94 crore rural houses have been completed, out of which 1.22 crore houses have been constructed under the revamped scheme of PMAY-G and 0.72 crore under erstwhile Indira Awaas Yojana scheme
NRDWP, now Jal Jeevan Mission (JJM)	• The objectives of the NRDWP wasto **provide safe and adequate water for drinking, cooking and other domestic needs to every rural person** on a sustainable basis. • Goal of JJM is **to provide functional tap water connection (FTWC) every rural household by 2024 and 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	• At the time of roll out of the scheme in August 2019, about 3.23 crore (17%) households had tap water supply. • Upto 16th January, 2021, so far about 3.2 crore of rural households have been **provided with FTWC since the launch of the Mission.**
Sahaj Bijli Har Ghar Yojana – Saubhagya	• Government launched Saubhagya Yojana in October, 2017 with the **objective to achieve universal household electrification by providing electricity connections to all willing un-electrified households in rural areas** and all willing poor households in urban areas in the country, by March, 2019.	• **All States have declared electrification of all households on Saubhagya portal**, except 18,734 households in Left Wing Extremists (LWE) affected areas of Chhattisgarh as on 31.03.2019. • Seven States reported that **19.09 lakh un-electrified households identified before 31.03.2019, which were earlier un-willing but have expressed willingness** to get electricity connection. ○ States have been asked to electrify these households under Saubhagya.

Pradhan Mantri Ujjwala Yojana (PMUY)	• PMUY launched in May, 2016 in order **to provide clean cooking fuel to poor households with a target to provide 8 crore deposit free LPG connection**. • This connection is provided in the name of an adult woman member of a poor family and the beneficiary has an option to avail connection with 14.2 kg or 5 kg cylinder. • The existing beneficiary with **14.2 kg LPG cylinder has an option to swap with 5 kg cylinder also.**	• Under PMUY, a **target to provide 8 crore new LPG connections has been achieved** in September, 2019, **7 months in advance of the target date of 31st March, 2020.**

- To measure the progress in the delivery of "the bare necessities", the **Survey develops a composite index called the Bare Necessities Index (BNI)**
- BNI is an attempt to **quantify "basic needs" approach to economic development** using data from **the National Statistical Office (NSO).**
    - 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.**
- 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**.

The Bare Necessities Index

Dimensions	Indicators used for the analysis	Status
Water	• It measuresthe **principal source of drinking water, distance from source of water, nature of access, and method of taking out water**.	• 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). • States such as Sikkim, Punjab, Haryana and Gujarat areat the top while Odisha, Jharkhand and Andhra Pradesh are at the bottom on the drinking water accessibility index. • **Regional disparities have increased** in 2018 when compared to 2012 despite such disparities declining in urban areas • **Across all groups, equity in access to drinking water increased** in 2018 when compared to 2012
Sanitation	• It measures **access to latrine for exclusive use, the type of latrine viz., piped sewer system, septic tank, twin leach pit, single pit.**	• **Access to sanitation for States, shows that 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. • **Regional disparities in access to sanitation has declined** as the states having low access to sanitation in 2012 have gained more. ○ However, Inter-State difference in access to sanitation are still large, especially in rural areas. • The **level of access to safe sanitation has increased** in lowest income quintile, both in rural as well as in urban areas
Housing	• It 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 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**, thereby enhancing equity in access to housing in 2018 vis-à-vis 2012.

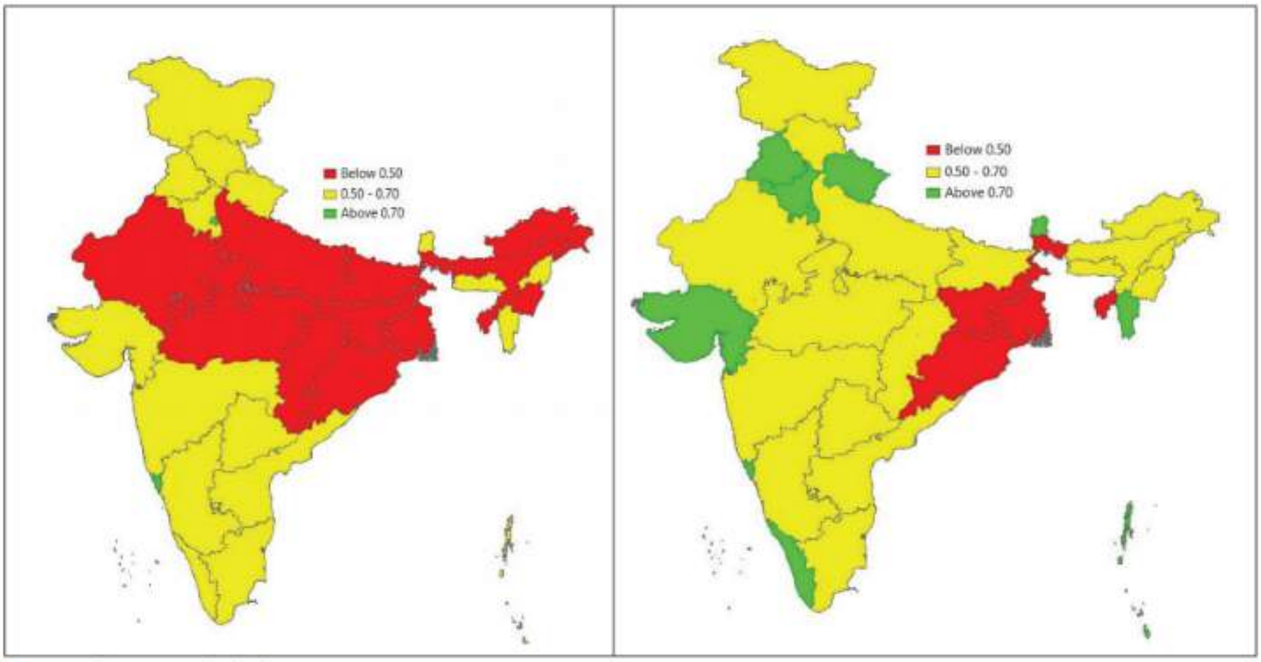
Micro-Environment Index	• **It** measures the **percentage of households who are living in a dwelling unit with access to drainage** (indicated in terms of access to drainage and quality of drainage in terms of other than Katcha drainage), without problems of flies/mosquitoes (indicated by other than severe), and efforts made by local bodies/State government to tackle problem of flies/mosquitoes.	• Micro-environment 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.** • The **micro-environment is much better in urban areas** when compared to the rural areas, and the rural-urban gaps are large. • The **access to microenvironment in 2018 has improved especially to the lowest income quintile** in rural as well as in urban areas
Other facilities index	• **It** 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 equity in **access to other facilities has improved in rural and 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.**

Overall findings related to bare necessities in 2018compared to 2012

- Access to "**the bare necessities" has improved across all States**.
    - 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.
    - **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**, and the States showing improvement over 2012 include Uttarakhand, J&K, Punjab, Rajasthan, Madhya Pradesh, Maharashtra, Karnataka, Kerala, Tamil Nadu, Arunachal Pradesh and Manipur.
- **Inter-State disparities in the access to "the bare necessities" have declined in 2018** compared to 2012 across rural and urban areas.
- Access to "the bare necessities" has **improved disproportionately more for the poorest households when compared to the richest households across rural and urban areas.**
- However, 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** to enable India **achieve the SDG goals of reducing poverty, improving access to drinking water, sanitation and housing by 2030.**
    - There must be **effective convergence in scheme implementation at the Centre-State and local levels.**
    - There should be **effective targeting of the needier population** be they in urban or rural areas or across states.
    - **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.

Figure 1: Improvement in the Bare Necessities Across India (Rural + Urban) from 2012 to 2018

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



Source: Survey calculations.

- The **difference in colours in a map indicate the regional variation in the access to bare necessities** for the households.
    - The three colours, **green, yellow and red, used in the maps show the level of a State in providing access to bare necessities to its households.**
        - ✓ Green (above 0.70) indicates 'High' level and is therefore the most desirable, followed by yellow (0.50 to 0.70), which indicates 'Medium' level. In contrast, Red (below 0.50) indicates very 'Low' level of access.
- **The BNI is created for all** States/UTs by employing the data at State level. As Telangana did not exist in 2011, data is not available for the State in 2011; however, the maps show the index value for the **combined State of Andhra Pradesh in 2011.**

Glossary	
"Basic needs" approach	• "basic needs" approach to economic development focuses on the **minimum specified quantities of basic necessities** such as food, clothing, shelter, water and sanitation that are necessary to prevent ill health, and undernourishment. • Amartya Sen defines poverty as a failure to achieve certain minimum basic needs or capacities.

CHAPTER AT A GLANCE

- **This chapter examines the** progress made in providing access to "the bare necessities" by constructing a Bare Necessities Index (BNI) **at the rural, urban and all India level.**
    - **Bare necessities include housing, water, sanitation, electricity and clean cooking fuel as these are jointly consumed by all the members of a household.**
- **In order to** improve access to "the bare necessities," successive governments have made constant efforts and launched several schemes such as **Swachh Bharat Mission-Rural and Urban, Pradhan Mantri Awaas Yojana (PMAY),Jal Jeevan Mission (JJM), Sahaj Bijli Har Ghar Yojana – Saubhagya, Pradhan Mantri Ujjwala Yojana (PMUY)**

This resulted in unintended and detrimental consequences for banks, firms, and the economy:

- Consequences for banks and lending practices- **Undercapitalization, enhanced lending to zombie firms, ever-greening of loans.**
- Consequences for firms and economy- **Borrower firms benefitting from forbearance witnessed weakening of corporate governance, deterioration in the quality of Boards, inefficient allocation of capital, mis-appropriation of resources, deterioration in economic performance and increased defaults.**

- **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.**
  - **BNI is an attempt to** quantify "basic needs" approach to economic development **using data from the National Statistical Office (NSO).**
- Key findings related to bare necessities in 2018 **compared to 2012**
  - **Access to "the bare necessities" has improved across all States.**
  - Inter-State disparities in the access to "the bare necessities" have declined in 2018 **compared to 2012 across rural and urban areas.**
  - **Access to "the bare necessities" has** improved disproportionately more for the poorest households when compared to the richest households across rural and urban areas.

CHAPTER 10

Quiz: Testing your remembering skills & Understanding skills

Q1. Which of the following government schemes is/ are associated with improvement in access to bare necessities for people?

1. Swachh Bharat Mission (SBM)
2. Pradhan Mantri Awas Yojana (PMAY)
3. Jal Jeevan Mission (JJM)
4. Sahaj Bijli Har Ghar Yojana
5. Pradhan Mantri Ujjwala Yojana (PMUY)

Select the correct option using code given below

a) 1 and 3 only
b) 1, 2 and 3 only
c) 2, 3 and 5 only
d) 1, 2, 3, 4 and 5

Q2. With reference to Swachh Bharat Mission (SBM), consider the following statements:

1. Under Swachh Bharat Mission (SBM), more than 10 crore toilets were built across rural India.
2. Phase II of Swachh Bharat Mission Grameen (SBM-G) is only focusing on Open Defecation Free (ODF) sustainability.
3. Out of total waste generated per day, 90 per cent is being processed.

Which of the statements given above is/are correct?

a) 1 only
b) 1 and 2 only
c) 3 only
d) 1, 2 and 3

Q3. With reference to the Bare Necessities Index (BNI) 2018, consider the following statements:

1. It uses data from the National Statistical Office (NSO) to quantify basic needs approach to economic development.
2. Access to the bare necessities has improved disproportionately more for the poorest households than the richest households across rural and urban areas.
3. Inter-State disparities in the access to the bare necessities have increased in 2018 compared to 2012 across rural and urban areas.

Which of the statements given above is/are correct?

a) 1 and 2 only
b) 1 and 3 only
c) 2 and 3 only
d) 1, 2 and 3

Q4. Consider the following statements about Pradhan Mantri Ujjwala Yojana (PMUY):

1. It aims to provide clean cooking fuel at free of cost to poor households.
2. The connection under Pradhan Mantri Ujjwala Yojana is provided in the name of an adult woman member of poor family.
3. Target to provide 8 crore new LPG connections under Pradhan Mantri Ujjwala Yojana has been achieved in 2019 in advance of the target by 2020.

Which of the statements given above is/are correct?

a) 1 and 2 only
b) 2 and 3 only
c) 3 only
d) 1, 2 and 3

Q5. Consider the following statements about Sahaj Bijli Har Ghar Yojana – Saubhagya:

1. **Its objective is to achieve universal household electrification by providing electricity connections to all un-electrified households in rural and urban areas.**
2. **Every States have declared electrification of all households on Saubhagya portal in 2019.**

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Self-Assessment: To practice Question for Answer Writing skills

Q1. There is an emerging need to focus on reducing variations in the access to bare necessities across states, between rural and urban areas and between income groups in India. Discuss.

Q2. Give an overview of the Bare Necessities Index highlighted in the Economic Survey 2020-21 and state its significance.

Q3. Discuss the components of the Bare Necessities Index. Is it a feasible measure to assess economic development?

ANSWER KEY

Chapter 1

Q1	Q2	Q3	Q4	Q5	Q6	Q7
c	c	a	d	b	c	c

Chapter 2

Q1	Q2	Q3	Q4	Q5	Q6	Q7
a	b	a	d	d	b	b

Chapter 3

Q1	Q2	Q3	Q4
a	c	c	d

Chapter 4

Q1	Q2	Q3	Q4
a	c	c	d

Chapter 5

Q1	Q2	Q3	Q4	Q5
a	c	a	d	d

Chapter 6

Q1	Q2	Q3	Q4	Q5
d	d	d	d	d

Chapter 7

Q1	Q2	Q3	Q4	Q5
c	c	a	d	d

Chapter 8

Q1	Q2	Q3	Q4	Q5
a	c	b	d	a

Chapter 9

Q1	Q2	Q3	Q4	Q5
b	b	a	b	b

Chapter 10

Q1	Q2	Q3	Q4	Q5
d	a	a	b	d

VOLUME II

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

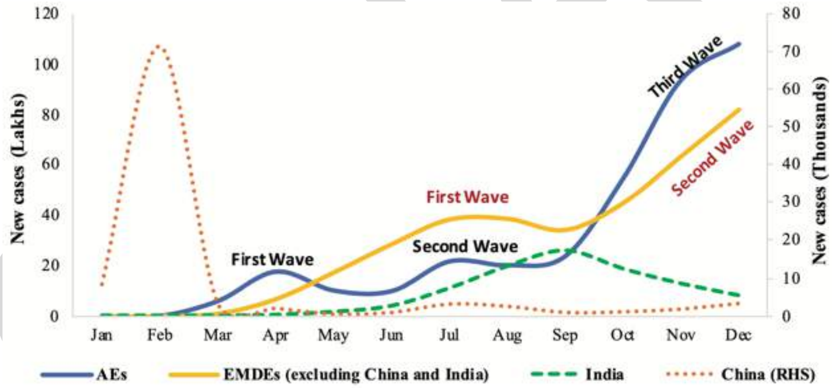
Introduction

The year 2020 saw outbreak of a once in lifetime 'black swan' event in the form of COVID-19. Which started in March 2020, engulfing every continent in the matter of months and is lingering up till now. The economic variables, status of the economy and performance of various stakeholders at both national and global level in the year 2020 has to viewed in this context.

Spread of The Pandemic

Global Spread:

- **Overall spread**: Since its first outbreak in Wuhan, China, COVID-19 has infected all continents, including Antarctica (in December, 2020), and more than 220 countries. The pandemic has caused over **10 crore confirmed cases and over 21 lakh fatalities.**
- **Global distribution**: Although, the pandemic has affected all major countries, Advanced Economies (AEs) such as US on an average have been affect harder compared to Emerging Market and Developing Economies (EMDEs) like India and Brazil.
- **Waves**: The spread of the pandemic has been happening in waves i.e., a wave of large number of cases followed by a period of containment to be followed by another wave.



  - The 3rd wave experienced by the advanced economies is proving to most lethal with fatalities exceeding the 2nd wave by 5.3 times.
  - India experienced its first wave till September, 2020 after which it has been able to effectively manage the spread – avoiding the second wave.

Spread of the Pandemic in India:

- **Overall cases:** India crossed its peak in cases in September, 2020. The **confirmed cases** in India have touched more than **1.06 crore**, representing around 11 percent of the world's total case load. The **total death toll in India,** as on 31st December, 2020, was **1.48 lakh.**
- **Decreasing case load:** New cases have moved down to less than 16,000 cases per day in January, 2021. Also, India's **share in new cases** load globally has drastically come down from 31 per cent in September, 2020 to 4 per cent in December, 2020.
- **Distribution in India:**
  - The **initial spread** of pandemic was limited primarily to **western and northern zones** of the country, this was followed by **sharp rise** in cases in the **Southern region** of the country.
  - In per capita terms, the **southern zone had a maximum caseload at 1226 cases** per lakh; the **eastern region had the lowest caseload at 342 cases** per lakh as on 31st December, 2020.
  - **More than 50 per cent of the total fatalities** occurred in **western and southern zones** of the country. The eastern and north-eastern saw relatively lower number of deaths.

Ramping Up Testing

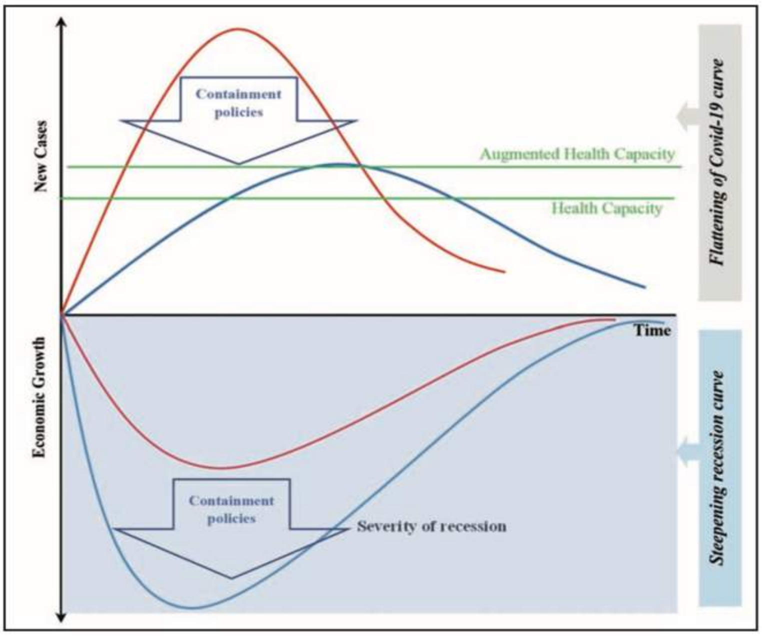
Testing has been identified as critical in limiting the spread of the pandemic by making contact tracing more effective and identifying and treating the prospective cases.

- **Global Testing:** It is observed that countries such as United Kingdom, Argentina, Germany, Colombia, Switzerland, Poland and Peru need to perform more tests as cases per lakh are on the higher side in relation to other countries.
- **Testing in India:** Keeping the focus on "Test, Track and Treat", India has tested nearly 18.5 crore cumulative COVID-19 samples.

Policy Dilemmas Underlying COVID-19

'Lives Vs Livelihoods': Given the fast spread of the pandemic, the **immediate public health policy priority was, 'flattening the epidemiological curve' t**o mitigate the impact of the spread. But the public health measures including the global and national lockdown led to **almost full suspension of economic activity**, curbed consumption and investment, as well as restricted labour supply and production, creating a dilemma of choosing 'lives' or 'livelihoods.

Figure 10: Trade-off between Flattening COVID-19 Infection Curve and Steepening of Recession Curve



Demand-side and Supply-side Shocks:

- **Demand Shock:** 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 created an unprecedented demand shock.
- **Supply Shock:** The supply chain disruptions caused by closure of economic activity and restricted movement of labour lead to creation of supply shocks.

These effects were further amplified through international trade and financial linkages, dampening global activity and pushing commodity prices down. In this context, it became all the more important to **balance 'flattening of the epidemiological curve' with 'flattening of the recession curve.'**

Sectoral Impact of Covid-19 In India: Ubiquitous, Yet Irregular

The sectoral impact of the pandemic can be measured by the twin indicators of **Gross Value Added (GVA) and Employment.**

- **GVA:** GVA shock can be analysed by observing non-essential and essential activities:
  - **Non-essential activities** like tourism endured a combined shock directly proportional to their respective GVA contribution in the economy.
  - **Essential activities** underwent a dampened shock, primarily arising from the indirect impact of restricted activities in non-essential sectors. For example, movement of essential products was initially hindered due to impact on logistical services.
- **Employment:** With regard to employment **contact-sensitive sectors** like trade, hotels, transport etc. bore the primary impact of the impact with disproportionate impact on the informal workers. As a result, informal worker dependent sectors like Construction and Mining were severely affected.

Disruption of Global Economy by The Pandemic

Economic activity has been belaboured by reduced mobility, owing both to official restrictions and private decisions; uncertainty regarding the post-pandemic economic prospects and policies has impacted investment; disruptions in education have decelerated human capital accumulation; concerns about the viability of global value chains; and the adverse impact on international trade and tourism. This can be evidently seen following indicators-

- 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.**
- The **Global composite Purchasing Managers Index (PMI)** was in **contraction for five months before July, 2020** which is an indicator of buoyancy in Manufacturing and Services sector.
- **Global trade** is projected to **contract by 9.2 per cent in 2020.**
- The pandemic has exacerbated the **risks associated with a decade-long wave of global debt** accumulation. **Debt levels have reached historic highs**, making the global economy particularly vulnerable to financial market stress.

Figure 19: Government Debt as % of GDP

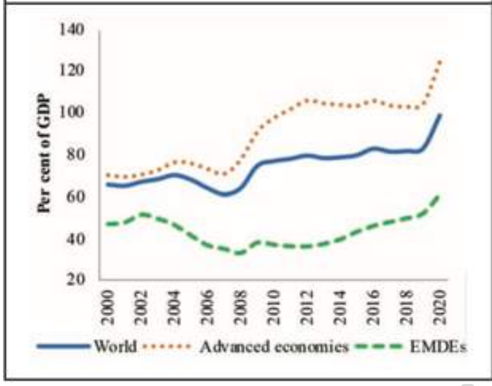
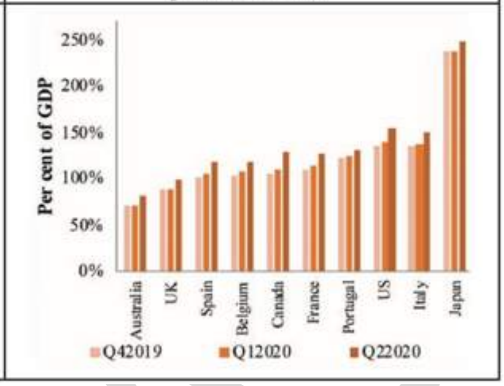


Figure 20: Major Economies - Total Debt as per cent of GDP



Continued policy support via unprecedented swift interventions by Central banks has provided the **silver lining to the situation**. Since mid-2020, commodity prices such as for gold, oil etc. and the global equity markets have rebounded which reflects improving demand.

Going forward, an effective vaccination campaign, restoration of consumer and business confidence as well as continued monetary and fiscal support are **expected to lift the global output by 4.5 – 5.5 per cent in 2021.**

Figure B3: Volume of E-Way Bill by Distance Category

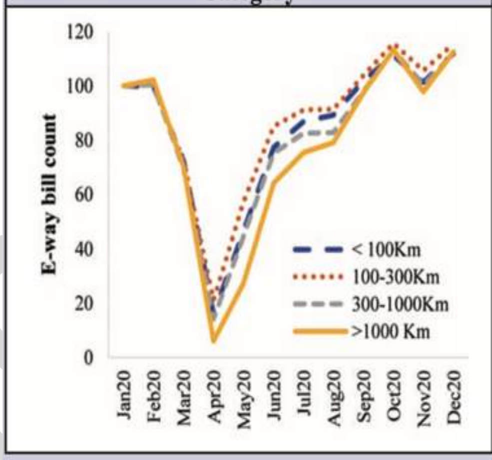
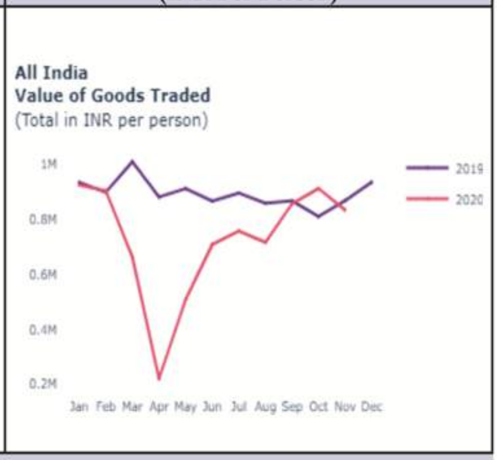


Figure B4: All India- Value of Goods Traded (INR Per Person)

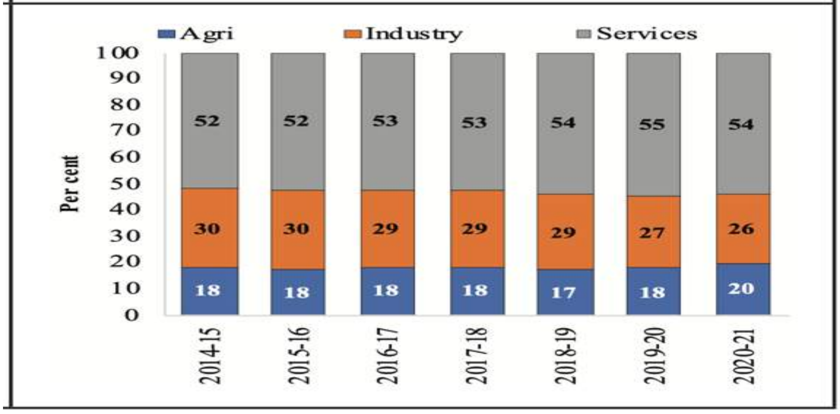


Source: GSTN

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.

Figure 44: Share of Components of GVA



Since then, several high frequency indicators (such as E-way Bills) have demonstrated a V-shaped recovery. Indicators **like E-way bills, rail freight, GST collections and power consumption** not only reached pre-pandemic levels but also surpassed previous year levels.

- E-way bills are a strong leading indicator of revenue collections, supply chain corrections and logistics growth. (as can be seen from the comparison of trade numbers and E-way bills). This makes it a good proxy for estimating the pattern of economic recovery.

Sectoral Trends:

- **Agriculture Sector:** The sector experienced a **growth of 3.4 per cent** in both Q1 and Q2 of FY 2020-21. This indicates that agricultural activities for rabi harvesting and kharif sowing were largely unaffected by the COVID 19-induced lockdown.
    - In this context, food grain production target has been set at 301 million tonnes for the 2020-21 crop year, up by 1.5 per cent from the record output achieved in 2019-20.
    - Resilient rural demand is also one of the reasons for robust agricultural growth. This can be attributed to government's thrust on the rural economy and infrastructure in previous years via initiatives in skill development, entrepreneurship and creation of Self-Help Groups.
    - Agricultural initiatives like PM-KISAN, adoption of cost plus 50 per cent formula for MSP, Pradhan Mantri Krishi Sinchai Yojana, Food Processing Organizations (FPOs) and e-NAM etc. have also contributed to agricultural sector's robustness.

Figure 24: Growth in Core Index

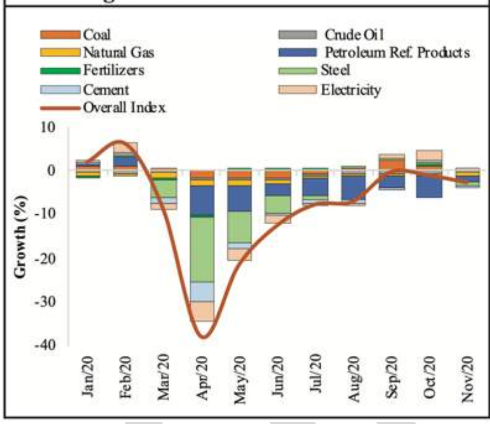
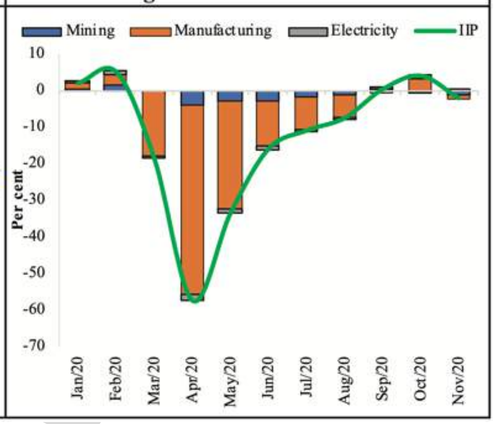


Figure 25: Growth in IIP

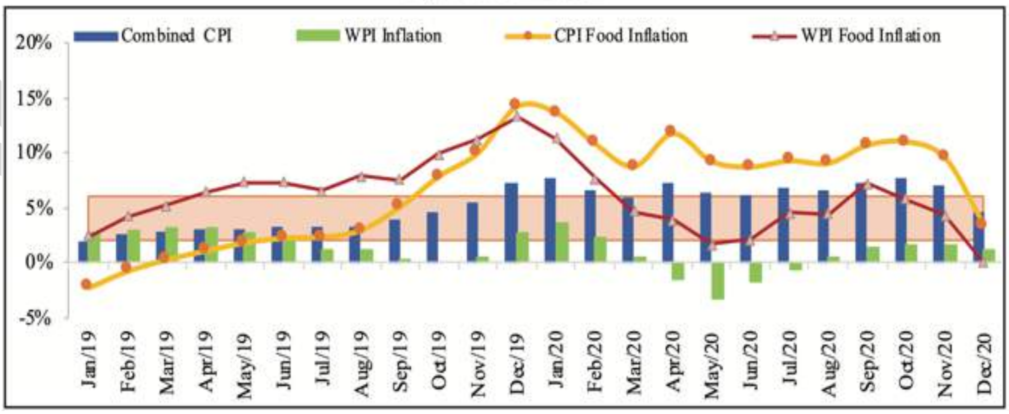


- **Industrial Sector:** V-shaped recovery in industrial production was observed over the year, indicated by growth in the index of eight core industries and growth in Index of industrial production. This was further validated by the expansionary rating of PMI Manufacturing for December 2020. Despite this revovery, the industrial sector is estimated to contract by 9.6 per cent during the year.
- **Services Sector:** Indian services sector sustained its recovery from the pandemic driven declines with PMI Services output and new business rising for the third straight month in December. Although, the sector is estimated to contract by 8.8 per cent during the year.

Other economic parameters:

- **Inflation:** After consistently rising for six months since Q1:2020-21, headline inflation eased gradually by December at 4.6 percent, thus falling into RBI's range of 4+/-2 percent.

Figure 28: Inflation



- **Bank Credit:** While overall bank credit growth and credit to commercial sector gradually picked up from its April lows to reach 6.7 per cent and 6.2 per cent YoY respectively as on 1st January, it remained sluggish compared to previous year levels.
- **Non-banking financing:** Assets under management (AUM) of mutual funds grew at 17.73 per cent during April to November 2020. These funds faced aggressive redemption pressures and liquidity

crunch in the initial part of the year but this was ameliorated through RBI's special liquidity scheme for mutual funds.

- **Fiscal Balance:** The fiscal arithmetic was impacted by the adverse impact on government revenues and elevated expenditures, as the Government enhanced spending during the unlock phase.
  - **Revenue:** During April-December 2020, total non-debt receipts of Central Government fell by 4.7 per cent YoY. However, gross GST collections (Centre plus states) gained buoyancy, crossing the 1 lakh crore mark consecutively for the last three months.
  - **Expenditure:** Total expenditure of the Central Government recorded a growth of 11 per cent during April-December 2020, with capital expenditure growing by 24.1 per cent and revenue expenditure by 9.2 per cent year-on-year.
  - **Overall borrowing:** While Centre's borrowings are 65 per cent higher than the amount raised in the corresponding period of the previous year, state governments have seen a step up of 41 per cent.
- **Government Bonds:** The India 10-year Benchmark G-Sec Yield on an average has been decreasing since 2019-20, indicating trust and confidence in overall government's economic fundamentals.
  - 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.
- **External Sector:** India recorded a current account surplus of 3.1 per cent of GDP in the first half of the year. Although, merchandise exports fell by 21.1 per cent but the contraction being more severe for imports at 38.8 per cent resulted in an overall surplus.
  - Exports, however have been reviving gradually as the rate of contraction eased to 5.0 per cent in Q3:2020-21 but further growth is contingent on the global COVID-19 outlook and successful rollout of vaccinations across the world.
- **Foreign Investment:** India remained a preferred investment destination in FY 2020-21.
  - **Foreign Direct Investment:** FDI poured in amidst global asset shifts towards equities and prospects of quicker recovery in emerging economies.
  - **Foreign Portfolio Investment**: During April- December 2020, equities witnessed inflow of FII at USD 30.0 billion, five times its previous year value - India was the only country among emerging markets to receive equity FII inflows in 2020.
    - As a result of these inflows, Sensex and NIFTY resulted in India's market-capitalisation to GDP ratio crossing 100 per cent for the first time since October 2010.
- **Currency Position:** Robust capital inflows along with a weak dollar lent an appreciating bias to the Indian rupee since June 2020. However, RBI's prudent interventions in the foreign exchange market limited the appreciation.
- **Foreign Exchange Reserves:** Combined with a rise in gold reserves and foreign currency assets, India's foreign exchange reserves climbed to a new high of US$ 586.08 billion as in January, 2020, covering more than 18 months of imports.
- **External Debt:** Also, external debt as a ratio to GDP, which is comprised primarily of private sector's external debt, rose marginally to 21.6 per cent as at end-September 2020.
  - Reflecting lower current receipts, debt service ratio (principal repayment plus interest payment), however, increased to 9.7 percent as in September 2020 as compared to 6.5 percent in March 2020.

COVID-19's Impact on GVA, Labour Markets and Fiscal Position: A Geographical Perspective

The geographical spread of the COVID-19 health shock is intertwined with the pre-existing economic fragilities of the states. This fragility can be interpreted on three fronts:

- **Relative sectoral shares in GVA:** States like Maharashtra with large percentage of output coming from contact-sensitive sectors faced a disproportionate impact.
- **Labour market:** Labour shock affected various states in different ways. For example, Kerala and Tamil Nadu faced a construction sector shock, Gujarat faced a manufacturing sector labour shortage and informal sector worker influx faced by UP.
- **Fiscal position:** States with comfortable fiscal situation like Delhi with better placed to tackle the health related costs on the state.

Policy Response To COVID-19

Global:

- **Preventive measures:** Social distancing measures with public information campaigns, broad- based testing, and contact tracing of individuals who were potentially exposed to known cases.
- **Fiscal Support:** An unprecedented fiscal response at $11.7 trillion globally, or close to 12 per cent of global GDP, has provided lifelines to vulnerable households and firms.
    - These measures include additional spending or forgone revenue, temporary tax cuts, cash and in-kind transfers, unemployment benefits, wage subsidies, and liquidity support, including loans, guarantees, and equity injections by the public sector.
- **Monetary policy support:** Several central banks around the world engaged in unconventional monetary policy interventions in the form of long-term asset purchase programs (for the first time in many EMDEs), relending facilities, relaxation in asset provisioning requirements and supporting credit provision to a wide range of borrowers.

India's Strategic Multi-Pronged Policy Response:

India adopted a graded four-pronged pre-emptive, and pro-active strategy consisting of (i) **containment measures**, (ii) **calibrated fiscal support focussed on essentials during lockdown and demand push during the unlock phase**, (iii) **financial measures** and (iv) **structural reforms to combat COVID-19.**

Also, a three-tier arrangement of health facilities was created for appropriate management of COVID-19 cases, (i) COVID Care Center with isolation beds for mild or pre-symptomatic cases; (ii) Dedicated COVID Health Centre (DCHC) with oxygen supported isolation beds for moderate cases and (iii) Dedicated COVID Hospital (DCH) with ICU beds for severe cases.

Policy package in India to combat COVID-19

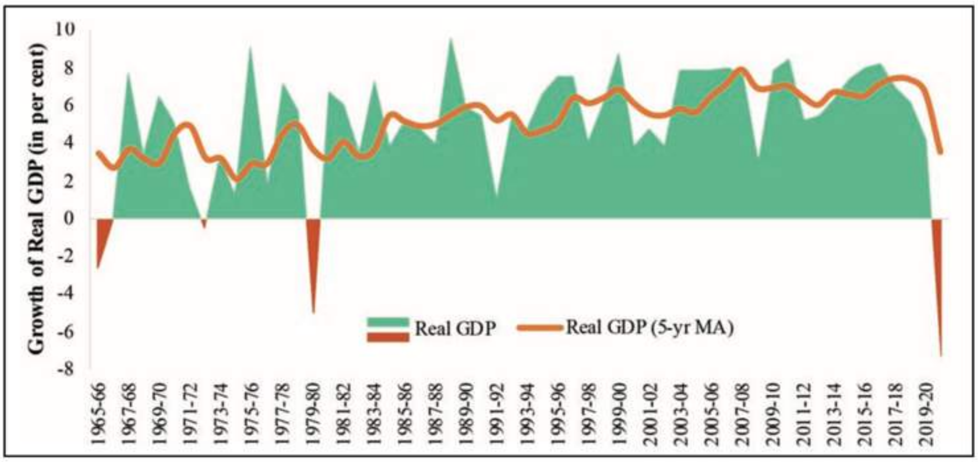
Measures	Nature	Policy Tools
Containment measures	• **Containment and Closure Policy** • **Transmission prevention**	• School closure • Complete Nation-wide lock-down for 21 days • Travel bans/restrictions • Closure of public places/cancellation of public events • Curtailment of non-essential economic activities • Risk profiling of districts into Red Zones (hot spots), Orange and Green Zones • Social distancing norms • Mandatory use of masks
Fiscal Policy Measures	• **Health** • **Welfare** • **Tax Measures** • **Demand push** • **Investment push**	• Emergency health fund (INR 150 billion) • Pradhan Mantri Garib Kalyan Yojana - Financial assistance and food security • Increment in daily wage under MGNREGS • Garib Kalyan RojgarAbhiyaan –livelihood creation in rural areas • Tax & contribution policy changes • Support to States, linking borrowings to Reforms AatmaNirbhar Bharat Package 1 • Emergency Credit Line Guarantee Scheme (ECLGS) for MSMEs • Subordinate Debt for Stressed MSMEs and Equity Infusion through Fund of Funds for MSME • Extension of Partial Guarantee Scheme to help NBFCs & MFIs • Special Credit Facility to Street Vendors • Liquidity Injection for DISCOMs • Special liquidity Scheme for NBFC/HFC/MFIs • Interest Subvention for MUDRA Shishu Loans • Housing Credit Linked subsidy Scheme -MIG • Additional Emergency Working Capital through NABARD • Additional credit through KCC • Creation of Agri Infrastructure Fund, Animal Husbandry

		Infrastructure Development Fund • Promotion of Herbal Cultivation • Beekeeping Initiative • Viability Gap Funding Scheme for Social Infrastructure projects AatmaNirbhar Bharat Package 2 • Boost Capital Expenditure • LTC voucher Scheme • Festival Advance AatmaNirbhar Bharat Package 3 • Boost for AtmaNirbhar Manufacturing - Production Linked Incentives • Boost for Rural Employment • R&D Grant for COVID Suraksha – Indian vaccine development • AtmaNirbhar Bharat Rozgar Yojana • Industrial Infrastructure, Industrial Incentives and Domestic Defence Equipment • Support for Agriculture – Fertiliser Subsidy • Housing for All - PMAY-U • Boost for Infrastructure-equity infusion in NIIF Debt PF • Boost for Project Exports – Support for EXIM Bank
Monetary measures	• **Policy Rates** • **Liquidity** • **Asset Purchases** • **Loan moratorium**	• Lowering of Repo and reverse repo rate by 115 and 155 bps respectively. • Injection of durable liquidity through Open Market Operation (OMO) • Targeted Long Term Repo Operations (TLTROs) of up to three years' • Reduction in the CRR requirement of banks • Raised bank's borrowing limit • Working capital support- term loan moratorium, deferment of interest and easing of financing requirements • Enhanced WMA borrowing limits and relaxation of CSF withdrawal rules • Easing of compliance to stressed asset classify • Deferment, easing of capital buffer & liquidity coverage requirements • Deferring compliance requirements for FPIs under Voluntary Retention Route (VRR)
Structural reforms	• **Agriculture** • **MSMEs** • **Labour** • **Business Process Outsourcing (BPO)** • **Power** • **Privatization of PSUs** • **Mineral Sector** • **Industry** • **Space** • **Defence**	**Agriculture** • Farmers' Produce Trade and Commerce (Promotion and Facilitation)Act, 2020 • Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020 • Essential Commodities (Amendment) Act, 2020 **MSMEs** • New MSME definition covering almost 99 per cent of all firms enabling MSMEs to grow in size and create jobs • Removal of artificial separation between manufacturing and service MSMEs **Labour** • Enactment of four labour codes namely, Wage Code, Industrial Relations Code, 2020, Code on Occupational Safety, Health & Working Conditions Code, 2020 & Social Security Code, 2020 • 'One labour return, one licence and one registration' **Business Process Outsourcing (BPO)** • Simplification of the Other Service Provider (OSP) guidelines of the Department of Telecom. Several requirements, which prevented companies from adopting 'Work from Home' and 'Work from Anywhere' policies have been removed.

		Power • Tariff Policy Reform: DISCOM inefficiencies not to burden consumers, Progressive reduction in cross subsidies, Time bound grant of open access, etc. • Privatization of Distribution in UTs Privatization of PSUs • PSUs in only strategic sectors • Privatization of PSUs in non-strategic sectors **Mineral Sector** • Commercial Mining in Coal Sector • Introduction of a seamless composite exploration-cum-mining-cum-production regime. **Industry** • Production Linked Incentive (PLI) Scheme **Space** • Level-playing field provided to private companies in satellites, launches and space-based services • Liberal geo-spatial data policy for providing remote-sensing data to tech- entrepreneurs **Defence** • Corporatization of Ordnance Factory Board • FDI limit in the Defence manufacturing under automatic route will be raised from 49 per cent to 74 per cent.

V-Shaped Economic Recovery

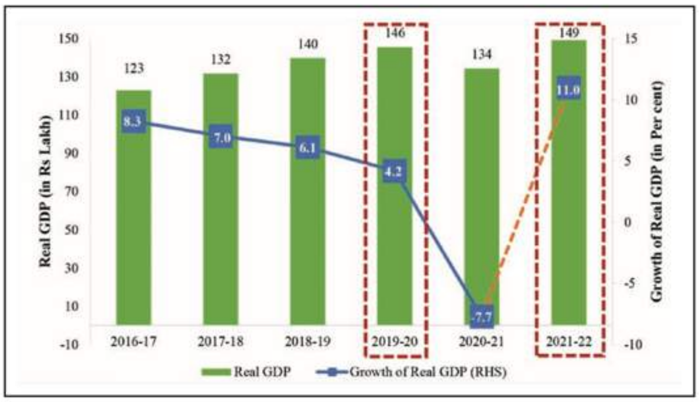
Figure 39: Trend in India's Real GDP Growth



Source: NSO

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 (unlike the current contraction).

Figure 47: Projections of Real GDP for 2021-22



Source: NSO and Survey Calculations

Government Consumption and Net Exports have cushioned the contraction in GDP while Gross Capital Formation (GCF) and Private Consumption have contributed to the contraction in GDP in 2020-21.

But following estimates provided by suggest a V-shaped economic recovery:

- **Government consumption that is expected to grow at a strong 17per cent** YoY in second half as against a 3.9 per cent contraction the first half.
- **Private consumption is also expected to improve** significantly with a mild contraction of 0.6 per cent as against a contraction of 18.9 per cent in the first half.

- **Gross Fixed Capital Formation (GFCF),** is also expected to recover significantly with a mild contraction of 0.8 per cent in the second half against a sharp 29 per cent drop in H1 of FY21.
- **Agriculture sector** growth is pegged at a steady 3.4 per cent in both the halves of 2020-21.
- **Industry sector** has staged a robust recovery in second half with a positive growth of 1.1 per cent as against a sharp 20.5 per cent drop in the first half with a sharp pick up in manufacturing sector to 0.5 per cent in second half against a contraction of 19.4 per cent in first half.
- **Trade, Hotels, Transport & Communication**, constituting one-third of overall services, contracted by 31.5 per cent in first half and are estimated to contract by 12.0 per cent in second half.

Overall, in the year 2021-22, a sharp recovery of real GDP growth of 10-12 per cent is expected based on a low base effect and inherent strengths of the economy.

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. This will translate to a growth in real GDP by 2.4 percent over the absolute level of 2019-20 – implying that the economy would take two years to reach and go past the pre-pandemic level.

Glossary	
Commercial Paper	Commercial paper is a commonly used type of **unsecured, short-term debt instrument issued by corporations**, typically used for the financing of payroll, accounts payable and inventories, and **meeting other short-term liabilities.**
Flash Estimates	A flash estimate is an early estimate for **an economic variable of interest** over the most recent reference period and is **normally calculated on the basis of a statistical or econometric model.**
Consolidated Sinking Fund	The Consolidated Sinking Fund in India was established by the Reserve Bank in 1999–2000 to **enable states to repay their debt easily**. At present **23 states have set up consolidated sinking funds.** This fund of state governments is managed by the Reserve Bank of India.
Index of Core Industries	Index of Core Industries measures collective and individual performance of production in selected **eight core industries viz. Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement and Electricity.**
Index of Industrial Production	The Index of Industrial Production (IIP) is an index which **shows the growth rates in different industry groups of the economy** in a stipulated period of time. The IIP index is **computed and published by the Central Statistical Organisation (CSO) on a monthly basis.**

CHAPTER AT A GLANCE
The year 2020 was predominated by the COVID-19 pandemic, posing the most formidable economic challenge to India and to the world, since the Global Financial Crisis.
Global economic output is estimated to fall by 4.4 per cent in 2020, the sharpest contraction in a century. AEs were hit harder, in terms of lives and economic output, compared to EMDEs.
Without a cure or vaccine, tackling this all-pervasive crisis made public health policy crucial. While policymakers faced a dilemma of "lives versus livelihoods, i.e., flattening the disease curve would invariably lead to steepening of the recession curve.
COVID-19 put emergency brake on an Indian economy that was gaining momentum at the start of the year 2020. India's GDP is estimated to grow by (-)7.7 per cent in FY2021, composed of a sharp 15.7 per cent decline in H1 and a modest 0.1 per cent fall in the second half.
Agriculture sector has remained the silver lining while contact-based services, manufacturing, construction were hit the hardest. Starting July, a resilient V-shaped recovery is well underway, as demonstrated by the recovery in GDP growth and the sustained resurgence in high frequency indicators such as power demand, E-way bills, GST collection, steel consumption, etc.
As part of India's four-pillar strategy, calibrated fiscal and monetary support was provided attuned to the evolving economic situation, cushioning the vulnerable in the lockdown and boosting consumption and investment while unlocking. Long-pending structural reforms in agriculture, mining, labour, etc. were concurrently undertaken for the economy to return to the potential growth path, keeping super-hysteresis at bay. The estimated real GDP growth for FY 2022 at 11 per cent is the highest since independence.
With the economy's returning to normalcy brought closer by the initiation of a mega vaccination drive, hopes of a robust recovery in services sector, consumption, and investment have been rekindled.

CHAPTER 1

Testing your remembering skills & Understanding skills

Q1. Which of the following factors can cause demand shock in an economy?

1. Fear of contagion
2. Weaker growth prospects
3. Risk aversion among businesses

Select the correct answer using the code given below.

(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Q2. Consider the following statements:

1. Higher Debt to GDP ratio tends to make the economy vulnerable to financial market stress.
2. Advanced economies have a higher government debt as percentage of GDP than that of Emerging Market and Developing Economies.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q3. Arrange the following sectors in increasing order of their respective contribution to Gross Value Added (GVA) in India?

1. Services
2. Agriculture
3. Industry

Select the correct answer using the code given below.

(a) 1 - 2 - 3
(b) 2 - 3 - 1
(c) 2 - 1 - 3
(d) 3 - 2 – 1

Q5. Which of the following Monetary measures have been adopted to combat COVID-19?

1. Emergency Credit Line Guarantee Scheme (ECLGS) for MSMEs
2. Lowering of repo rate
3. Viability Gap Funding Scheme for Social Infrastructure projects

Select the correct answer using the code given below.

(a) 1 and 2 only
(b) 2 only
(c) 1 and 3 only
(d) 1, 2 and 3

Self-Assessment: To practice Question for Answer Writing skills

Q1. Pandemic induced lockdown posed a threat of Twin Economic Shock in the beginning, however, various recent parameters have suggested a V-shaped economic recovery of Indian economy. Elucidate.

Q.2. Discuss the sectoral impact of Covid-19 induced lockdown to Indian economy.

CHAPTER 2: FISCAL DEVELOPMENTS

Introduction

This chapter reviews the fiscal developments in India both before and after the outbreak of pandemic. It begins with a discussion of fiscal performance and policy response to the pandemic in the current financial year, followed by the section on the major reforms introduced in tax administration in 2020-21. The chapter then gives a detailed analysis of the medium to long term trends in Central, State and General Government finances, and concludes with the outlook for 2021-22.

Fiscal Situation and Response to Covid Pandemic

- In contrast with the fiscal policy approach adopted by some of the other countries, whereby a one-time large demand stimulus package was announced, the fiscal stimulus by the Government of India was introduced in a phased manner.
    - **Initial phase of lockdown:** The special economic and comprehensive package announced in this phase focused on measures to primarily provide a cushion to the vulnerable sections of the society and the small businesses. This included direct food transfers to the poor and vulnerable, livelihood programmes, guarantees and liquidity enhancing measures.
    - **Phase of steady unwinding of the lockdown and restrictions:** The demand side impetus was given to re-inflate consumption demand.
    - **Phase of lifting up of the lockdown:** The focus of the stimulus measures shifted towards on investment boosting measures like Production Linked Incentives, enhancing capital expenditure and steps to encourage investment in infrastructure sector.
- In order to facilitate a resilient recovery of the economy from the impact of COVID-19 pandemic and the following lockdown, **Government of India and RBI together announced a total stimulus worth ` 29.87 lakh crore (15% of national GDP).** Out of this, stimulus worth 9% of GDP has been provided by the Government under AtmaNirbhar Bharat Package.
- Owing to the recovery of the economy over the past few months, the **monthly GST collections have crossed the ` 1 lakh crore mark,** reaching its highest in December 2020**.**

Reforms In Tax Administration

- The government has introduced the platform **'Transparent taxation- Honoring the Honest'** 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 :
    - Usage of technology, data analytics and Artificial Intelligence and
    - 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**
        - ✓ This **involves automated random allocation of cases across Income Tax teams** and elimination of face-to-face contact between the income-tax authorities and the taxpayer that 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.
        - ✓ To further facilitate and streamline the process of assessment there are various **Regional Faceless Assessment Centers** which are vested with the power to make assessments.
    - **Faceless Appeals Scheme 2020**
        - ✓ Under this, **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.

- Under the NFApC are **Regional Faceless Appeal Centers (RFAC)** to facilitate the e-appeal proceedings.
- **Taxpayers' Charter:**
  - **The concept of taxpayers' Bill of Rights was first introduced in the US in 1988** which grouped the existing rights in the tax code into ten clearly defined fundamental rights and applied to all taxpayers.
  - India's Taxpayer Charter **comprises of commitments by the Income Tax Department and obligations of the taxpayers.** It emphasizes the importance of fair, courteous and reasonable treatment to taxpayer.
  - In addition to explicitly recognizing the taxpayers' rights, presence of a dedicated institution (or the **independent ombudsman) aimed to take up issues from taxpayers' perspective helps in developing trust of the taxpayers in the system.** This ensures that the taxpayers understand their rights and are treated fairly. However **such an institution, in India's past experience, was not effective and was abolished.**

Case of an Independent Ombudsman in India – to ensure enforcement of taxpayers' rights

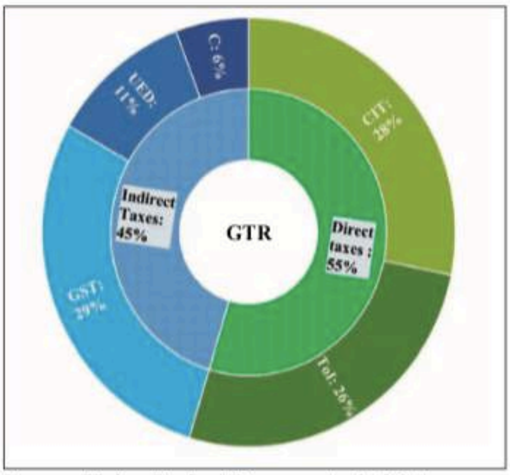
- In India, the **institution of Income Tax Ombudsman was created in 2003** and Indirect Tax Ombudsman came to existence in 2011.
  - Since the functioning of Ombudsman was governed by the guidelines (Income Tax Ombudsman Guidelines 2010 and Indirect Tax Ombudsman Guidelines 2011), and **there was no act of law empowering it with different functions**, the institution of Ombudsman was ineffective and the decisions only advisory in nature.
  - The institutions of Ombudsman for direct and indirect taxes were, therefore, **abolished in February 2019.**
  - The **present tax grievance redressal system consists of grievance cells** headed by department officials/ AaykarSewaKendras (ASK), e-nivaran portal which is a separate and dedicated window for grievance redressal in the Income Tax Business Application, and CPGRAMS (Central Public Grievance Redress and Monitoring System).
- **Global experience with Independent tax Ombudsman**
  - The global experience suggests that countries (such as Australia, Canada, UK, and Brazil) with an independent tax Ombudsman have performed better on the tax administration front through better trust between taxpayers and tax authorities, and have exhibited a higher average Tax to GDP ratio and lower time taken to file taxes (OECD 2017).
- There is a **need to reinvigorate the systems of grievance redressal in India**, and incorporate a more holistic view of enhancing customer experience and protecting taxpayer rights. A redressal organisation with adequate teeth and independent of the tax department thereby make the 'Honoring the Honest' platform more successful by ensuring accountability and trust in the tax administration system.

Central Government Finances

Deficits:

- **Fiscal Deficit** for 2019-20 stood at **4.6 per cent of GDP,** (1.2 percentage points higher than Fiscal deficit in 2018-19).
- **Effective Revenue Deficit** also increased to **2.4 per cent of GDP** in 2019-20 (1% higher than in 2018-19).
- **Primary Deficit** increased to **1.6 % of GDP** (1.2% higher from 2018-19).
- The **Medium Term Fiscal Policy (MTFP)** Statement pegged the **fiscal deficit target** for FY 2020-21 at **3.5% of GDP.**

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



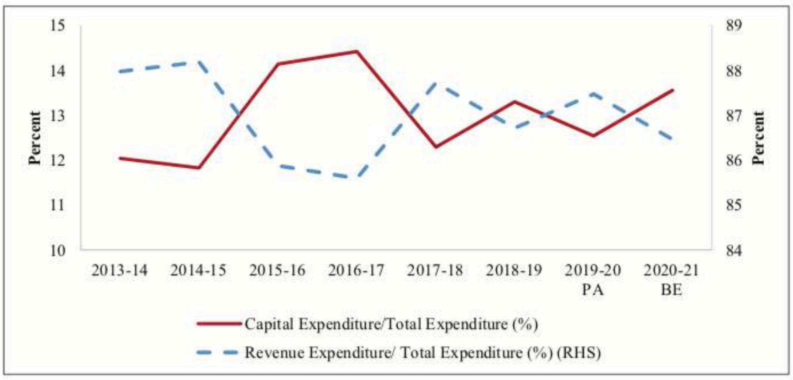
Source: Union Budget Documents & CGA
GTR: Gross Tax Revenue, CIT: Corporation Tax, ToI: Taxes on Income other than Corporation Tax (includes STT), C: Customs, UED: Union Excise Duties, GST: Goods and Services Tax

Receipts:

- **Non-debt receipts**
  - **Tax-Revenue**
    - ✓ **Gross Tax Revenue (GTR):** Budget 2020-21 estimated GTR to be 24.23 lakh crore (10.8 per cent of GDP also known as Tax-to-GDP Ratio).
      - **The direct taxes,** comprising mainly of corporate and personal income tax, **constitute around 55 per cent of GTR.**
      - **Receipts from corporate and personal income tax have come down** in 2019-20 compared to the trend of improvement observed over the previous years. This is due to the moderation in growth of the economy and implementation of structural reforms like Corporate Tax rate cut.
  - **Non-Tax revenue:** The Budget 2020-21 aimed to raise ` 3.85 lakh crore of Non-Tax revenue, 1.7 per cent of the GDP. Nearly 40 per cent of the Non Tax revenue is envisaged to be raised from dividends and profits .
  - **Non-debt Capital receipts:**
    - ✓ The Non-debt Capital receipts have been pegged at 2.3 lakh crore that is **1 per cent of GDP in 2020-21 BE.**
    - ✓ The **contribution of Non-debt Capital receipts in the total pool of Non- debt receipts have declined** from 6.8 per cent in 2018-19 to 3.9 per cent 2019-20, primarily due to shortfall in disinvestment proceeds .
    - ✓ Government **envisaged to mobilize 2.1 lakh crore on account of disinvestmentproceeds** as per 2020-21 BE.
- **Debt receipts**
  - The target for gross market borrowings of the Central Government for the financial year 2020-21 was revised from the Budget estimate of 7.8 lakh crore to 12 lakh crore.

Expenditure:

Figure 13: Trends in components of Total Expenditure



- Budget 2020-21 estimated total expenditure at 30.42 lakh crore, comprising:
  - **Revenue expenditure** of ` 26.3 lakh crore (11.7 per cent of GDP) and
  - **Capital expenditure** of ` 4.12 lakh crore, (1.7 per cent of GDP)
- As a percentage of GDP, the **anticipated growth of total expenditure in 2020-21 BE is 0.3 per cent of GDP** with growth equivalent to 0.15 per cent of GDP each in both Revenue and capital expenditure.
- Apart from budgetary spending, **Government has raised Extra Budgetary Resources (EBRs) of ` 1.35 lakh crore during the period from 2016-17 to 2019-20.** It proposes to raise EBR of Rs. 49,500 crore in 2020-21 BE which is 0.22 per cent of GDP.

Transfer to States:

The Central Government has accepted the recommendations made by the Fifteenth Finance Commission (FC-XV), i.e. 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 (50% higher than recommended by the FC-XIV).

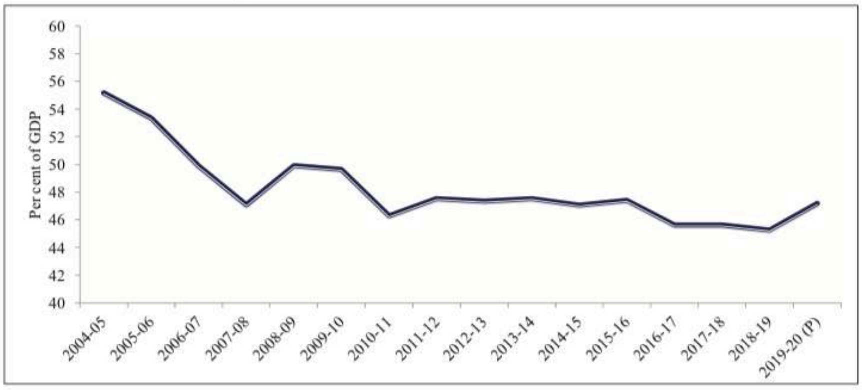
- Out of the corpus of ` **90,000 crore allocated as grant for local bodies** in the year 2020-21, 32.5 per cent have been recommended for urban local bodies and the remaining for rural local bodies.
- Unlike that of the FC-XIV recommended grants, the **local bodies grant during the year 2020-21 were also allocated to Fifth and Sixth Schedule Area as well as Mandal/Tehsil and District/Zila**

Panchayatsin case of rural local bodies, and also allocated to fifty-nine Cantonment Boards in case of the urban local bodies.

- For the first time, Finance Commission grants were **also allocated for the purpose of improving ambient air quality in million plus cities**/ urban agglomerations.

Central Government Debt:

Figure 14: Trend in Centre's Debt-GDP ratio



- 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.
- **Debt-GDP Ratio, declined steadily immediately after the enactment of the FRBM Act, 2003,** and has sustained at a level during the last decade.

State Finances

- The average **Gross Fiscal Deficit** Budget Estimate for states that presented their budgets before the outbreak of COVID-19 was 2.4 per cent of GSDP, while the **average for budgets presented post-lockdown was 4.6 per cent of GSDP .**
- 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.** This may have adverse implications for the pace and quality of economic development, given the high fiscal multiplier effect of capital expenditure.
- **Several steps have been taken by the Central Government to support the State Governments** towards a faster economic recovery amidst the COVID-19 pandemic.

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

- **Enhanced limit of borrowing for FY2020-21 under AtmaNirbhar Bharat package:** Under the package, additional borrowing limit of up to 2 percent of Gross State Domestic Product (GSDP) was allowed to the States, of which 1% was conditional on state- level reform implementation in following areas:
  - Implementation of One Nation One Ration Card System;
  - Ease of doing business reform;
  - Urban Local body/ utility reforms; and
  - Power Sector reforms
- **Compensation to the States for loss in GST revenue :**In order to compensate the states for the loss of GST revenue, Central Government had given the states an option to either borrow the shortfall arising out of GST implementation through issue of debt under a Special Window coordinated by the Ministry of Finance or raise the entire shortfall through the issue of market debt.
  - All the 28 states and 3 UTs with legislature decided to go for back-to-back borrowing coordinated by the Ministry of Finance.
  - The special window of ` 1.1 lakh crore has been operationalised and the Government of India has borrowed an amount of ` 54,000 crore on behalf of the States.
- **Scheme for Special Assistance to States for Capital Expenditure:** Special assistance is being provided to the State Governments in the form of 50-year interest free loan up to Rs. 12,000 crore.
- **State Disaster Relief Fund:** The states' limit for spending the SDRF during FY 2020-21 was raised to 50%, in order to support them in containment measures of COVID-19 including measures for quarantine, sample collection and screening; and procurement of essential equipment/ labs for response to COVID-19.

General Government Finances

- The General Government (Centre plus States) **Debt-to-GDP ratio exhibit an increasing trend over the last few years.**

- In the wake of the global pandemic outbreak, the General Government is **expected to register a fiscal slippage in FY 2020-21**, on account of the shortfall in revenue and higher expenditure requirements.

Outlook

- In order to sustain the recovery in aggregate demand, the Government may have to continue with an expansionary fiscal stance.
- The calibrated approach of expenditure support along with the various key reforms introduced during the year are likely to impart the required momentum to medium-term growth. The growth recovery would facilitate buoyant revenue collections in the medium term, and thereby enable a sustainable fiscal path.

Glossary	
Fiscal Deficit	It is the difference between the government's total expenditure and its total receipts excluding borrowing. Gross fiscal deficit = Total expenditure – (Revenue receipts + Non-debt creating capital receipts) It is a key variable in judging the financial health of the public sector and the stability of the economy.
Primary Deficit	It is simply the fiscal deficit minus the interest payments. It indicates the borrowing requirements of the government, excluding interest.
Revenue Deficit	It is the excess of its total revenue expenditure to its total revenue receipts. related to revenue expenditure and revenue receipts of the government. It indicates that the government doesn't have sufficient revenue for the normal functioning of the government departments.
Effective Revenue Deficit	It is the difference between revenue deficit and grants for creation. It signifies that amount of capital receipts that are being used for expenditure of the Government. This term was introduced in the Union Budget 2011-12.
Non-debt receipts	Comprise of Tax and Non-Tax revenue, and Non-debt Capital receipts like recovery of loans and disinvestment receipts.
Debt receipts	Comprise of market borrowings and other liabilities, which the government is obliged to repay in the future.
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.
Extra Budgetary Resources	Those financial liabilities that are raised by public sector undertakings for which repayment of entire principal and interest is done from the Central Government Budget.
Central Government Debt	Total liabilities of the Central Government include debt contracted against the Consolidated Fund of India, technically defined as Public Debt, as well as liabilities in the Public Account. These liabilities include external debt (end-of-the financial year) at current exchange rate but exclude part of NSSF liabilities to the extent of States' borrowings from the NSSF and investments in public agencies out of the NSSF, which do not finance Central Government deficit.
Tax-to-GDP ratio	It is a measure of a nation's tax revenue relative to the size of its economy. This ratio is used with other metrics to determine how well a nation's government directs its economic resources via taxation.
Debt-to-GDP ratio	• It is the ratio of a country's public debt to its gross domestic product (GDP). If a country is unable to pay its debt, it defaults, which could cause a financial panic in the domestic and international markets. The higher the debt-to-GDP ratio, the less likely the country will pay back its debt and the higher its risk of default. ○ A study by the World Bank found that if the debt-to-GDP ratio of a country exceeds 77% for an extended period of time, it slows economic growth.

CHAPTER AT A GLANCE
• To facilitate a resilient recovery of the economy from the impact of COVID-19 pandemic, **Government of India adopted a calibrated approach best suited for the evolving situation** of the economy in contrast with a front-loaded large stimulus package adopted by many countries.
• **Reforms in tax administration** have set in motion a process of transparency, accountability and more importantly, enhancing the experience of a tax-payer with the tax authority, thereby incentivising tax compliance.
• **Fiscal Deficit for 2019-20 stood at 4.6 per cent of GDP,** (1.2 percentage points higher than Fiscal deficit in 2018-19).
• **Debt-GDP Ratio, declined steadily immediately after the enactment of the FRBM Act, 2003,** and has sustained at a level during the last decade.
• As a percentage of GDP, **the anticipated growth of total expenditure in 2020-21 BE is 0.3 per cent of GDP** with growth equivalent to 0.15 per cent of GDP each in both Revenue and Capital expenditure.
• During 2020-21, the **Central Government has taken consistent steps to impart support to the States in the challenging times of the pandemic.**
• **General Government (Centre plus States) is expected to register a fiscal slippage in FY 2020-21,** on account of the shortfall in revenue and higher expenditure requirements. However, longer term sustainability depends crucially on reviving growth relative to the interest cost of Government debt.

CHAPTER 2

Testing your remembering skills & Understanding skills

Q1. Consider the following statements regarding Faceless Assessment Scheme 2020?

1. It aims at automated random allocation of cases related to direct and indirect taxes.
2. It establishes National Faceless Assessment Centre (NFAC) as the sole point of contact between the tax authorities and the taxpayer.
3. Appeals against the tax assessment can only be filed at National Company Law Appellate Tribunal (NCLAT).

Which of the statements given above is/are correct?

(a) 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Q2.Consider the following statements regarding the Taxpayers' Charter:

1. It comprises of commitments by the Tax authorities and obligations of the taxpayers.
2. Grievances related to charter are redressed by the Tax Ombudsman.
3. India is the first country to introduce the concept of taxpayers' charter.

Which of the statements given above is/are correct?

(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 only
(d) 1, 2 and 3

Q3. With reference to Central Government Expenditure in last five years, consider the following statements:

1. In contrast to capital expenditure, revenue expenditure (as percentage of total expenditure) has consistently increased.
2. Revenue expenditure has been higher than the Capital expenditure.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q4. With reference to Central Government Debt, consider the following statements:

1. Public debt comprises the majority of Central Government Debt.
2. Debt-GDP Ratio declined steadily after the enactment of the FRBM Act, 2003.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Self-Assessment: To practice Question for Answer Writing skills

Q1. Highlighting recent reforms taken by the government in context of tax administration in India, suggest some measures in the context

Q.2. Government's fiscal policy response was adapting to the various phases of the pandemic of COVID 19. Illustrate. Also enumerate the measure taken by the central government to support state government in this pandemic time.

CHAPTER 3: EXTERNAL SECTOR

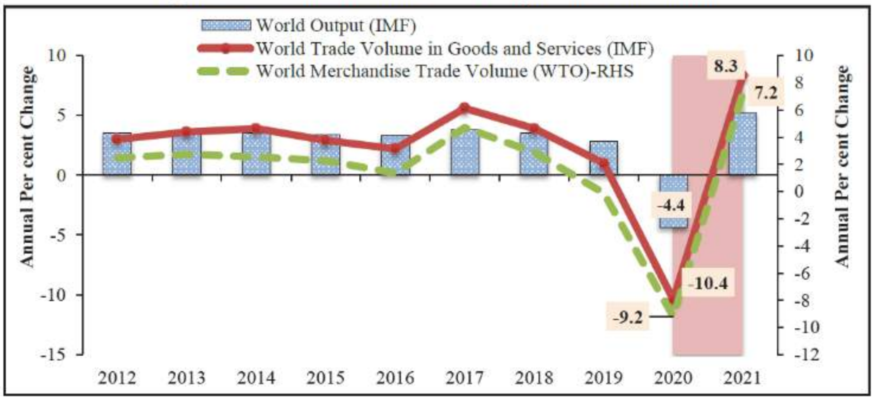
Introduction

COVID-19 pandemic has triggered the worst global recession in 2020 since the Great Depression; the adverse economic impact is, however, expected to be lesser than initially feared. COVID-19 has affected nearly all spheres of the global economy with the spread catalyzed by the increasing interconnectedness of global value chains. The resulting crisis has constituted an intense shock, with a sharp decline in global trade, lower commodity prices, tighter external financing conditions and with varying implications for current account balances and currencies.

Global Economic Environment

- Spread of the pandemic saw suspension of economic activities, supply-chain disruptions, travel restrictions and volatility in international commodity prices. Accordingly, WTO in its revised forecast predicted 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 advanced economies (AEs), the contraction for GDP as well as trade volume is projected to be more severe** than for the emerging markets and developing economies (EMDEs).

Figure 1:Trends in Growth of World Output and Trade Volume



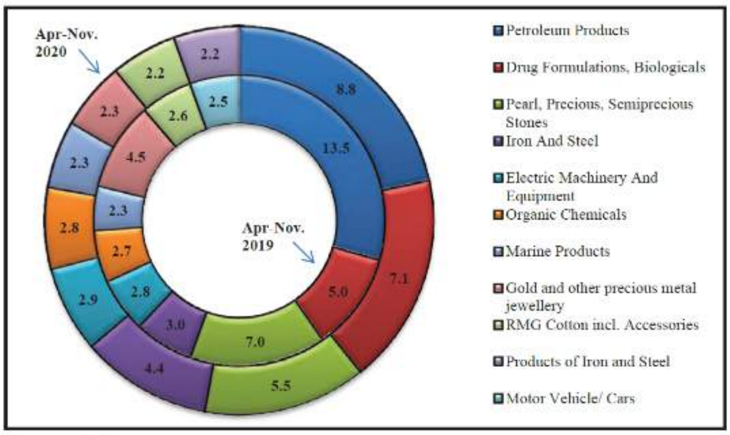
- **Impact on trade differed significantly across regions**. AEs suffered the steepest decline in exports and imports, while EMDEs witnessed lower contraction.
- **Impact on trade varied significantly across different types of goods**. While trade in agricultural products fell less than the world average in the second quarter of 2020, it fell precipitously for fuels and mining products as prices collapsed.
- As per IMF, **near-term global financial stability risks have been contained for now due to the unprecedented and timely policy responses**. However, **vulnerabilities have increased** in the nonfinancial corporate sector, as firms have taken on more debt to cope with cash shortages and in the sovereign sector, as fiscal deficits have widened to support the economy.
- Also, Potential debt defaults could ensue in 2021 as a large amount of foreign debt is estimated to be due for repayment in that year.

Developments in India's Balance of Payments (BOP)

Merchandise Trade

- During first half of FY 2020-21 (April-December), **India's exports and imports saw contraction** in line with the contraction in global trade. The **decline in imports outweighed that in exports-resulting in lower trade deficit of US$ 57.5 billion** as compared to US$ 125.9 billion in the corresponding period last year. Also, **India registered a trade surplus in the month of June, 2020 after a gap of 18 years.**

6: Top 10 Export Commodities in April-November 2020 and April-November 20
[By Share in Per cent]



- During the same period, 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.

Merchandise Exports

- In April-November, 2020, **USA was to be the largest export market for India**, while China has occupied the 2nd position.
- Total exports during April-December, 2020-21 amounted to US$ 200.8 billion contracted by (-) 15.7 per cent as compared to the previous year. The fall in **Petroleum, Oil and Lubricants (POL) exports, which constitute about 10-15 per cent of the total exports**, was key contributor to this fall.
- **Within Non-POL exports**, agriculture & allied products, drugs & pharmaceutical and ores & minerals **recorded expansion**.
- **Drug formulations, biologicals** have consistently registered positive growth making it the **second largest exported commodity** among the top 10 export commodities.

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.
- The global pharmaceutical market is set to exceed US$ 1.5 trillion by 2023. Indian pharmaceutical industry is currently valued at US$ 41 billion and is expected to grow to US**$ 120-130 billion by 2030**.

India's strengths

- A **significant raw material base and availability of a skilled workforce** have enabled India to emerge as an international manufacturing hub for generic medicines.
- India is the **only country with largest number of US-FDA compliant pharma plants** (more than 262 including APIs) outside of USA.
- According to US-FDA, Indian pharma companies have **garnered nearly 45 per cent of all new abbreviated new drug application** (ANDAs) approvals over the past nine months, which would aid exports growth in the coming years.

Limitations

- **Excessive dependence of Indian pharmaceutical industry on China** for sourcing Active Pharmaceutical Ingredients (APIs) and Key Starting Materials (KSMs).
- **Disproportionate dependence of Indian pharma exports on USA** and generics.

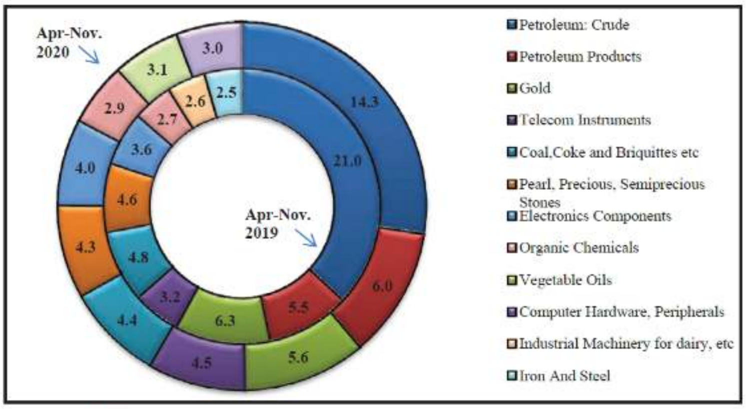
A well-defined strategy including the following components can help India emerge as the 'pharmacy of the world'.

- **Broaden base in terms of markets, as well as product categories**: E.g., newer product classes such as biosimilars, gene therapy and specialty drugs and increasing exports to large and traditionally underpenetrated markets such as Japan, China, Africa, Latin America etc.
- **Restructure the current regulatory mechanism and upgrade and build capacities** at various National Institute of Pharmaceutical Education and Research (NIPERs).
- **Greater R&D Expenditure** to move up the value chain from generics to Novel Chemical Entities (NCEs).

Merchandise Imports

- During April-December, 2020-21 there was **decline in POL imports that constitute about a quarter of total merchandise imports** pulled down the overall import growth.
- Gold & silver imports, constituting about 7-9 per cent of India's imports, witnessed a sharp growth **primarily due to the**

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



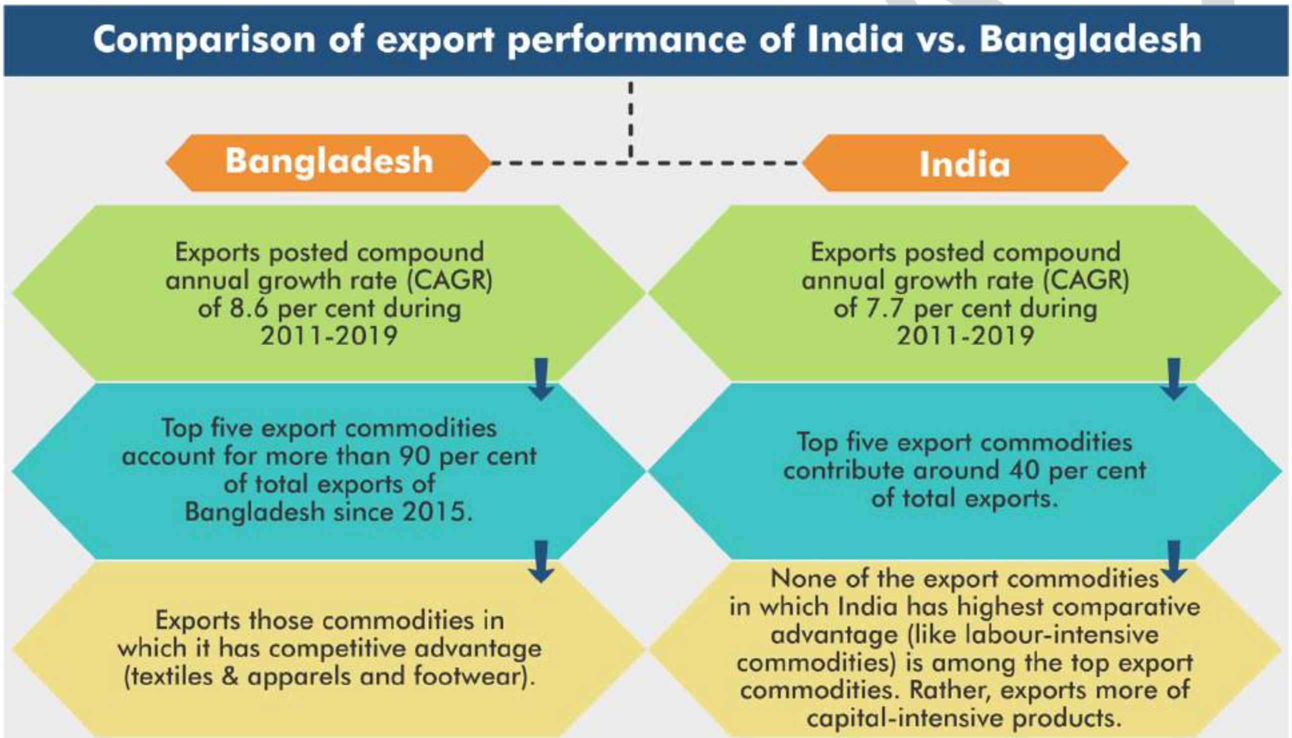
SUMMARY OF ECONOMIC SURVEY

simultaneous rise in international gold and silver prices on account of demand for bullion as safe haven.

- Crude **Petroleum continues to be the highest imported commodity** in April-November, 2020, accounting for 14.3 per cent share.
- **China continues to be the largest import source** for India in April-November, 2020, with share of imports rising to 17.7 per cent.

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.
- **Net private transfer receipts**, mainly representing remittances by Indians employed overseas, totalling US$ 35.8 billion in first half of FY 2020-21 declined by 6.7 per cent over the corresponding period of previous year. Remittances are **projected to fall by about 8.9 per cent to US$ 76 billion in 2020.**
    - As per, World Migration Report 2020, **India has the largest number of migrants living abroad** (17.5 million) and was the top recipient of remittances of US$ 83.3 billion in 2019.



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** due to lower trade deficit and a sharp rise in net invisible receipts. This quarterly **surplus was registered after a gap of 13 years after Q4: FY 2006-07.**
- In first half of FY 2020-21, current account surplus of US$ 34.7 billion was registered. Given the trend in imports of both goods and services, it is **expected that India will end with an annual current account surplus of atleast 2 per cent of GDP – after a period of 17 years.**

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 same period previous year, an endorsement of India's status as a preferred investment destination.
    - Computer **software and hardware attracted the highest FDI equity** inflows.
    - **Singapore is the top investing country**, in terms of FDI equity inflows, while US has taken second position.

- **Foreign portfolio investment (FPI) witnessed strong rebound** especially in equity inflows, recording net FPI flows of US$ 28.5 billion during April- December, 2020 as against US$ 12.3 billion in corresponding period of last year.
    - This was due to **abundant global liquidity, better corporate earnings and better management of COVID-19 re-igniting economic recovery** prospects, addition of Indian stocks to Morgan Stanley Capital International (MSCI) Global Standard indices.
- Among other forms of capital flows, **banking capital outflow and net outflows on ECBs increased** during first half of FY 2020-21.

External Debt

- At end-September 2020, **India's external debt was placed at US$ 556.2 billion**.
    - **ECBs were the largest component of external deb**t, followed by NRI deposits, trade credit (import-financing).
- **Ratio of foreign exchange reserves to total and short-term debt (original and residual) improved** because of the sizable accretion in reserves.

India's External Debt: Stock-Taking and the Way Forward

- The **total external debt of the world stands at US$ 89 trillion** at end-June 2020, with **the US as the most heavily indebted country in the world**. **India is placed at 23rd position globally**.
- **India's share of short-term debt, at 18.9 per cent**, is lower than median share of 24.2 per cent, and smaller than that of any top 20 debtor countries.
- India's **share of government sector in gross external debt** as at end-June 2020 was at 18 per cent, which is lower than the median share of at 29.7 per cent.
- There is "**Laffer Curve" relationship between foreign debt and growth**: foreign debt has a positive impact on investment and growth up to a certain threshold level (optimal zone); beyond this level, however, its impact turns adverse. Also, countries with good policies and strong institutions tend to have higher thresholds.
- The **India's external debt to GDP ratio has been well below the optimal zone over the years** as it came down from 38.7 per cent as at end-March 1992 to **21.6 per cent as at end-September 2020.** Barring China, leading emerging market economies have higher ratio than India's.
- However, it **has climbed up in the recent years and is now hovering in the close vicinity of the optimal zone.**

- **Government debt increased to US$ 103.6 billion** from US$ 100.9 billion as at end-March 2020.
- **Share of short-term debt (original maturity) in the total stock of external debt**, which is an important metric to analyse potential debt vulnerability, has improved.

Indian Rupee Exchange Rate

- **RBI's policy on the exchange rate of the rupee has been to allow it to be determined by market forces,** with interventions only to maintain orderly market conditions by containing excessive volatility in the exchange rate, without reference to any pre-determined target level or band.
- **After depreciating to its lowest level of `76.86 in April, 2020**, Rupee subsequently appreciated owing to FPI flows to the domestic equity market and the weakening of the US$.
- In the months following the outbreak of the pandemic, India experienced **unprecedented FPI outflows** and later large stimulus by central banks in advanced economies has resulted in **heightened capital flows into emerging markets** such as India. In both the cases, RBI has been largely **successful in controlling the volatility in the Rupee**.

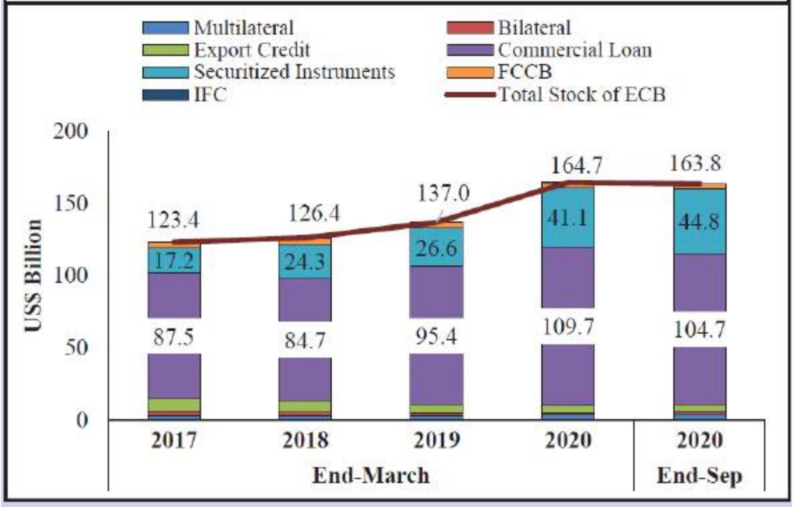
Foreign Exchange Reserves

- India's **foreign exchange reserves reached an all-time high of US$ 586.1 billion** as on January, 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** 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. The surplus gives adequate space for increased expenditure on investments in FY 2021-22.

ECBs- Gradual Easing of Policy

- The outstanding ECBs as at end-September 2020 at **US$ 163.8 billion.**
- Bulk of the **ECBs was in the form of commercial loans and securitized borrowings** (91.2 per cent) predominantly denominated in US$ (77.2 per cent) and accessed mainly by non-financial corporations (74.5 per cent).
- **Drivers of ECBs in the Indian context**
    - **Country-specific factors**: domestic real economic activity, exchange rate, interest rate and inflation, status of domestic corporate bond market, degree of openness in terms of capital account and the regulatory framework.
    - **Global financial conditions** including rates of interest, global growth and inflation are among the pull factors.

Figure B3.1: Stock of ECBs: Instrument-wise



- As a capital scarce growing economy with large investment needs, India has taken **following steps to encourage capital inflows.**
    - A **new and simplified ECB policy** was put in place in March 2019 by removing the scope of arbitrage, creating a level playing field for all eligible borrowers, and widening the base of borrowers and lenders.
    - **Development of financial markets** in India to enable the external commercial borrowers to hedge their interest and currency risk.
    - In order to **address potential system stability risk to other stake holders arising out of individual corporate-borrower vulnerability,** the regulatory prescription for incremental provisioning and capital requirements has been in place for banks' exposures to firms with unhedged foreign currency liability.
    - **Progressive rationalization and liberalization of the regulations governing the end-use of ECBs** with a view to improve ease of doing business.
    - **Refinancing is permitted only if the outstanding maturity of the original borrowing is not reduced** and all-in-cost of fresh ECB is lower than the all-in-cost of existing ECB. Further, only highly rated corporates (AAA) and Maharatna/ Navratna public sector undertakings are permitted to participate in refinancing of existing ECBs.

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: National Committee on Trade Facilitation** was constituted as procedures, Trade Facilitation Agreement (TFA), negotiated at WTO, came into force in 2017. **National Trade Facilitation Action Plan** for 2017-2020 containing specific activities to further ease out the bottlenecks to trade was prepared.
    - Also**, regulatory relaxation measures for facilitating trade were taken during COVID-19,** which include 24X7 clearance, dedicated single window, condonation of delay in filing import declarations, waiver of late filing fees, undertakings instead of bond, etc.
- **Remission of Duties and Taxes on Exported Products (RoDTEP):** Under this Scheme, **duties and taxes levied at the Central, State and local levels**, such as 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.** The credits can be used to pay basic customs duty on imported goods or transferred to other importers.
    - It is a **WTO compliant scheme**, as earlier Merchandise Exports from India Scheme was observed as 'prohibited subsidy' by WTO panel.

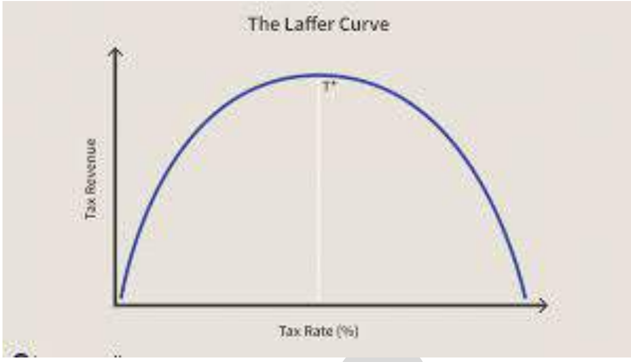
- **Production-Linked Incentive (PLI) Scheme:** Launched to **boost domestic manufacturing and exports**, with an outlay of `1.46 lakh crore. Scheme aims to give incentive to companies on incremental sales from products manufactured in domestic units under **ten-identified champion sectors**.
- **Trade 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**. India was ranked **44 out of 160 countries in 2018** *vis-à-vis* rank of 54 in 2014 under Logistics Performance Index of World Bank.
  - **National Logistics Policy** is in an advanced stage of roll-out with a vision to develop a modern, efficient and resilient logistics services sector.
  - **Some process related reforms towards improving logistics efficiency**: GST, revision in axle load norms for heavy vehicles leading to better carrying capacity, paperless EXIM trade through E-Sanchit, faceless assessment by 'Turant Customs', scanners at major ports, Radio Frequency Identification (RFID) tagging of all EXIM containers, mandatory electronic toll collection system (FASTag) etc.
  - **Infrastructure Initiatives**: Bharatmala Pariyojana, Sagarmala, Multi-Modal Logistics Parks, Dedicated Freight Corridors, Trade Infrastructure for Export Scheme.
  - **Digital/Technological Initiatives**:
    - ✓ **Logistics Planning and Performance Monitoring Tool (LPPT)** for real-time monitoring of operational performance and asset utilization of various logistics infrastructure such as ports, airports etc.
    - ✓ **India Logistics Platform (iLOG)** is being developed for integrating all logistics related digital portals such as Port Community System, Freight Operations Information System (FOIS) by Indian Railways and VAHAN (National Vehicle Registration System) etc.
  - **Logistics sector employs 12 million workforce**. To impart skills, curriculum on logistics and supply chain is being developed at school level and also courses are being introduced under various skill development initiatives.

India's Engagement With WTO

- In the ongoing discussions on WTO reforms, the **broad elements of India's proposal include**: Preserving the core values of the Multilateral Trading System; Resolving the impasse in the Dispute Settlement System; Safeguarding development concerns; and Transparency and Notifications.
- **During the WTO TRIPS Council meeting**, India and South Africa jointly proposed "**Waiver from Certain Provisions of the TRIPS Agreement for the Prevention, Containment and Treatment of COVID-19"** to ensure that the intellectual property rights do not become a barrier in the timely and affordable access to medical products, vaccines etc.
- India has introduced an online portal, **ARTIS (Application for Remedies in Trade for Indian industry and other Stakeholders) – to submit online petitions for different trade remedies** like anti-dumping duty, safeguard duty and countervailing duty.
- **Issues at WTO concerning India:**
  - Issue of public stockholding for food security purposes.
  - Issue of customs on e-commerce and India's stand of preserving policy space for developing countries for their digital advancement.

Way forward

COVID-19 pandemic impacted external sector differently for different countries. AEs suffered larger contraction in exports and imports. Easing of lockdown saw improving trends in India's merchandise trade, supplemented by capital inflows. d build-up of foreign exchange reserves. Also, comfortable foreign exchange reserves give the much-needed space for enhanced domestic investments. The disruption of global manufacturing value chains due to COVID-19 pandemic presents a opportunity for India to become one of the key nodes in the chain.

Glossary		
Laffer Curve	• **Laffer Curve** shows the **relationship between tax rates and the amount of tax revenue collected** by governments. It states that if tax rates are increased above a certain level, then tax revenues can actually fall because higher tax rates discourage people from working.	

CHAPTER AT A GLANCE
• COVID-19 pandemic has led to a sharp decline in global trade, lower commodity prices and tighter external financing conditions with varying implications for different countries.
• India's exports of drugs and pharma, software and agriculture and allied products improved. Pharma exports, in particular, hold the potential to be the pharmacy of the world.
• Overall, India is expected to witness current account surplus during the current financial year after a gap of 17 years.
• Foreign exchange reserves rose to an all-time high of US$ 586.1 billion in January, 2021. RBI's interventions in the forex markets ensured financial stability and orderly conditions and have been largely successful in controlling the volatility of the Rupee.
• Various initiatives undertaken to promote exports, like PLI Scheme, RoDTEP, improvement in logistics infrastructure and digital initiatives would go a long way in strengthening external sector in general and exports in particular.

CHAPTER 3

Testing your remembering skills & Understanding skills

Q1. Which of the following statements is true with respect to the India's policy of management of exchange rate of rupee?

1. Exchange rate is left to be determined by market forces, with interventions only to contain excessive volatility.
2. Like the inflation target band of Monetary Policy Committee, there exists a pre determined target band for Exchange rupee management.
3. FPI outflows to advanced economies from Indian Market weakens Indian rupee.

Which of the statements given above is/are correct?

(a) 2 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1 and 3 only

Q2. Which of the following is/are included in invisibles in Balance of Payments?

1. Remittances
2. Software Exports
3. Petroleum imports

Select the correct answer using code given below.

(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Q3. Government of India recently launched ARTIS portal to

(a) create a single platform for high-end scientific research by scholars and students.
(b) provide an interface between NGOs and the key government ministries
(c) facilitate interest-free loans to the street vendors affected by Covid-19 lockdown
(d) provide expedited relief to the domestic producers with respect to different trade remedies

Q4. The term 'Key Starting Materials' is used in the context of

(a) Electronics manufacturing
(b) Pharmaceutical industry
(c) Agro Processing industry
(d) Automobiles sector

Self-Assessment: To practice Question for Answer Writing skills

Q1. India has great potential to become the "pharmacy of the world". Critically examine the statement and present a strategy to realise this potential.

Q.2. Give an account of the current status of exports from India. Also, highlight few initiatives taken by the government to boost exports in recent years.

CHAPTER 4: MONETARY MANAGEMENT AND FINANCIAL INTERMEDIATION

Introduction

This chapter gives a detailed account of monetary developments in the country amidst the extraordinary situation prevailing due to COVID-19. The chapter also describes the developments that took place in the Banking, NBFC, Pension and Insurance Sectors and various measures taken by the Government and RBI in these sectors to deal with the evolving situation.

Monetary Developments During 2020-21

- **Repo and Reverse Repo Rates:** Since March 2020, the repo rate has been reduced by 115 basis points (bps) to 4.0 per cent *and* the reverse repo rate was reduced by 90 bps to 4.0 per cent.
  - This was **to make it unattractive for banks to passively deposit funds with the Reserve Bank** and nudge them to use these funds for on-lending to productive sectors of the economy and thus increasing the liquidity.
- **Monetary Aggregates:** During 2020-21, the growth of monetary aggregates **witnessed higher growth as compared to previous few years** on account of higher liquidity in the economy.
  - **Reserve money (M0)** recorded a growth of 15.2 per cent driven by currency in circulation (CIC) which witnessed a surge in the post-COVID-19 pandemic period.
  - **Broad Money (M3)** recorded a growth of 12.5 per cent.
  - **Money multiplier** (measured as a ratio of M3/M0), was mostly increasing from 1980s onwards up to 2016-17, has however been declining since then. This shows that the money supply has responded only partially to reserve money growth, reflecting that the liquidity transmission in the economy remains impaired.
- **Growth Forecasts:** RBI revised the projected GDP growth from (-) 9.5 per cent to (-) 7.5 per cent in 2020-21.

Liquidity Conditions and Its Management

- The **systemic liquidity in 2020-21 so far has consistently remained in surplus** , main drivers of which have been Currency in Circulation (CIC), Government cash balances and Reserve Bank's forex operations.
- Reserve Bank undertook several conventional and unconventional measures to manage the liquidity in the economy. These measures included:
  - Injection of durable **liquidity of more than ` 2.7 lakh crore through Open Market Operation (OMO) purchases.**
  - **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.
  - **Reduction in the CRR requirement of banks** from 4 per cent of net demand and time liabilities (NDTL) to 3 per cent
  - **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 fund**s for ` 50,000 crore; and
  - **Refinance facility worth `75,000 crore for all India financial institutions** i.e., NABARD, NHB, SIDBI and EXIM Bank.

Developments In The G-Sec Markets

- **Initially, the yields on 10 year benchmark G-sec showed a declining trend** due to low trading volumes amid the countrywide lockdown and reduced market hours, selling pressure by Foreign Portfolio Investors (FPIs) along with the upward movement of US treasury yields.

- **Later, yields softened** reflecting the impact of a sharp decline in crude oil prices, the announcement by the Federal Open Market Committee (FOMC) to keep rates unchanged and a lower CPI.

Banking Sector

- **Gross Non-Performing Advances (GNPA) ratio** (i.e. GNPAs as a percentage of Gross Advances) and **Stressed Advances ratio** of Scheduled Commercial Banks (SCBs) decreased.
- **Restructured Standard Advances (RSA)** ratio of Scheduled Commercial Banks (SCBs) increased.
- **Capital to risk-weighted asset ratio (CRAR)** of SCBs increased from 14.7 per cent to 15.8 per cent.
- For SCBs, **the net profit (profit after tax) increased.**

Regulatory Measures in Banking Sector

- Commercial Banks
  - **Merger of 10 PSBs**, with Punjab National Bank, Canara Bank, Union Bank of India and Indian Bank as anchor banks.
  - **Restructuring of MSME loans** that were in default but 'standard' without an asset classification downgrade.
  - **Large exposure framework** of a bank to a group of connected counterparties was **increased from 25 per cent to 30 per cent** of the eligible capital base of the bank.
  - **Maximum permissible period ofExport Credit** sanctioned by bankswas increased from one year to 15 months.
  - **Monetary policy transmission:** the banks were mandated to link all new floating rate personal or retail loans and floating rate loans extended to MSMEs to external benchmarks such as repo rate, Treasury Bill Rate and any external benchmark published by Financial Benchmarks India Pvt Ltd (FBIL).
- **Co-operative Banks**
  - **Revision in the target for priority sector lending** from the present level of 40 per cent to 75 per cent.
  - **Inclusion of co-operative banks as eligible member lending institutions** under interest subvention scheme for MSMEs
  - **Urban Cooperative Banks (UCBs) with assets of `500 crore and above were brought under the** Central Repository of Information on Large Credits**(CRILC) reporting framework.**
  - **Limits on exposure to single and group borrowers and large exposures**
  - **Extension of time for UCBs for submission of returns** under Section 31 of the Banking Regulation Act,
  - **Amendments to the Banking Regulation Act, 1949:** Banking Regulation (Amendment) Act, 2020 to bring changes in the regulatory regime of UCBs. Major provisions under it include:
    - ✓ The Reserve Bank has been given powers over the management of the UCBs,
    - ✓ Enable UCBs to raise capital by issue of equity/ preference/special shares and debentures/bonds/like securities subject to such conditions as the Reserve Bank may specify in this behalf.
    - ✓ The Reserve Bank has been empowered to supersede the Board of Directors of a UCB;

Monetary Policy Transmission

- The transmission of policy repo rate changes has been **weak on quantity of credit but improved on rate structure and term structure.**
  - **Rate structure**
    - ✓ The **transmission of policy repo rate changes to deposit and lending rates** of scheduled commercial banks (SCBs) has improved 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.

Status of Digital payments in India

- This financial year has witnessed **jumps in both volume and value of digital payments** across all categories.
- Reserve Bank of India has constructed a **composite Digital Payments Index (DPI)** to capture the extent of digitisation of payments across the country.
- **The RBI-DPI comprises of 5 broad parameters** that enable measurement of deepening and penetration of digital payments in the country over different time periods. These parameters are:
  - Payment Enablers (weight 25%),
  - Payment Infrastructure – Demand-side factors (10%),
  - Payment Infrastructure – Supply-side factors (15%),
  - Payment Performance (45%) and
  - Consumer Centricity (5%).
- The RBI-DPI has been constructed with **March 2018 as the base period**. The DPI for March 2019 and March 2020 is 153.47 and 207.84 respectively, indicating high growth over the years.
- **The index has grown more than 100 per cent in a span of 2 years.**

- ✓ The **weighted average lending rate (WALR)** on fresh rupee loans declined by 94 bps in response to the reduction of 115 bps in the policy repo rate and comfortable liquidity conditions.
- ✓ **Public v/s Private Sector Banks:** Across bank groups, Private Sector Banks exhibited greater transmission in terms on fresh loans, however Public Sector Banks exhibited greater transmission on outstanding loans.

- **Credit Growth**
  - ✓ **Credit growth had declined to 5.1 per cent** in October 2020 from 14.8 per cent in February 2019.
  - ✓ The moderation in credit growth in 2020-21 was witnessed in mostly all the sectors, **barring services.**
- **Term Structure**
  - ✓ The reduction in policy rates and surplus liquidity helped in **bringing down both the short term and long term interest rates.** However, the impact has been much smaller on longer term interest rates.
  - ✓ The yield on 1 year G-Sec has reduced by 157 bps whereas the yield on 10 year G-sec has declined by only 24 bps. **The gap between two yields have widened over this year.**

Non-Banking Financial Companies (NBFC) Sector

- **NBFCswitnessed slowdown in their growth** in 2019-20 largely due to isolated credit events in few large NBFCs and challenges in accessing funds.
- **Credit growth of NBFCs continued to slow down. Total assets of NBFCs had witnessed an annual growth of 16.01** per cent during 2019-20 as compared with 24.86 per cent in 2018-19.
- **Asset quality of NBFCs deteriorated moderately** however, net NPA ratio improved marginally.
- **Banks continued to support NBFCs** with their lending expanding 9.2 per cent well above the overall bank credit growth. The sector also benefitted from the liquidity infusing **measures announced by the Reserve Bank** during the pandemic that also included Targeted Long-Term Repo (TLTRO) Operations covering the NBFC sector.
- The **external liabilities of NBFCs** in the form of secured and unsecured borrowings and public deposits increased by 13.7 per cent.

Developments in Capital Markets

- **Primary Markets (Equity):** Resource mobilization increased through both public issue and rights issue route and witnessed a decrease through private placement route.
- **Primary Markets (Debt):** the amount raised through private placement of debt increased whereas declined through public debt issues.
- **Mutual Fund Activities:** There was a net inflow of ` 2.76 lakh crore into the mutual funds industry during 2020-21.

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 from 0.81 lakh crore during 2019-20.

Movement of Indian Benchmark Indices

- India's benchmark indices, namely, **Nifty50 and S&P BSE Sensex index reached record highs of 14,644.7 and 49,792.1 respectively.**
- In view of the COVID-19 pandemic, various measures were undertaken by SEBI.
  - In the period of moratorium by the RBI, Credit Rating Agencies (CRAs) may not consider the delay in payment as a default event if it has arisen solely due to the lockdown.
  - **Extension in timelines for press release and disclosures**.
  - **Flexibility to CRAs to deviate from the curing period of 90 days for upgrading a rating** from default to non-investment grade.
  - **Temporary relaxation in processing of documents pertaining to FPIs.**

Insurance Sector

- The performance and **potential of insurance sector is assessed using two indicators- Insurance penetration and Insurance Density**.
  - Insurance penetration is calculated as percentage of insurance premium to GDP and insurance density is calculated as ratio of insurance premium to population.
- In India, **Insurance penetration has steadily increased to 3.76 per cent** in 2019 from 2.71 per cent in 2001. (In contrast, insurance penetration in countries like Malaysia, Thailand and China was 4.72, 4.99 and 4.30 per cent respectively in 2019).
- The **insurance density in India reached to approximately US$ 78 in 2019** from US$11.5 in 2001. (In contrast, insurance density in countries like Malaysia, Thailand and China in 2019 were much higher at US$ 536, US$ 389 and US$ 430 respectively).
- Some important regulatory measures undertaken due to COVID-19 are as follows:
  - **Simplification of the KYC process.**
  - **Guidelines were issued for introduction of short term health insurance policies** providing coverage for COVID-19 disease, for Corona Rakshak policy (standard benefit-based policy) and Corona KavachPolicy, (a standard health policy).

Pension Sector

- The overall contribution under NPS grew by more than 30 percent.

Insolvency and Bankruptcy Code

- **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.**
- In view of COVID-19 pandemic, the **Insolvency and Bankruptcy (Amendment) Ordinance, 2020 was promulgated which suspended initiation of the CIRP of a corporate debtor (CD) under section 7, 9 and 10.**
- **Manufacturing Sector, Real Estate and Construction are among the top three sectors initiating CIRP**.
- RBI data indicates that as a percentage of claims, **scheduled commercial banks (SCBs) have been able to recover 45.5 per cent of the amount involved through IBC** for the financial year 2019-20, which is the **highest as compared to recovery under other modes and legislations**.
- **Behavioural Change brought by the code**: The inevitable consequence of a resolution process deters the management and promoter of the firm from operating below the optimum level of efficiency. Further, it encourages the debtors to settle default expeditiously with the creditor at the earliest, preferably outside the Code.

Glossary	
Long Term Repo Operations and Targeted Long Term Repo Operations (LTRO & TLTRO)	LTRO is a tool that lets banks borrow one to three-year funds from the central bank at the repo rate, by providing government securities with similar or higher tenure as collateral. • It is called 'Targeted' LTRO as in this case, the central bank wants banks opting for funds under this option to be specifically invested in investment-grade corporate debt. • LTROs provide banks with access to cheaper capital from the RBI. This, in turn, encourages them to lend more and spur economic activity.
Central Repository of Information on Large Credits(CRILC)	It was set up by the RBI to collect, store, and disseminate credit data to lenders. Under this, banks will have to furnish credit information to CRILC on all their borrowers having aggregate fund-based and non-fund based exposure of Rs.5 crores and above.
Weighted average lending rate (WALR)	A weighted average interest rate is an average that is adjusted to reflect the contribution of each loan to the total debt. The weighted average multiplies each loan's interest rate by the loan balance and divides the sum by the total loan balance.

CHAPTER AT A GLANCE

- **Monetary policy remained accommodative** in 2020 and **Repo and Reverse Repo Rates** reduced by 115 basis points 90 bps respectively.
- **Systemic liquidity in 2020-21 remained in surplus.** RBI undertook various conventional and unconventional measures like OMOs, Long Term Repo Operations, Targeted Long Term Repo Operations etc. to manage liquidity situation in the economy.
- **Reserve money (M0) and Broad Money (M3) r**ecorded a growth of 15.2 per cent and 12.5 per cent respectively. However, Money multiplier (measured as a ratio of M3/M0), has been declining.
- **The yields on 10 year benchmark G-sec softened after an initial declining trend.**
- **In the banking sector, Gross Non-Performing Advances (GNPA) ratio** and **Stressed Advances ratio** of SCBs decreased. Whereas, **Restructured Standard Advances (RSA), Capital to risk-weighted asset ratio (CRAR)** and **the net profit (profit after tax) of SCBs increased.**
- The transmission of policy repo rate changes has been **weak on quantity of credit but improved on rate structure and term structure.**
- **Credit growth of NBFCs continued to slow down.**
- **Insurance penetration and Insurance Density** in India is very low in comparison to other Asian Countries like Malaysia, Thailand and China.
- **Nifty 50 and S&P BSE Sensex reached record high** closing of 14,644.7 and 49,792.12 respectively in January, 2021.
- **The recovery rate for the Scheduled Commercial Banks through IBC (since its inception) has been over 45 per cent.**

CHAPTER 4

Testing your remembering skills & Understanding skills

Q1. Which of the following actions increase the liquidity in the market?

1. Sale of Government securities
2. Decrease in CRR of banks
3. Increase in Reverse Repo rate

Select the correct answer using code given below.

(a) 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Q2. Consider the following statements with respect to Composite Digital Payments Index:

1. It is prepared by NITI Aayog.
2. The index is formulated with March 2016 as the base period.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q3. With respect to Urban Cooperative Banks, Which of the following changes were brought under the Banking Regulation (Amendment) Act, 2020?

1. Co-operative banks can raise debt capital from the public subject to prior SEBI approval.
2. RBI may supersede the Board of Directors of a co-operative bank.
3. The Reserve Bank has been given powers over the management of the UCBs.

Select the correct answer using code given below.

(a) 1 and 2 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Q4. What do you understand by the term Insurance Penetration?

(a) It refers to the ratio of number of insured people to the total number of population.
(b) It refers to the ratio of insurance premium to population.
(c) It is calculated as the ratio of total number of insured population to the insurance premium.
(d) It represents the percentage of insurance premium to GDP.

Self-Assessment: To practice Question for Answer Writing skills

Q1. 'Despite several pushes and prods by the central bank, the monetary policy transmission in India has been less than satisfactory.' Discuss.

Q2. Analyze the efficacy of the Insolvency and Bankruptcy Code, 2016 to be an enabler giving choices and nudging distressed companies towards value maximizing outcomes.

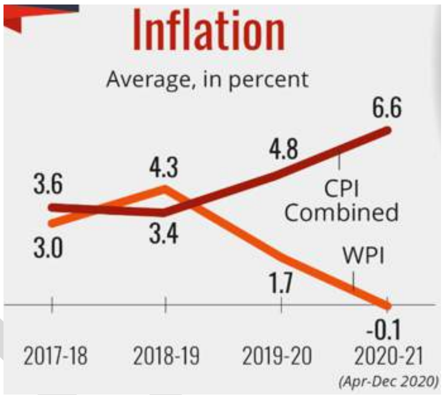
Q3. Analyse the effect of the steps taken by the government and RBI to deal with the economic situations resulted from the COVID-19 pandemic.

Q3. Discuss the effect of the recent transmission of policy repo rate changes on quantity of credit, rate structure and term structure in the Indian economy.

CHAPTER 5: PRICES AND INFLATION

Introduction

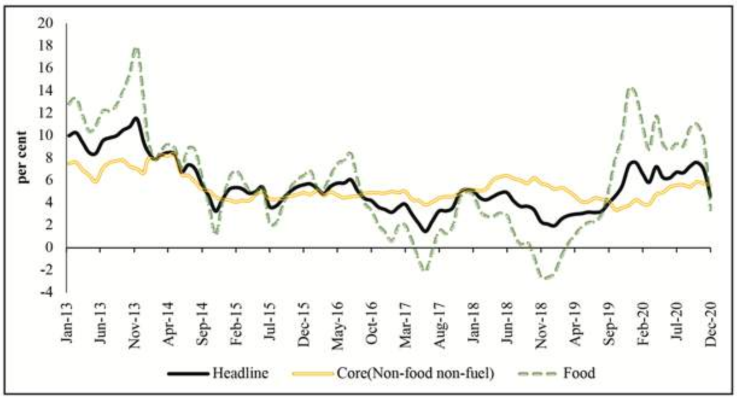
- CPI-Combined (C) inflation has moderated since 2013-14. However, **inflation dynamics have changed considerably in 2020.**
- Overall, **headline CPI inflation remained high during the COVID-19 induced lockdown period** and subsequently, due to the persistence of supply side disruptions.
  - On the one hand, there was a **dampening of demand owing to lower economic activity**.
  - On the other hand, **supply chain disruptions have caused spikes in food inflation**.
- The rise in inflation **was mostly driven by food inflation**, which increased to 9.1% during 2020-21 (Apr-Dec).



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.
  - Within various groups of CPI-C, **the increase in inflation in the current year was mainly driven by rise in food inflation**, which increased from 0.1% in 2018-19 to 9.1% in 2020-21 (Apr-Dec), owing to build up in vegetable prices.

Figure 2: Trends in CPI-C Headline, Core and Food inflation



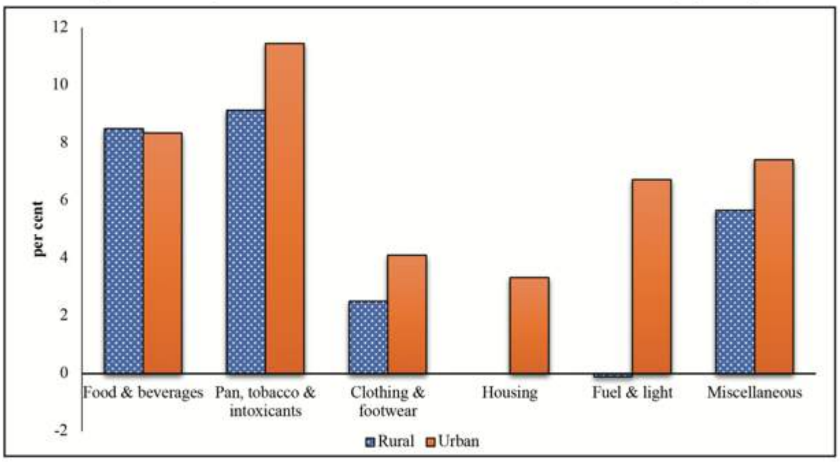
Source: NSO.

- **WPI inflation declined** from 4.3% in 2018-19 to - 0.1% in 2020-21 (Apr-Dec). The decline in WPI inflation in the current year is **mainly on account of fuel & power.**
  - Persistent volatility in the global crude oil prices during the year led to fall in inflation of major fuel products.
- **Rural-urban difference in CPI inflation, which was high in 2019,** saw a decline in 2020.
  - Inflation in non-food components of CPI is higher in urban areas as compared to rural areas in the current year.

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**.
  - Miscellaneous group was the second largest contributor to inflation.
- Food inflation based on Consumer Food Price Index (CFPI) which remained negative from October 2018 to February 2019, **showed a sharp increase since the second half of 2019, mainly due to surge in vegetable prices**, before declining in the recent months.

Figure 6: Component-wise rural and urban inflation in 2020-21 (Apr-Dec)

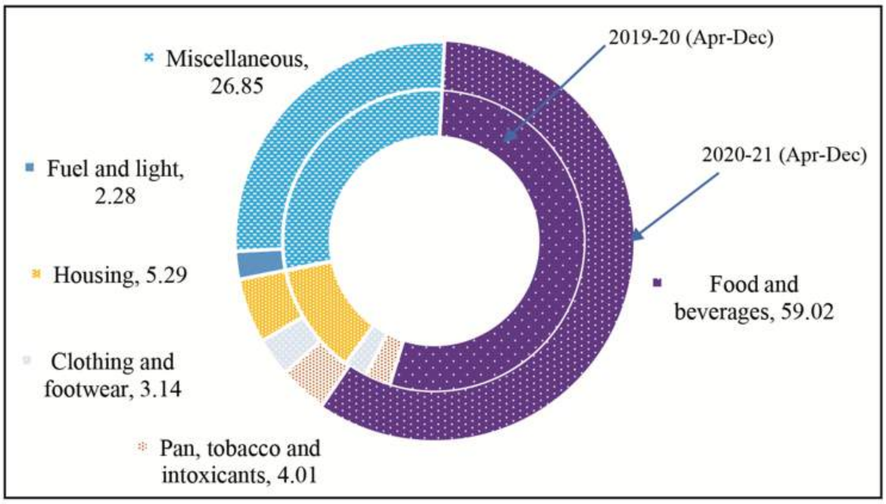


Source: NSO

- 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.

- **Escalation in wholesale prices was also witnessed after the COVID-19** induced restrictions due to labour shortages on account of reverse migration, social distancing in factories, and other transaction costs in the production and distribution network.
- **Thali prices for both vegetarian and non- vegetarian Thalis** declined significantly in January-March 2020 before rising sharply during April to November in both rural and urban areas before easing in December 2020.

Figure 10: Contribution of groups to overall CPI-C inflation in 2019-20 (Apr-Dec) and 2020-21 (Apr-Dec) in per cent



Source: NSO

Inflation in States

- CPI-C inflation **increased in most of the states in the current year**, however, regional variation persists.
  - 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.
- Majority of the **States/UTs has witnessed higher urban inflation than rural inflation** in the current year with variations, mainly due to high food inflation in urban areas.
- **States in the North Eastern region as well as those in the East**, experienced relatively higher inflation in rural areas.

Headline inflation or core inflation as target for monetary policy

- Headline inflation is the total inflation in an economy which figure includes inflation in a basket of goods that includes commodities like food and energy. It is different from core inflation, which excludes food and energy prices while calculating inflation.
- Core inflation 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.
- While under complete markets, the choice of targeting strict core inflation is the best policy, with incomplete markets, headline inflation targeting is welfare improving relative to core inflation targeting.
- However, given wide variations in the price stickiness of food items, it is important to pay attention to the sticky component of food inflation in addition to core inflation.

Global Commodity Prices

- At the global level, **inflation remained benign on the back of subdued economic activity** as a result of COVID-19 outbreak.
- The **largest impact of COVID-19 has been on energy prices** driven by fall in crude oil prices.
- **Agricultural prices remained more or less stable** during the period of pandemic induced restrictions.
- **Gold prices saw sharp spike 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), which is an independent regulator for pricing of drugs and to ensure availability and accessibility of medicines at affordable prices, **has played an active role in addressing the exigencies arising out of COVID-19 pandemic** and undertook necessary measures to ensure continued availability of life saving essential medicines throughout the country.
  - NPPA invoked extraordinary powers in public interest under Drug Price control Order, 2013 and National Disaster Management Act to cap the prices of drugs.

- During the pandemic period, the government also 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.

Measures to Control Inflation

Government has taken several steps to improve the availability of these commodities and make them available to consumers at affordable prices.

- Steps were taken to stabilise prices of food items like **banning of export of onions, imposition of stock limit on onions, easing of restriction on imports of pulses etc.**
- **Price Stabilization Fund (PSF) Scheme** has succeeded in achieving its objective of stabilizing prices of pulses and offered significant benefits to all stakeholders.
- **Creation of buffer stock of pulses** has helped in moderating pulses prices. Also, Pulses from the buffer were utilised for PDS distribution, in Mid-day Meal Scheme and in ICDS Scheme.
- Government has decided that **procurement at MSP would be under Price Support Scheme (PSS)** and requirement towards building suitable buffer would be met from the PSS stock in case procurement is not required to be undertaken under PSF.
- Government of India **entered into a MoU with Mozambique to ensure assured supply of pulses** (Tur and other pulses) in India

Other measures that can be taken

- Apart from the short-term measures to curtail the upward price movement, there is n**eed to invest in medium to long-term measures** such as decentralised cold storage facilities at production centres.
- Good storer varieties, judicious use of fertilizers, timely irrigation and post-harvest technology are essential to reduce the losses in stored onions (Operation Greens portal).
- Review of onion buffer stock policy is also essential.
- System needs to be developed to reduce wastages, efficient management and ensure timely release.

Conclusion

Going forward, as food inflation eases further, overall inflation is expected to moderate further. On the other hand, improving demand conditions are likely to keep WPI inflation in the positive territory with improving pricing power for manufacturers.

Essential Commodities (Amendment) Act, 2020

- Recently, Government amended the Essential Commodities Act of 1955.
  - Amendment provides that foodstuffs, including cereals, pulses, potato, onions, edible oil seeds and oils **shall only be regulated under extra ordinary circumstances** which may include war, famine, extra ordinary price rise and natural calamity of grave nature.
  - However, **Amendment has not curbed the powers of the State Governments** to enforce stock limits on essential commodities or take actions on hoarders and profiteers.
- Essential Commodities (EC) Act, 1955 empowers the **Government to regulate essential commodities through regulation, by licences, permits, control of prices** etc for maintaining or increasing their supplies and for securing their equitable distribution and availability at fair prices.
- **Essential commodity under the EC Act includes**
  - Drugs;
  - Fertilizer
  - foodstuffs, including edible oilseeds and oils;
  - hank yarn made wholly from cotton
  - petroleum and petroleum products
  - raw jute and jute textiles;
  - seeds of food-crops, fruits, vegetables, cattle fodder, jute, cotton

Amendment is a visionary step, one which would **radically alter the incomes and growth prospects of farmers and incentivize investment** in the entire agri-sector.

Glossary	
Consumer Price Index for Industrial Workers (CPI-IW)	• It 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.**
National Housing Bank (NHB) RESIDEX	• The Housing Price Indices (HPIs) are a broad measure of movement of residential property prices observed within a geographic boundary. • 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.

CHAPTER AT A GLANCE

- Headline CPI inflation remained high during the COVID-19 induced lockdown period and subsequently, due to the persistence of supply side disruptions.
- Headline CPI inflation averaged 6.6% in 2020-21 (Apr-Dec) and stood at 4.6% in December 2020, mainly driven by rise in food inflation, owing to build up in vegetable prices.
- During 2020-21, retail and wholesale inflation saw movements in the opposite directions. While headline CPI-C inflation saw an increase compared to the previous year, WPI inflation remained benign.
- Supply-side shocks especially owing to COVID-19 pandemic affected the retail inflation with food articles contributing to the overall rise in inflation.
- Rural-urban difference in CPI inflation, which was high in 2019, saw a decline in 2020.
- Government interventions to augment the supply of commodities as well as to ensure the provision of essentials have likely softened the impact of the pandemic.

CHAPTER 5

Testing your remembering skills & Understanding skills

Q1. Consider the following statements:

1. Core inflation measures overall inflation in an economy whereas Headline inflation excludes price rise in fuel and food items.
2. Rise in housing prices constitutes an important part in calculation of both Urban and Rural CPI indices.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q2. Which of the following actions help in decreasing the inflation rates?

1. Incentivising exports of food items
2. Imposition of Stock limits
3. Increasing customs duty on imports

Select the correct answer using code given below.

(a) 2 only
(b) 3 only
(c) 1 and 3 only
(d) 2 and 3 only

Q3. Which of the following statements are correct with reference to Essential Commodities (EC) Act, 1955?

1. Jute textiles and Petroleum products are included in the list of essential commodities under EC Act.
2. EC (Amendment) Act, 2020 has curbed the powers of the State Governments to enforce stock limits on essential commodities.

Select the correct answer using code given below.

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q4. Who among the following prepares Consumer Price Index for Industrial Workers (CPI-IW)?

(a) Office of Economic Advisor
(b) National Statistics Office
(c) Labour Bureau
d) Reserve Bank of India

Self-Assessment: To practice Question for Answer Writing skills

Q1. 'Highlighting the current inflationary trends in India, discuss why sole focus on CPI-Combined (C) inflation may not be appropriate.

Q2. Although government has taken several measure to stabilize prices of food items, there is need to invest in certain long-term measures to address the issue of food inflation. Discuss.

CHAPTER 6: SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE

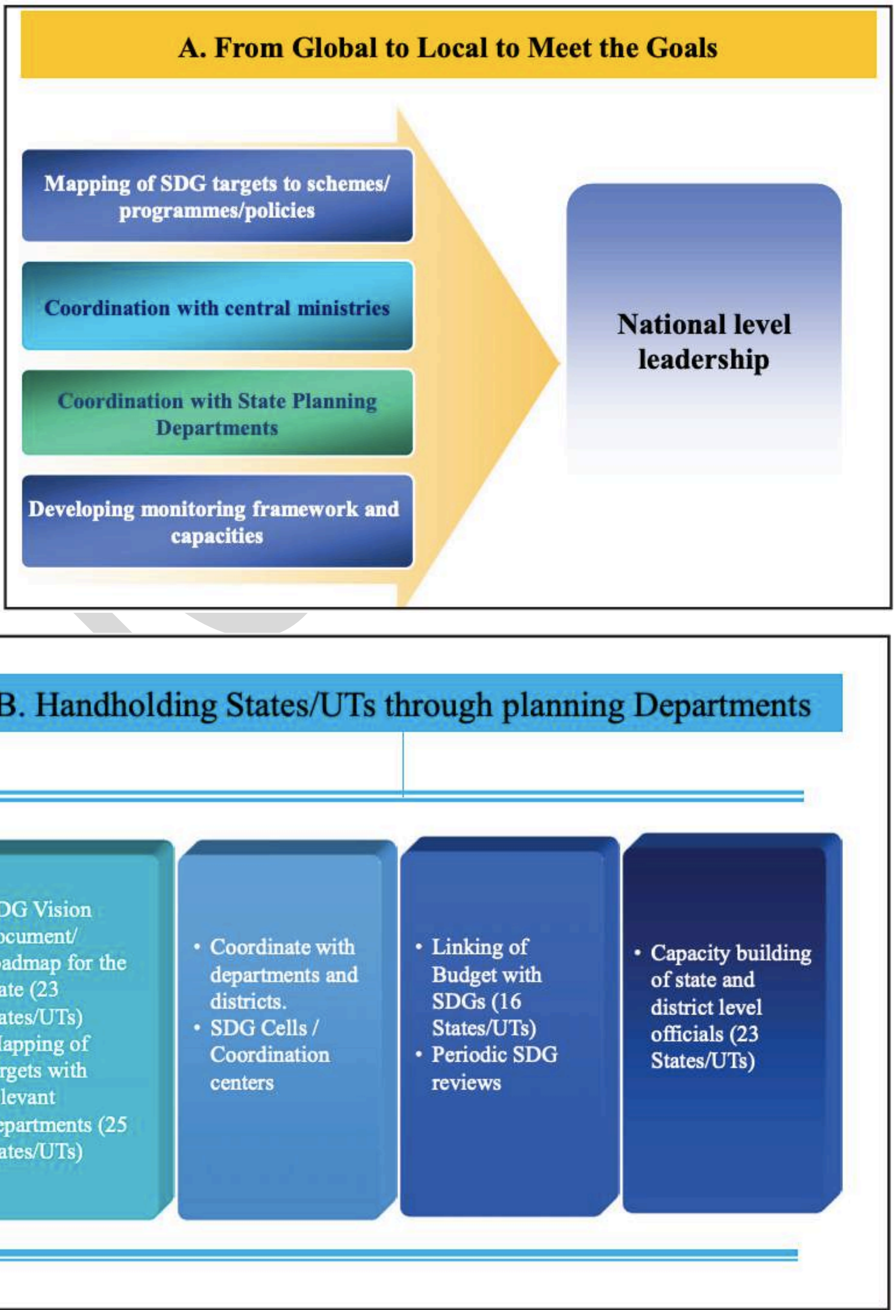
Introduction

- The public health emergency from COVID-19, has led to considerable human and economic costs setting countries back on their developmental goals and creating serious impediments to the attainment of the SDGs.

> **Sustainable Development Goals**
> The 2030 agenda for Sustainable Development with 17 Sustainable Development Goals (SDGs) and 169 associated targets encompasses a comprehensive developmental agenda integrating social, economic and environmental dimensions.

- India is faced with remarkable challenges emerging from the need to provide substantive economic stimulus, address livelihood losses, introduce and implement wide ranging economic reforms. However, sustainable development remains at the core of the country's development strategy.
- This chapter studies India's commitment, progress and challenges with respect to the 2030 agenda for Sustainable Development and climate change goals.

Figure 2: SDG Localisation



India And The SDGs

- India has taken several steps at both the national and the sub national level to mainstream the SDGs into the policies, schemes and programmes of the Government.
- In 2020, NITI Aayog submitted **Voluntary National Review (VNR) to the United Nations High-Level Political Forum (HLPF) on Sustainable Development.**
  - The reviews are voluntary and countries -led and are aimed at facilitating the sharing of experiences, including successes, challenges and lessons learned.

- **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.
  - Consultations with over 1000 Civil Society Organisations (CSOs) have been the cornerstone of the VNR Report preparation process.
- The preparation of the VNR also provided an excellent opportunity to strengthen the engagement with the private sector on SDGs which enhanced the uptake in adoption of **business responsibility and sustainability frameworks** and created greater consciousness among industry leaders for the same.

Localization of the SDGs

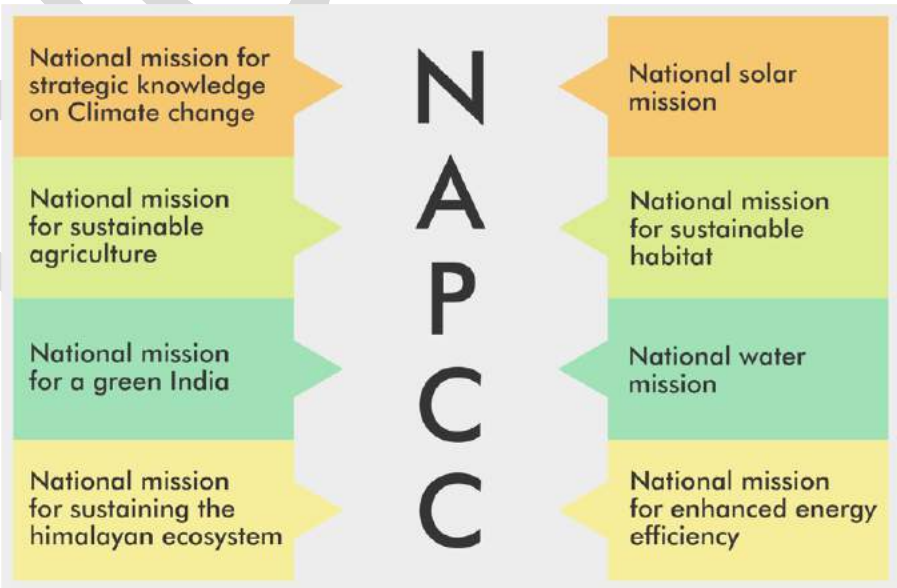
- Localising SDGs involves the process of adapting, planning, implementing and monitoring the SDGs from national to local levels by relevant institutions and stakeholders.
- To accelerate SDG achievements, the country has adopted the approach of **cooperative and competitive federalism which is based on Centre-State collaboration** in nation building and healthy competition among the States in various development outcomes.
- SDG performance at the national and sub-national levels are monitored by **the SDG India Index** and Dashboard designed and developed by NITI Aayog.
- The **States are the key actors in the process of localisation of SDGs** and are institutionally empowered and positioned to achieve the SDGs with the support of the Central Government and allied institutions.
- Figure A and B show the institutional set up for SDG localisation.

SDG Related Intervention of The Centre Governments During the Pandemic

- 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 to cope with the pressure created by the contagion.
- In addition several reforms measures have been brought in such as in agricultural labour and MSME reforms which will directly or indirectly impact the SDGs.

Nationally Determined Contribution (NDC) of India: In its NDC, India has sought to:

- reduce the emissions intensity of its GDP by 33 to 35 per centbelow 2005 levels by the year 2030;
- achieve 40 per cent of cumulative electric power installedcapacity 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.



Climate Change

India has taken several proactive climate actions to fulfil its obligations as per the **Nationally Determined Contribution** (NDCs). Prominent Government initiatives on mitigation & adaptation actions and their progress are given below:

- **National Action Plan on Climate Change (NAPCC):** It was launched in 2008 with 8 National Missions and was revised to keep in line with the NDC submitted by India under the Paris Agreement. The major developments under the NAPCC are captured in the table:

Missions	Major objective/Target	Progress
National Solar Mission (NSM)	• Achieve 100 GW of solar power in seven years starting from 2014-15.	• The cumulative capacity of 36.9 GW was commissioned till November 2020.
National Mission for Enhanced Energy Efficiency (NMEEE)	• Mandating reduction in energy consumption in large energy consuming industries, • Financing for PPP to reduce energy consumption through demand-side management programs in the municipal, buildings, and agricultural sectors, • Energy incentives, including reduced taxes on energy-efficient appliances.	• Perform Achieve and Trade (PAT) is one of the initiatives under the scheme. Currently PAT Cycle IV is under implementation. • PAT Cycle I (2012-2015) has over achieved the target, saving around 31 million tonnes of CO2 (Mt CO2). • PAT Cycle II (2016-17 to 2018-19)- achieved emission reduction of 61.34 MtCO.
National Mission for a Green India (GIM)	• Improved ecosystem services by Increasing forest/tree cover by 5 m ha and improving quality of forest cover on another 5 m ha (a total of 10 m ha).	• A sum of Rs. 343.08 crore has been released to 13 states during the period 2015-16 to 2019-20 for undertaking afforestation activities over an area of 1.42 lakh ha.
National Mission on Sustainable Habitat (NMSH)	• Development of sustainable habitat standards. • Promoting energy efficiency as a core component of urban planning by extending the existing Energy Conservation Building Code (ECBC). • Strengthening the enforcement of automotive fuel economy standards, and • Using pricing measures to encourage the purchase of efficient vehicles and incentives for the use of public transportation.	• The mission is being implemented through programmes like: • **Smart Cities Mission-** It requires cities to have at least 10 per cent energy coming from solar and at least 80 per cent buildings to be energy efficient and green. o Under the Smart Cities Mission, 1987 projects have already been completed so far. o Smart roads, smart solar, smart water, PPPs and vibrant public spaces projects are being implemented under the Mission. • **Swachh Bharat Mission**: Under the mission, 100 per cent door-to-door waste collection has been achieved in more than 83 thousand wards. o 99 per cent of the total cities have been declared Open Defecation Free (ODF) in the country.
National Water Mission (NWM)	• Focuses on monitoring of ground water, aquifer mapping, capacity building, water quality monitoring and other baseline studies. • Promoting citizen and state action for water conservation, augmentation, and preservation. • Focusing attention on overexploited areas. • Promoting basin-level integrated water resources management.	• The National Institute of Hydrology is the nodal agency to get the State Specific Action Plan (SSAP) for the water sector for 16 selected states. • Five States have completed the first phase of SSAP. • 6,376 new ground water monitoring wells created.
National Mission for Sustainable Agriculture	• Enhancing food security by making agriculture more productive, sustainable, remunerative, and climate resilient.	• Multiple farm machinery banks established in 2018-19 to reduce crop residue burning. • Under Rainfed Area Development Programme, an area of about 74,175.41 ha and 55,902.92 ha was brought under different Integrated Farming System. • At present, 25.34 lakh ha, is under organic farming.
National Mission for	• To continuously assess the health status of the Himalayan Ecosystem.	• The key achievement include launch of- • Centre of Glaciology at Wadia Institute of

Sustaining Himalayan Ecosystems	• Enable policy bodies in their policy formulation functions. • Start of new centres relevant to climate change in the existing institutions in the Himalayan States. • Regional cooperation with neighbouring countries in Glaciology.	Himalayan Geology. • National network programme on Himalayan Cryosphere. • **Human and Institutional Capacity Building (HICAB) programme** for the Indian Himalayan Region during the 2018-19. • Three Centres of Excellence, one each at Kashmir University, Sikkim University and Tezpur University.
National Mission on Strategic Knowledge for Climate Change (NMSKCC)	• To gain a better understanding of climate science, formation of knowledge networks among the existing knowledge institutions engaged in research and development. • Development of national capacity for modeling the regional impact of climate change on different ecological zones within the country.	• Key achievements include setting up of- o 12 Centres of Excellence and 10 State Climate Change Centres. o 8 Global Technology Watch Groups (GTWGs) in areas like Renewable Energy Technology, Advance Coal Technology, etc.

- **Climate Change Action Plan (CCAP):** It is Central Sector Scheme which aims to build and support the scientific and analytical capacity for assessment of climate change.
  - Two important components of the CCAP scheme are the National Carbonaceous Aerosols Program (NCAP) and the Long-Term Ecological Observatories (LTEO).
  - NCAP is a multi-institutional program being implemented by a consortium of 17 institutions led by IIT Bombay. It was inaugurated in the year 2017-18 and is a five-year duration project.
- **National Adaptation Fund on Climate Change (NAFCC):** It a Central Sector Scheme with National Bank for Agriculture and Rural Development (NABARD) as the National Implementing Entity. Till September 2020, 30 projects (including two multi state regional projects) worth Rs. 847.5 crores have been approved by NAFCC.
- **National Solar Mission (2015)**: 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 mission.
- **Faster Adoption and Manufacturing of (Hybrid&) Electric Vehicle in India (FAME India) scheme:** Government notified Phase-II of FAME India Scheme in 2019 with a total budgetary support of Rs. 10,000 crore.

India's NDC and Its Forthcoming Challenges

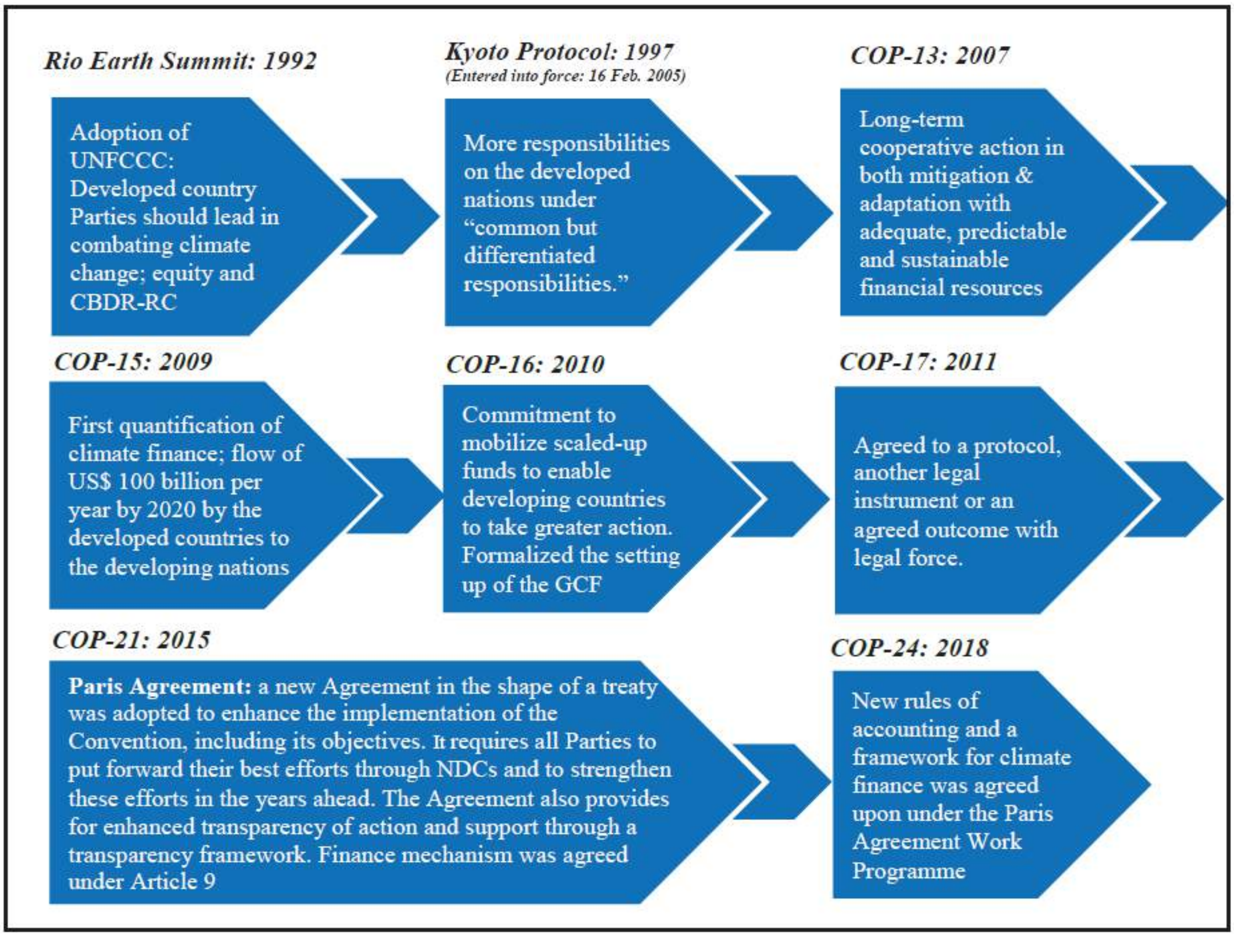
- The imperatives of the **intra-generational equity**, i.e., eradication of poverty and equitable social and economic development need focus.
- **Adaptation costs and adaptation efforts will increase in India** as it is highly vulnerable to extreme weather events and climate change impacts are expected to worsen with the passage of time (because of the momentum due to carbon stock continuing to increase the temperature).
- The country is relying on domestic resources to implement adaptation and mitigation action on mission mode. Hence, **availability of adequate financial resources required to implement wide-ranging NDC goals presents a major challenge**.
  - Preliminary estimates provided by NDC indicates that India's climate change actions till 2030 will require financial resource of **US$ 2.5 trillion** (at 2014-15 prices), including **US$ 206 billion between 2015 and 2030 for implementing adaptation actions** in key areas like agriculture, forestry, fisheries, infrastructure, water resources and ecosystems.
- To fully implement our NDC in a timely manner, the country requires **enhanced new and additional financial resources, technological support and capacity building**, especially from developed nations.
  - Commitment of US$ 100 billion each year by 2020 by the developed countries, which is yet to be realized, under Paris Agreement is insufficient.

Multilateral Negotiations on Climate Change

- **25th Session of the Conference of Parties (COP 25):** It brought out '**Chile Madrid Time for Action'** decision which provided for a balanced and integrated view that includes not only efforts for climate change mitigation, but also for adaptation and 'means of implementation' support from the developed country Parties to the developing country Parties.

- **26th Session of the Conference of Parties (COP 26) and Post 2020 Issues**: Due to COVID-19 pandemic, the COP 26 and the preceding UNFCCC subsidiary bodies' sessions has now been postponed to 2021. COP 26 is expected to take forward the discussions and reach consensus on:
    - market mechanisms;
    - common time frames for nationally determined contributions;
    - long-term climate finance;
    - governance of Warsaw International Mechanism for loss and damage;
    - continued work on pre-2020 implementation;
    - launch of second periodic review of the long-term global goal under the Convention;
    - definition of climate finance and
    - common accounting methodology for assessment and evaluation of climate finance.

Figure 6: Rio Summit 1992 to the 24th Session of the Conference of Parties (COP 24)- A brief history of the decisions taken



Aligning Finance with Sustainability

Past and ongoing steps taken to augment financing for sustainable development	
By the Government of India	● National Voluntary Guidelines for Responsible Financing, which lay down principles covering different aspects of environmental, social and governance (ESG) responsibilities to inform business action, was finalized in 2015.
	● The 'Voluntary Guidelines on Corporate Social Responsibility' were issued in 2009 to mainstream the concept of business responsibility. ● Also, revised guidelines were released as the National Guidelines on Responsible Business Conduct were released in March 2019.
	● A Committee was constituted to review and update the Business Responsibility Reporting (BRR) framework formats for listed as well as unlisted companies. ● The Committee recommended a new reporting framework called the 'Business Responsibility and Sustainability Report (BRSR)'.
	● India joined European Commission-led International Platform on Sustainable Finance (IPSF) in October 2019. ● The platform accounts for 50 per cent of the world population, almost 50 per cent of global GDP and about 55 per cent of global GHG emissions.
	● Bilateral Sustainable Finance Forum between India and UK was established.
By Reserve Bank of India (RBI)	● In 2015, the RBI included lending to social infrastructure and small renewable energy projects within the priority sector targets. In September 2020, the loan limits for renewable energy were doubled to Rs. 30 crores (Rs. 10 lakh for individual households).
By Securities and Exchange Board of India (SEBI)	● *Business Responsible Report (BRR):* The SEBI through its 'Listing Regulations' in 2012 mandated the top 100 listed entities by market capitalization to disclose their performance against the NVGs using a BRR format from an environmental, social and governance perspective. ● In December 2019, SEBI extended the BRR requirement to top 1000 listed companies by market capitalization from 2019-20.
	● India is moving in the direction of creating a Social Stock Exchange (SSE), under the regulator ambit of SEBI.
	● *Green Bonds:* In 2017, to give push to Green Bonds issuances in India, SEBI issued guidelines on green bonds including listing of green bonds on the Indian stock exchanges.. ● Green bonds are debt instrument issued by an entity for raising funds from investors and the proceeds of a green bond offering are used towards financing 'green' projects. ● Various green indices such as S&P BSE CARBONEX, MSCI ESG India, and S&P BSE 100 ESG Index allows passive and retail investors to invest in 'green' companies.

Investing in Resilience for Sustainable Development

- As per the Global Climate Risk Index, in 2018, India lost US$ 37 billion due to climate events such as cyclones. During 1998-2017 these losses added up to US$ 79.5 billion.

- India is in absolute terms expected to lose the equivalent of 34 million full-time jobs in 2030 as a result of heat stress.
- Although most of the impact in India will be felt in the agricultural sector, more and more working hours are expected to be lost in the construction sector, because of heat stress.

Climate Risk Insurance

- **Crop insurance** is a necessity in India to mitigate the risks associated with climate aberrations, given the significant contribution of the agricultural sector in the Indian economy.
    - It is difficult to implement in India due to large number of small and scattered landholdings, varying climatic and soil conditions, lack of basic data, and variety of agricultural practices, widespread lack of knowledge about the nature and functions of crop insurance amongst the farmers etc.
- Studies suggest moving towards **parametric insurance** that agrees to make payment on just the occurrence of a climate event, data for which is easily accessible. Further, the use of climate information services could also be useful.
    - Karnataka State Natural Disaster Monitoring Centre's Varuna Mitra has benefitted 3.5 lakh farmers through its weather advisories.
- **Climate risk insurance now needs to include pandemic insurance as well** with increasing conversion of natural/primary forests to secondary forests driven by agriculture and development increasing the risk of new infectious diseases.

Developmental Schemes and Protection of Environment-Need for Convergence

- Many Central and State level incentive schemes (especially KUSUM and state solar policies) are promoting uptake of **low carbon technologies such as decentralised solar systems for community scale water supply and irrigation** and have an immense impact in reducing production losses during dry periods.
- But these schemes can also lead to **unsustainable extraction of ground water** and need to be designed by considering cropping patterns, local environment, and climate projections, and should further incentivise farmers to adopt water conservation and rainwater harvesting practices.

India's Initiatives at the International Stage		
International Solar Alliance (ISA) It has recently launched following initiatives –	**World Solar Bank**	Dedicated financing window for solar energy projects across the members of ISA.
	One Sun One World One Grid Initiative	To create an inter connected green grid that will enable solar energy generation in regions with high potential and facilitate its evacuation to demand centers.
	Coalition for Sustainable Climate Action	Comprises of global public and private corporate and has been launched to institutionalize ISA's partnership with the corporate sector.
	World Solar Technology Summit (WSTS)	Platform for increasing access to new technologies at an affordable cost.
Coalition for Disaster Resilient Infrastructure	• The CDRI is co-chaired by India and the United Kingdom (UK) • As of December 2020, 19 countries and 4 multilateral organizations have become members of the Coalition. • The Coalition functions as an inclusive multi-stakeholder platform led and managed by national governments, where knowledge is generated and exchanged on different aspects of disaster resilience of infrastructure. • It has initiated the process to carry out the national level risk and resilience assessment of infrastructure such as power sector in the state of Odisha, airports etc.	

Way Forward

- Sustainable macroeconomic development should entail an alignment of both climate and economic policies.
- India is on its track to successfully decoupling its economic growth from GHG emissions.
    - 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 developed country partners are yet to fulfill the promised support of US$ 100 billion per year by 2020, in the form of climate finance to the developing nations.
    - The lack of required momentum in the scope, scale and speed of climate finance from developed to developing countries needs to be addressed.

- The Global Commission on Adaptation in its flagship report concluded that investing US$ 1.8 trillion globally in five areas i.e. strengthening early warning systems, making new infrastructure resilient, improving dryland agriculture crop production, protecting mangroves and making water resources management more resilient-from 2020 to 2030 could generate US$ 7.1 trillion in total net benefits.
- In addition to avoiding losses, investing in the future can provide economic benefits now, by reducing risk, increasing productivity, and driving innovation while continuing to restore the environment. Failing to do so will, however, undermines potential growth and prosperity.

CHAPTER AT A GLANCE
Sustainable development remains core to India's development strategy, despite several challenges emerging on account of the unprecedented crisis due to COVID-19 pandemic.
NITI Aayog submitted Voluntary National Review (VNR) to the United Nations High **which also also presented the Indian model of** SDG localization.
India has been taking several proactive climate actions to fulfil its obligations as per the principles of common but differentiated responsibilities and respective capabilities and equity such as National Action Plan on Climate Change (NAPCC), Climate Change Action Plan (CCAP) etc**.**
The first priority for India is adaptation as the country is highly vulnerable to extreme weather events.
The country is relying on domestic resources to implement adaptation and mitigation action on mission mode. Hence, availability of adequate financial resources required to implement wide-ranging NDC goals presents a major challenge.
COP 26 now scheduled in 2021 is expected to discuss and arrive at a consensus on several issues such as transparency mechanism; Article 6 (market and non-market mechanisms); common time frames for nationally determined contributions; long-term climate finance, definition of climate finance etc.
India has also taken several steps to augment financing for sustainable development such as National Voluntary Guidelines for Responsible Financing, promotion of green bonds etc.
Indian needs to invest in resilience for sustainable development such as **Climate risk insurance.**
Developmental schemes **such as decentralised solar systems for community scale water supply and irrigation** needconvergence with protection of environment.
The country is on its track to successfully decoupling its economic growth from GHG emissions.
India has taken several initiatives at the international stage such as International Solar Alliance (ISA) and Coalition for Disaster Resilient Infrastructure.

CHAPTER 6

Testing your remembering skills & Understanding skills

Q1. Which of the following are Nationally Determined Contribution (NDC) of India under Paris Agreement?

1. To reduce the emissions intensity of its GDP by 40% below 2005 levels by the year 2030
2. To achieve 33 to 35% of total electric power from non-fossil fuel sources by 2030
3. To create additional carbon sink equivalent to 2.5 to 3 billion tons of carbon dioxide by 2030.

Select the correct answer using code given below.

(a) 3 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1 and 2 only

Q2. 'Chile Madrid Time for Action' is sometimes seen in the news in the context of negotiations related to

(a) World Trade Organisation
(b) Climate Change
(c) Migration Crisis
(d) Financing of terrorism

Q3. Which of the following initiatives are launched by International Solar Alliance?

1. World Solar Bank
2. Coalition for Sustainable Climate Action
3. One Sun One World One Grid initiative
4. Climate and Clean Air Coalition

Select the correct answer using code given below.

(a) 1 and 3 only
(b) 2 and 4 only
(c) 1, 2 and 3 only
(d) 2, 3 and 4 only

Q4. Which of the following developed the SDG India Index?

a) Ministry of Environment and Forest and Climate Change
(b) Ministry of Statistics and Programme Implementation
(c) The Energy and Resources Institute (TERI)
(d) NITI Aayog

Q5. Consider the following statements with respect to International Platform on Sustainable Finance:

1. It is launched by European Commission to promote cooperation in sustainable finance.
2. India is not a member of the Platform.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q6. Which of the following Missions come under the Umbrella of National Action Plan on Climate Change?

1. National Mission for Green India
2. National Mission on Sustainable Habitat
3. National Water Mission
4. National Mission for Sustainable Agriculture

Select the correct answer using code given below.

(a) 2 and 3 only
(b) 1, 3 and 4 only
(c) 1, 2 and 4 only
(d) 1, 2, 3 and 4

Q7. Consider the following statements:

1. NABARD is the National Implementing Entity of National Adaptation Fund on Climate Change (NAFCC).
2. National Carbonaceous Aerosols Program (NCAP) is being implemented by respective State Governments.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Self-Assessment: To practice Question for Answer Writing skills

Q1. Evaluate the governments's performance on the mitigation and adaptation intiatives taken under the National Action Plan on Climate Change.

Q2. Enlist the various government measures taken to augment finance for sustainable development.

CHAPTER 7: AGRICULTURE & FOOD MANAGEMENT

Introduction

- About 54.6 per cent of the total workforce in the country is still engaged in agricultural and allied sector activities (Census 2011).
- COVID-19 pandemic impacted farming activities as COVID induced lockdowns influenced the movement of farm inputs including farm machinery, national lockdown coincided with the commencement of the harvesting season for the Rabi crops and migration of agricultural labourers to their native places during the lockdown created a shortage of farm labourers.
- However, India's agricultural system demonstrated its resilience amid such adversities.
- In order to further strengthen and support the agricultural sector, several initiatives have been taken by the Government of India under the AtmaNirbhar Bharat Abhiyan.

Overview of Agricultural Sector

- **Share in Goss Value Added (GVA):** The share of agriculture and allied sectors in GVA of the country has declined from 18.2 per cent in 2014-15 to 17.8 per cent in 2019-20.
  - Within the agriculture sector, the share of crops has fallen from 11.2 per cent in 2014-15 to 9.4 per cent in 2018-19 but the share of livestock and fisheries sectors increased.
- **Growth in Agriculture & Allied Sectors:** During 2020-21, while the GVA for the entire economy contracted by 7.2 per cent; GVA for agriculture maintained a positive growth of 3.4 per cent.
- **Gross Capital Formation (GCF) has fluctuating trend:** 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 2019-20, total food grain production in the country is estimated at **record high** 296.65 million tonnes as against 285.21 million tonnes achieved during 2018- 19.

Agriculture Infrastructure Fund

- This central sector scheme is operational from the year 2020-21 to 2029-30.
- The scheme provides for medium to long term debt financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets.
- Under the scheme, **Rs. 1 lakh crores** will be provided by banks and financial institutions as loans to primary agricultural credit societies (PACS), marketing cooperative societies, farmer producers organizations (FPOs), self help group (SHG), etc.
- All loans under this financing facility will have **interest subvention of 3 per cent per annum** up to a limit of Rs.2 crores. This subvention will be available for a **maximum period of 7 years**.
- Further, **credit guarantee coverage** will be available for eligible borrowers from this financing facility under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for a loan up to Rs. 2 crores.
- As on January 2021, Rs. 2991 crores has been 'in principle' sanctioned under the scheme to 3055 PACS by NABARD.

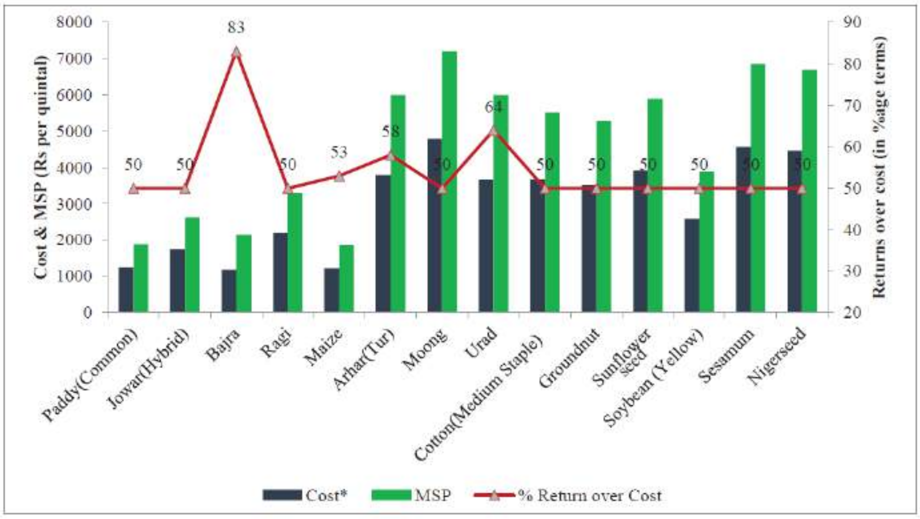
- **Agricultural Credit:** The agriculture credit flow target for 2020-21 was fixed at Rs. 15,00,000 crores and till 30th November, 2020 a sum of Rs. 9,73,517.80 crores was disbursed.
  - However, in this total disbursement, the share of southern region in agricultural credit was more than 40 per cent while it was **less than 2 per cent for the north-eastern region (NER).**
  - This is because the low cultivable area in North Eastern States (about 2.74 per cent of the total GCA of the country) and community ownership of land affected the intake of Kisan Credit Card (KCC) loans in NER.
  - The **Agriculture Infrastructure Fund** announced as a part of AtmaNirbhar Bharat Abhiyan is expected to further boost credit flow to the agriculture sector.
- **International Trade in Agricultural Commodities:** Since economic reforms began in 1991, India has remained a net exporter of agri-products, with agri-exports touching Rs. 2.52 lakh crores in 2019-20.
  - The major export destinations were **USA, Saudi Arabia, Iran, Nepal and Bangladesh**.

- o 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.
- o During the period 2015-16 to 2019-20, share of basmati rice, marine products, non-basmati rice, spices and sugar in total agricultural export value increased, while share of the commodities such as buffalo meat and raw cotton declined.
- o India's total agri-export basket accounts for a little over 2.5 per cent of world agri-trade.

Subsidies and Insurance

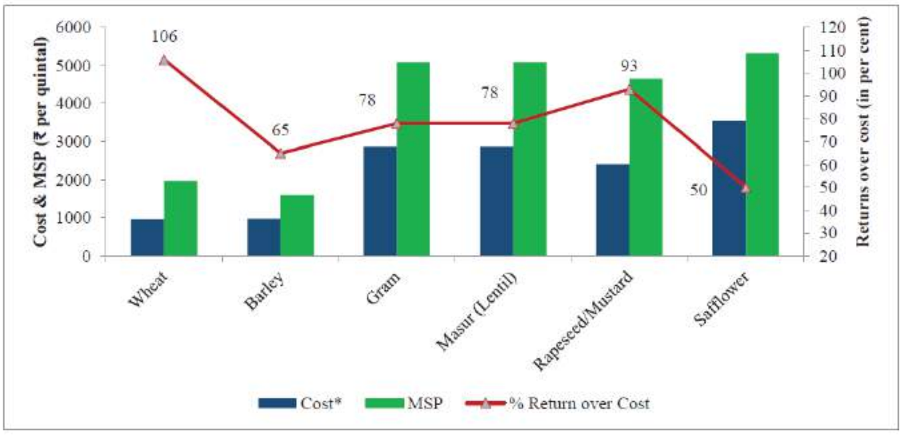
- **Minimum Support Price (MSP):** As per the announcement in Union Budget for 2018-19 to keep that MSPs at the level of 1.5 times of the cost of production, Government recently increased the MSPs for all mandated kharif and rabi crops for 2020-21 season.
  - o MSP of Kharif Crops- The highest increase in MSP announced was for nigerseed.
  - o MSP of Rabi Crops- The highest increase in MSP was announced for lentil.

Figure 8: Cost, MSP & Returns of Kharif Crops of year 2020-21



- **Crop Insurance:** The Pradhan Mantri FasalBima Yojana (PMFBY) scheme completed five successful years of implementation on 13th January, 2021.
  - o PMFBY extends coverage for the entire cropping cycle from pre-sowing to post-harvest including coverage for losses arising out of prevented sowing and mid-season adversities.
    - ✓ Individual farm level losses arising out of localized calamities and post-harvest losses are also covered due to perils such as inundation, cloudburst and natural fire.
  - o **Increase in sum insured**: The average sum insured per hectare has increased from INR 15,100 during the pre-PMFBY Schemes to INR 40,700 under PMFBY.
    - ✓ As of January, 2021, claims worth INR 90,000 crores have already been paid out under the Scheme.

Figure 9: Cost, MSP & Returns of Rabi Crops of year 2020-21



  - o **Improvements in the scheme:**
    - ✓ The scheme was made voluntary for all farmers in February 2020.
    - ✓ States have also been provided flexibility to rationalize the sum insured so that adequate benefits can be availed by farmers.
    - ✓ Aadhar seeding has helped in speedy claim settlement directly into the farmer accounts.
- **Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)**: The scheme was launched in 2019 to provide income support to all landholder farmer families across the country with cultivable land, subject to

certain exclusions. As on December 2020, more than Rs. 1.10 lakh crore have reached the account of farmers.

Allied Sectors: Animal Husbandry, Dairying & Fisheries

- **Livestock sector:** Livestock sector contributed 4.2 per cent of total GVA in 2018-19. 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).
  - **Milk:** Indiacontinues 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**: 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.
  - **Meat**: India ranks 5th in meat production in the world. Meat production in the country has increased from 6.7 million tonnes in 2014-15 to 8.6 million tonnes in 2019-20.

Recent Initiatives in the Livestock Sector

- **Impact of COVID-19**: Covid-19 lockdown caused a drop in the market demand due to closure of the outlets selling livestock products.
  - Farmers started diverting their milk to the cooperatives as sweet shops and tea stalls stopped milk procurement due to closure. Since cooperatives could not reject milk supplied by the farmers, they are faced with liquidity problems due to higher conversion into milk powder and white butter caused by higher milk procurement.
- **One time support for financially stressed milk unions**: A sub-scheme for providing interest subvention (2 per cent per annum, with an additional incentive of 2 per cent on prompt and timely repayment) on working capital loans was designed for the financial year 2020-21 under the ongoing scheme **State Dairy Cooperative & Farmers Producers Organization (SDCFPO)** for financially stressed milk unions.
- **Inclusion of livestock sector in Kisan Credit Card** (KCC): 1.5 crores dairy farmers of milk cooperatives and milk producer companies' were targeted to provide KCC as part of Prime Minister's AtmaNirbhar Bharat Package.
- **Animal Husbandry Infrastructure Development Fund (AHIDF):** A Rs. 15000 crores AHIDF has been set up to incentivize investments by individual entrepreneurs, private companies including MSME, farmers producers organizations(FPOs) and Section 8 companies, through 3 per cent interest subvention, to establish -
  - dairy processing and value addition infrastructure
  - meat processing and value addition infrastructure, and
  - animal feed plant.
- **National Animal Disease Control Programme (NADCP):** The programme aims at vaccinating all cattle, buffalo, sheep, goat and pig population against Foot & Mouth Disease (FMD) and all bovine female calves of 4-8 months of age against brucellosis. The programme has a total outlay of Rs.13,343 crores for five years (2019-20 to 2023-24).

- **Fisheries:** India is the second largest fish producing country in the world and accounts for 7.58 per cent of the global production.
  - **Fish production:** in India has reached an all-time high of 14.16 million metric tons during 2019-20.
  - **Contribution to GVA**: The fisheries sector contributes 1.24 per cent to the GVA and 7.28 per cent to the agricultural GVA.
  - **Export of marine products**: stood at 12.9 lakh metric tons with a value of Rs. 46,662 crores during 2019-20.
  - **Government initiatives in Fisheries Sector:**
    - ✓ The centrally sponsored scheme – **Blue Revolution (CSS-BR)** to catalyze the "Integrated, Responsible and Holistic Development and Management of the Fisheries Sector", ended in March 2020.

Pradhan Mantri MatsyaSampada Yojana (PMMSY)

- It aims to-
  - enhance fish production to 220 lakh metric tons by 2024-25 at an average annual growth rate of about 9 per cent.
  - increase aquaculture productivity to 5 tonnes per hectare (up from national average
  - of 3 tonnes per hectare
  - enhance domestic fish consumption and attract investments in fisheries sector from other sources.
- Insurance coverage for fishing vessels is being introduced for the first time under PMMSY.

- ✓ The Government of India in October 2018 approved the establishment of a dedicated **Fisheries and Aquaculture Infrastructure Development Fund (FIDF)** at INR 7522 crores.
- ✓ **Pradhan Mantri MatsyaSampada Yojana (PMMSY)** was launched in May, 2020 as a part of AtmaNirbhar Bharat Package by Government of India with an estimated investment of Rs. 20,050 crores.

Agricultural Research and Education: Indian Council of Agricultural Research (ICAR) is a premier research organization for coordinating, guiding and managing agriculture research and education including in horticulture, fisheries and animal sciences in the entire country.

- **High Yielding Varieties and Breeder Seeds**: A total of 172 new varieties/hybrids of field crops and 75 horticultural crops were notified/released till October, 2020.
- **Natural Resource Management and Integrated Farming:** The Council has developed 60 location specific, cost effective, eco-friendly, socially acceptable multi-enterprise **Integrated Farming System (IFS)** models in farmers' participatory mode.
  - **Bio-intensive cropping systems** having higher productivity potential for different agro-climatic zones have been included in the crop production guide /package of practices of respective states.
  - The Council has developed an **agri-voltaic system to generate electricity** in interspace area of crops and to harvest rainwater from top surface of photovoltaic (PV)-module has been designed.
- **Demonstration and Upscaling of Climate Resilient Technologies:** Climate resilient technologies are being demonstrated in 446 villages and up-scaled in about 300 cluster villages in the country.
- **Mechanization and Crop Residue Management:** To increase availability of equipments/machines to the small and marginal farmers on hire basis, custom hiring centres have been initiated in Punjab, Haryana and UP. Several measures have been taken in these states to manage cropresidue which reduced the crop burning events in from 127774 in 2016 to 61332 in 2019. These include**:**
  - Distribution of machines to the farmers.
  - Awareness creation about in-situ crop residue management by conducting awareness programmes, demonstrations, training programs and kisan melas.
  - Replacement of long duration variety with short duration paddy.
  - Crop diversification leading to reduction in area under paddy.
- **Reaching to the farmers and youth with improved technologies:** The linking of 3.37 lakh common service centers with 721 KVKs has tremendously enhanced outreach of the KVKs and provided demand driven services and information to farmers.

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. The sector constitutes as much as 8.98 per cent of Gross Value Added (GVA) in manufacturing in 2018-19 at 2011-12 prices.

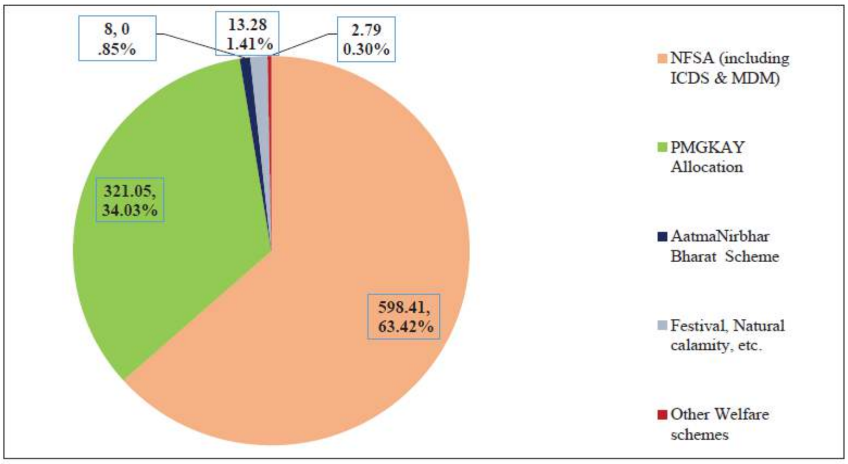
New Initiatives in Food Processing Sector

- **Prime Minister-Formalisation of Micro Food Processing Enterprises (PM-FME):** It was launched under the AtmaNirbhar Bharat Abhiyan as a Centrally Sponsored Scheme, with a total outlay of Rs.10,000 crores over the period 2020- 2025.The scheme is expected to benefit 2 lakh micro food processing units through credit linked subsidy.
  - The Scheme adopts One District One Product (ODOP) approach to reap benefit of scale in terms of procurement of inputs, availing common services and marketing of products. ODOPs of 650 districts in 34 States/UTs have already been approved.
  - The Scheme also places focus on waste to wealth products, minor forest products and Aspirational Districts
- **Operation Greens:** Under AtmaNirbhar 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. Transport subsidy has been allowed on any fruit & vegetable through any rail service provided by Indian Railways.
- **Production-Linked Incentive (PLI) Scheme:** It was approved in November 2020 with financial outlay of Rs. 10,900 crores for food processing sector. The scheme would also support the branding and marketing abroad.
- **Pradhan Mantri Kisan SAMPADA Yojana (PMKSY):** Various components under the umbrella scheme include Mega Food Parks, Integrated Cold Chain and Value Addition Infrastructure, Infrastructure for Agro-processing Clusters, Creation of Backward and Forward Linkages, Creation/ Expansion of Food Processing & Preservation Capacities, and Operation Greens.

Food Management

- **For prudent management of foodgrain stock** and to ensure adequate availability of wheat and rice, the Central Government has undertaken the following measures:
  - MSP of wheat and paddy has been increased to protect the interest of farmers.
  - State Governments, particularly those undertaking Decentralized Procurement (DCP), are encouraged to maximize procurement of wheat and rice by state agencies.
  - Strategic reserves of 5 million tons of food grains over the existing buffer norms have been maintained to be used in extreme situations.
  - Sale of wheat and rice is undertaken through Open Market Sale Scheme (OMSS) to check inflationary trend of food in market.

Break up of Allocation under Various Schemes (share in per cent and quantity in lakh tons)



- **Allocation of Food grains:** During the Financial Year 2020-21, allocation of foodgrains has been done through two channels- under the **National Food Security Act (NFSA)** and the **Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY) scheme.**
  - Further, under **AtmaNirbhar Bharat Package**, Government of India made allocation of free foodgrain (wheat and rice) at the rate of 5 kg per person per month for two months (May and June, 2020) to benefit approximately 8 crores migrants/stranded migrants who are not covered under NFSA or state ration card.
- **Fortification of Rice and Its Distribution:** To address the issue of anaemia and micro-nutrient deficiency and to promote nutrition security in the country, a centrally sponsored pilot scheme named **"Fortification of Rice & its Distribution under Public Distribution System"** was approved for a period of 3 years beginning in 2019-20.
- **One Nation One Ration Card:** The Department of Food & Public Distribution in collaboration with all States/UTs is implementing a central sector scheme namely "**Integrated Management of Public Distribution System (IM-PDS)" to introduce nation-wide portability of ration card under NFSA** through 'One Nation One Ration Card' System.
- **Open Market Sale Scheme (Domestic):** 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) in the open market from time to time at predetermined prices.
  - A special dispensation was introduced, in April, 2020, for supply of foodgrains to all the charitable/ non-governmental organizations etc. engaged in providing relief or in running community kitchens for migrant labourers and vulnerable groups during the lockdown.
- **Food Subsidy**: The difference between the per quintal economic cost and the per quintal Central Issue Price (CIP) gives the quantum of food subsidy.
  - Non revision of Central Issue Price (CIP) and rise in economic cost of wheat and rice for FCI operations has resulted in the rise in food subsidy. Further, the NFSA provides a wider coverage than the erstwhile TPDS.
- **Storage:** The total storage capacity available with FCI and state agencies for storage of foodgrains is 819.19 LMT, comprising covered godowns of 669.10 LMT and Covered and Plinth (CAP) facilities of 150.09 LMT. Steps taken for increasing storage capacity-

- **Construction of godowns has been undertaken in PPP mode** in 24 states under Private Entrepreneurs Guarantee (PEG) Scheme through the private sector as well as the Central Warehousing Corporation (CWC) and the State Warehousing Corporation (SWC).
- Godowns are also being constructed through a **central sector scheme by FCI** in the North Eastern States, Kerala, Jharkhand and Himachal Pradesh.

- **Ethanol:** The Government has set 10 per cent blending target for mixing ethanol with petrol by 2022 & 20 per cent blending target by 2030.
  - With a view to achieve these blending targets, Government is **encouraging sugar mills and molasses** based standalone distilleries through various financial assistance to enhance their ethanol distillation capacity and has also **allowed conversion of surplus stock of rice with FCI and Maize to ethanol**.

Recent Agricultural Reforms: A Remedy, Not A Malady

In 2020, the President gave his assent to three reforms related to agriculture sector. Major provisions and intended benefits of the Reforms are presented below:

Laws and their objectives	Intended Benefits
The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 • It seeks to create an ecosystem where the farmers and traders enjoy the freedom of choice relating to sale and purchase of farmers' produce. • 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	• **Allows farmers to sell agri-produce outside the notified APMC market yards** and avoid inefficiencies linked with APMCs legislations which have led to low realization and post-harvest losses for farmers. o Prevalent issues with APMC mandis include presence of multiple intermediaries, large range of taxes and cesses levied, poor infrastructure, issues related to manual weighing, single window systems, lack of modern grading and sorting processes, long queues etc. • **Removes restrictions on farmers to sell the produce only to registered licensees** of the state governments.
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**	• **Creates level playing field** by empowering farmers in their engagement with processors, wholesalers, aggregators, large retailers, exporters. • **Transfers the risk of market unpredictability from the farmer to the sponsor.** • **Enable the farmer to access modern technology and better inputs.** • **Provides adequate protection** as sale, lease or mortgage of farmers' land is totally prohibited and farmers' land is also protected against any recovery. • **Power to fix price**: The farmers will have full power in the contract to fix a sale price of their choice for the produce and they will receive payment within a maximum of 3 days. • **Formation of FPOs**: As part of this law, 10000 Farmer Producer Organizations are being formed throughout the country. o These FPOs will bring together small farmers and work to ensure remunerative pricing for farm produce. • **Farmers do not need to seek out traders** as the purchasing consumer will need to take the produce directly from the farm.
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.	• **Removes fears in private investors from excessive regulatory interference** in their business operations. • The freedom to produce, hold, move, distribute and supply will lead to **harnessing of economies of scale** and will **attract private sector/foreign direct investment** into the agriculture sector. • **Help in driving up investment** in cold storages and modernization of food supply chain.

Way Forward

Measures that can be taken to increase productivity, reduce post-harvest losses and help realize the objective of doubling farmers' income are stated below-

- **Need for a paradigm shift in viewing agriculture**: from a rural livelihood sector to a modern business enterprise.
- **Undertake measures on post production front:** such as village level procurement centres, linkages between production and processing, development of rural markets, option of selling outside the APMC markets – warehouse upgradations and strengthening of railways freight operations, dedicated freight corridors among others.
- **Increase in area under irrigation, adoption of hybrid and improved seeds, increasing variety replacement ratio and augmentation in seed testing facilities** to help address low productivity concerns.
- **Integrate agriculture with nutritional outcomes** by means of food fortification of staples.
- **Impart farmers with basic education and training** to transform their role from that of a producer to an entrepreneur.
- **Strengthen agriculture extension services** to provide technical information to the farmer about improved agricultural practices, guidance on the use of these inputs and other services in support of their production.
- **Consider the revision of CIP** to reduce the bulging food subsidy bill.

Some illustrations of Reports recommending Agricultural Market Reforms and the Amendments to the Essential Commodities Act

- **Model Act on Agricultural Marketing (September 2003)**: Under the Model Act, legal persons, growers and local authorities were permitted to apply for the establishment of new markets for agricultural produce in any area, as against the existing provisions that allow markets to be setup at the initiative of State Governments alone.
    - Consequently, in a market area, more than one market could be established by private persons, farmers and consumers.
    - There was to be no compulsion on the growers to sell their produce through existing markets administered by the APMC.
- **Series of 'Serving Farmers and Saving Farming' reports under Chairman Dr M.S. Swaminathan**: These reports underscore the need for reforms in the agricultural sector especially in the context of APMCs and Essential Commodities Act.
- **Draft State Agricultural Marketing (Development and Regulations) Rules, 2007:** It provides details on, inter-alia, how the market committees would function.
- **Standing Committee on Agriculture, Ministry of Agriculture and Farmers Welfare (Department of Agricultural, Cooperation and Farmers Welfare) (2018-19):** The Committee was of the view that there is need to create alternative platform for marketing of agriculture produce near the production centre so that farmers can get remunerative prices for their produce.

CHAPTER AT A GLANCE
India's agricultural sector has shown its resilience amid the adversities of COVID induced Lockdowns, clocking a growth rate of 3.4 per cent at constant prices during 2020-21 (1st Advance Estimates).
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.
The sector has got renewed thrust due to various measures on credit, market reforms and food processing under the AtmaNirbhar Bharat announcements.
Various interventions of the Government for the development of allied sectors including animal husbandry, dairying and fisheries exhibit its resolve towards tapping the potential of allied sectors to further enhance farm welfare.
To enhance agricultural research and education, progress has been made in the field of High Yielding Varieties and Breeder Seeds, Natural Resource Management and Integrated Farming, Climate Resilient Technologies and Mechanization and Crop Residue Management.
In addition to various measures aimed at increasing productivity and improving marketing of agricultural produce, the Government also carries out a large food management programme with a significant financial implication in terms of food subsidy.
The newly introduced farm laws herald a new era of market freedom which can go a long way in the improvement of farmer welfare in India.

CHAPTER 7

Testing your remembering skills & Understanding skills

Q1. With reference to the economic trends in Agriculture sector in India, consider the following statements:

1. The agriculture sector has a share of more than 20% in the Gross Value Added of the Indian economy.
2. Inspite of an overall contraction in the economy, the agriculture sector registered positive growth during 2020-21.
3. The Gross Capital Formation (GCF) in the agriculture sector has been continously on the rise in the last five years.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) 1 and 2 only
(d) 1, 2 and 3

Q2. With reference to Agriculture Infrastructure Fund scheme, consider the following statements:

1. It is a centrally sponsored scheme providing short-term loans for agricultural inputs.
2. Under the scheme, loans will be provided to primary agricultural credit societies and farmer producer organizations.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q3. Recently it was reported in the economic survey that the share of agriculture credit flow was only at 2% for the North-Eastern Region. Which of the following reasons can be ascribed for the same?

1. Low cultivable area
2. Prevelence of community ownership of land
3. Poor Literacy rate

Select the correct answer using the code given below.

(a) 2 only
(b) 1 and 3 only
(c) 1 and 2 only
(d) 1, 2 and 3

Q4. With reference to India's trade in agriculture, which of the following statements is not correct?

(a) India is a net-exporter of agri-products.
(b) The major destinations of India's exports includes the USA and Saudi Arabia.
(c) India's agri-export basket accounts for a little over 10% of the world agri-trade.
(d) Marine products and basmati rice are one of the major commodities exported from India.

Q5. With reference to Pradhan Mantri Fasal Bima Yojana (PMFBY), consider the following statements:

1. It extends coverage for the entire cropping cycle from pre-sowing to post-harvest.
2. Individual farm level losses arising out of localized calamities such as cloudbursts are also covered under the scheme.
3. The scheme is mandatory for all farmers to ensure minimization of post-harvest losses.

Which of the statements given above is/are correct?

(a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Q6. India is the largest producer of which of the following agricultural commodities in the world?

1. Milk
2. Meat
3. Eggs
4. Fisheries

Select the correct answer using the code given below.

(a) 1 only
(b) 1, 3 and 4 only
(c) 3 and 4 only
(d) 1, 2 and 3

Q7. Recently, The Government has set 10 per cent blending target for mixing ethanol with petrol by 2022 and 20 per cent blending target by 2030. In this context, the surplus stock of which of the following crops has been allowed for conversion to ethanol?

1. Rice
2. Wheat
3. Maize
4. Sugarcane

Select the correct answer using the code given below.

(a) 1 and 2 only
(b) 3 and 4 only
(c) 1 and 3 only
(d) 1, 3 and 4 only

Q8. Serving Farmers and Saving Farming' is a report by the eight-member National Commission on Farmers chaired by:

(a) M.S. Swaminathan
(b) Amitabh Kant
(c) Trilochan Mohapatra
(d) None of the above

Self-Assessment: To practice Question for Answer Writing skills

Q1. How far do you agree with the view that recent agricultural reforms are a remedy and not a malady to the farmers? Justify your view with proper substantiation.

Q2. Growth in Food Processing sector will open up opportunities in agri-value chain. Discuss the significance of Food Processing sector. Mention the steps taken by the government to give boost to food processing sector.

CHAPTER 8: INDUSTRY AND INFRASTRUCTURE

Introduction

- **Pandemic jolt:** FY21 began amidst a global pandemic which led to countries adopting unprecedented measures that brought the economy to a grinding halt.
- **Measures Taken:** India implemented policies aimed at reducing transaction costs, supporting Micro Small and Medium Enterprises (MSMEs), enhancing competition, fostering employment creation and securing sustenance through the Atmanirbhar Bharat Abhiyan.
- **Strong industrial sector is a sine quo non for Atmanirbhar Bharat:** Performance of the industrial sector is critical given its deep backward and forward linkages with the other sectors of the economy.
    - A bouquet of measures equivalent to 29.87 lakh crores or 15% of India's GDP were introduced as a measure of relief and support to the economy.

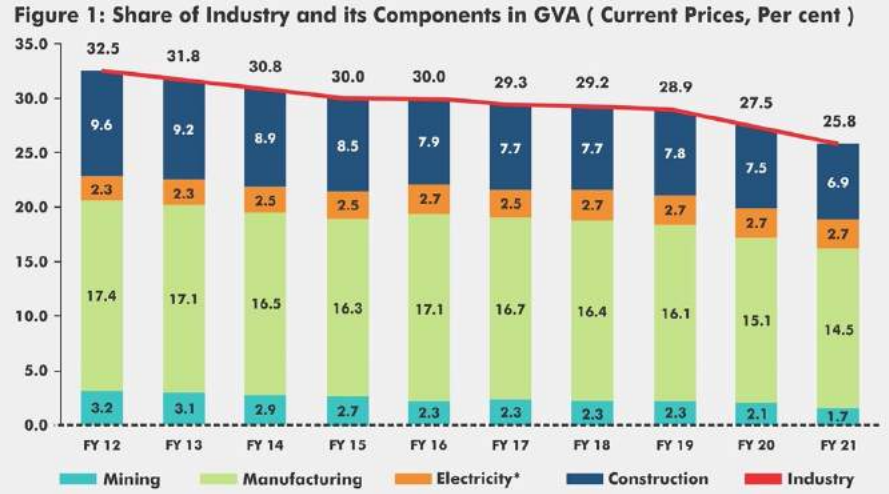
Announcements under the Atmanirbhar Bharat Abhiyan were made in three tranches.

- **Atmanirbhar Bharat 1.0**
    - **Relief and credit support to MSMEs to fight against COVID-19**
        - ✓ 3 lakh crores Collateral-free Automatic Loans for Businesses, including MSMEs.
        - ✓ 20,000 crores Subordinate Debt for Stressed MSMEs
        - ✓ 50,000 crores equity infusion through MSME Fund of Fund
        - ✓ New definition of MSME by raising the investment limit and an additional criteria of turnover has been introduced.
        - ✓ Global tenders to be disallowed upto 200 crores.
        - ✓ Relief of 1500 crores to MUDRA- Shishu loans.
    - **Packages for Power Sector-** ₹ 90,000 crores liquidity injection for DISCOMs
    - **Real Estate:** The extension of registration and completion date of real estate projects 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.
- **Atmanirbhar Bharat 2.0** provided ₹ 25,000 crores as additional capital expenditure to the Ministry of Road Transport and Ministry of Defence.
- **Atmanirbhar Bharat 3.0 initiatives that impact the industrial sector include:**
    - 1.46 lakh crores boost for Atmanirbhar manufacturing production-linked incentives for 10 Champion Sectors.
    - 18,000 crores additional outlay for PM Awaas Yojana (PMAY) –Urban
    - 1.10 lakh crores platform for infra debt financing – ₹ 6000 crores equity infusion in National Investment and Infrastructure Fund (NIIF) Debt Platform

Overview of Industrial sector

- **Negative growth:** Industrial sector is expected to record a growth of -9.6% with an overall contribution in GVA of 25.8% in FY21. Contribution of the industrial sector has been constantly declining since 2011-12.
- **Index of Industrial Production (IIP):** IIP growth started contracting immediately after the lockdown reaching its historical low in April-2020. IIP turned positive for the first time in September 2020.

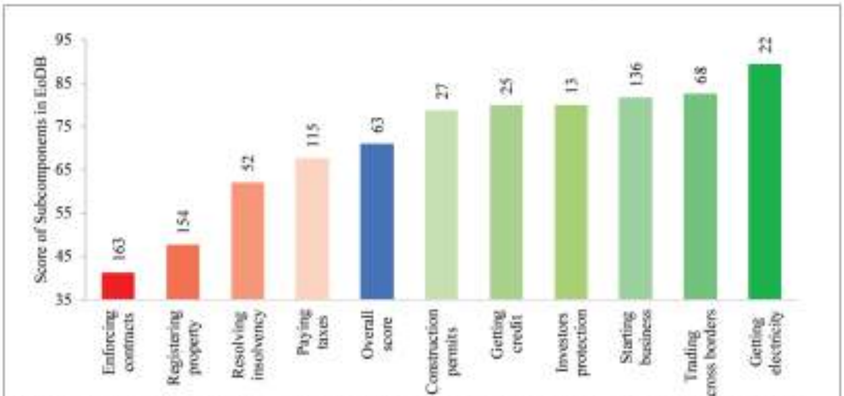
Figure 1: Share of Industry and its Components in GVA (Current Prices, Per cent)



*Electricity, gas, water supply & other utility services.
Source: Survey calculations based on MoSPI data.

- **Index of Eight-Core Industries:** Recorded its all-time low growth of (-) 37.9 due to covid-19 led nation-wide lockdown (April-2020).
    - 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% in the IIP.
- **Gross Capital Formation (GCF) in the Industrial Sector:** Rate of growth of GCF in industry registered a sharp rise from 1.2% in FY18 to 17.5% in FY19.
- **Increased Credit flow to the Industrial Sector:** Gross bank credit recorded (-) 1.7 growth in October-2020 as compared to 3.4% growth in October-2019.
- **Performance of Central Public Sector Enterprises (CPSEs)**
    - **Profitable CPSEs:** There are 366 CPSEs as of March 2020. Of these, 256 are in operation, but only 171 CPSEs booked profit during FY20.
        - ✓ The total profit of profit-making CPSEs was 1.38 lakh crores in FY20, whereas the consolidated loss of loss-making enterprises was 44,816 crores.
    - **Rationalisation of CPSEs under Atmanirbhar Bharat**.
        - ✓ 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.
        - ✓ To strengthen the retained CPSEs, there is need to completely revamp the Boards of the CPSEs to reorganize their structure, enhance their operational autonomy coupled with strong corporate governance norms including listing on stock exchanges for greater transparency.
- **Corporate Sector Performance:** net profit for the manufacturing sector contracted by 7.8% in Q2:2020-21.
- **Ease of Doing Business:** As per the Doing Business Report, 2020, the rank of India in EoDB Index for 2019 has moved upwards to the 63rd position amongst 190 countries from a rank of 77 in 2018.

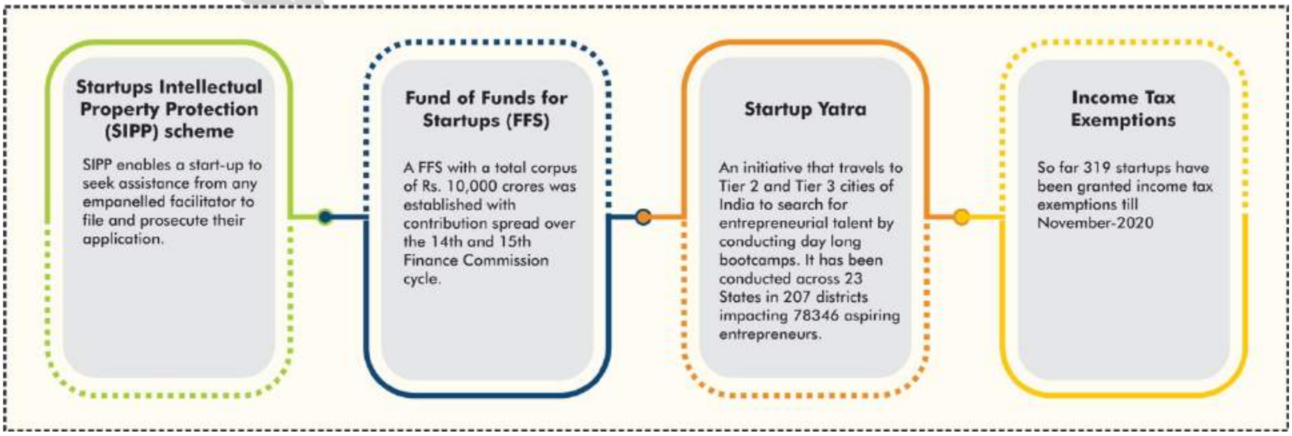
Figure 15: Leads and Laggards in Ease of Doing Business in overall ranking and score (EoDB 2019)



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

Source: Survey calculations based on EoDB data.

- **Start-up India:**
    - **Facilitating growth of startups:**GoI 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.
    - **Robust growth in numbers:** 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.
    - **Recent initiatives taken for startups**



- **Foreign Direct Investment (FDI)**
  - **Total inflows:** During FY20, total FDI equity inflows were US$49.98 billion as compared to US$44.37 billion during FY19.
  - **Leading industries:** Within the manufacturing sector, industries like automobile, telecommunication, metallurgical, non-conventional energy, chemical (other than fertilizers), food processing, and petroleum & natural gas get the bulk of FDI equity flows.

Measures taken for 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 CO2 equivalent/year.
- **Surface coal gasification projects** (100 million tonnes (MT) coal by 2030) with relatively lesser carbon footprint.
- A total of 11 coal blocks are allocated under Mines and Minerals (Regulation and Development) (MMDR) Act.

Sector wise issues and initiatives

- **Steel:** India is the second-largest producer of crude steel only after China. India is also the second largest consumer of steel.
  - **Initiatives taken under AtmanirbharAbhiyaan to enhance the domestic production of steel:** inclusion of 'Speciality Steel' for incentives under Production Linked Incentive (PLI) scheme, preference to domestically produced iron and steel in government procurement, protecting the industry from unfair trade etc.
- **Coal:** It accounts for 55% of the country's energy needs.
  - In the FY20, production of raw coal in India was 729.1 million tonnes (MnT) with a minuscule growth of 0.05% over the previous year.
  - India is also an importer of coal importing 248.54 MT of coal in FY20, a growth of 5.7% over FY19.
- **Micro, Small & Medium Enterprises (MSME) and Textile and Apparels**

	MSME	Textile and Apparels
GDP Contribution	• Roughly 30%	• 2%
Employment Generation	• More than 11 crore people employed.	• Direct and indirect employment of about 10.5 crore people. • Sector is the second-largest employment generator in the country, next only to agriculture.
Exports	• Contributes half of the country's exports.	• India is the sixth-largest exporter of textile and apparel products after China, Germany,Bangladesh, Vietnam, and Italy.
Measures taken/ Schemes launched	• Revision of the investment criteria in the MSME definition • Udyam registration portal. • Launch of Champions Portal o CHAMPIONS' stands for Creation and Harmonious Application of Modern Processes for Increasing the Output and National Strength o It is an ICT based technology system aimed at making the smaller units big by solving their grievances, encouraging, supporting, helping and handholding them throughout the business lifecycle	• Amended Technology Upgradation Fund Scheme (ATUFS) • Scheme for Integrated textiles park (SITP). • Samarth Scheme

Definition of MSME sector

Earlier MSME classification

Criteria: Investment in plant & machinery or equipment			
Classfication	**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			
Classfication	**Micro**	**Small**	**Medium**
Manufacturing & Service	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: investment in infrastructure is quintessential for more rapid and inclusive economic growth.

- **National Infrastructure Pipeline** launched for the FY 2020-2025 to facilitated world class infrastructure projects to be implemented.
- In FY21, GoI approved the continuation of the **revamped Infrastructure Viability Gap Funding** scheme till 2024-25.

Sectoral developments

- **Road sector:** Share of the transport sector in the GVA for FY19 was about 4.6% of which the share of road transport contributed roughly 67%.
  - **Road Network:** With 63.86 lakh kms of rural-urban roads and national-state highways, India is next only to USA.
  - **Pace of construction:** The pace at which roads have been constructed has grown significantly from 12 kms per day in 2014-15 to 30 kms per day in FY19 before it moderated in FY20.
  - **Investment:** Total investment in the Roads and Highway sector has gone up more than three times in the six years period from FY15 to FY20.
- **Civil Aviation:** India's domestic traffic has more than doubled from around 61 million in FY14 to around 137 million in FY20, a growth of over 14% per annum.
  - **Rapid growth:** From the third largest domestic aviation market, it is expected to become the third largest overall (including domestic and international traffic) by FY25.
  - **At forefront during COVID-19:**Vande Bharat Mission (to evacuate stranded Indians) and Lifeline Udan initiative (transporting life-critical supplies to remotest corners of the country) are the major initiatives in civil aviation sector.
  - **Air bubble:** Government has also entered into air-links or air transport bubble arrangements with 23 countries to facilitate the movement of passengers between the respective countries and India.
- **Port and Shipping**: In India, around 95% (68%) of total volume (value) of international trade is transported by sea.
  - **Ports capacity:** The installed capacity of major ports in India has increased to 1534.91 Million Tonnes Per Annum (MTPA) in March-2020 as compared to 871.52 MTPA in March-2014.

- Turnaround time: The average turnaround time in FY20 improved to 61.75 hours as against 126.96 hours in FY11 and 96 hours in FY15.

- **Railways:** Indian Railways (IR) with over 67,580 route kms, is the third-largest network in the world under single management.
  - **Traffic:** During the FY20, IR carried 1.2 billion tonnes of freight and 8.1 billion passengers – making it the world's largest passenger carrier and fourth-largest freight carrier.
  - **Improved safety:** Because of safety measures taken by IR , the number of train accidents has come down from 104 in FY17 to 55 in FY20.
  - **PPP in railways:**GoI has allowed the private players to operate in the Railways sector through the PPP mode under the "New India New Railway" initiative.
    - ✓ Ministry of Railways has identified over 150 pairs of train services for the introduction of 151 modern train sets or rakes through private participation.
    - ✓ The private entity shall be responsible for financing, procuring, operating, and maintenance of the trains and shall have the freedom to decide on the fare to be charged from its passengers.
  - **Kisan Rail:** Union Budget 2020-21 made an announcement to run the Kisan Rail services to provide better market opportunity by transporting perishables and agri-product, including milk, meat, and fish.
  - **Parcel train:** To ensure that the supply of essential commodities throughout the country is not disrupted during COVID-19, Indian Railways introduced parcel special train services, including time-tabled parcel special trains.
  - **National Rail Plan (NRP):** It aims at developing adequate rail infrastructure by 2030 to cater to the projected traffic requirements up to 2050.
    - ✓ NRP objective is to increase the modal share of rail in freight from the current level of 27 to 45%.
- **Telecom Sector**
  - **Wireless dominance:** Wireless telephony constitutes 98.3% of all subscriptions whereas the share of landline telephones now stands at only 1.7%.
  - **Internet subscribers** stood at 776.45 million at the end of September-2020 as compared to 636.73 million in March-2019.
  - **Data consumption:** Average wireless data consumption per subscriber per month increased from 9.1 GB in March-2019 to 12.2 GB in June-2020.
  - **Reduced data cost:** As on June-2020, the cost of wireless data stood at Rs. 10.55 per GB.
  - **Under BharatNet,** As on 15.01.2021 about 4.87 lakh kms of optical fiber cable has been laid to cover 1.63 lakh Gram Panchayats (GPs) and nearly 1.51 lakh GPs have become service ready.
- **Petroleum and Natural Gas:** India is the third-largest energy consumer in the world after USA and China (With a share of 5.8% of the world's primary energy consumption).
- **Power:** The total installed capacity has increased from 3,56,100 MW in March-2019 to 3,70,106 MW in March 2020.
  - **Improved 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.
  - **Energy intensity of India** (at 2011-12 prices) decreased from 65.6 tonne of oil equivalent (**toe**) per crore rupees in FY12 to 55.43 toe per crore rupees in FY19.
  - **Increased per capita consumption** from 0.47 toe in FY12 to 0.58 toe in FY19.
  - **Two major landmarks achieved in rural electrification** arena:
    - ✓ 100% village electrification under DeenDayal Upadhyaya Gram Joyti Yojana.
    - ✓ Universal household electrification under 'Pradhan Mantri Sahaj Bijli Har Ghar Yojana' (Saubhaagya).
  - **High T&D losses:** As compared to the T&D losses of the peer countries, India's T&D are very high
- **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).
  - **Contribution:** Mining and quarrying sector in FY20 was accounting for about 2.1% of the overall GVA during FY20.

- o **Increased production** of major minerals by 2.3% in FY20 as compared to 22.4% growth in FY19.
- **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.
  - o **Deendayal Antyodaya Yojana - National Urban Livelihoods Mission**: As on 31st October 2020, ` 3,378 crores have been released to States/UTs and 9.9 lakh beneficiaries have been skill-trained and certified to enhance their employability.
  - o **Pradhan Mantri AwasYojan-Urban (PMAY-U)** has so far approved more than 109 lakh houses of which over 70 lakh houses have been grounded for construction. More than 41 lakh houses have been completed and delivered.
    - ✓ **Further, a sub scheme Affordable Rental Housing Complexes** under PMAY-U has been initiated to address the needs of the migrant workers for decent rental housing at affordable rate near their work places.
  - o **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.
  - o **Light House Projects (LHPs) was launched** on 1st January, 2021 to provide impetus to innovative technology for housing construction.
    - ✓ LHPs are being implemented at six places – Lucknow, Indore, Rajkot, Chennai, Ranchi and Agartala using innovative technologies identified through Global Housing Technology Challenge– India.

Way Forward

- COVID-19 crisis management strategy had to encompass all the stakeholders, especially the weaker and the vulnerable sections.
- 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 revival of the industrial and infrastructure sector will be key to overall economic growth and macroeconomic stability.

Key data from chapter

FDI	• During FY20, total FDI equity inflows were US$49.98 billion as compared to US$44.37 billion during FY19.
MSME	• MSME sector employs more than 11 crores people, contributes roughly 30% to the GDP, and contributes half of the country's exports.
Textile and Apparels	• It contributed 2% in the overall GDP and 11% of total manufacturing GVA in FY20 and provided total direct and indirect employment of about 10.5 crore people.
Road	• Pace at which roads have been constructed has grown significantly from 12 kms per day in 2014-15 to 30 kms per day in FY19. • With 63.86 lakh kms of rural-urban roads and national-state highways, India is next only to USA
Railways	• Indian Railways (IR) with over 67,580 route kms, is the third-largest network in the world under single management. • During the FY20, IR carried 1.2 billion tonnes of freight and 8.1 billion passengers – making it the world's largest passenger carrier and fourth-largest freight carrier.
Civil Aviation	• From the third largest domestic aviation market, India is expected to become the third largest overall (including domestic and international traffic) by FY25.
Port and Shipping	• Average turnaround time in FY20 improved to 61.75 hours as against 126.96 hours in FY11 and 96 hours in FY15.
Telecom	• Internet subscribers stood at 776.45 million at the end of September-2020 as compared to 636.73 million in March-2019. • Data consumption: Average wireless data consumption per subscriber per month increased from 9.1 GB in March-2019 to 12.2 GB in June-2020.

CHAPTER 8

Testing your remembering skills & Understanding skills

Q1. Which of the following incentives were given to boost industrial growth under the Atmanirbhar Bharat initiatives?

1. Collateral-free automatic loans for MSMEs
2. Infusion of liquidity in DISCOMs
3. Additonal outlay under Pradhan Mantri Awas Yojana
4. Product-linked incentives for ten champion sectors.

Select the correct answer using the code given below.

(a) 1 and 2 only
(b) 2 and 3 only
(c) 1, 3 and 4 only
(d) 1, 2, 3 and 4

Q2. Which of the following form a part of the index of the Eight-Core Industries?

1. Electricity
2. Fertilizers
3. Cement
4. Textile
5. Heavy Industry

Select the correct answer using the code given below.

(a) 1, 2 and 3 only
(b) 1 and 2 only
(c) 3, 4 and 5 only
(d) 1, 2, 3, 4 and 5

Q3. With reference to Central Public Sector Enterprises (CPSEs) in India, consider the following statements:

1. At present there are more than 500 CPSEs in operation in India.
2. Majority of the CPSEs were loss-making during the current financial year.
3. The union government aims to rationalize the number of CPSEs under the Atmanirbhar Bharat initiative.

Which of the statements given above is/are correct?

(a) 2 only
(b) 2 and 3 only
(c) 3 only
(d) 1, 2 and 3

Q4. The Startups Intellectual Property Protection (SIPP) scheme aims to:

(a) provide copyrights to startups engaged in the domain of online content creation.
(b) guarantee patent rights to startups engaged in innovative pharmaceuticals & vaccine development.
(c) enable support from a facilitator to file and prosecute their application.
(d) ensure compliance of startups with the provisions of the TRIPS agreement.

Q5. The government recently brought about changes in the classification of MSMEs. In this context, which of the following is/are correctly matched?

Industry Definition

1. Micro-scale in Manufacturing : Investment less than 1 crore
2. Small-scale in Services : Investment between 10 lakhs and 2 crores
3. Medium-scale in Manufacturing : Turnover between 50 crores and 100 crores

Select the correct answer using the code given below.

(a) 1 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Self-Assessment: To practice Question for Answer Writing skills

Q1. A strong industrial sector is sine quo non for the success of India's 'Atmanirbhar Bharat' initiative. Elaborate.

Q2. Giving a brief overview of India's industrial sector, discuss the sub-sectoral breakdown of the key issues plaguing the same.

CHAPTER 9: SERVICES SECTOR

Overview of the Services Sector

- **Share in India's Gross Value Added (GVA):** Services sector now **accounts for over 54% of the economy** and almost four-fifths of total FDI inflows.

> - **Impact of COVID-19 on Services Sector**
>   - Owing to its contact-intensive nature, **sector contracted by nearly 16%** during the first half of 2020-21 because of COVID-19 mandated lockdown.
>   - 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% in H1 FY 2020-21.
>   - As per the first advance estimates, GVA of services sector is estimated to contract by 8.8% in 2020-21, whereas it grew by 5.5% in 2019-20.

- **Contribution in Gross State Value Added (GSVA)**: Services sector accounts for more than 50% of GSVA in 15 out of the 33 states and UTs. Chandigarh and Delhi stand out with a particularly high share of services in GSVA of over 85% while Sikkim's share remains the lowest at 27.02%.
- **FDI Inflows into Services Sector:** Gross FDI equity inflows (excluding re-invested earnings) into the services sector jumped 34% YoY during April-September 2020 to reach US$ 23.61 billion, accounting for almost four-fifth of the total gross FDI equity inflows into India during this period.
    - High FDI equity inflow was observed in following sub-sectors Computer Software & Hardware, Retail Trading, Agriculture Services, and Education.
    - **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).
- **Trade in Services: Export**
    - India remained **among the top ten trading countries in commercial services** in 2019 accounting for 3.5% of world services Services exports.
    - India's services export growth moderated to 2.5% in 2019-20 from 6.6% in 2018-19 as receipts primarily on account of transportation, insurance and communication services.
    - **Software exports, with a share of 49.3% in total services exports** remained resilient with higher demand for digital support, cloud services and infrastructure modernisation catering to the new challenges posed by the pandemic.

> **Gross value added (GVA)**
> - As per United Nations System of National Accounts, GVA is defined as the value of output minus the value of intermediate consumption and is a measure of the contribution to GDP made by an individual producer, industry or sector.
> - At its simplest it gives the rupee value of goods and services produced in the economy after deducting the cost of inputs and raw materials used.

- **Trade in Services: Import**
    - Services imports exhibited sharper decline of 13.95% in H1 of FY2020- 21 in comparison with services exports.
    - Payments for imports of overseas travel, transport services declined whereas payment for imports of business services increased.
- **Net Export**
    - Sharper decline in services imports over exports led to an increase in net services receipts by 2.1% in Q1 of 2020-21 over the previous year.
    - Sharp contraction in merchandise trade deficit and a stable net services receipts led to a current account surplus of 3.9% of GDP in Q1 of 2020-21.

Sub-sector wise performance and recent policies

- In the wake of the COVID-19 pandemic, most of the sub-sectors of the services sector witnessed a contraction in growth during 2020-21.
- **Tourism Sector**
    - **Decline in Foreign exchange Earning:** Foreign exchange earnings from tourism declined to US$ 6.16 billion during the first six months of 2020 as compared to US$ 14.19 billion during the corresponding period last year.

- **India's Share in International Tourist Arrivals:** Foreign Tourist Arrivals (FTAs) in 2019 stood at 10.93 million compared to 10.56 million in 2018.India ranked 23rd in the world in terms of international tourist arrivals 2019,falling slightly from the 22th position in 2018.
- **Country profile of Foreign tourists:** Foreign tourists from the top 10 countries visiting India are from Bangladesh, USA, UK, Australia, Canada, China, Malaysia, Sri Lanka, Germany and Russia. They accounted for 67% of total FTA in India in 2019.
- **Preferred Destinations for Foreign tourists:** Top five states attracting foreign tourists are Tamil Nadu, Maharashtra, Uttar Pradesh, Delhi and West Bengal, accounting for 69.4 percent of the total foreign tourist visits in the country in 2019.
- **E-Visa scheme for foreign tourists:** Government further liberalized the visa regime 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'. The e-Visa scheme is now available for 169 countries with valid entry through 28 designated airports and 5 designated seaports. With this, foreign tourist arrivals to India on e-visas have increased from 4.45 lakh in 2015 to 29.28 lakh in 2019 and stood at 8.37 lakh in January-March 2020.

Vande Bharat Mission

- In order **to evacuate Indians stranded abroad** after the breakout of the Covid-19 pandemic and the resultant lockdowns across the world, Mission was launched in early May.
- Under this Mission, which is currently in its ninth phase, the **government established Transport Bubbles with countries to repatriate its citizens.**
- At present, India has active air bubbles with 24 countries.
- As of January 5, 2021, over 4.49 million people were facilitated international travel.

Evolution of the business model for IT-ITeS

			Customer centric	Customer + collaboration
Dimension	**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

Source: NASSCOM

- **IT-BPM Services**
  - **IT Services dominant:** Over the last six years, IT services have constituted the majority share (over 50%) of the IT-BPM sector, with about US$ 97 billion in revenues in 2019-20.
  - **Export driven services :**A significant part (about 84 %) of the IT-BPM industry (excluding hardware and e-commerce) continues to be export driven, with export revenues in excess of US$ 146 billion in 2019-20.
  - **Increased revenue growth:** During 2019-20, the revenue growth for the IT-BPM sector (excluding hardware and e-commerce) made a recovery to reach 7.9% from 6.8% in 2018-19. This was driven primarily by a significant boost in domestic revenue growth.
  - **IT-BPM export composition:** 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 the 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% and 7.6% of the export earnings of India, respectively.

- **Policy initiatives of government:** In 2021, a number of significant structural reforms have been undertaken to drive innovation, technology adoption and efficiency in the IT-BPM sector, including Relaxation of OSP Terms & Conditions, and Consumer Protection (E-commerce) Rules, 2020.
- **Progress in Indian start-up ecosystem :** Faced with a myriad of challenges at the onset of the pandemic, the ecosystem defied the odds and had a record number of 12 start-ups that reached unicorn status. 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.

Major policy initiatives and reforms in IT-BPM sector

Relaxation of OSP Terms & Conditions

- With an aim to improve the Ease of Doing Business of the IT Industry particularly Business Process Outsourcing (BPO) and IT Enabled Services, the Government, in November 2020, simplified the Other Service Provider (OSP) guidelines of the Department of Telecom.
- The new guidelines reduce the compliance burden of the BPO industry and enable to Work from Home.

Consumer Protection Act, 2019

- The Act came in to force in July 2020 empowering consumers and to protect their rights through its various notified rules and provisions such as Consumer Protection Councils, Consumer Disputes Redressal Commissions, Mediation, Product Liability and punishment for manufacture or sale of products containing adulterant / spurious goods.
- Act includes establishment of the Central Consumer Protection Authority to promote, protect and enforce the rights of consumers.
- Moreover, every e-commerce entity is required to provide information relating to return, refund, exchange, warranty/guarantee, delivery, modes of payment, grievance redressal, payments, charge-back options, etc. including country of origin.
- Act introduces the concept of product liability and brings within its scope, the product manufacturer, product service provider and product seller, for any claim for compensation.

- **Port and Shipping Services:** Ports handle around 90% of export-import cargo by volume and 70% by value in India. India has a 1% share in world fleet as on January 2020.
  - **Port Capacity:** The total cargo capacity of major ports which was 871.52 Million Tonnes Per Annum (MTPA) at the end of March 2014 has increased to 1,534.91 MTPA by the end of March 2020 and handled traffic of 704.92 MT during 2019-20.
  - **Important ports:** Ports including Deendayal (Kandla), Paradip, JNPT, Visakhapatnam, and Chennai had the highest cargo capacities as of March 2020.
  - **Halving of turnaround time:** 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 has declined across all major ports and is now the lowest at the Cochin port and the highest at the Mormugao port. As per the latest UNCTAD data, the median ship turnaround time globally is 0.97 days,
- **Space Sector**
  - **Diversified services:** Expanding from simple mapping services in the 1960s to many diversified uses including- design and development of a series of launch vehicles and related technologies, satellites and related technologies for earth observation, telecommunication & broadband, navigation, meteorology and space science, R&D in space sciences, & most recently, planetary exploration.

- **Low spending vis-à-vis global players:** India spent about US$ 1.8 billion on space programmes in 2019-20. However, the country still lags behind major players in the sector, such as USA, China and Russia.
- **Satellites launched**: India has launched around 5-7 satellites per year in recent years. On the other hand, USA, Russia and China dominate the satellite launching services with 19, 25 and 34 satellites respectively in 2019.

Prospects for commercialization and attracting private investment in the space sector

- 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 established **Indian National Space Promotion and Authorisation Centre (IN-SPACe)** for promoting industries and attracting investment in space sector.
- **ISRO would be sharing its infrastructure,** transfer technology know-how for production and spin-off.
- 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.
- PwC estimates that the I**ndian space economy is valued at US$ 7 billion,** which is around 2 per cent of the global space economy.
- The commercial satellite industry is accounting for nearly 75 per cent of global space business.

CHAPTER AT A GLANCE

- **Owing to its contact-intensive nature,** Services sector contracted by nearly 16% **during the first half of 2020-21 because of COVID-19 mandated lockdown. Most of the sub-sectors witnessed a contraction.**
- **Services sector accounts for more than 50% of GSVA in 15 out of the 33 states and UTs.**
- India improved its position from 12th in 2018 to 9th in 2019 **in the list of the world's largest FDI recipients.**
- **Sharper decline in services imports over exports led to** an increase in net services receipts by 2.1% in Q1 of 2020-21 **over the previous year.**
- Government took major policy initiatives **for some sectors like** IT-BPM sector **(including Relaxation of OSP Terms & Conditions, Consumer Protection Act, 2019)** and Space sector **(NSIL, IN-SPACE etc.)**

CHAPTER 9

quiz

Testing your remembering skills & Understanding skills

Q1. With reference to the services sector in India, consider the following statements:

1. It accounts for a majority share in the Indian economy.
2. It accounts for a majority share in the Gross State Value Added (GSVA) of all the states in India.
3. It accounts for a majority share in the FDI inflows in India.

Which of the statements given above is/are correct?

(a) 1 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Q2. With reference to India's exports in the services sector, consider the following statements:

1. India accounts for more than 10% in world services exports.
2. Among all services exports, software exports account for the majority share.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q3. Recently, the Consumer Protection Act, 2019 came into force. In this context, consider the following statements:

1. It provides for the establishment of the Central Consumer Protection Authority.
2. Under the act, all e-commerce entities are required to provide information relating to the country of origin of the product.
3. It introduced the concept of product liability which holds even the seller accountable for the product quality.

Which of the statements given above is/are correct?

(a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Q4. With reference to trade logistics in India, which of the following statements is correct?

(a) The average turnaround time of ships has increased in the last five years.
(b) India has a 10% share in world fleet.
(c) Indian ports handle around 90% of export-import cargo by volume.
(d) Railways accounts for the largest share of export-import cargo by value.

Q5. With reference to New Space India Limited (NSIL), consider the following statements:

1. It is a Central Public Sector Enterprise under Department of Space.
2. It is mandated to enable Indian industry to scale up high-technology manufacturing base.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Self-Assessment: To practice Question for Answer Writing skills

Q1. Highlighting the fact that India is a service sector based economy, discuss the impact of COVID 19 on service sector in India.

Q2. Analyse the steps taken by India to control the fall in services sector during the present COVID 19 crisis.

CHAPTER 10: SOCIAL INFRASTRUCTURE, EMPLOYMENT AND HUMAN DEVELOPMENT

Introduction

- COVID-19 has brought into **focus the vulnerabilities of societies, states and countries** in facing a pandemic.
- Though the **lockdown helped in arresting the number of fatalities** due to COVID-19, it had an inevitable impact on the vulnerable and informal sector, the education system, and on the economy as a whole.
- Government announced **relief packages under 'Pradhan Mantri Garib Kalyan Yojana and 'Atma Nirbhar Bharat Abhiyan'** and welfare schemes have enabled to endure the impact of the COVID-19 pandemic and led to a V-shaped economic recovery.

Trends in Social Sector Expenditure

- **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).
- **Share of expenditure on social services out of total budgetary expenditure**, has increased to 26.5 per cent in 2020-21 (BE) from 23.4 per cent in 2014-15.
- A **special economic and comprehensive package of 20 lakh crore**- equivalent to 10 per cent of India's GDP was announced under **Atma Nirbhar Bharat** to revive the economy and to address the pandemic. In subsequent announcements, additional support cumulating to **29.88 lakh crore was announced.**
- Of these, **4.31 lakh crore were allocated for social sector** including PMGKY and PMGKY Anna Yojana, support to worker & employers, MGNREGS workers etc.

Human Development

- India's rank in Human Development Index (HDI)**1** was 131 in 2019, compared to 129 in 2018.
- Value of HDI for India has increased **from 0.579 in 2010 to 0.645 in 2019**.
- Average **annual HDI growth during 2010-2019 was 1.21 per cent** and cross-country comparison of average annual HDI growth shows India is ahead of BRICS countries.

Quality Education for All

- As per **Unified District Information System for Education (U-DISE)- 2018-19, among Government elementary schools** 90.2 per cent have girls' toilet, 93.7 per cent have boys' toilet, 95.9 per cent have provision of drinking water facility, 88.1 per cent have hand wash facility, 84.2 per cent have medical check-up facility, 20.7 per cent have computer and 67.4 per cent have electricity connection, 69.3 per cent have playground.
- 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. Literacy at the elementary school level is 96 per cent.

Programmes and Schemes for School Education during 2020-21

Samagra Shiksha, an overarching programme for the school education sector extending from preschool to class 12, was **launched in 2018-19 with the following major features**:

- **Holistic approach to education:** Treat school education holistically as a continuum from Pre-school to Class 12.
- **Focus on Quality of Education by** focus on the two T's – Teachers and Technology; Capacity Building of Teachers and School Heads; Grants to schools for strengthening Libraries; Support for Rashtriya Avishkar Abhiyan to promote Science and Math learning.
- **Focus on Digital Education** through smart classrooms, digital boards and DTH channels and ICT infrastructure in schools; Support to "DIKSHA", a digital platform which offers teachers, students and parents engaging learning material.
- **Focus on Girl Education:** Upgradation of Kasturba Gandhi BalikaVidyalayas (KGBVs) from Class 6-8 to Class 6-12; Self-defence training for girls; enhanced focus on Beti Bachao Beti Padhao.
- **Focus on Inclusion, Skill Development, Sports and Physical Education, Regional Balance etc.**

- **Under Samagra Shiksha,** NISHTHA (National Initiative for School Heads' and Teachers' Holistic Advancement) was contextualized to improve learning outcomes and made **100 per cent online during the COVID-19 pandemic**.
- **Padhna Likhna Abhiyan:** An adult education scheme has been introduced in FY 2020-21.
- During 2019-20, the **Mid-Day Meal (MDM) Programme** in schools covered 11.59 crore children enrolled in elementary classes.

National Education Policy (NEP) 2020

NEP, 2020 was announced replacing the 34-year-old National Policy on Education, 1986. The new policy aims to pave the way for transformational reforms in school and higher education systems in the country.

Key features of the policy

- **Universalization of education** from pre-school to secondary level by 2030.
- Current 10+2 system to be replaced by a **new 5+3+3+4 curricular structure**
- Class 10 and 12 **board examinations to be made easier to test core competencies** rather than memorized facts.
- **Changes in school governance**, with a new standards framework based on online self-declaration
- Emphasis on **foundational literacy and numeracy**, and no rigid separation between academic streams, extra-curricular, **vocational streams in schools**.
- Teaching up to at least Grade 5 to be in **mother tongue/regional language**, wherever possible.
- **Assessment reforms**, tracking student progress
- New and **comprehensive National Curriculum Framework** for school education, Early Childhood Care & Education, Teacher Education and Adult Education.

Impact of COVID-19 pandemic on School Education

- Since March 2020, most of the schools are closed due to COVID-19 induced restrictions and children are taught online from their homes.
- As per Annual Status of Education Report (ASER) 2020, **percentage of enrolled children from government and private schools owning a smartphone** increased enormously from 36.5 per cent in 2018 to 61.8 per cent in 2020 in rural India (in October 2020).

Initiatives for school going students during COVID-19 pandemic

- **PM eVIDYA,** announced for school and higher education under the Atma Nirbhar Bharat programme is a comprehensive initiative to unify all efforts related to digital/online/on-air education to enable multi-mode and equitable access to education. It has four components:
  - **One nation, one digital education infrastructure:** Under this component all States/UTs have free access to a single digital infrastructure i.e, DIKSHA. Also, VidyaDaan portal was launched on Diksha to allow contribution of e-learning resources by educational bodies, private bodies, and individual experts.
  - **One class, one TV channels through Swayam Prabha TV Channels:** 12 channels devoted to telecast high quality educational programmes
  - **Extensive use of Radio, Community radio and Podcasts** e.g., Shiksha Vani podcast, GyanVani FM Radio Stations etc.
  - **For the differently-abled**: DTH channel in sign language; study material developed in Digitally Accessible Information System (DAISY) and in sign language.
- **Swayam MOOCs (massive open online courses)** on SWAYAM portal. Around 1.5 crore students are enrolled under Swayam MOOCs.
- **Funding support for digital initiative**: Fund allocation to states/UTs to promote online learning through digital initiatives, online teacher training etc.
- **National Repository of Open Educational Resources (NROER),** an open storehouse of e-content.
- **PRAGYATA guidelines on digital education** was developed with a focus on online/blended/ digital education.
- **MANODARPAN** initiative, for psychosocial support for strengthening and empowering the human capital to increase productivity and efficiency through reforms and initiatives in the education sector.

Skill Development

- Though **there is an improvement in the proportion of skilled people,** the level of skill acquirement remained low. **Only 2.4 per cent of the workforce of age 15-59 years** have received **formal vocational training** and another 8.9 per cent of the workforce received training through informal sources.

- **Policy Reforms under Skill Development Initiatives**
  - **Unified Skill Regulator- National Council for Vocational Education and Training**: Under this, regulatory capacity is being continuously strengthened through various standardization processes, regulatory systems, human resources.
  - **Pradhan Mantri Kaushal Vikas Yojana 3.0 (PMKVY 3.0):** Its first phase targets to skill 8 lakh candidates including migrants. Other features include, bottom-up approach for identification and mapping of job roles, vocational courses in schools. District Skill Committees will be the focal point of implementation.
  - **Quality Enhancement:** Grading of Industrial Training Institutes (ITI) to improve their quality and transparency.
  - **Integration of Vocational and Formal education both at school and higher education**: Offering vocational courses in schools and equal weightage to vocational courses for admission in undergraduate courses; 'hub-n-spoke' model being piloted in an ITI becoming a 'Hub' for providing Vocational Education and Training.

Status of Employment

- **As per PLFS,**
  - The **size of labour force in 2018-19 was estimated at about 51.8 crore** persons with 3.0 crore unemployed.
  - **Agriculture is the largest employer** with 42.5 per cent of workforce, followed by other services (13.8 per cent of workforce).
  - **Self-employment is the major source of employment** with close to 52 per cent of the workforce was self-employed, followed by regular wage/ salaried employees and casual workers.

Formal Employment

- There was a **net increase of new subscribers in Employees' Provident Fund Organisation (EPFO)** of 78.58 lakhs in 2019-20 as compared to 61.1 lakhs in 2018-19.
- **Employment reported by start-ups increased** from 1.52 lakh in January- December, 2019 to 1.75 lakh in January-December, 2020 due to increase in the number of active recognitions of start-ups from 11,694 to 14,784 in the same period.

Unemployment

- **Unemployment rates at all India level declined marginally** to 5.8 per cent in 2018-19 from 6.1 per cent in 2017-18.
- **Highest decline in unemployment rates** is seen among those who have received formal vocational training.

Labour Reforms

- Last year, **29 Central Labour laws were amalgamated, rationalized and simplified into four labour codes**:
  - Code on Wages, 2019,
  - Industrial Relations Code, 2020,
  - Occupational Safety, Health and Working Conditions Code, 2020 and
  - Code on Social Security, 2020.
- These codes **bring laws in tune with the changing labour market trends** at the same time accommodating the welfare needs of the unorganized sector workers, including the self-employed and migrant workers.

Chronology of Labour Reforms post 1991

Recommendations by various committees over the years.

- **National Commission on Rural Labour** (1991) made recommendations for specific categories of workers, definition of migrant workers to cover all migrants.
- **Report of the Task Force on Employment Opportunities** (Chairman: Dr. Montek. S. Ahluwalia-2001), recommended short term employment contracts etc.

- **Special Group on Targeting 10 million Employment Opportunities per year headed by Planning Commission Chairman** suggested **State Governments may be permitted to amend labour laws as per their requirements, Self-certification by Units and random inspection etc.**
- **Second National Commission on Labour** (Chairman- Shri Ravindra Varma- 2002) recommended to group Central labour laws into four or five broad groups.
- **National Commission for Enterprises in the Unorganized Sector** (Chairman- Dr. Arjun Sengupta-2009) recommended separate legislation for providing social security to unorganized sector workers.

Changing Nature of Work: Gig and Platform Workers

- The **nature of work has been changing** with the change in technology, evolution of new economic activities, innovation in organization structures and evolving business models.
- **Digital platforms have created massive opportunities** for the consumer and service provider to interact through innovative ways. With emergence of e-commerce and online retailing platforms such as Amazon, Flipkart, Ola, Uber etc. India has emerged as one of the **largest countries for flexi-staffing (employing temporary workers) in the world**.
- COVID-19 induced lockdown **saw increasing role of the gig economy**, with employers preferring 'Work from home' of their employees, engaging freelancers or outsourcing tasks to reduce overhead costs etc.
- The **nature of job contract for a gig worker is different** from regular employer-employee contract, as, it is usually shorter and more specific to the task; employment type might be either temporary or contractual; nature of payment is more of piece rate, negotiable; workers are flexible to decide on when to work, where to work etc.
- For the first time, **gig or platform 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.

Impact of COVID-19 on the Labour Market

- COVID-19 has **exposed the vulnerability of urban casual workers**, who account for 11.2 per cent of urban workforce, with **significant proportion of them being migrants.**
- **Limited data on inter-state migration and employment in informal sectors** made it difficult to figure the numbers of migrants who lost jobs and accommodation during the pandemic and returned home.
- Government of India has taken following initiatives for the welfare of workers during the pre-lockdown and lockdown period:
  - **Aatmanirbhar Bharat Rojgar Yojana (ABRY):** It is a component of Aatmanirbhar Bharat 3.0 which proposes to pay:
    - ✓ **Entire employees' and employers' contribution** (12 per cent each i.e., 24 per cent of wages) towards EPF in respect of new employees in establishments employing up to 1000 employees for defined period.
    - ✓ **Only employees' share of EPF contribution** (i.e., 12 per cent) of wages in respect of new employees in establishments employing more than 1000 employee, and also to re-employee who lost their jobs due to COVID-19.
  - **Pradhan Mantri Rojgar Protsahan Yojana (PMRPY):** Launched in 2016, under which Government was paying 8.33 per cent (increased to 12%) of the employer EPS contribution for all sectors in respect of new employees. Data suggest the that the formalization of the workers in eligible enterprises has improved with the incentive under the PMRPY scheme.
  - **Under Prime Minister's Garib Kalyan Package** (PMGKP) financial assistance was given to **building & other construction workers (BOCW)** from the funds collected under BOCW's cess.
  - **Shramik Special Trains**: Indian Railways operated special trains to facilitate migrant labourers/stranded passengers. These trains facilitated about 63.19 lakh migrant workers to reach their destination between 1st May 2020 to 31st August 2020.

Gender Dimension Of Employment

- Labour 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.

- While **54.7 per cent of urban women were employed in the regular wage** category, about **59.6 per cent of rural females were self-employed** and 37.9 per cent among them were helpers in household enterprises.
- Low female LFPR is attributed to **high participation of women in domestic duties**, that is 55.7 per cent in rural areas and 59.1 per cent in urban areas in 2018-19.
- As per **National Statistics Office's Time Use Survey,**
  - Time spent on employment-related activities by female members is 127 minutes lower than male.
  - **Females spent disproportionately higher time** on childcare and instruction, food, meal management as compared to males.
  - Unpaid domestic and caregiving services provided by women **are not influenced by their level of education.**
  - Women in the workforce shoulder the **responsibility of domestic activities as well as paid work,** which leaves them with less time to spend on employment related activities.
  - Time spent on **unpaid domestic and care giving services** is relatively less for females in the workforce than females who are not in the labour force.
- To **incentivise more women to join into the labour force**, investment in institutional support to affordable and quality child care facilities, paid paternal leave, family-friendly work environment, and support for elderly care needs to be made. Also, there is a need to promote non-discriminatory practices at the workplace like pay and career progression, improve work incentives, including other medical and social security benefits for female workers.

Health

- COVID-19 demonstrated the importance of investing and strengthening public health system.
- India has **made significant progress in improving its health outcomes over the last two decades** by eliminating Polio, Guinea worm disease, Yaws and maternal & neonatal Tetanus.
- India improved health indicators,
  - Total Fertility Rate has reduced from 3.6 in 1991 to 2.2 in 2018,
  - Maternal Mortality Ratio was 113 per 1,00,000 live births (2016- 2018) and
  - Under Five Mortality Rate was 36 per 1000 live births in 2018.
- COVID-19 pandemic that put to **test the health infrastructure of India**. There are more than 1 crore COVID-19 cases reported in India, with recovery of more than 95 per cent. However, the country lost around 1.52 lakh lives due to the Covid-19 pandemic.
- **Accredited Social Health Activists (ASHAs):** During the pandemic, in addition to performing tasks related to COVID-19, they continued support in accessing essential health services such as anti-natal care, immunization, safe delivery and treatment adherence for chronic illnesses. All ASHAs and ASHA facilitators were covered under PMGKP insurance scheme and their incentives were increased to Rupees 2000 per month.

Achievements in Fight Against COVID-19

- Government has **assessed and ensured the availability of the essential medicines**, hand sanitizers as well as protective equipment including masks, PPE Kits.
- **Fast-track processing of applications** for clinical trials and new drug including vaccines for COVID-19.
- **Fit Health Worker Campaign** was launched at Auyshman Bharat-Health & Wellness Centres to enable the screening and early detection of non-communicable diseases in the Frontline-Health care workers.
- **'PMGKP Insurance Scheme for Health Workers Fighting COVID-19'** was announced which provides and insurance cover of Rupees 50 lakh to healthcare providers, including community health workers, who may have to be in direct contact and care of COVID-19 patients and therefore at risk of being infected.
- **Covid-19 Vaccine:** The **world's largest COVID-19 immunization programme** commenced in January 2021 through tw**o indigenously manufactured vaccines viz; COVISHIELD and COVAXIN.**
  - Based on the **humane principle**, about 3 crore people mainly frontline health workers have been offered the vaccine in the first round, while about 30 crores including elderly and people with serious co-morbidities will be vaccinated in the second round.
  - The vaccination exercise is underpinned by the **principles of people's participation (Jan Bhagidari),** utilizing experience of elections (booth strategy) and Universal Immunization Program.
  - **Co-WIN software has been developed** for real time information of vaccine stocks, their storage temperature and individualized tracking of beneficiaries for COVID-19 vaccine.

Child health outcomes

- National Family Health Survey-5 (2019-20) ((NFHS-5) significant improvement in the institutional birth in selected States.
- **Infant mortality rate and under five mortality rates have declined** in most of the selected States in NFHS-5 compared to NFHS-4. However, **inter-State difference in mortality rates remained quite large.**
- To **address the problem of malnutrition in the country**, Anganwadi Services, Pradhan Mantri Matru Vandana Yojana and Scheme for Adolescent Girls under the Umbrella Integrated Child Development Services Scheme, PM Overarching Scheme for Holistic Nutrition (POSHAN) Abhiyan were launched.
- **AYUSH**: About 12,500 Health & Wellness Centres (HWCs) were to be set up through National AYUSH Mission.

Water And Sanitation

Swachh Bharat Mission-Grameen (SBM-G)

- Under SBM-G, rural sanitation coverage has increased from 39 per cent in 2014 to 100 per cent in 2019 with more than 10 crore toilets built.
- UNICEF study (2020), states that **91 per cent of the women reported that they have been able to save upto an hour and do not have to travel up to a kilometre for defecation** after the construction of toilets.
- Based on success of **SBM-G**, Phase-II of SBM(G) from 2020-21 to 2024-25 is being implemented focusing on Open Defecation Free (ODF) sustainability and Solid & Liquid Waste Management (SLWM) etc.
- Further, **Prime Minister Gareeb Kalyan Rozgar Abhiyaan was launched** for creating sanitary infrastructure creation in order to have better, safe hygiene and sanitary practices during COVID-19.

Jal Jeevan Mission (JJM)

- In August 2019, about 17 per cent rural households had tap water supply. **JJM aims to provide functional tap water connections (FTWC) by 2024 to remaining 83 per cent.**
- 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.
- It is a **decentralized, demand-driven and community-managed programme** with local bodies playing a key role in planning, implementation, management, operation and maintenance of water supply systems.
- About **3.2 crore of rural households have been provided with FTWC** since the launch of the Mission.

RURAL DEVELOPMENT

- Rural sector **witnessed the phenomenon of reverse migration** during the period of complete lockdown, with migrants returning home.
- Under Atma Nirbhar Package, funds were allocated to **National Social Assistance Programme, Mahatma Gandhi NREGS** etc to support rural households**.**

Key elements and remarkable achievements of MGNREGA

- **Steps to strengthen NREGA**: Electronic Fund Management System (eFMS), use of Aadhaar, Geo tagging of assets and strengthening of Social Audit System, implementation of Software for Estimate Calculation Using Rural rates for Employment (SECURE), Geographical Information System (GIS) based planning, , JanMANREGA- a mobile application system, eSaksham- a digital learning platform, and Project Unnati to upgrade the skill base of Mahatma Gandhi NREGA workers.
- **311.92 crore person-days generated in FY 2020-21** which is an all-time high. Of the total person-days, person-days for women is 52.69 per cent, SC is 19.9 per cent and ST is 17.8 per cent.
- **99 per cent of wages paid electronically into the accounts** of the NREGS workers during 2020-21 as against 37.17 per cent during 2013-14.
- Around **61 per cent of total works taken up during FY 2020-21 pertain to individual beneficiary schemes** and 68.37 per cent of the total expenditure is on agriculture and allied works.

Other Initiatives for Rural Development

Deen Dayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM)	Pradhan Mantri Gram Sadak Yojana (PMGSY)	Garib Kalyan Rojgar Abhiyan (GKRA)
• It 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, entitlements and services from both public and private sectors.	• It was launched in 2000 with the objective to **provide single all-weather road connectivity to all eligible unconnected habitations** of the designated population in rural areas of country.	• It was **launched in 2020 with major objectives** of provision of livelihood opportunities to returning migrants and similarly affected rural citizens, saturate villages with public infrastructure viz. roads, housing, anganwadis, panchayat bhavans, various livelihood assets and community complexes etc.
• Upto December 2020 **about 7.26 crore households have been mobilized** into 66.03 lakh SHGs under the mission and SHGs have been provided more than Rupees 12,195 crore cumulatively. • It has been **instrumental in providing the last mile delivery of financial services** in remote rural areas through deployment of **SHG Women as Banking Correspondent Sakhi.**	• More than **6.44 lakh km road length** has been constructed so far under the Scheme.	• Under this, 1.5 lakh Water conservation structures, 4.5 lakh rural houses, 3500 anganwadi centres, 70,000 Plantations etc. were created.

Conclusion

Investment in social infrastructure played a crucial role in India's economic growth. In spite of COVID-19 pandemic, public spending on social sector has increased in 2020-21 and India's progress towards vibrant economy is deep-seated in investing in social capital.

CHAPTER AT A GLANCE
• Combined (Centre and States) social sector expenditure as per cent of GDP has increased in 2020-21 compared to last year.
• Online schooling took off in a big way during the COVID-19 pandemic. Innovative measures were adopted to bring all strata of the society under the medium of online/digital schooling.
• Formal skill training showed an improvement over the annual cycle of PLFS.
• Year 2018-19 was witnessed as a good year for employment generation. About 1.64 crore additional employment created during this period.
• Government has given incentive to boost employment under the scheme Atmanirbhar Bharat Rojgar Yojana. Existing Central labour laws have been rationalized and simplified into four Labour Codes.
• In the fight against COVID-19, India acquired self-reliance in essential medicines, hand sanitizers, protective equipment. World's largest COVID-19 immunization program commenced in India through two indigenously manufactured vaccines.
• A total of 311.92 crore person-days was generated under MGNREGA.

CHAPTER 10

Testing your remembering skills & Understanding skills

Q1. With reference to Samagra Shiksha programme, which of the following statements is not correct?

(a) It is an overarching programme for the school education sector extending from preschool to class 10th.
(b) It aims to digitize education through smart classrooms and ICT infrastructure.
(c) It seeks to upgrade Kasturba Gandhi Balika Vidyalayas (KGBVs) from Class 6-8 to Class 6-12.
(d) It focuses on capacity building of teachers and school heads.

Q2. Which of the following are the key provisions of the National Education Policy (2020)?

1. Universalization of education from pre-school to secondary level by 2030.
2. Teaching up to at least Grade 5 to be in mother tongue/regional language, wherever possible.
3. Current 10+2 system to be replaced by a new 7+3+4 curricular structure.

Select the correct answer using the code given below.

(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Q3. Which of the following initiatives of the government facilitated online education for school students during the lockdown in 2020?

1. MANODARPAN
2. PM eVIDYA
3. Swayam MOOCs

Select the correct answer using the code given below.

(a) 1 only
(b) 2 and 3 only
(c) 2 only
(d) 1, 2 and 3

Q4. With reference to Skill development in India, consider the following statements:

1. Only 2.4 per cent of the workforce of age 15-59 years have received formal vocational training in India.
2. Services sector is the largest employer with 42.5 per cent of workforce.
3. Majority of the workforce is comprised of salaried employees and professionals.

Which of the statements given above is/are correct?

(a) 1 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Self-Assessment: To practice Question for Answer Writing skills

Q1. 'Discuss the impact of the COVID-19 pandemic on school education in India and state the measures initiated for school going students to give a push to digital education during the pandemic.

Q2. In an era of rapidly changing work structure and organisation, discuss how the nature of job contract for a gig worker is different from the contract between an employer and employee/worker. In this context, discuss the challenges with regard to providing social security benefits for gig workers.

Q3. Give an overview of programmes and initiatives for school going students undertaken by the Government of India during COVID-19.

Q4. Discuss the key features of the Jal Jeevan Mission and its progress. How is it playing a role in empowering women?

ANSWER KEY

Chapter 1

Q1	Q2	Q3	Q4	Q5
d	c	b	d	b

Chapter 2

Q1	Q2	Q3	Q4
a	c	b	c

Chapter 3

Q1	Q2	Q3	Q4
a	a	d	b

Chapter 4

Q1	Q2	Q3	Q4
a	d	c	d

Chapter 5

Q1	Q2	Q3	Q4
d	a	a	c

Chapter 6

Q1	Q2	Q3	Q4	Q5	Q6	Q7
a	b	c	d	a	d	a

Chapter 7

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
b	b	c	c	b	a	c	a

Chapter 8

Q1	Q2	Q3	Q4	Q5
d	a	c	c	a

Chapter 9

Q1	Q2	Q3	Q4	Q5
b	b	d	c	c

Chapter 10

Q1	Q2	Q3	Q4
a	a	d	a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