



# ECONOMIC SURVEY 2021-22



[www.visionias.in](http://www.visionias.in)



8468022022 , 9019066066

Delhi | Jaipur | Ahmedabad | Hyderabad | Pune | Lucknow | Chandigarh | Guwahati

# ECONOMIC SURVEY SUMMARY 2021-22

## Table of Contents

<b>CHAPTER 1: STATE OF THE ECONOMY</b>	<b>2</b>
<b>CHAPTER 2: FISCAL DEVELOPMENTS</b>	<b>14</b>
<b>CHAPTER 3: EXTERNAL SECTOR</b>	<b>24</b>
<b>CHAPTER 4: MONETARY MANAGEMENT AND FISCAL INTERMEDIATION</b>	<b>32</b>
<b>CHAPTER 5: PRICES AND INFLATION</b>	<b>42</b>
<b>CHAPTER 6: SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE</b>	<b>48</b>
<b>CHAPTER 7: AGRICULTURE &amp; FOOD MANAGEMENT</b>	<b>59</b>
<b>CHAPTER 8: INDUSTRY AND INFRASTRUCTURE</b>	<b>71</b>
<b>CHAPTER 9: SERVICES</b>	<b>80</b>
<b>CHAPTER 10: SOCIAL INFRASTRUCTURE AND EMPLOYMENT</b>	<b>85</b>
<b>CHAPTER 11: TRACKING DEVELOPMENT THROUGH SATELLITE IMAGES &amp; CARTOGRAPHY</b>	<b>94</b>

**Note:** To enhance the learnings and understanding from each chapter, a Quiz has been added at the end of the chapters. The answers to the MCQs are given at the end.

**Copyright © by Vision IAS**

All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Vision IAS.

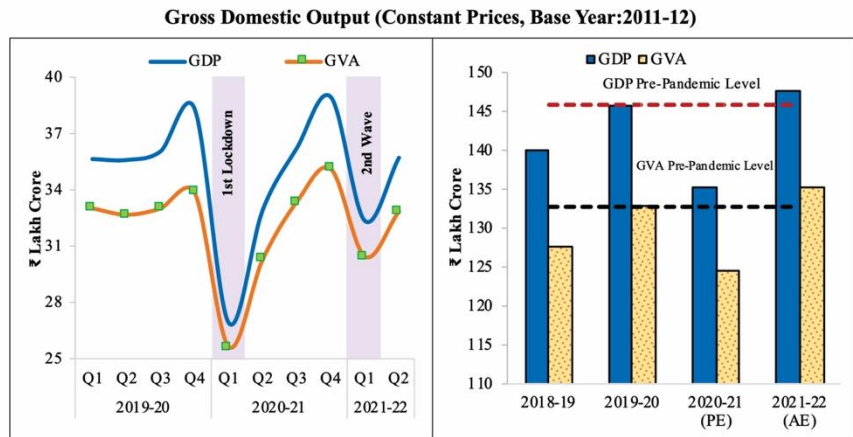
# CHAPTER 1: STATE OF THE ECONOMY

## Introduction

Two years into the COVID-19 pandemic, the global economy continues to be plagued by uncertainty, with **resurgent waves of mutant variants, supply-chain disruptions, and a return of inflation** in both advanced and emerging economies.

In this context, it is important to evaluate both the pace of growth revival, strength of macro-economic stability indicators and also progress in vaccination as this is not just a health response but also a buffer against economic disruptions caused by repeated waves of the pandemic.

### Economy recovers past Pre-Pandemic levels



Source: National Accounts Statistics (NSO), MoSPI

Indian economy, as seen in quarterly estimates of GDP, has been **staging a sustained recovery since the second half of 2020-21**. The economic impact of the second wave of the pandemic in April- June 2021 was muted compared to the national lockdown of the previous year. Advance estimates suggest that **GDP will record an expansion of 9.2 per cent in 2021-22**.

### Share of Sectors in Nominal GVA (per cent)

Sectors	2019-20 (1st RE)	2020-21 (PE)	2021-22 (1st AE)
<b>Agriculture &amp; Allied Sectors</b>	<b>18.4</b>	<b>20.2</b>	<b>18.8</b>
<b>Industry</b>	<b>26.7</b>	<b>25.9</b>	<b>28.2</b>
Mining & quarrying	1.9	1.6	2.3
Manufacturing	14.7	14.4	15.4
Electricity, gas, water supply & other utility services	2.6	2.7	2.5
Construction	7.4	7.2	8.0
<b>Services</b>	<b>55.0</b>	<b>53.9</b>	<b>53.0</b>
Trade, hotels, transport, communication and services related to broadcasting	18.9	16.4	16.9
Financial, real estate & professional services	21.2	22.1	20.9
Public administration, defence and Other Services	14.9	15.4	15.2
<b>GVA at basic price</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

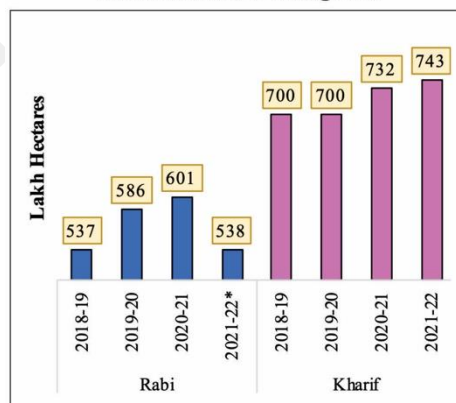
Source: NSO  
Note: RE: Revised Estimates, PE: Provisional Estimates, AE: Advance Estimates

### Sectoral Trends

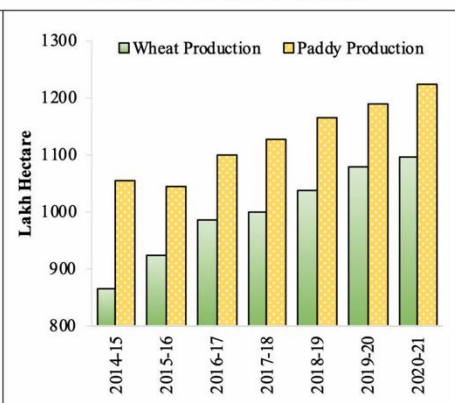
- Agriculture:**

- **Agricultural sector was the least impacted** by the pandemic-related disruptions.
- It is estimated to grow **3.9% in 2021-22** on top of 3.6% and 4.3% respectively in the previous two years.
- This sector **accounts for 18.8% of gross value added (GVA)**.

#### Area Sown under Foodgrains



#### Production of Wheat and Rice



Source: M/o Agriculture & Farmers Welfare; \*till 31st December 2021

- Area sown in the Kharif cycle of 2021-22 was again higher than in the previous year.
- ✓ In the current year, food grains production for the Kharif season is estimated to post a record level of 150.5 million tonnes.

- ✓ It was also **helped by good monsoon rains** as reflected in reservoir levels being higher than the 10-year average.

- **Industry**
  - Industrial sector went through a big swing by **first contracting by 7% in 2020-21** and then **expanding by 11.8%** in this financial year.
  - Manufacturing, construction and mining sub-sectors went through the same swing. The **share of industry in GVA is now estimated at 28.2%**.
  - Since January 2021, **Purchasing Managers' Index-Manufacturing has remained in the expansionary zone (i.e., over 50) except for one month** when the second wave had slowed down economic activity.
  - **Index of Industrial Production (IIP) and Core Industry indices have both followed a similar pattern** and, in November 2021, went past their pre-pandemic level for the corresponding month in 2019.
  - **Rising capital expenditure** by government on infrastructure an uptick in housing cycle have been responsible for reviving the construction sector.
    - ✓ This has allowed consumption and production of steel and cement to revert to pre-COVID levels.
- **Services**
  - **Services account for more than half of the Indian economy** and was the most impacted by the COVID-19 related restrictions.
  - The overall sector **contracted by 8.4% in 2020-21** and is **estimated to grow by 8.2% in 2021-22**. However, there is a **wide dispersion of performance by different sub-sectors**.
    - ✓ **While** Finance/Real Estate and Public Administration segments are now well above pre-COVID levels, segments like Travel, Trade and Hotels are yet to fully recover due to **stop-start nature of repeated pandemic waves**.
  - There has been a **strong recovery of the Purchasing Managers' Index-Services** since August 2021. **Google mobility indicators** for retail and recreation (i.e., restaurants, cafes, shopping centres, etc.) and transit stations (public transport hubs such as subway, bus, and train stations), hotel occupancy show similar recovery.
  - In contrast to contact-based services, **distance-enabled services have increased their share** with the growing preference for remote interfaces for office work, education, and even medical services. Thus, there has been a **boom in software and IT-enabled services exports**.

**Demand Trends**

**Annual Real growth in demand side of GDP and its components (per cent)**

- Latest advance estimates suggest **full recovery of all components on the demand side** in 2021-22 except for private consumption. Recovery is most significant in exports, government consumption, gross fixed capital formation and in imports.

Components	2019-20 (1st RE)	2020-21 (PE)	2021-22 (1st AE)	Recovery over 2019-20
Total Consumption	5.9	-7.3	7.0	99.2
Government Consumption	7.9	2.9	7.6	110.7
Private Consumption	5.5	-9.1	6.9	97.1
Gross Fixed Capital Formation	5.4	-10.8	15.0	102.6
Exports	-3.3	-4.7	16.5	111.1
Imports	-0.8	-13.6	29.4	111.8
<b>GDP</b>	<b>4.0</b>	<b>-7.3</b>	<b>9.2</b>	<b>101.3</b>

Source: NSO  
 Note: RE - Revised Estimates, PE - Provisional Estimates, AE - Advance Estimates

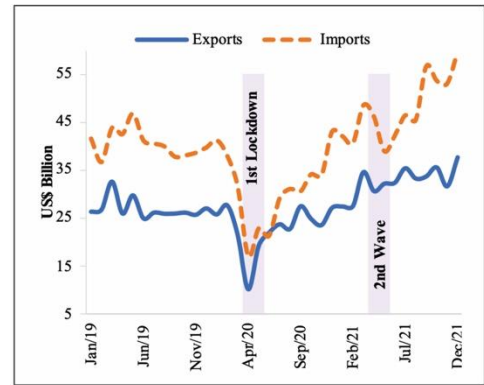
**Consumption**

- **Total consumption is estimated to have grown by 7%** in 2021-22 with government consumption remaining the biggest contributor.
  - Government consumption is estimated to grow by a strong 7.6% surpassing pre-pandemic levels.
  - Private consumption is also estimated to have improved significantly to recover 97% of corresponding pre-pandemic output level.
- Private consumption is poised to see **stronger recovery with rapid coverage in vaccination and faster normalisation of economic activity**.
- Recent dip in vehicle registrations reflects **persistent supply-side constraints** owing to the **shortage of semi-conductor chips** rather than lack of consumption demand.

### Investment

- Investment, as measured by Gross Fixed Capital Formation (GFCF) is expected to see strong **growth of 15% in 2021-22** and achieve full recovery of pre-pandemic level. Increased government capex and infrastructure spending has lifted **investment to GDP ratio to about 29.6 per cent in 2021-22, highest in seven years.**
- While **private investment** recovery is still at a nascent stage, there are many signals which indicate that India is poised for stronger investment. A **sturdy and cleaned-up banking sector** stands ready to support private investment adequately.

### Foreign Trade

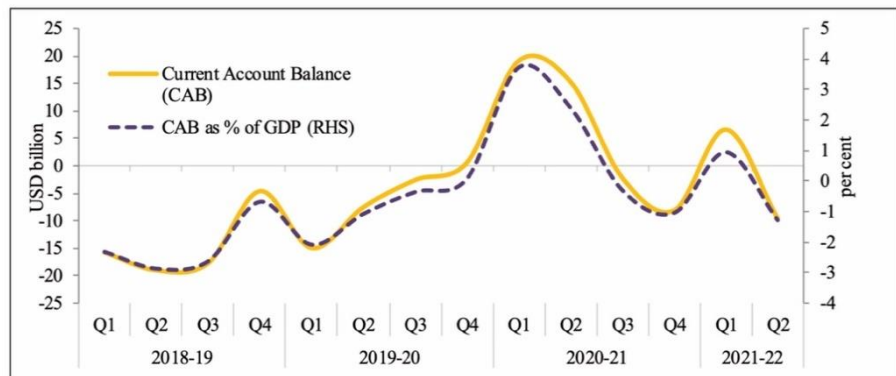


Source: Ministry of Commerce

### Exports and Imports

- India's **total exports are expected to grow by 16.5 per cent in 2021-22** and **Imports are expected to grow by 29.4 per cent in 2021-22**, both surpassing pre-pandemic levels.
- India's **net exports have turned negative in the first half of 2021-22**, compared to a surplus in the corresponding period of 2020-21 with current account recording a modest deficit of 0.2 per cent of GDP in the first half.

### India's Current Account Balance



Source: RBI

- Elevated **global commodity prices, higher domestic demand and growing uncertainty surrounding capital inflows** may widen current account deficit further during the second half of the year.






### Barbell Strategy, Safety Nets & Agile Response

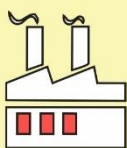

- Faced with uncertainty in the last two years with repeated waves from a mutating virus, Government of India opted for a **“Barbell Strategy” that combined a bouquet of safety-nets** to cushion the impact on vulnerable sections of society/business, with a **flexible policy response based on a Bayesian updating of information.**
- This is a **common strategy used in financial markets to deal with extreme uncertainty** by combining two seemingly disparate legs.
- The **iterative leg of this strategy is the same as the “Agile” approach** that uses feedback-loops, and real-time adjustment.
  - Feedback-loop based policy-making** is particularly effective at a time when we have wealth of real-time data. Over the last two years, Government leveraged a host of High Frequency Indicators (HFIs) which includes GST collections, power consumption, mobility indicators, digital payments, cargo movements, highway toll collections to tailor responses.
  - In an uncertain environment, the Agile framework responds by **assessing outcomes in short iterations and constantly adjusting incrementally.** This is **different from “Waterfall” framework** which has been the conventional method for framing policy in India and most of the world.
    - ✓ The Waterfall approach entails a **detailed, initial assessment of the problem followed by a rigid up-front plan for implementation.** This methodology works on the premise that all requirements can be understood at the beginning and therefore pre-commits to a certain path of action. This is the thinking reflected in five-year economic plans, and rigid urban master-plans.
- Flexibility of Agile improves responsiveness and aids evolution, but it does not attempt to predict future outcomes. Thus, **other leg of the Barbell strategy cushions for unpredictable negative outcomes** by providing safety nets. This explains Government's initial measures in 2020-21 like making food available to the poor, providing emergency liquidity support for MSMEs etc.

### Safety Nets used to Cushion Vulnerable Sections

- Recognising extreme **uncertainty associated with a ‘once-in-a-century’ pandemic**, Government opted for a careful mix of emergency support and economic policy actions to provide a cushion against pandemic induced shocks.
- In early 2020, when the first wave of the pandemic was making its way around the world, the Government focused on **saving lives through emergency policy actions** like imposition of a stringent lockdown, testing.
- Recognising that lockdowns and quarantines disrupt economic activity. government quickly put in place **economic safety nets** (see table). This was combined with a rapid ramp-up of the vaccination programme.

## Key Safety Net Measures to Prevent Distress during COVID-19

Basis	Safety Measures
 <b>Cash Transfers</b>	Rs 500/month for 3 months to women Jan Dhan Account holders
	Rs 1000 to vulnerable sections (widows, Divyangs, elderly)
	<b>Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)</b> - Rs 6000/- per year in three instalments
 <b>Food Security</b>	<b>Pradhan Mantri Garib Kalyan Anna Yojana</b> - Additional free-of-cost food grains to 80 Crore National Food Security Act (NFSA) beneficiaries @ 5 Kg per person per month, over and above the regular monthly NFSA foodgrains
	<b>One Nation One Ration Card</b> to ensure PDS benefit for people in transit, especially migrant workers.
	Cooking gas cylinders under <b>Ujjawala</b>
 <b>Employment</b>	<b>Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)</b>
	<b>MGNREGS</b> wage increased by `20 over the wage rate of 2019-20
	Contribution of 12 per cent employer and 12 per cent employee’s share under <b>Employees Provident Fund (EPF)</b> for 6 months for establishments with upto 100 employees with 90 per cent earning less than Rs 15000/-
	<b>Aatmanirbhar Bharat Rojgar Yojana (ABRY)</b> to reduce the financial burden of the employers and encourages them to hire more workers, implemented by EPFO
 <b>Housing</b>	<b>Pradhan Mantri Awas Yojana – Gramin (PMAY-G)</b>
	<b>Pradhan Mantri Awas Yojana – Urban (PMAY-U)</b>
 <b>Skill Development</b>	<b>Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)</b> and <b>Rural Self Employment Training Institutes (RSETIs)</b> - skill development programmes for rural poor youth
	Fresh skilling and upskilling of the returnee migrant workers under <b>Pradhan Mantri Kaushal Vikas Yojana (PMKVY)</b> covering 6 states

 <b>MSMEs</b>	6-month <b>moratorium and deferment of interest for all term loans</b> by RBI
	<b>Restructuring of MSME default loans</b> – Aug 2020 and May 2021 Schemes of RBI
	<b>Emergency Credit Line Guarantee Scheme</b>
	<b>Credit Guarantee Scheme (CGS)</b> for MSMEs
 <b>Credit</b>	<b>Suspension of initiation of corporate insolvency process</b> under Insolvency and Bankruptcy Code for 1 year, and increasing minimum threshold from rs 1 lakh to 1 crore
	<b>Term Liquidity Facility</b> of Rs 50,000 crore for Emergency Health Services by RBI
	<b>Credit Guarantee Scheme to Micro Finance Institutions (MFIs)</b> for on-lending
	Rs 45,000 crore Partial Credit Guarantee Scheme 2.0 for NBFCs, HFCs and MFIs for fresh lending to MSMEs & individuals
	Special Long Term Repo Operations for Small Finance Banks
	Lending by Small Finance Banks (SFBs) to MFIs for on-lending to be classified as priority sector lending
	Rs 30,000 crore <b>Additional Emergency Working Capital Funding</b> for farmers through NABARD
	<b>Nationwide Credit Outreach</b> Programme
	<b>Kisan Credit Cards</b> Special Drive- Rs 2 lakh crore Concessional credit boost to 2.5 crore farmers
	<b>PM SVANidhi Scheme</b>
	<b>Self-Help groups (SHGs)</b>
	<b>Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM)</b>
	Rs 30,000 crore Special Liquidity Scheme for NBFCs/HFCs/MFIs
Rs 1.1 lakh crore loan guarantee scheme for COVID affected sectors – health infrastructure, tourism, etc	

### Monetary and Financial Support

- Monetary Policy Committee (MPC) cut the policy repo rate by 115 basis points (bps) during February to May 2020, on top of a reduction of 135 bps in the preceding twelve months. Since then, **MPC has maintained status quo** on the policy repo rate keeping it unchanged at 4 per cent. **Marginal Standing Facility rate and the bank rate have also remained unchanged** at 4.25 per cent and so has the reverse repo rate at 3.35 per cent.

### High Frequency Indicators (HFIs)

- In the last two years, Government leveraged **an array of eighty HFIs representing industry, services, global trends, macro-stability indicators** to gauge underlying state of the economy on a real-time basis. These include electricity generation, scheduled domestic flights, volume/value of financial transactions, capital flows, etc.
- While HFIs have **advantage of being real-time and frequent**, they need to be used with care as each indicator provides a partial view of developments. Moreover, the **noise-to-signal ratio can be higher**

than for national accounts and other slower moving data. Thus, using HFIs for gauging trends in the economy is as much an art as a science.

### Vaccination

- Vaccination has played a **critical role in minimizing loss of lives**, boosting confidence in the economy towards resumption of activity and containing the sequential decline in output due to second wave.

### Macroeconomic Stability

- This section **analyses macroeconomic stability indicators** on all fronts- external sector, fiscal indicators, financial sector and inflation.

### External sector

- India's **balance of payments remained in surplus throughout the last two years**. This allowed **accumulation of foreign exchange reserves**, which stands at US\$634 billion on 31st December 2021. This is equivalent to 13.2 months of imports and **higher than country's external debt**. As of end-November 2021, India was the **fourth largest foreign exchange reserves holder in the world after China, Japan, and Switzerland**.

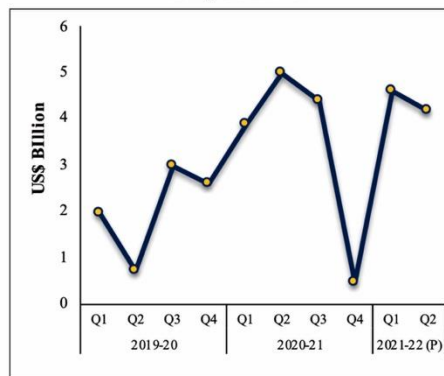
Comparison of Macroeconomic Indicators during Global Financial Crisis, Taper Tantrum and COVID-19

Macroeconomic Indicators	Global Financial Crisis	Taper Tantrum	COVID-19 Pandemic	
	2008-09	2012-13	2021-22	
CPI inflation	9.1	9.4	5.2	Apr-Dec 2021
India's Gross Fiscal Deficit as % of GDP	8.3	6.9	10.2	2021-22 (BE)
Fiscal Deficit of EMDEs (Asia) as % of GDP	1.6	1.7	7.8	2021
Current Account Balance as % of GDP	-2.3	-4.8	-0.2	Apr-Sept 2021
External Debt as % of GDP	20.7	22.4	20.2	June 2021
Forex Reserves (US\$ billion)	252	292	634	31 <sup>st</sup> Dec 2021
Govt Bond Yields 10-year	7.3	8.0	6.4	11 <sup>th</sup> Jan 2022
Total FDI inflows (US\$ billion)	8.3	34.0	48.4	Apr-Oct 2021
SCBs Capital to Risk Weighted Assets Ratio (CRAR)	13.2	13.9	16.5	Sept 2021
SCBs Provision Coverage Ratio	-	47.6	68.1	Sept 2021

Source: NSO, MoSPI, RBI, CGA, CDSL, Ministry of Finance, IMF.

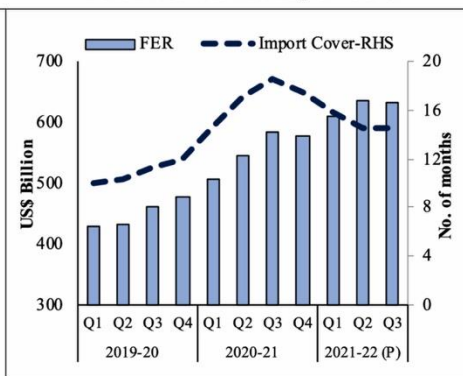
Note: The taper tantrum happened in 2013. In the table above, 2012-13 is used to show the position just prior to taper tantrum as this is analogous to the present situation prior to withdrawal of liquidity in financial markets.

Surplus in BoP

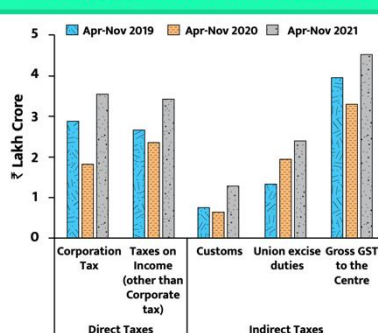


Source: RBI

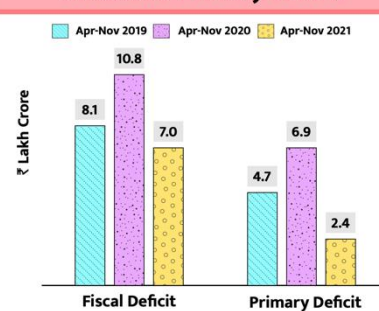
Forex reserves and Import Cover



Direct and indirect tax revenue



Fiscal and Primary Deficit



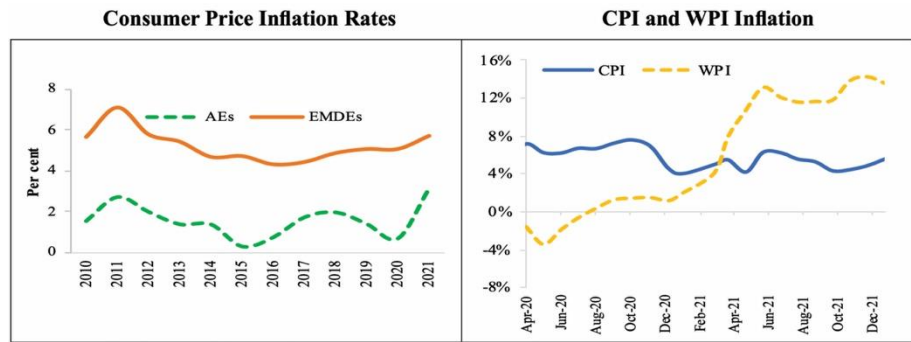
- India's **salient external sector sustainability indicators are strong and much improved** as compared to what they were during the global financial crisis or taper episode of 2013.
  - Federal Reserve embarked on a programme of **asset purchases under the Quantitative Easing (QE)**, as part of a **broader policy response to the Global Financial Crisis in 2007-08**.
  - As the US economy gained traction, **in an attempt to unwind the QE, on May 22, 2013, the Fed announced the intent to start tapering asset purchases at a future date, which triggered a tantrum in the form of spike in bond yields and resulted in disruptions on the external front for India as well.**



- The combination of **high foreign exchange reserves, sustained foreign direct investment, and rising export earnings will provide an adequate buffer against possible global liquidity tapering in 2022-23.**

**Fiscal Balance**

- Though there was **rise in fiscal deficit and government debt in 2020-21**, there has been a strong rebound in government revenues in 2021-22 so far.
- Also, **fiscal deficit for April-November 2021 has been contained at 46.2 per cent of Budget Estimates (BE)** which is nearly one third of the proportion reached during the same period of the previous two years.



Source: World Economic Outlook, January 2022 Update, IMF; Source: MoSPI, DPIIT

**Financial Sector**

- Among major emerging market economies, **Indian markets outperformed its peers** in April-December 2021. 89,066 crore was raised via 75 IPO issues in April- November 2021, much **higher than in any year in the last decade.**
- Banking system is well capitalized **Gross Non-Performing Advances (GNPA) and Net Non-Performing (NNPA) ratio of Scheduled Commercial Banks (SCBs) continued to decline** since 2018-19.
  - **GNPA ratio** of SCBs decreased from 7.5% at end-September 2020 to 6.9% at end-September 2021.
  - **NNPA ratio** of SCBs also declined from 6% at end of 2017-18 to 2.2% at end-September 2021.
  - **Capital to risk-weighted asset ratio (CRAR)** of SCBs increased from 15.84% at end- September 2020 to 16.54% at end-September 2021.

**Inflation**

- In India, **Consumer Price Index (CPI) inflation moderated to 5.2%** in 2021-22 (April-December) from 6.6% in the corresponding period of 2020-21.
- Wholesale Price Inflation (WPI), however, has been running in double-digits. **Inflation in ‘fuel and power’ group of WPI was above 20%** reflecting higher international petroleum prices.

**Global Supply-Side Disruption**  
As the world economy recovered in 2021, it is faced with serious supply-side constraints ranging from delivery delays, container shortages and semiconductor chip shortages.

**Shipping Container Shortage and Rising Trade Costs**

- Lack of containers has resulted in rising sea freight rates in the range of 300 per cent to 350 percent.
- Further, **production of the new containers has slowed since 2019, rise in the disposal of containers has also been observed.** Thus, Unless the production is ramped up significantly across the globe, this will remain a persistent problem.

**Semiconductors industry spillover in the automobile industry**

- As per report supply chain disruptions in the semiconductor industry have **spillovers in over 169 industries.**
- Manufacturing of semiconductors requires large amount of capital and has an **average gestation period of 6-9 months and long production cycle of about 18-20 weeks.** Hence, any recovery from the supply chain disruptions will be a slow and costly affair.
- Microchips and semiconductors account for about 4.7 per cent of value added by the automotive industry. With the delay in supply, the **average lead time in the automobile industry for 2021 has been around 14 weeks globally.**

**Supply Side Reforms**

- Supply-side reforms include **deregulation of numerous sectors, simplification of processes, removal of legacy issues like ‘retrospective tax’,** privatisation, production-linked incentives etc.
- Important emphasis is on **‘process reforms’ which is different from deregulation.** While deregulation relates to reducing or removing the role of government from a particular activity, **process reforms**

**broadly relate to simplification and smoothening of the process** for activities where the government’s presence as a facilitator or regulator is necessary.

- Emphasis **given to the supply-side** in India’s COVID-19 response is driven by **two important considerations**. **First**, disruptions caused by travel restrictions, lockdowns and supply-chain breakdowns as an interruption of the economy’s supply-side. **Second**, post-Covid world will be impacted by a wide variety of factors – changes in technology, consumer behaviour, geo-politics, supply-chains, climate change and so on.
- There are two common themes in India’s supply-side strategy.
  - **Reforms that improve flexibility and innovation** in order to deal with the long-term unpredictability of the post-Covid world like factor market reforms (e.g. deregulation of sectors like space, drones)
  - **Reforms aimed at improving the resilience of the Indian economy**. These range from climate/environment related policies; social infrastructure such as public provision of tap water, toilets, basic housing etc.
- The two pronged approach of “flexibility” and “resilience” is **analogous to the Barbell strategy** used for the short-term response to the pandemic.

#### Key supply side measures/reforms

Sectors	Measures/Reforms
Industry	<ul style="list-style-type: none"> <li>• Production Linked Incentive Scheme approved for 13 sectors like Automobiles and auto components, Pharmaceutical drugs etc.</li> <li>• Retrospective tax repealed to promote tax certainty and foreign investment.</li> </ul>
Business Process Outsourcing (BPO) sector	<p><b>Liberalized guidelines for Other Service Providers (OSPs)</b></p> <ul style="list-style-type: none"> <li>• <b>Clear definition of OSP</b>: The applicability of new guidelines is limited to entities that provide ‘Voice based BPO services’ to its customers.</li> <li>• <b>Removal of registration requirement</b> for OSP centres in India.</li> <li>• <b>No bank guarantee required</b> for any facility or dispensation under these guidelines.</li> <li>• Distinction between Domestic and International OSPs removed.</li> <li>• <b>Work from home</b> and remote locations allowed.</li> <li>• <b>Interconnection between two or more OSP centres</b> of the same or unrelated company is now permitted.</li> <li>• <b>Infrastructure sharing</b> among OSPs is now allowed.</li> </ul>
Telecom	<p><b>Structural reforms</b></p> <ul style="list-style-type: none"> <li>• <b>Rationalization of Adjusted Gross Revenue</b>: Non-telecom revenue will be excluded from the definition of Adjusted Gross Revenue.</li> <li>• <b>Bank Guarantees rationalized</b>: Huge reduction in Bank Guarantee requirements against License Fee and other similar levies.</li> <li>• <b>Interest rates rationalized</b> and penalties from delayed payments of License Fee or Spectrum Usage Charge (SUC) removed.</li> <li>• <b>100 per cent FDI under automatic route</b> permitted in telecom sector.</li> <li>• <b>No Spectrum Usage Charge (SUC)</b> for spectrum acquired in future spectrum auctions.</li> <li>• <b>Spectrum sharing encouraged</b>.</li> </ul> <p><b>Process Reforms</b></p> <ul style="list-style-type: none"> <li>• Requirement of <b>customs clearance for import of wireless equipment removed</b> and replaced with self-declaration.</li> <li>• Standing Advisory Committee on Radio Frequency Allocation clearance process for installing towers shall be through self-declaration/ automated time-bound approvals on <b>Saral Sanchar portal</b> of Department of Telecom.</li> <li>• <b>Self-KYC</b> permitted</li> <li>• Paper Customer Acquisition Forms will be replaced by <b>digital storage of data</b>.</li> <li>• <b>Auction calendar fixed</b>: Spectrum auctions to be normally held in the last quarter of every financial year.</li> <li>• Measures were undertaken to <b>address liquidity requirement of telecom service providers</b> including moratorium/ deferment on payments of dues etc.</li> </ul>

<b>Public procurement policy</b>	<p><b>New guidelines for procurement and project management were announced in October 2021</b></p> <ul style="list-style-type: none"> <li>• <b>Quality-cum-Cost Based Selection for the selection of bidders</b> for works and non-consultancy services allowed as well.</li> <li>• <b>Stringent deadlines for making payments:</b> Timely release of payments of 75 per cent or more of bills raised within 10 working days of the submission of the bill. The remaining bill payment is to be made after final checking within 28 working days.</li> <li>• <b>Arbitration and dispute resolution:</b> Procuring authorities to set a special committee to review the case before filing an appeal against any order. <ul style="list-style-type: none"> <li>○ Government has allowed for <b>release of 75 per cent of the amount to contractors against a bank guarantee</b> in cases where a procuring agency has challenged an arbitral award.</li> </ul> </li> </ul>
<b>Aviation</b>	<ul style="list-style-type: none"> <li>• <b>Drone Rules</b> (announced in August 2021)</li> </ul>
<b>Financial sector</b>	<p><b>Banking: Reforms in Deposit Insurance</b></p> <ul style="list-style-type: none"> <li>• <b>Increase in deposit insurance</b> from Rs 1 lakh to Rs 5 lakh per depositor per bank. This led to 98.1 per cent of the total number of accounts being fully protected and 50.9 per cent of total deposits being insured at end-March 2021.</li> <li>• <b>Introduced interim payments:</b> To be made by Deposit Insurance and Credit Guarantee Corporation (DICGC) to depositors of those banks for whom any restrictions/ moratorium have been imposed by RBI.</li> <li>• <b>Timeline of maximum of 90 days</b> has been fixed for providing interim payment to depositors.</li> <li>• <b>Expansion in the factoring ecosystem:</b> The earlier condition of NBFCs whose principal business was factoring has been removed and now <b>all NBFCs are permitted to undertake factoring business.</b></li> </ul>
<b>Micro Small &amp; Medium Enterprises (MSMEs)</b>	<ul style="list-style-type: none"> <li>• <b>Revised definition of MSMEs:</b> <ul style="list-style-type: none"> <li>○ Removal of distinction between manufacturing and service MSMEs.</li> <li>○ Upward revised definition of MSMEs in industry and service sector.</li> </ul> </li> <li>• <b>Simplified registration process</b> for MSMEs.</li> <li>• <b>Increasing market access to micro and small industries (MSEs)</b> under public procurement policy. <ul style="list-style-type: none"> <li>○ All Central Ministries, Government Departments and CPSEs are required to <b>procure 25 per cent of their annual requirements</b> of goods and services from MSEs.</li> <li>○ No global tenders for procurement up to ` 200 crores.</li> </ul> </li> </ul>
<b>Space &amp; Geospatial sector</b>	<ul style="list-style-type: none"> <li>• <b>Increased private sector</b> participation.</li> <li>• <b>Guidelines for the creation, acquisition and use of geospatial data</b>, including maps have been liberalised. <ul style="list-style-type: none"> <li>○ <b>Introduction of self-certification regime</b>, as opposed to obtaining prior approval.</li> <li>○ <b>Relaxation of restricted areas:</b> Mapping activities are prohibited only for specific attributes of highly sensitive locations.</li> <li>○ <b>Relaxation on export restrictions:</b> Guidelines permit export of maps with resolutions up to a 1:100 resolution (previous threshold of 1:250000.)</li> <li>○ <b>Open access to publicly funded data:</b> All geospatial data produced using public funds, to be freely accessible to all Indian entities.</li> </ul> </li> </ul>
<b>Disinvestment</b>	<ul style="list-style-type: none"> <li>• <b>New Public Sector Enterprise Policy and Asset Monetisation Strategy.</b> <ul style="list-style-type: none"> <li>○ <b>New policy is for strategic disinvestment</b> of public sector enterprises.</li> <li>○ <b>Public sector commercial enterprises</b> are classified as Strategic and Non- Strategic sectors, with the policy of privatisation in non-strategic sectors and bare minimum presence even in strategic sectors.</li> <li>○ <b>Identified strategic sectors</b> are: (i) Atomic Energy, Space &amp; Defense; (ii) Transport &amp; Telecommunication; (iii) Power, Petroleum, Coal &amp; other minerals; and (iv) Banking, Insurance &amp; Financial Services.</li> <li>○ Privatization of Air India.</li> </ul> </li> <li>• <b>National Monetisation Pipeline</b> <ul style="list-style-type: none"> <li>○ <b>Aggregate monetisation potential</b> of Rs 6 lakh crore through core assets of the Central Government over a four-year period from 2021-22 to 2024-25.</li> <li>○ <b>Top 5 sectors including</b> roads, railways, power, oil &amp; gas pipelines and telecom account for around 83 per cent of the aggregate value.</li> </ul> </li> </ul>
<b>Labour Reforms</b>	Central Government notified <b>four labour codes</b>
<b>Defence</b>	<ul style="list-style-type: none"> <li>• <b>Corporatisation of Ordnance Factory Board (OFB)</b> approved and 7 new Defence Public Sector Undertakings created.</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>FDI enhanced in Defence sector</b> up to 74 per cent through the automatic route and up to 100 per cent by government route</li> </ul>
--	--

### Growth Outlook

- Indian economy is estimated to **grow by 9.2 per cent in real terms** in 2021-22, after a **contraction of 7.3 per cent in 2020-21**. Growth in 2022-23 will be supported by widespread vaccine coverage, supply-side reforms and easing of regulations, robust export growth, and availability of fiscal space to ramp up capital spending and is projected to grow in real terms by 8.0-8.5 per cent in 2022-23.
- Forecasts by World Bank, Asian Development Bank and IMF's latest World Economic Outlook (WEO) growth projections India as **fastest growing major economy in the world** in all these three years (2021-23).

Glossary	
<b>Purchasing Managers' Index</b>	<ul style="list-style-type: none"> <li>• It is an <b>indicator of business activity</b> -- both in the manufacturing and services sectors.</li> <li>• It is a <b>survey-based measure</b> that asks the respondents about changes in their perception of some key business variables from the month before.</li> <li>• A <b>figure above 50 denotes expansion</b> in business activity. Anything below 50 denotes contraction.</li> </ul>
<b>Index of Industrial Production (IIP)</b>	<ul style="list-style-type: none"> <li>• It <b>shows growth rates in different industry groups</b> of the economy in a stipulated period of time.</li> <li>• It is <b>computed and published by the Central Statistical Organisation (CSO)</b> on a monthly basis.</li> </ul>
<b>Quantitative easing (QE)</b>	<ul style="list-style-type: none"> <li>• QE is when a <b>central bank buys long-term securities from its member banks</b>. By buying up these securities, the central bank adds new money to the economy; as a result of the influx, interest rates fall, making it easier for people to borrow.</li> </ul>
<b>Tapering</b>	<ul style="list-style-type: none"> <li>• Tapering is the <b>incremental reversal of a central bank's quantitative easing strategy</b> designed to boost economic growth. Tapering is when a central bank reduces asset purchases when the economy has recovered sufficiently to no longer need a stimulus.</li> </ul>

CHAPTER AT A GLANCE
<ul style="list-style-type: none"> <li>• The last <b>two years have been difficult for the world economy</b> on account of the COVID-19 pandemic, repeated waves of infection, supply-chain disruptions and, more recently, inflation.</li> </ul>
<ul style="list-style-type: none"> <li>• Government's <b>immediate response was a bouquet of safety-nets</b> to cushion the impact on vulnerable sections <b>followed by push to increase in capital expenditure</b>.</li> </ul>
<ul style="list-style-type: none"> <li>• Another distinguishing feature of India's response has been <b>an emphasis on supply-side reforms</b> like deregulation of numerous sectors, simplification of processes, rather than a total reliance on demand management.</li> </ul>
<ul style="list-style-type: none"> <li>• Advance estimates suggest that the <b>Indian economy is expected to witness real GDP expansion of 9.2 per cent in 2021-22 after contracting in 2020-21</b>.</li> </ul>
<ul style="list-style-type: none"> <li>• With the vaccination programme having covered the bulk of the population, economic momentum building back and the likely long-term benefits of supply-side reforms in the pipeline, the Indian economy is in a <b>good position to witness GDP growth of 8.0-8.5 per cent in 2022-23</b>.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Overall, macro-economic stability indicators</b> suggest that the Indian economy is well placed to take on the challenges of 2022-23.</li> </ul>

**CHAPTER 1****Testing your remembering skills & Understanding skills**

**Q1. With reference to Agriculture Sector in India, consider the following statements:**

1. Area under production of Rice and Wheat stagnated over the last five years.
2. Area sown under Foodgrains during Kharif cycle is more than the area sown during Rabi cycle.

**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. Arrange the following components of Industrial Sectors in increasing order their share in GVA?**

1. Construction
2. Manufacturing
3. Mining and Quarrying
4. Electricity & Utility service

**Select the correct answer using the code given below.**

- (a) 1-4-3-2
- (b) 4-3-1-2
- (c) 3-4-1-2
- (d) 4-3-2-1

**Q3. Which of the following could widen Current Account Deficit of India?**

1. Elevated global commodity prices
2. Higher domestic demand
3. Increase in Remittances

**Select the correct answer using the code given below.**

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

**Q4. Consider the following statements regarding India's External Sector:**

1. India is the second largest foreign exchange reserve holder in the world.
2. India's foreign exchange reserves are greater than country's external debt.
3. India's Balance of Payments remained surplus through out the last two years.

**Which of the statements given above is/are correct?**

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

**Q5. With reference to Purchasing Managers Index, consider the following statements:**

1. It is an indicator of business activity in both manufacturing and services.
2. It is computed and published by Central Statistical Organisation.

**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. Give a brief account of the sector wise economic recovery past pre-pandemic levels.**

**Q.2. COVID-19 pandemic has brought an environment of uncertainties, affecting vulnerable sections the most. In this context, discuss the strategy adopted by the government to provide a cushion against pandemic induced shocks.**

**“You are as strong as your Foundation”**

# FOUNDATION COURSE GENERAL STUDIES

## PRELIMS CUM MAINS 2023

Approach is to build fundamental concepts and analytical ability in students to enable them to answer questions of Preliminary as well as Mains examination

- Includes comprehensive coverage of all the topics for all the four papers of GS Mains, GS Prelims & Essay
- Access to LIVE as well as Recorded Classes on your personal student platform
- Includes All India GS Mains, GS Prelims, CSAT & Essay Test Series
- Our Comprehensive Current Affairs classes of PT 365 and Mains 365 of year 2022

ONLINE Students

NOTE - Students can watch LIVE video classes of our COURSE on their ONLINE PLATFORM at their homes. The students can ask their doubts and subject queries during the class through LIVE Chat Option. They can also note down their doubts & questions and convey to our classroom mentor at Delhi center and we will respond to the queries through phone/mail.

**Live - online / Offline  
Classes**

Scan the QR CODE to  
download **VISION IAS** app

**DELHI: 1 MAR, 9 AM | 9 MAR, 1 PM**  
**11 JAN, 5 PM**

**LUCKNOW: 9<sup>th</sup> Feb | JAIPUR: 15<sup>th</sup> Dec | PUNE: 31<sup>st</sup> Jan**  
**HYDERABAD: 15<sup>th</sup> Dec | CHANDIGARH: 15<sup>th</sup> Feb**

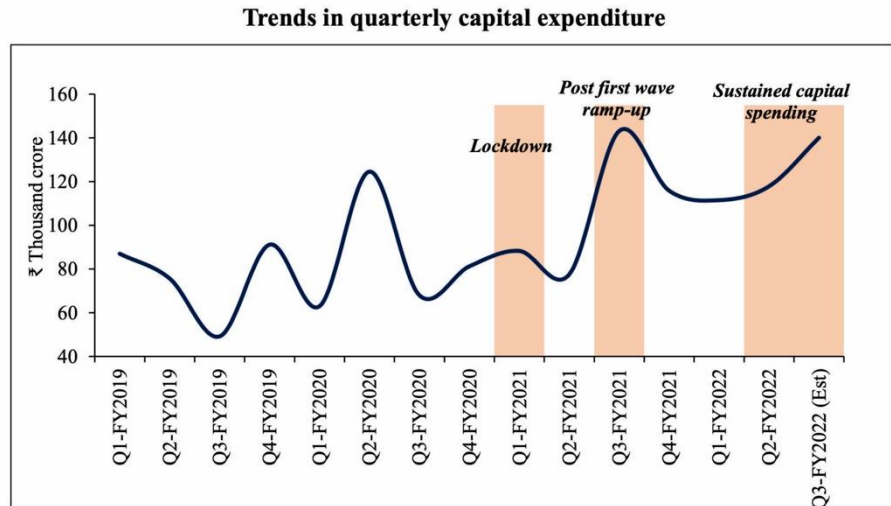
# CHAPTER 2: FISCAL DEVELOPMENTS

## Introduction

- India has adopted a **calibrated fiscal policy approach** to the pandemic, which had the flexibility of adapting to an evolving situation in order to support the vulnerable sections of society/firms and enable a resilient recovery. India's **unique agile policy response** differed from the waterfall strategy which has now been widely accepted in the policy circles.
- This chapter **reviews fiscal developments in India** in the aftermath of the pandemic outbreak. The chapter concludes with a discussion on policy measures to enhance efficiency of Government spending.

## Fiscal Policy Strategy in the Aftermath of the Pandemic Outbreak

- In the initial phase of the pandemic, fiscal policy focused on **building safety-nets for the poor and vulnerable** sections of society to hedge against the worst-case outcomes which include stimulus measures such as direct benefit transfers to the vulnerable sections, emergency credit to the small businesses etc. With **restoration of economic activities, fiscal response focused on stimulating demand in the economy** with investment boosting measures like Production Linked Incentives etc.



Source: CGA Monthly Accounts  
Note: The estimate for Q3 FY2021-22 uses flash figures for Dec 2021.

- Due to **movement restrictions in containment zones**, and inability of contractors and workers to carry out works, the quarterly capital expenditure was restrained during first two quarters of 2020-21. With the easing of movement and health-related restrictions in Q3 of 2020-21, capital expenditure shows an **increasing trend during first three quarters of 2021-22**.
- Government budgeted for a **34.5% growth in capital expenditure** over 2020-21 BE.
  - Also, **National Infrastructure Pipeline** covering 6835 projects was expanded to 7400 projects, **PLI schemes for 13 sectors** was launched with an outlay of Rs 1.97 lakh crore to collectively generate employment and boost output in the medium to long term **through multiplier-effects**.
- The focus on **capital spending has been sustained during the current fiscal**, as the capital expenditure shows an increasing trend during the first three quarters of 2021-22.

## Performance of Fiscal Indicators During 2021-22

- Fiscal deficit of Central Government at end November 2021 stood at 46.2 per cent of BE** compared to 135.1 per cent during the same period in 2020-21.

## Revenue collection

- Revenue receipts have grown at a much higher pace during the current financial year (April to November 2021) compared to the corresponding periods during the last two years.** This performance is attributable to **considerable growth in both tax and non-tax revenue**.
- Net tax revenue grew at 64.9%** during April to November 2021 over April to November 2020, which is due to high growth shown by all major direct and indirect taxes.

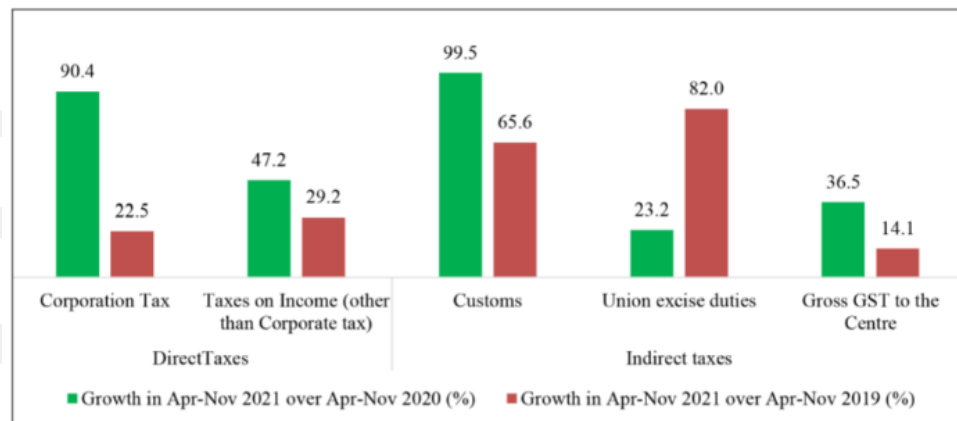


- **Corporate income tax** registered a **growth of 90.4 per cent** over April-November 2020 due to **improved profitability of corporates, formalization of economy and improved compliance due to tax reforms.**
- **Indirect tax receipts** have registered a **YoY growth of 38.6 per cent** in first eight months of this fiscal year.
- **Revenue collection from customs** has registered a growth of **almost 100 per cent** over April to November 2020.
- Government had **raised excise duty on petrol and diesel to garner revenues** during the year 2020-21, when collection of other direct and indirect taxes was adversely impacted by COVID-19 and low global petroleum prices created some elbow-room for raising taxes on petroleum.

#### Asset Monetization

- Union Budget 2021-22 also emphasized **monetization of assets as one of the three pillars for enhanced and sustainable infrastructure financing** in the country.
- Based on mandate for Asset Monetisation under Union Budget 2021-22, **National Monetisation Pipeline (NMP) has been developed by NITI Aayog in consultation with infrastructure line ministries.**
  - It is envisaged to serve as an essential roadmap for the asset monetisation of various brownfield infrastructure assets across roads, railways, shipping, aviation, power, telecom, oil & gas, and warehousing sectors.
- NMP estimates **aggregate monetisation potential of Rs 6.0 lakh crores** through core assets of Central Government, over a four-year period, from FY 2022 to FY 2025.
  - Around 15% of assets with an indicative value of ` 0.88 lakh crore are envisaged to be rolled out in the current financial year (FY 2021-22).
- The assets and transactions identified under NMP are **expected to be rolled out through a range of instruments** including **direct contractual instruments such as public private partnership concessions and capital market instruments such as Infrastructure Investment Trusts (InvIT) among others.**
- While **monetization of core assets is steered by NITI Aayog**, initiative for monetization of non-core assets has been hitherto steered by the Department of Investment and Public Asset Management (DIPAM).
  - So far, CPSEs have **referred ~3400 acres of land and other non-core assets to DIPAM/MoF for monetization.**
- Budget 2021-22 announced setting up of a **Special Purpose Vehicle (SPV), with capacity and expertise**, to carry out the monetization of the land and other non-core assets in an efficient and prudent manner, in line with international best practices. Thus, '**National Land Monetisation Corporation**' (NLMC) is being incorporated as a 100% Govt of India owned entity with an initial authorized share capital of Rs 5000 crores and subscribed share capital of Rs 150 crores.

Figure 5: Growth in major direct and indirect taxes during April-November 2021

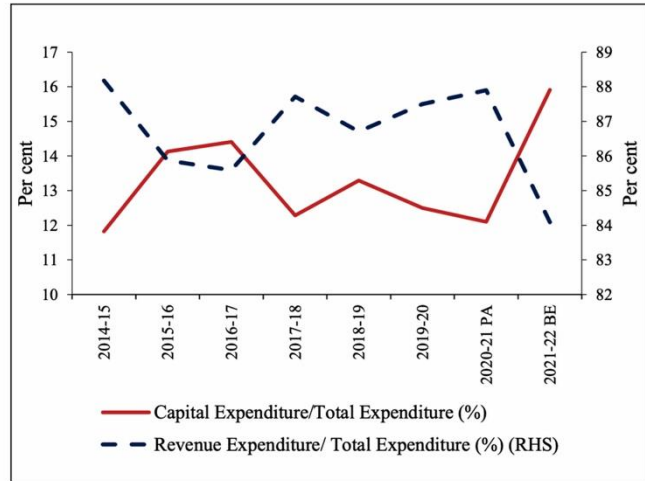


- **Gross GST collections**, Centre and States taken together during April to December 2021, **were 61.5 per cent higher** than April to December 2020.
  - **Over the last 4 years, GST revenues have steadily grown** and year-average of monthly GST collection has increased from 0.9 lakh crore in 2017-18 to 1.19 lakh crore in 2021-22.
  - This is **due to combined effect of rapid economic recovery post pandemic, nation-wide drive against GST evaders and fake bills, systemic changes introduced recently, and rate rationalization measures** undertaken by the GST Council to correct inverted duty structure.
- Non-tax revenue collections up to November 2021 registered an YoY increase of 79.5 per cent. This increase was driven by dividends and profits, including was **Rs 0.99 lakh crore surplus transfer from RBI.**
- Budget 2021-22 had **envisaged to mobilise Rs 1.75 lakh crore from disinvestment proceeds** this year.



- As on January 2022, government has been able to **raise Rs 9330 crore from disinvestment**. Government introduced New Public Sector Enterprise Policy and Asset Monetisation Strategy, and privatised Air India.

**Share of Revenue and Capital Expenditure in Total Expenditure**

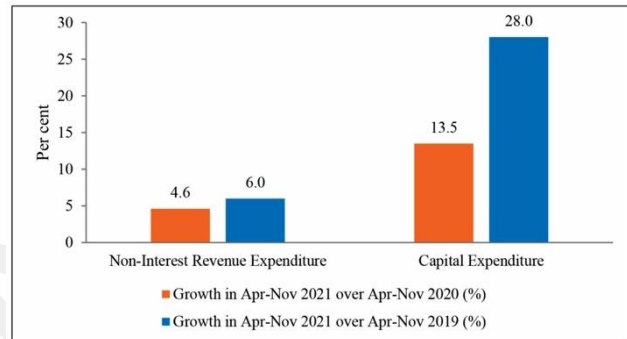


Source: Union Budget Documents & O/o CGA  
BE: Budget Estimate, PA: Provisional Actuals,

**Expenditure**

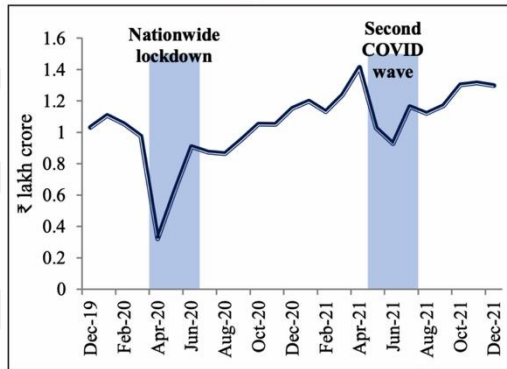
- Total expenditure of the Government **increased by 8.8 per cent during April to November 2021** and stood at 59.6 per cent of Budget Estimate.
- In the wake of pandemic, **additional expenditure requirements led to a YoY growth of more than 30 per cent in the revenue expenditure of Government in 2020-21 PA**.
  - Nearly 60 per cent of increase in revenue expenditure during 2020-21 PA was due to increase in major subsidies
  - During April to November 2021, the expenditure on **major subsidies stood at Rs 2.31 lakh crore**.
- During April to November 2021, capital expenditure registered a **growth of 13.5%** over April to November 2020.
  - Capital expenditure in 2021-22 BE is envisaged to reach 2.5% of GDP from 1.6% of GDP in 2019-20.
  - Focus has been directed towards **infrastructure-intensive sectors** like roads and highways, railways, housing and also Centre has put in place several **incentives to boost the capital expenditure by the States**.

**Growth in expenditure components during April to November 2021**



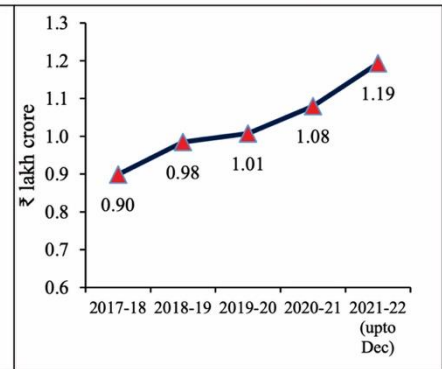
Source: CGA Monthly Accounts

**Buoyant GST collections during 2021-22**

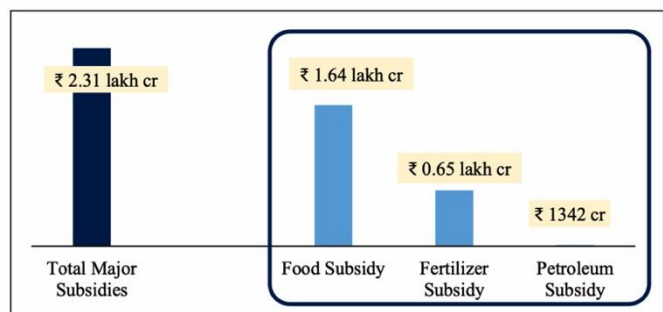


Source: Department of Revenue

**Rising year-average of monthly Gross GST collections**



**Expenditure on Subsidies during April to November 2021**

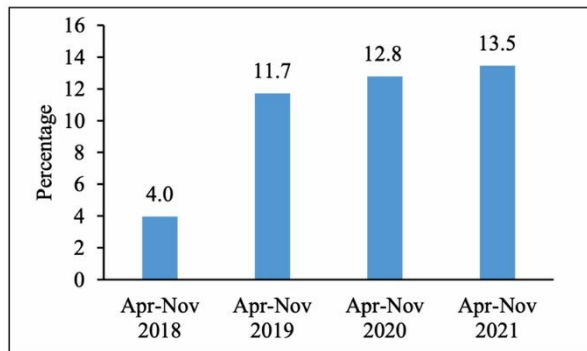


Source: CGA Monthly Accounts

- Robust economic growth path and various tax policy and administration reforms undertaken over the last few years will be **fundamental in sustaining the buoyant revenues** in medium term, and thus, be on track with fiscal path outlined by the Medium-Term Fiscal Policy Statement.
- Government has **raised Extra Budgetary Resources (EBR) of Rs 6.04 lakh crore** from 2016-17 to 2020-21, of which Rs 1.43 lakh

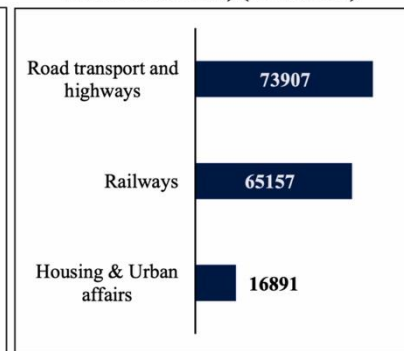
crore has been mobilised from the issue of Govt. fully serviced bonds and Rs 4.61 lakh crore have been raised through financial support extended through loans from NSSF.

**YoY growth in Capital Expenditure during April to November over the years**



Source: CGA Monthly Accounts

**Emphasis sectors for Capital expenditure (April to November 2021) (In ₹ crore)**



Source: CGA Monthly Accounts

### Transfer to States

- Union Government has accepted recommendations made by **Fifteenth Finance Commission (XV-FC)** for period 2021-22 to 2025-26 relating to the grants-in-aid amounting to Rs 2,33,233 crore to States during 2021-22 for Post Devolution Revenue Deficit grant, grants to Local Bodies, Health sector grant and Disaster Management grants.
- XV-FC has recommended a total Post Devolution Revenue Deficit grant of Rs 1.18 lakh crore to 17 States in financial year 2021-22, of which an amount of Rs 98,710 crore has already been released, as on 6th January 2022.
- With regard to grants to Local Bodies, XV-FC had recommended that

**urban areas are grouped into two broad categories for recommending grants:**

- Category-I cities: urban agglomerations/ cities with more than one million population and
- Category-II cities: other than million-plus cities.

### Evolution of the Disinvestment Policy of the Government of India

- With passing of Constitution (First Amendment) Act, 1951, **nationalisation of private firms became a standard policy tool by Government.** The Act allowed for nationalisation or trading by the state in any business.
  - Under **Air Corporations Act, 1953**, nine airlines were nationalised including Air India. This was followed by nationalisation of life insurance in 1956 and General Insurance Business in 1972.
  - Further in banking system, **government nationalised 14 banks in 1969 through the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970**, followed up by a second round of bank nationalisation in 1980. **Coal mines were also nationalised during the period 1971-1975.** Nevertheless, the issue of nationalisation has always been a highly debated issue.
- After the 1991 reforms, there was a **transition in thinking about public and private sector.** The term 'disinvestment' was used first time in Interim Budget 1991 and policy on disinvestment gathered when a **new Department of Disinvestment was created in 1999, which became a full Ministry in 2001.**
  - Government **stakes were sold in as many as 12 public sector companies** during this time, including Maruti Udyog, Hindustan Zinc etc.
- Disinvestment continued intermittently over the next decade 2004-2014. After 2014, **disinvestment policy was renewed** with stake sales in PSEs such as Hindustan Petroleum Corporation Limited, Rural Electrification Corporation Limited etc.
- In order to realize the mission of New, Self-reliant India, there was a **need to redefine public sector participation in business** enterprises and to encourage private sector participation in all sectors. In this backdrop, **New Public Sector Enterprise ("PSE") Policy for Atmanirbhar Bharat** was notified on 4th February 2021.
- Under this, public sector commercial enterprises have been classified as Strategic and Non-Strategic sectors.
  - Following **four broad strategic sectors have been delineated** based on the criteria of national security, energy security, critical infrastructure, provision of financial services and availability of important minerals- (i) Atomic Energy, Space and Defense; (ii) Transport and Telecommunication; (iii) Power, Petroleum, Coal and other minerals; and (iv) Banking, Insurance and Financial Services.
- Since 2016, government has given '**in-principle' approval for strategic disinvestment of 35 CPSEs** and/or Subsidiaries/ Units/ Joint Ventures of CPSEs and IDBI Bank.

- For cities with million plus population (Million-Plus cities), **100% of the grants are performance-linked** through Million-Plus Cities Challenge Fund (MCF).
- Commission has recommended that **60% of grants to rural local bodies** and for urban local bodies in non-Million-Plus cities should be **tied to supporting and strengthening the delivery of two categories of basic services:**

- sanitation, maintenance of 'Open Defecation Free' status (for Rural Local Bodies), solid waste management and attainment of star ratings as (for non-million plus cities / Category-II Cities / Towns);
- drinking water, rainwater harvesting and water recycling (both for Rural Local Bodies and Urban Local Bodies).

**Debt Position of the Central Government (in ₹ lakh crore)**

Components	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 PA
1	2	3	4	5	6	7	8
<b>A. Public Debt (A1+A2)</b>	51.05	57.11	61.50	68.45	75.49	85.65	105.24
<b>A1. Internal Debt (a+b)</b>	47.38	53.05	57.42	64.01	70.75	80.20	99.09
a. Marketable Securities	43.08	47.28	50.49	55.10	59.69	65.60	78.60
b. Non-marketable Securities	4.29	5.77	6.93	8.91	11.06	14.60	20.50
<b>A2. External Debt</b>	3.66	4.07	4.08	4.45	4.74	5.44	6.15
<b>B. Public Account - Other Liabilities</b>	7.62	8.16	8.57	9.15	9.96	13.70	12.74
<b>C. Extra-Budgetary Resources (EBRs)</b>	-	-	0.09	0.24	0.99	1.12	1.43
<b>D. Total Liabilities (A+B+C)</b>	58.66	65.27	70.16	77.85	86.35	99.91	117.04

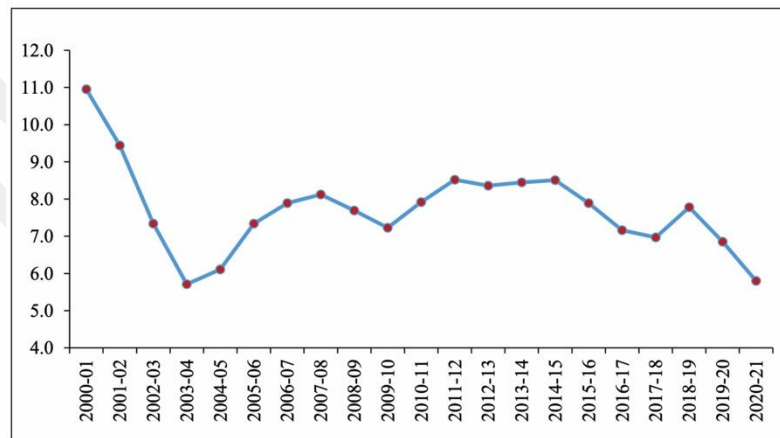
Source: Union Budget and Finance Accounts (Various Issues); Provisional Accounts, CGA.

- XV-FC has recommended **grants for Health to be channelised through Local Governments** amounting to Rs 13,192 crore for the year 2021-22.
- With regard to the Disaster Management grants, **SDRF (State Disaster Response Fund) should get 80 per cent of total allocation** and SDMF (State Disaster Mitigation Fund) 20 per cent.
  - Similarly, NDRF (National Disaster Response Fund) should get 80 per cent of the total allocation of the National Disaster Risk Management Fund and balance 20 per cent for National Disaster Mitigation Fund.

**Central Government Debt**

- Weighted average cost of Government on dated securities during 2020-21 was at 17-year low of **5.79 per cent**, despite a 141.2 per cent jump in net market borrowings.
- Central Government's **total outstanding liabilities were at Rs 117.04 lakh crore** at end-March 2021.

**Weighted average interest rate on Central Government Securities (Per cent)**



Source: RBI

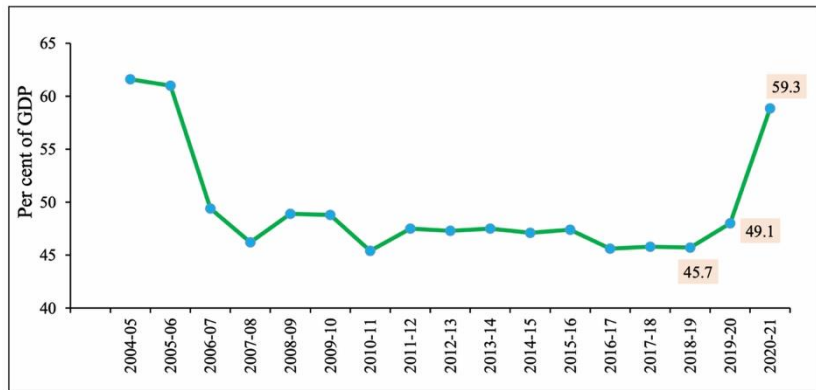
- Public Debt accounted for 89.9 per cent** of total liabilities, while Public Account Liabilities, constituted the remaining 10.1 per cent.
- Total liabilities of Central Government, as a ratio of GDP**, which were relatively stable over the past decade have **risen sharply in 2020-21**. However, Debt-GDP is however **expected to follow a downward trajectory in upcoming years**.
- Public debt portfolio exhibits low currency and interest rate risk** owing to low reliance on external borrowing and issuance of majority of securities at fixed coupon.
  - Public debt is **largely owned by institutional segments** like banks, insurance companies, provident funds etc, largest being share of commercial banks at 37.77 per cent at end-March 2021.
  - Further, most of **external borrowing are from official sources** which are of long term and concessional in nature. Weighted average maturity of outstanding stock of dated securities of Government has increased from 9.7 years at end March 2010 to 11.31 years at the end March 2021, thus **reducing rollover risk**.

- Recently launched **Retail Direct Scheme by RBI** will be instrumental in channelizing the savings of middle class, small businessmen and senior citizens directly into risk free government securities.

- Under the scheme, **retail investors will be able to open a Retail Direct Gilt (RDG)** account using an online portal through which it can directly invest minimum of Rs 10,000 and maximum of Rs 2 crore per security.

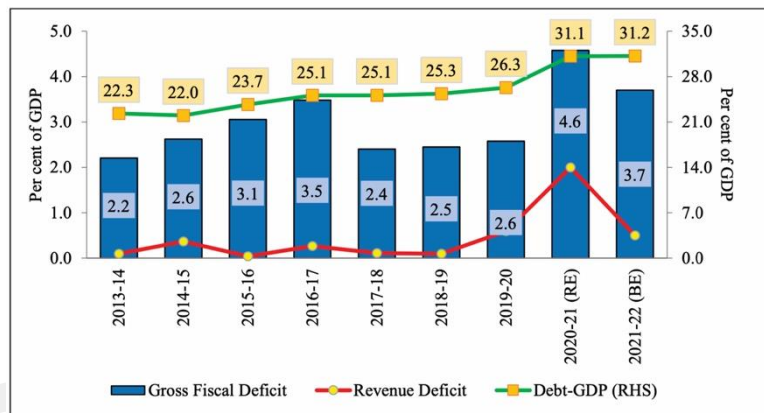
- Retail investors can not only place a non-competitive bid in primary issuance of all Central & State Government securities such as Treasury Bills and bonds but also access Secondary market through Negotiated Dealing System-Order Matching (NDS OM) - RBI's trading system.

**Trend in Centre's Debt-GDP ratio**



Source: Various issues of Status Paper on Government Debt  
Note: The figures for 2020-21 are Provisional

**Major deficit and debt indicators of States**



Source: RBI State Finances: A Study of Budget; RE: Revised Estimates; BE: Budget Estimates  
Note: States include 29 states and 2 Union Territories with legislatures.

**State Finances**

- Gross Fiscal Deficit of States** is estimated to cross the Fiscal Responsibility Legislation (FRL) threshold of **3 per cent of GDP during 2020-21 RE and 2021-22 BE.**

- Revenue Deficit of States also increased **from 0.1 per cent of GDP in 2018-19 to 2 per cent of GDP in 2020-21 (RE).**

- Net borrowing ceilings of the States were enhanced to 5% of GSDP of the States for the year 2020-21 and 4 per cent of GSDP of the States for 2021-22.

- In addition to the net borrowing ceilings fixed for the States, XV-FC had recommended

performance based **additional borrowing space of 0.50 per cent** of Gross State Domestic Product to States in the power sector.

- Objective of the additional borrowing space is **to improve the operational and economic efficiency of the sector, and promote a sustained increase in paid electricity consumption.**
- As per 2021-22 Budget Estimates of State Governments, **States' combined own Tax revenue and own Non-Tax revenue** were anticipated to grow at **28.5 per cent and 36 per cent respectively** over 2020-21 RE.
- Revenue expenditure and capital expenditure** in 2021-22 BE were envisaged to grow at **12.1 per cent and 30.5 per cent respectively** over 2020-21 RE.

**Fiscal Indicators of States**

Items	2016-17	2017-18	2018-19	2019-20	2020-21(RE)	2021-22 BE
(in ₹ lakh crore; Numbers in parenthesis are growth rates)						
Own Tax Revenue	9.46 (11.3)	11.3 (19.5)	12.15 (7.5)	12.24 (0.7)	12.41 (1.4)	15.95 (28.5)
Own Non-Tax Revenue	1.7 (14.0)	1.8 (5.3)	2.19 (21.7)	2.61 (19.2)	2.11 (-19.2)	2.87 (36.0)
Revenue Expenditure	21.22 (15.3)	23.4 (10.3)	26.38 (12.7)	27.92 (5.8)	31.86 (14.1)	35.72 (12.1)
Capital Expenditure	5.17 (23.1)	4.31 (-16.6)	4.87 (13.0)	4.6 (-5.5)	5.54 (20.4)	7.23 (30.5)

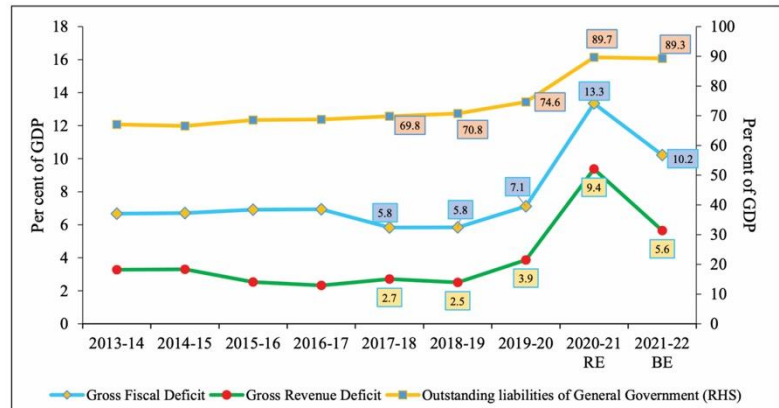
Source: Source: RBI State Finances: A Study of Budget for 2020-21, RE: Revised Estimates; BE: Budget Estimates;  
Note: States also includes 2 UTs (Delhi and Puducherry) from 2017-18

- In order to emphasize the importance of States' fiscal policy towards capital expenditure, Central Government has continued **Scheme for Special Assistance to States for Capital Expenditure for 2021-22**.

**General Government Finances**

- General Government liabilities as a proportion of GDP increased steeply during 2020-21 on account of additional borrowings made by Centre and States. However, in 2021-22 BE, with the recovery in the economy and the General Government is expected to follow the path of fiscal consolidation.

**Trends in General Government Debt and Deficits (as a per cent of GDP)**



Source: RBI Handbook of Statistics for Indian Economy; BE: Budget Estimates; RE: Revised Estimates

**Policy Measures to Enhance the Efficiency of Government Spending**

- **Government e-Marketplace (GeM):** Setup in 2016 for purchase of certain standard day to day use goods. General Financial Rules 2017 mandates all Ministries and Departments to procure Goods and Services available on GeM from GeM.
- The use of this e-marketplace has resulted in a substantial reduction in prices in comparison to the rates used earlier, with average prices falling by at least 15-20 per cent, up to 56 per cent.

**New guidelines for reforms in Public Procurement and Project Management**

- Government procures non-routine Goods, Services and Works

**Measures taken by the Centre to support the States during 2021-22**

- **Enhanced limit of borrowing for the States**
  - **FY 2020-21:** Under the Atma Nirbhar Bharat package, additional borrowing limit of up to 2 per cent of Gross State Domestic Product (GSDP) was allowed to the States for FY2020-21.
    - ✓ Of this the first instalment of 0.5 per cent borrowing was untied for all the states.
    - ✓ **Second part amounting to 1 per cent of GSDP was subject to implementation of following four specific State level reforms, where weightage of each reform is 0.25 per cent of GSDP.**
      - Implementation of One Nation One Ration Card System;
      - Ease of doing business reform;
      - Urban Local body/ utility reforms; and
      - Power Sector reforms
    - ✓ Another, 0.5 per cent of GSDP, which was earlier linked to the completion of at least 3 out of 4 above mentioned reforms, was made untied for States choosing Option 1 to meet the shortfall arising out of GST implementation.
  - **FY 2021-22:** The net borrowing of States for the year 2021-22 has been fixed at RS 8,46,922 crore at 4 per cent of GSDP of the States. Out of this, 0.50 per cent of GSDP was earmarked for the **incremental capital expenditure to be incurred by the States during 2021-22.**
- **Loan to States in lieu of GST Compensation shortfall**
  - In order to meet shortfall in Goods and Services Tax (GST) compensation to be paid to States, **Rs 1,10,208 crore was borrowed by Government of India through a special window** during 2020-21 on behalf of the States and UTs.
- **Scheme for Special Assistance to States for Capital Expenditure**
  - Under this special assistance of Rs 11,830 was provided to State Governments in the form of **50-year interest free loan** during 2020-21. It was extended for the year 2021-22 with an allocation of Rs 10,000 crore and has three parts:
    - ✓ **Part-I** is for the 8 north eastern States. The sum allocated for this part is Rs 2,600 crore.
    - ✓ **Part-II** is for all other States not included in Part-I. An amount of Rs 7,400 crore is earmarked for this part.
    - ✓ **Part-III** is for providing incentives to States Governments for **privatization/disinvestment of the State Public Sector Enterprises (SPSEs)** and monetization/recycling of assets. Under this part, States will be provided **additional funds** above their allocation under Part-I/Part-II of the Scheme. An amount of ` 5,000 crore is allocated for this part of the Scheme.

like construction of highways, buildings, hiring of consultants etc. using **Central Public Procurement Portal as per the General Financial Rules (GFR) 2017**. GFR 2017 guidelines provide three methods for selection and evaluation of bidders for different categories of procurement.

- Least Cost System,
- Quality-cum-Cost Based Selection (QCBS) and
- Single Source Selection (SSS)
- In most cases, **principle of Least Cost System, commonly known as 'L1' is the most prevalent**. While L1 system may be good for procurement of routine works and non-consulting services, this method **may not be able to cater to the need for innovation, quality, speed and functionality for high impact, complex and technology-intensive procurements**.
  - Various organisations including Central Vigilance Commission and NITI Aayog have argued that solely relying on L1 does not work well and there is a **need to move from 'one size fits all' to 'fit to purpose' approach** and various alternatives such as Value for Money, Rated Criteria to consider non-price attributes should be included in the procurement methods.
- Keeping in mind the limitations of the earlier procurement strategy, Government issued **new guidelines for procurement and project management in October 2021**. The key changes in the procurement process are:
  - **Quality-cum-Cost Based Selection (QCBS) is allowed for Works and Non-consultancy Services** (Earlier, allowed for only Consultancy Services).
  - **Fixing of Evaluation/ Qualification and Scoring Criteria under QCBS for Works and Non-consultancy Services**: Procuring entities now have **freedom to amend the specifications based on their requirements** and make any criteria used in evaluation as mandatory. Weightage may also be given for timely completion of past projects by bidder.
  - **Stringent deadlines for making payments**: Timely release of payments of 75 per cent or more of bills raised within 10 working days of the submission of the bill. The remaining bill payment is to be made after final checking within 28 working days.
  - **Single bid rejection**: Single bid can be considered valid provided that procurement was satisfactorily advertised, sufficient time was given for submission of bids etc.
  - **Fixed Budget based Selection for Consultancy Services**: Under this method, cost of consulting services shall be specified as affixed budget in the tender document itself.

### Glossary

<b>Gross Fixed Capital Formation</b>	<ul style="list-style-type: none"> <li>● Also called "investment", it is <b>defined as the acquisition of produced assets</b> (including purchases of second-hand assets), including the production of such assets by producers for their own use, <b>minus disposals</b>.</li> </ul>
<b>Special Drawing Rights (SDR)</b>	<ul style="list-style-type: none"> <li>● It is an <b>international reserve asset, created by IMF</b> in 1969 to supplement its member countries' official reserves.</li> <li>● The <b>value of the SDR is based on a basket of five currencies</b>—U.S. dollar, Euro, Chinese renminbi, Japanese yen, and British pound sterling.</li> <li>● SDR is <b>neither a currency nor a claim on the IMF</b>.</li> </ul>

Chapter at a glance	
●	In the backdrop of an evolving pandemic situation, Government of <b>India's agile policy response differed from the waterfall strategy</b> of introducing front-loaded stimulus packages, adopted by most other countries in 2020.
●	With the bouncing back of the economy in the current financial year, the <b>revenue receipts of the central government during April to November 2021 have gone up by 67.2 per cent (YoY)</b> .
●	<b>New Public Sector Enterprise Policy and Asset Monetisation Strategy</b> introduced by the Government reaffirm its commitment towards privatization and strategic disinvestment of Public Sector Enterprises.
●	Budget 2021-22 had not only enhanced the expenditure estimates but also <b>directed them towards more productive capital expenditure</b> .
●	With the enhanced borrowings on account of COVID-19, the <b>Central Government debt has gone up from 49.1 per cent of GDP in 2019-20 to 59.3 per cent of GDP in 2020-21</b> , but is expected to follow a declining trajectory with the recovery of the economy.

**CHAPTER 2****Testing your remembering skills & Understanding skills**

**Q1. Which of the following tax accounts for the highest share in Gross Tax Revenue 2021-22?**

- (a) Corporation Tax
- (b) Union Exercise Duty
- (c) Customs Duty
- (d) Goods and Service Tax

**Q2. Arrange the following events in the chronological order.**

1. Nationalization of Air India
2. Constitution (First Amendment) Act
3. Nationalization of Life Insurance in India

**Select the correct answer using the code given below.**

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

**Q3. Consider the following statements regarding Central Governments debt during 2020-21:**

1. Total liabilities of Central Government as a ratio of GDP increased sharply.
2. Weighted average cost of Government on dated securities declined during the 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

**Q4. With reference to Retail Direct Scheme, consider the following statements:**

1. The scheme was formulated to facilitate investment in Government Securities by individual investors.
2. Under the scheme, retail investors can only access Secondary market.
3. The scheme was launched by the Securities and Exchange Board of India (SEBI).

**Which of the statements given above is/are not correct?**

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

**Q5. With reference to States Finances during 2020-21, consider the following statements:**

1. Debt to GDP ration of states is increased to more than 40%
2. Net borrowing ceilings of the States were enhanced to 10% of GSDP of the 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

**Self-Assessment: To practice Question for Answer Writing skills**

**Q1. Over the last two years fiscal policy too has remained significant for addressing the economic fallout of the economy. In this context, analyze the strategy adopted by the government since the COVID-19 pandemic set in.**

**Q.2. Highlighting the performance of state finances since the onset of the COVID-19 pandemic, discuss the steps taken by the Central government to support the states during this period.**

**फाउंडेशन कोर्स  
सामान्य अध्ययन  
प्रारंभिक एवं मुख्य परीक्षा 2023**

**इनोवेटिव क्लासरूम प्रोग्राम**

- प्रारंभिक परीक्षा, मुख्य परीक्षा और निबंध के लिए महत्वपूर्ण सभी टॉपिक को विस्तृत कवरेज
- मौलिक अवधारणाओं की समझ के विकास एवं विश्लेषणात्मक क्षमता निर्माण पर विशेष ध्यान
- एनीमेशन, पॉवर प्वाइंट, वीडियो जैसी तकनीकी सुविधाओं का प्रयोग
- अंतर - विषयक समझ विकसित करने का प्रयास
- योजनाबद्ध तैयारी हेतु करेंट ओरिएंटेड अप्रोच
- नियमित क्लास टेस्ट एवं व्यक्तिगत मूल्यांकन
- सीसेट कक्षाएं
- PT 365 कक्षाएं
- MAINS 365 कक्षाएं
- PT टेस्ट सीरीज
- मुख्य परीक्षा टेस्ट सीरीज
- निबंध टेस्ट सीरीज
- सीसेट टेस्ट सीरीज
- निबंध लेखन - शैली की कक्षाएं
- करेंट अफेयर्स मैगजीन

Scan the QR CODE to download VISION IAS app

**DELHI: 1 FEBRUARY | 1 PM**

**LUCKNOW: 12 APR | 9 AM**      **JAIPUR: 15 FEB**

लाइव/ऑनलाइन कक्षाएं भी उपलब्ध

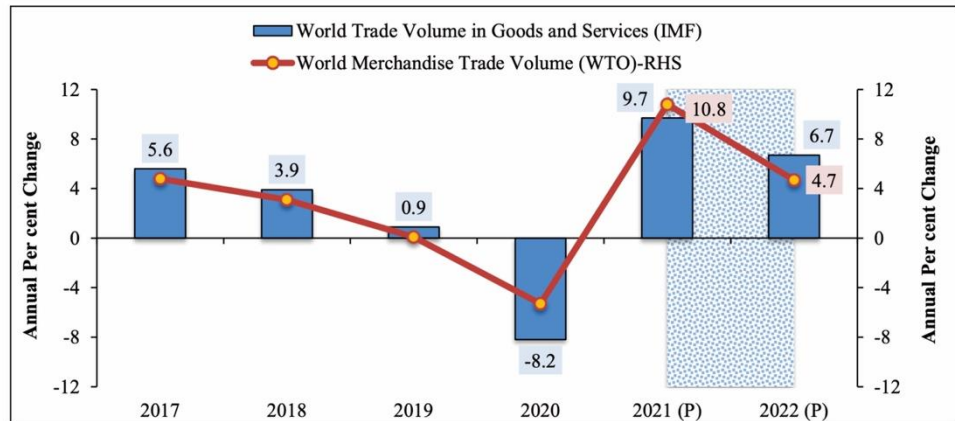


# CHAPTER 3: EXTERNAL SECTOR

## Introduction

External trade recovered strongly in 2021-22 after the pandemic-induced slump of the previous year, with strong capital flows into India, leading to a rapid accumulation of foreign exchange reserves. However, the downside risks of global liquidity tightening and continued volatility of global commodity prices, high freight costs, coupled with the fresh resurgence of COVID-19 with new variants may pose a challenge for India during 2022-23.

**Projection for World Trade Volume Growth**



Source: IMF and WTO  
 Note: Projections. The shaded area represents projected growth.

## Global Economic Environment

- First half (H1) of 2021 witnessed an acceleration in the global economic activity, that lifted the **merchandise trade above its pre-pandemic peak**. Reflecting this, International Monetary Fund (IMF) projected **higher growth of global trade volume in goods and services of 9.7 percent** in 2021, and WTO also upgraded its forecast for global merchandise trade volume growth to 10.8 percent in 2021.
  - The pick-up in momentum witnessed during the first two quarters of 2021 **weakened again by the third quarter (Q3)** due to rapid spread of Delta variant, leading to breakage in critical links of global supply chains resulting in longer than expected supply disruptions, taking its toll on the global recovery.
- The impact on trade in value terms varied significantly across different types of goods. Trade value of fuels and mining products was boosted by a **four-fold rise in natural gas prices**. Among manufactured goods, sectors like iron and steel, electronic components and pharmaceuticals showed strong y-o-y increase while automotive products and telecommunications equipment showed stagnation or decline, reflecting **recent shortage of semiconductors**.
- In 2021, **inflation picked up globally** as economic activity revived with opening up of economies. This **poses risks from both a tighter global liquidity condition** and exchange rate volatility in global currency.
- Other risks for global trade include **port delays, higher freight rates, shortage of shipping containers, shortage of inputs** such as semiconductors etc.
- India’s external sector has shown **immense resilience during the year**, which augurs well for growth revival in the economy.

## Developments In India’s Merchandise Trade

### Merchandise Exports

- During 2021-22 (April-December), **merchandise exports recorded growth of 49.7 per cent** to US\$ 301.4 billion, **exceeding the pre-pandemic levels**.
  - **Sharp recovery in key markets; increased consumer spending; pent up savings and disposable income due to announcement of fiscal stimulus by major economies; global commodity price rise and an aggressive export push by the government** have bolstered exports in 2021-22.
  - The rise in exports is **contributed by high growth in petroleum, oil and lubricants (POL) exports** (constituting about 15 per cent of total exports) as well as non-POL exports, indicating broad-based nature of expansion. **Non-POL exports stood at US\$ 257.5 billion** during 2021-22 (April-December), registering a growth of 40.1 per cent over corresponding period of last year.
  - **Pro-active support agencies** including Export Inspection Council (EIC), Agricultural & Processed Food Products Export Development Authority (APEDA) and measures like online issuance of certificates

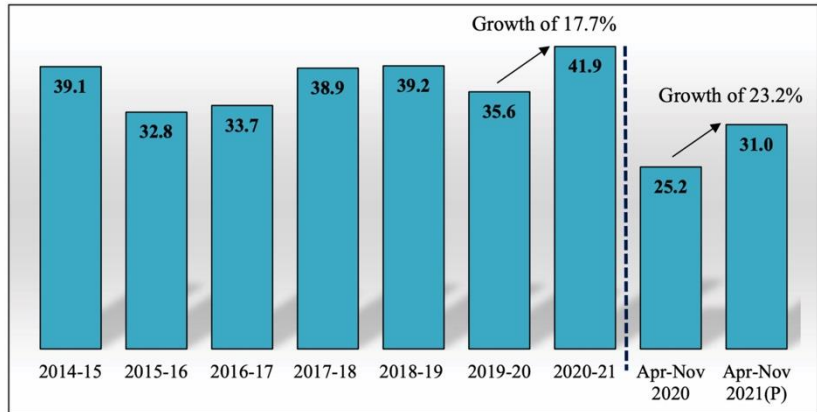
required for exports, increased rates of assistance under **Transport and Marketing Assistance**, launch of **Krishi UDAN** (Ude Desh ka Aam Nagarik) scheme in August 2020 to assist farmers in transporting agricultural products on international and national routes aided the growth of agricultural exports.

✓ Segments like **marine products, buffalo meat, tea, coffee and dairy products** have registered substantial growth during the current year. This augurs well for further diversification and strengthening of agricultural exports in the coming years.

- **United States of America (USA)** remained the top export destination in April-November, 2021 followed by United Arab Emirates (UAE) and China. Belgium, replacing Malaysia entered into the top ten leading export destinations.

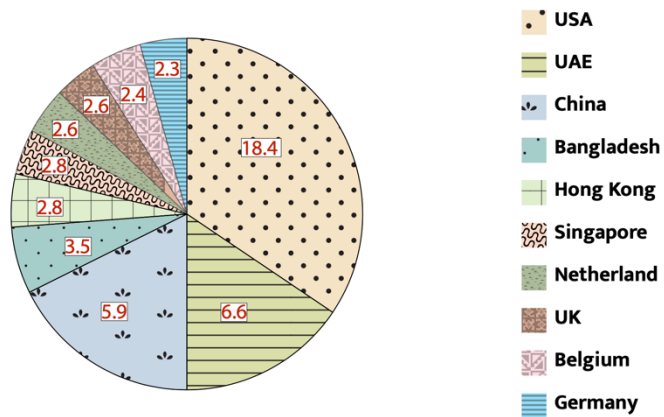
- More than **40 per cent of India's exports** is still accounted by only seven countries.

**Agricultural Exports (US\$ Billion)**



Source: Department of Commerce  
Note: P: Provisional

**Top ten Export Destinations in 2021-22 (April-November) | By Share in Per cent**



Export commodities			
commodity	US\$Billion (2021-22(P))	Share in Percent	
Petroleum products	39.5	14.9	
Pearl, precious, semiprecious stones	18.1	6.8	
Iron and steel	15.9	6	
Drug Formulations, Biological	12.4	4.7	
Gold and other precious metal jewellery	7.6	2.8	

Import commodities			
commodity	US\$Billion (2021-22(P))	Share in Percent	
Petroleum crude	73.3	19.2	
Gold	33.2	8.7	
Petroleum Products	24.1	6.3	
Pearl, Precious, Semiprecious Stones	19.2	5.0	
Coal, Coke and Briquettes, etc.	18.9	4.9	

**Progress on Trade Agreements**

- During last few years, India has initiated its trade agreement negotiations and reviewed existing agreements with many countries. This **trade negotiations include** Comprehensive Economic Cooperation Agreement (CECA) between India and Australia, FTA with European Union, Comprehensive Economic Partnership Agreement (CEPA) with Canada and UAE. India is reviewing its existing trade agreements such as CECA with Singapore and ASEAN etc.
- India launched the **FTA negotiations with the UK** in January, 2022, with target of doubling bilateral trade by 2030.

- Under **India-US Trade Policy Forum** (Ministerial), discussions were held regarding Social Security Agreement, Mutual Recognition Agreements (MRAs) in nursing services and accountancy services, and mobility issues concerning Indian professionals.

### Major Schemes & Initiatives to boost exports

- **Remission of Duties and Taxes on Exported Products (RoDTEP):** It is **WTO compliant** scheme based on the globally accepted principle that taxes and duties should not be exported. It **reimburses currently un-refunded Central, State, and Local taxes and duties** (like electricity duty, value-added tax (VAT) on fuels used in transportation etc.) incurred in the process of manufacture and distribution of exported products.
- **Developing District as Export Hub:** Under this District Export Promotion Committees (DEPCs) have been set up in each district and products with export potential (including agricultural, geographical indication (GI) & toy clusters) have been identified in all 739 districts across the country.
- **Production-Linked Incentive (PLI) scheme:** The scheme is expected to give a push to both domestic manufacturing capabilities and exports.
- **Electronic Platform for Preferential Certificate of Origin (CoO):** Introduced in view of the COVID-19 crisis to avoid physical movement.
- **Infusion of capital in EXIM Bank:** Capital of Rs 750 crore in Export-Import Bank of India (EXIM Bank) during the current financial year 2021-22.
- **Export Credit Guarantee Corporation of India Ltd. (ECGC)** provides insurance cover to banks against risks in export credit lending to the exporter borrowers. Rs 4,400 crore capital infusion was approved to ECGC Ltd. over a period of five years, that will support **additional exports of Rs 5.28 lakh crore** over the five-year period.
- **Export Promotion Capital Goods (EPCG) Scheme:** To increase procurement of capital goods from indigenous manufacturers, government has **reduced specific export obligations from 90 per cent to 75 per cent** of the normal export obligation.
- **Other schemes include,** Trade Infrastructure for Export Scheme (TIES), Market Access Initiatives (MAI), Special Economic Zone (SEZ) scheme, Emergency Credit Line Guarantee Scheme (ECLGS) and Advance Authorization Scheme.

#### Enabling an efficient Logistics eco-system to boost exports

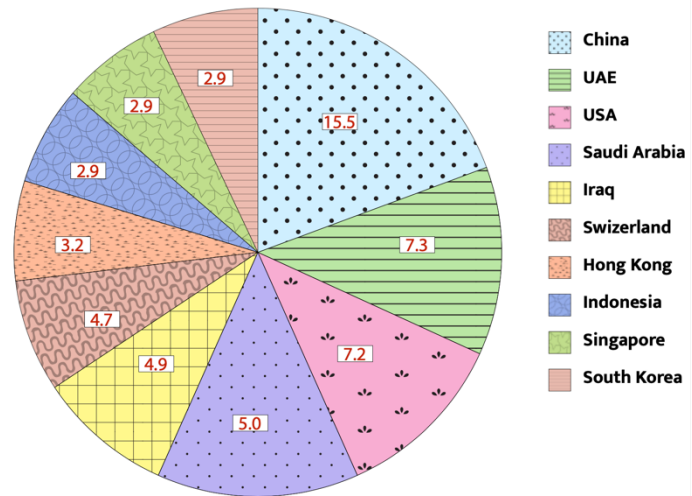
- India scored **90.3 per cent in 2021 in United Nations Economic and Social Commission for Asia Pacific's (UNESCAP) latest Global Survey on Digital and Sustainable Trade Facilitation**, a remarkable jump from its score of 78.5 per cent in 2019. Survey notes that **India is the best performing country when compared to South and South West Asia region** and Asia Pacific region.
  - **Transparency index got 100 per cent score** in 2021, while paperless trade and formalities got 96 per cent.
- **Pradhan Mantri Gati Shakti National Master Plan (NMP):** Aims to provide multimodal connectivity to various economic zones and **integrate the infrastructure linkages holistically for seamless movement** of people, goods & services to improve logistics efficiency.
  - It will bring 16 Ministries together for **integrated planning and coordinated implementation** of infrastructure connectivity projects.
  - It will also **leverage technology extensively including** spatial planning tools with ISRO imagery. This will boost economic growth, attract foreign investment and create multiple employment opportunities.
- **Other Initiatives to improve logistics ecosystem** include introduction of FASTag, Turant Customs, mandatory RFID (Radio Frequency Identification) tagging at all EXIM bound containers, E-San chit, Indian Customs Enquiry for Trade Assistance and Knowledge (ICETRAK), ICEDASH (Indian Customs EDI Dashboard), Secured Logistics Document Exchange (SLDE), Import Clearance System, GHG Calculator etc.
- To **ease maritime trade**, efforts on development of port-specific master plans, upgradation of select Land Customs Stations (LCS) to Integrated Check Posts (ICPs), promoting Free Trade Warehousing Zones, etc. are being undertaken.

### Merchandise Imports

- **Merchandise imports grew at the rate of 68.9 per cent** to US\$ 443.8 billion in April-December, 2021 over the corresponding period of last year.

- **Crude petroleum imports more than doubled** to US\$ 73.3 billion in April-November, 2021 compared to last year and continues to be the highest imported commodity.
- Among top ten countries for import origin, **China, UAE and USA were the top import sources** for India in April-November, 2021, with **China's share reducing to 15.5 per cent** from 17.7 per cent in corresponding period a year earlier. **Indonesia – second biggest source of crude palm oil** – remains to be one of top ten suppliers of India.

**Top ten Import Sources in 2021-22 (April-November) | By Share in Per cent**



### Merchandise Trade Balance

- **Merchandise trade deficit stood at US\$ 142.4 billion** in April-December, 2021 compared to deficit of US\$ 61.4 billion in corresponding period of last year.
- India had **most favourable trade balance with USA** followed by Bangladesh and Nepal.

**India's Merchandise Trade Balance with Major Countries**

		(US\$ Billion)					
S. No	Country	Exports		Imports		Trade Balance	
		Apr-Nov 20	Apr-Nov 21 (P)	Apr-Nov 20	Apr-Nov 21 (P)	Apr-Nov 20	Apr-Nov 21 (P)
1	U S A	31.3	49.0	16.3	27.4	15.0	21.6
2	Bangladesh	5.1	9.2	0.6	1.3	4.4	7.9
3	Nepal	3.5	6.0	0.4	1.0	3.1	5.0
4	Turkey	2.3	5.1	0.9	1.3	1.4	3.8
5	Netherland	3.8	6.9	1.9	2.8	1.9	4.1
6	U K	4.6	6.8	2.6	4.3	2.0	2.5
7	Italy	2.6	5.4	2.2	3.2	0.4	2.1
8	Korea	2.9	4.8	7.1	11.1	-4.2	-6.3
9	Qatar	0.8	1.2	4.6	7.7	-3.8	-6.5
10	U A E	9.7	17.5	13.1	27.9	-3.4	-10.4
11	Saudi Arab	3.6	5.8	9.2	19.2	-5.6	-13.4
12	Iraq	1.0	1.3	7.6	18.5	-6.6	-17.2
13	Switzerland	0.9	0.9	5.8	17.8	-4.9	-16.9
14	China	13.6	15.6	38.8	59.0	-25.2	-43.4

Source: Department of Commerce  
Note: P: Provisional

### Trade in Services

#### Services Exports

- India's **services exports recorded growth of 18.4 per cent** to US\$ 177.7 billion during 2021-22 (April-December), over corresponding period a year, surpassing the pre-pandemic levels.
  - **Top three -computer, business and transportation services** constitute more than 80% of total services exports.

#### Services Imports

- **Services imports rose by 21.5 per cent** to US\$ 103.3 billion in 2021-22 (April-December) from the corresponding period a year, surpassing the pre-pandemic levels.
  - Payments for business, transport, travel and computer services, together constitute more than 75% of services imports.

#### Private Transfers

- In H1: FY 22, net private transfers – mainly representing **remittances by Indians** employed overseas – **grew by 7.2 per cent** to US\$ 38.4 billion, over corresponding period a year, exceeding the pre-pandemic levels.

- India continues to be the **largest remittance recipient country** in the world in 2021 (in current US dollar terms) and has been so since 2008.

### Invisibles

- Net invisibles were higher at US\$ 72.1 billion** in H1: FY 22, compared to US\$ 60.1 billion last year, surpassing the pre-COVID levels.

### Current Account Balance

- After witnessing a surplus in H1: FY 21, India's current account balance flipped into deficit of US\$ 3.1 billion. Current account balance switched into a deficit in Q2: FY 22 from surplus in the previous quarter.

### Capital Account/ Financial Account

- In H1: FY 22, **net capital flows more than tripled** to US\$ 65.6 billion (4.5 per cent of GDP) over those in H1: FY 21, due to inflow of foreign investment, rise in loans mainly external commercial borrowings (ECBs), banking capital and other capital (inclusive of SDR allocation of US\$ 17.9 billion by the IMF).
- Net capital flows **remained volatile yet witnessed y-o-y and sequential growth** in both quarters of 2021-22.
- Foreign Investment, consisting of foreign direct investment (FDI) and foreign portfolio investment (FPI), is the **largest component of the capital account**.
  - Net FDI recorded a lower inflow of US\$ 24.7 billion, gross FDI inflows moderated at US\$ 54.1 billion during April-November, 2021** compared to corresponding period last year.
    - ✓ **Computer software and hardware attracted highest FDI equity** inflows of US\$ 7.1 billion in April-September, 2021.
    - ✓ Singapore continues to be the top investing country in terms of FDI equity inflow while USA occupies the second position.
  - FPI flows remained volatile** due to global uncertainties relating to US monetary policy normalisation, rising global energy prices, fear of new variants of COVID-19 and strong inflationary pressures.
  - Banking capital recorded net inflow** of US\$ 4.4 billion in H1: FY 22 as compared with a net outflow of US\$ 9.0 billion in corresponding period a year earlier.

Rank	Country	USD Billion		Share (in percent)	
		2019-20	2020-21	2019-20	2020-21
1	Singapore	14.7	17.4	29.4	25.9
2	U.S.A	4.2	13.8	8.4	14.9
3	Mauritius	8.2	5.6	16.5	13.9
4	Netherlands	6.5	2.8	13.0	6.9
5	Japan	3.2	2.0	6.5	2.6
	Sum of Above	36.9	41.6	73.8	64.1
	All Countries*	50.0	59.6	100	100

Rank	Country	Share (in percent)	
		2019-20	2020-21
1	Computer software & Hardware	15.4	43.8
2	Automobile Industry	5.7	2.7
3	Services Sector**	15.7	8.5
4	Trading	9.2	4.4
5	Telecommunications	8.9	07
	Total of above	58.8	60.1
	Total FDI	100	100

### BoP Balance and Foreign Exchange Reserves

- India witnessed **balance of payments (BoP) surplus of US\$ 63.1 billion** in H1: FY 22. This led to an augmented **foreign exchange reserves crossing the milestone of US\$ 600 billion** and touching US\$ 635.4 billion as at end-September 2021.
- However, the **import cover of India's foreign exchange reserves declined to 13.2 months** at end-December 2021 from 17.4 months at end-March 2021 as merchandise imports increased with pick-up in domestic economic activity.

## Movement in Exchange Rate

- Indian rupee **depreciated by 4.5 per cent (y-o-y basis)** against US dollar in 2020-21. The depreciation of the rupee, however, was modest as compared with its emerging market peers, like Turkish lira, Argentine Peso. The rupee **appreciated against euro, Japanese yen and pound sterling**.
- In terms of 6-currency **nominal effective exchange rate (NEER) (trade-weighted)**, the rupee **depreciated** by 2.1 per cent in December 2021 over March 2021, while it **appreciated by 0.9 per cent in terms of real effective exchange rate (i.e. REER) terms**.

## Net International Investment Position

- India's net international investment position stood at (-) 11.3 per cent of GDP (US\$ -332 billion)** as at end-September 2021 – a sustained improvement since end-March 2019 – led by a higher asset-liability ratio which improved to 73.6 per cent as at end-September 2021 from end-March 2021.

## External Debt

- India's **external debt as at end-September 2021, estimated at US\$ 593.1 billion**, grew by US\$ 22.3 billion (3.9 per cent) over the level as at end-June 2021.
  - Commercial borrowings were the largest component of external debt**, at US\$ 218.8 billion, followed by NRI deposits, short-term trade credit.
- US dollar denominated debt remained the largest component** of India's external debt, with a share of 51 per cent at end-September 2021, followed by the Indian rupee.
  - External debt denominated in Indian rupee witnessed impressive increase over the years owing.

External Debt Outstanding				
USD Billion (Percentage change)				
		March-21 PR	June-21 PR	Sep.-21 P
1	Multilateral	69.7 (2.5)	70.2 (0.6)	71.4 (1.7)
2	Bilateral	30.9 (1.3)	30.8 (-0.5)	30.9 (0.5)
3	International Monetary Fund	5.6 (-1.6)	5.7 (0.6)	23.3 (310.8)
4	Trade Credit	6.3 (-3.1)	5.7 (-8.8)	5.6 (-1.7)
5	Commercial Borrowings	213.1 (2.5)	213.4 (0.4)	218.8 (2.5)
6	NRI Deposits (above one-year)	141.9 (1.0)	141.5 (-0.3)	141.6 (0.0)
7	Rupee Debt	1.0 (-2.2)	1.0 (-0.8)	1.0 (-1.6)
8	Total long-Term Debt (1 to 7)	468.5 (1.8)	468.3 (-0.1)	492.5 (5.2)
9	Short term Debt	101.1 (-2.4)	102.5 (1.4)	100.6 (-1.9)
9a	Trade related Credits	97.3 (-2.4)	99.2 (2.0)	97.4 (-1.8)
	Total (8+9)	569.6 (1.0)	570.8 (0.2)	593.1 (3.9)

- Debt service (i.e., principal repayments and interest payments) declined to 4.7 per cent** of current receipts at end-September 2021, as compared with 8.2 per cent at end-March 2021.
- Share of **short-term debt in total external debt fell marginally** to 17.0 per cent at end-September 2021 from 17.7 per cent at end-March 2021.
- From a medium-term perspective, **India's external debt continues to be below what is estimated to be optimal** for an emerging market economy, while various external sector vulnerability indicators improved over the recent years.

## Glossary

<b>Net international investment position</b>	It is the difference between the value of financial assets of residents of an economy that are claims on non-residents and the liabilities of residents of an economy to non-residents at a point in time. It represents either a net claim on or a net liability to the rest of the world.
<b>Headline Inflation</b>	Headline inflation refers to the change in value of all goods in the basket. Headline inflation is more relevant for developing economies than developed economies.
<b>Core inflation</b>	Core inflation excludes food and fuel items from headline inflation. Since the prices of fuel and food items tend to fluctuate and create 'noise' in inflation computation, core inflation is less volatile than headline inflation.

**Chapter at a glance**

- **External trade recovered strongly in 2021-22** after the pandemic-induced slump of the previous year, with strong capital flows into India, leading to a rapid accumulation of foreign exchange reserves.
- Owing to the recovery of global demand coupled with revival in domestic activity, **India's merchandise exports and imports rebounded strongly** and surpassed pre-COVID levels during the current financial year.
- India's **external sector is resilient to face any unwinding of the global liquidity** arising out of the likelihood of faster normalisation of monetary policy by systemically important central banks, including the Fed, in response to elevated inflationary pressures.

**CHAPTER 3****Testing your remembering skills & Understanding skills****Q1. Consider the following statements regarding India's International trade:**

1. India's agricultural exports declined steadily over the last five years.
2. USA remained the top export destination during the current financial year.

**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. The Global Survey on Digital and Sustainable Trade Facilitation is conducted every two years by**

- (a) World Bank
- (b) International Monetary Fund
- (c) World Trade Organization
- (d) UN Economic and Social Commission for Asia and the Pacific (UNESCAP)

**Q3. Which of the following are the major export commodities of India?**

1. Iron and Steel
2. Vegetable Oils
3. Marine Products
4. Plastic raw materials

**Select the correct answer using the code given below.**

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

**Q4. Which of the following can influence India's Capital Account Balance?**

1. Rise in External Commercial Borrowings
2. Decline in remittances due to COVID Pandemic
3. Increase in SDR allocation to India

**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

**Q5. With reference to India's External Debt, consider the following statements:**

1. NRI Deposits were the largest component of external debt
2. More than 90% is denominated in US dollar.

**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. Pandemic-related stimulus programme in advanced economies have reignited some fears of taper tantrum, however India's external sector is resilient to such external shocks. Discuss.**

**Q2. An efficient, competitive, and resilient logistics ecosystem is pivotal to boost exports. In this context, highlight the role played by the logistics in Indian exports and mention the steps taken by the government to boost exports.**

**#PrelimsIsComing**

**ABHYAAS 2022**

**ALL INDIA PRELIMS**

**(GS+CSAT)**

**MOCK TEST SERIES**

**3 TESTS | 17 APRIL | 1 & 15 MAY**

- 🎯 All India ranking & detailed comparison with other students
- 🎯 Vision IAS Post Test Analysis™ for corrective measures and continuous performance improvement

**Register @**  
[www.visionias.in/abhyaas](http://www.visionias.in/abhyaas)

**OFFLINE\* IN 100+ CITIES**

AGARTALA | AGRA | AHMEDABAD | AIZAWL | AJMER | ALIGARH | ALMORA | ALWAR | AMRAVATI | AMRITSAR | ANANTHAPURU | AURANGABAD | BAREILLY | BENGALURU | BHAGALPUR | BHOPAL | BHUBANESWAR | BIKANER | BILASPUR | CHANDIGARH | CHENNAI | CHHATARPUR | COIMBATORE | CUTTACK | DEHRADUN | DELHI MUKHERJEE NAGAR | DELHI RAJENDRA NAGAR | DHANBAD | DHARWAR | DIBRUGARH | FARIDABAD | GANGTOK | GAYA | GHAZIABAD | GORAKHPUR | GREATER NOIDA | GUNTUR | GURGAON | GUWAHATI | GWALIOR | HALDWANI | HARIDWAR | HAZARIBAGH | HISAR | HYDERABAD | IMPHAL | INDORE | ITANAGAR | JABALPUR | JAIPUR | JAMMU JAMSHEDPUR | JHANSI | JODHPUR | JORHAT | KANPUR | KOCHI | KOHIMA | KOLKATTA | KOTA | KOZHIKODE (CALICUT) | KURNOOL | KURUKSHETRA | LUCKNOW | LUDHIANA | MADURAI | MANGALURU | MATHURA | MEERUT | MORADABAD | MUMBAI | MUZAFFARPUR | MYSURU | NAGPUR | NASIK | NAVI MUMBAI | NOIDA | ORAI | PANAJI ( GOA) | PANIPAT | PATIALA | PATNA | PRAYAGRAJ (ALLAHABAD) | PUNE | RAIPUR | RAJKOT | RANCHI | ROHTAK | ROORKEE | SAMBALPUR | SHILLONG | SHIMLA | SILIGURI | SONIPAT | SRINAGAR | SURAT | THANE | THIRUVANANTHAPURAM | TIRUCHIRAPALLI | UDAIPUR | VADODARA | VARANASI | VIJAYAWADA | VISHAKHAPATNAM | WARANGAL



# CHAPTER 4: MONETARY MANAGEMENT AND FISCAL INTERMEDIATION

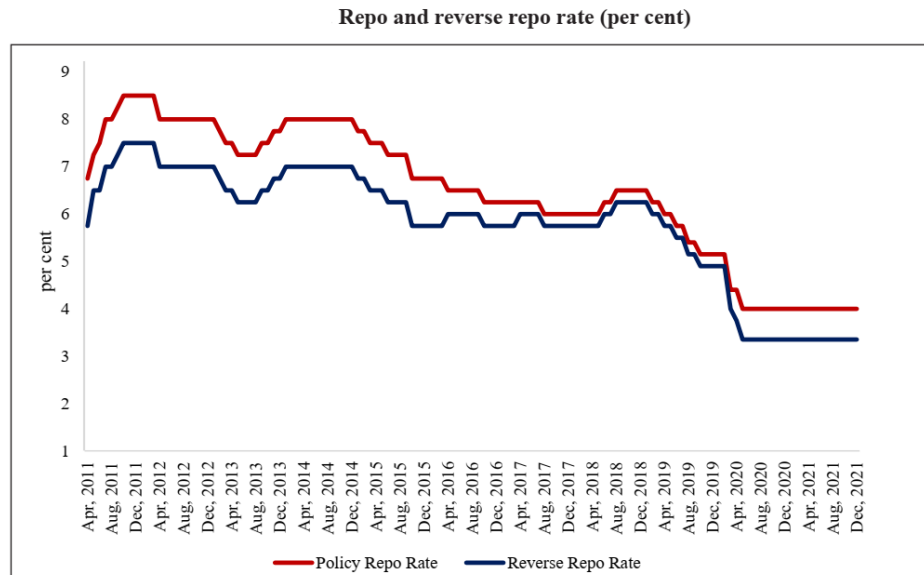
## Introduction

Since the beginning of the Covid-19 pandemic, the monetary policy and liquidity operations have geared towards mitigating its adverse impact on the economy. The easing of monetary conditions continued in 2021-22 to provide a safety net to the system with resumption of normal liquidity operations in a phased manner. Some of the earlier liquidity measures from RBI reached pre-set sunset dates as well but liquidity conditions remained in surplus in 2021-22.

## Monetary Developments

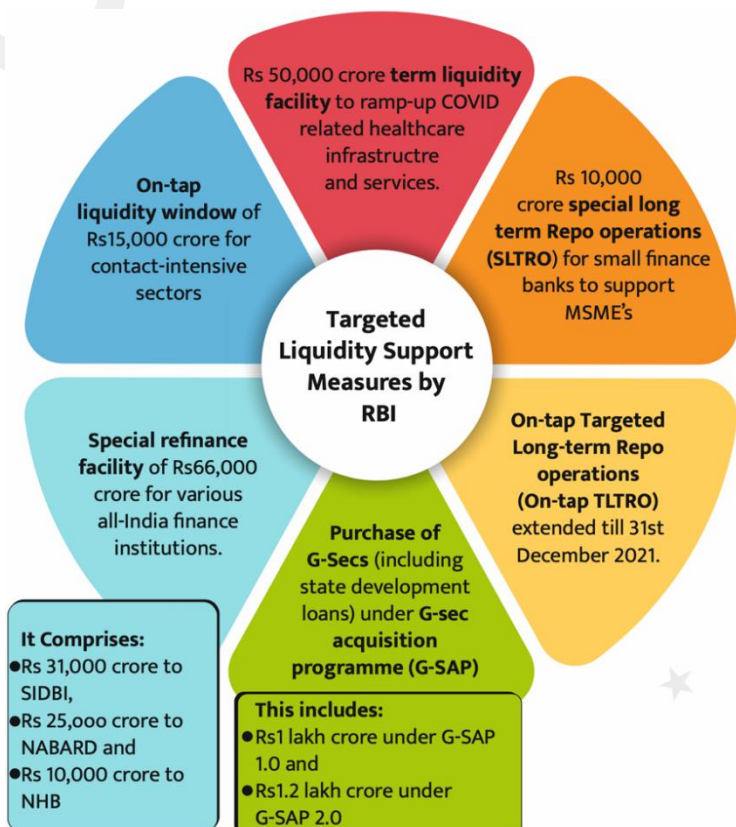
- **Repo Rate:** Since **May 2020**, the **Monetary Policy Committee (MPC)** has maintained **status quo** on the **policy repo rate (4%)** with an **accommodative monetary policy stance**.

- It follows the cumulative **250 basis points** cut since **February 2019**.



Source: RBI

- MPC forward guidance is to **persist with an accommodative stance** and continue **monitoring inflationary pressure** to revive growth on a **durable basis** while ensuring that inflation remains within the target (Consumer Price Index inflation of 4% within a band of +/- 2%).
- **Monetary Aggregates:** In 2021-22, the monetary aggregates **growth rates** (including Reserve money, Broad money) were **lower** as compared to the last year. As on 7 January 2022-
  - **Reserve money (M0)** recorded a growth of **13%**, as compared to **14.3%** a year ago, with growth largely driven by **banker's deposits with the RBI**.
  - **Broad Money (M3)** recorded a **9.9%** growth (by Dec 2021), mainly driven by **aggregate deposits** (from component side) and **bank credit** (from sources).
  - **Money Multiplier** (measured as a ratio of M3/M0) has been on the **decline since 2017-18**. It stood at **5.3** (by Dec 2021), a slight improvement over **5.2** of March 2021.
- **Currency in Circulation (CIC)** grew by **7.8%**, lower than previous year.



## Liquidity Conditions and its Management

- **Surplus liquidity** in the banking system **since mid-2019**, in sync with **accommodative stance** from RBI and **easing of monetary conditions** to support growth.
- In 2021-22, RBI used targeted liquidity support measures (see **image**).
- In 2021-22, RBI resumed normalization of liquidity as well in a phased manner. E.g.
  - It deployed **14-day Variable Rate Reverse Repo (VRRR) auctions** under the **Liquidity Adjustment Facility (LAF)** to rebalance liquidity from passive absorption.
  - **Cash reserve ratio (CRR)** also reached its pre-pandemic level of 4% by May 2021 (from 3% of March 2020) through gradual increase.

## Developments in G-Sec Markets

- The yields on 10-year G sec increased to 6.45% on 31 Dec 2021 from 5.75% in June 2020.
- The **term spread** (the gap between 10 year and 1-year G-sec yield) also narrowed down slightly; still wider as compared to the pre-pandemic years.

## Banking Sector

Banking System appears to have weathered the economic shock of the pandemic with-

- **Credit Growth for Scheduled Commercial Banks (SCBs)** at 9.2% (6.6% last year).
- **Gross Non-Performing Advances (GNPA) ratio** (i.e. GNPA as a percentage of Gross Advances) of SCBs declined from 11.2% at the end of 2017-18 to 6.9% in September, 2021.

### National Asset Reconstruction Company Limited (NARCL) and India Debt Resolution Company Limited (IDRCL)

- Despite various resolution mechanisms (e.g. Insolvency and Bankruptcy Code, SARFAESI Act, Debt Recovery Tribunals etc.) and 28 Asset Reconstruction Companies (ARCs), a large stock of **Legacy NPAs** are yet to be resolved.
- To resolve the legacy NPAs and clean up the bank books, two new related entities (under debt management agreement) were incorporated in 2021 as-
  - **NARCL:** An ARC (**majorly owned** by PSBs with **Canara Bank** as **Sponsor**), incorporated in July 2021, to **aggregate** and **acquire** stressed assets; and
  - **IDRCL:** A service company [**majorly owned** by Private Sector Banks (**51%**), rest with PSBs], incorporated in September 2021, to manage and dispose of the assets.
- NARCL will have a finite life of **5 years** with IDRCL term being co-terminus to NARCL.

### Resolution Process

- NARCL will acquire assets of around **₹2 lakh crore** by making an offer to Lead Bank, with Lead Bank to run a '**Swiss Challenge**' process to invite other ARCs/Bidders to better NARCL anchor offer, before NARCL being declared as a **preferred bidder**.
- The assets will be acquired by NARCL in the underlying trusts, with IDRCL to prepare and suggest the proposed restructuring/resolution plan, strategies, etc. for each of them.
- The **asset acquisition** and **resolution** will happen within the **RBI Framework for ARCs**.
  - E.g. Asset acquisition within the extant regulations of RBI under **15:85 structure** (15% in Cash and 85% in Security Receipts or SRs).
- Based on international practices like Malaysia and UK, SRs issued by NARCL will be **backed by Government** (up to ₹30,600 crore) for **credibility** and providing a **contingency buffer**.
- Valid for 5 years, the government will charge a guarantee fee on the amount it guarantees, which will increase annually to incentivize early and timely resolution.

- **Net Non-Performing Advances (NNPA) ratio** declined from 6% to 2.2% in the same period.
- **Restructured Standard Advances (RSA) ratio** of SCBs increased to 1.5% from 0.4%.
- **Stressed Advances ratio of SCBs** increased from 7.9% at end-September 2020 to 8.5% at end-September 2021 due to various COVID-19 related dispensations/moratoriums.
  - GNPA for PSBs decreased to 8.6% while stressed advances ratio increased to 10.1%.
- **Capital to Risk-weighted Asset Ratio (CRAR) of SCBs** increased from 15.84% to 16.54% due to capital infusion in PSBs by government and private banks raising capital from the market.
- **Annualised Return on Assets (RoA) and Return on Equity (RoE)** for SCBs increased. For Public Sector Banks (PSBs), both became positive in June 2020 after remaining negative since March 2016.

### Monetary Transmission- Bank Lending and Deposit Rates

- **Weighted Average Lending Rate (WALR)** on fresh rupee loans declined by 197 basis points and by 133 bps on outstanding loans during the period February 2019 to November 2021.
- Higher monetary transmission from **PSBs** in comparison to private banks.
- Monetary transmission was aided by- **Large surplus systemic liquidity, forward guidance** of continuing with the **accommodative stance** and the **external benchmark system** for **pricing of loans in select sectors**.

#### Deposit Insurance and Credit Guarantee Corporation (DICGC) and DICGC (Amendment) Act, 2021

- Governed by the provisions of the **DICGC Act of 1961** and **DICGC General Regulations of 1961**, DICGC is liable to pay the **insured deposit amount** to **depositors** of an **insured bank**.
- It covers all commercial banks, including Payment Banks, Small Finance Banks, Regional Rural Banks, Foreign Bank branches in India, Local Area Banks and Co-operative Banks in all States and Union Territories.
- It registers a bank as insured immediately and automatically on issuance of banking license.
- For all insured banks, Payment of deposit insurance premium to DICGC is compulsory and DICGC pays the insured deposit amount to depositors in situations like-
  - Liquidation (sale of all assets on closing down of the bank) (ii) reconstruction or any other arrangement under a scheme, or (iii) merger or acquisition by another bank.
- In the last budget, the deposit insurance cover was increased from ₹1 lakh to ₹5 lakh per depositor per bank, fully protecting **98.1%** of the total **252.6 crore accounts** or **50.9%** of **total assessable deposits** as at end-March 2021.
  - Internationally, fully protected accounts are around 80% and 20-30% of total assessable deposits.
  - Bank-group wise, the percentage of insured deposits vis-à-vis total deposits is 84% for RRBs, 70% for cooperative banks, 59% for SBI, 55% for PSBs, 40% for private sector banks and 9% for foreign banks.

#### Key Features of DICGC (Amendment) Act, 2021

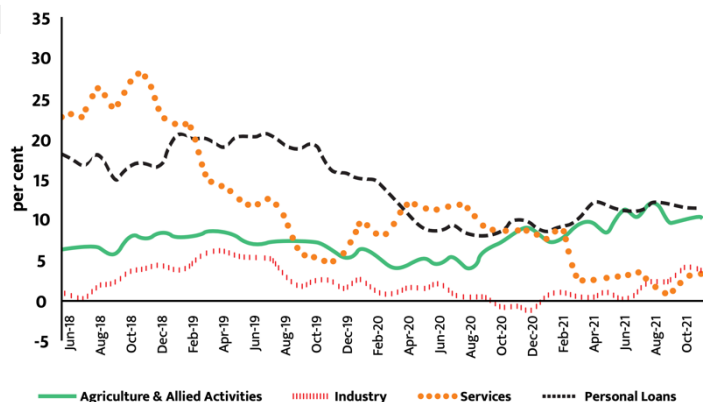
It addresses the difficulties faced by genuine depositors in accessing their own money on imposition of various restrictions, such as moratorium, imposed by RBI and other issues by-

- Introduction of interim payments from DICGC to these depositors with a timeline of maximum 90 days.
- Empower DICGC's Board to defer due repayments from insured banks after insurance pay out on its own terms.
- Put provisions for penal interest in case of delay to ensure timely repayment from banks to DICGC.
- Removal of earlier ceiling of 15 paise on premium and DICGC to notify the ceiling on premium with prior RBI approval.

### Bank Credit Growth

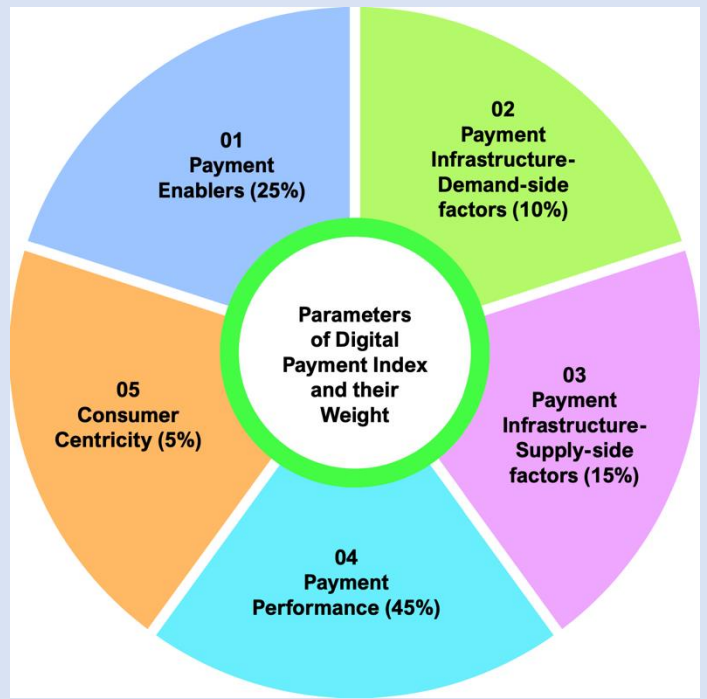
- **Credit Growth: Sharp pick up in December** to **9.2%** after modest rise to **7.3%** from **5.3%** at beginning of **April 2021**.
- **Sector-wise Credit Growth** (YoY growth in November 2020-21)
  - **Agriculture and Allied Sectors** and **Personal loans** registered high growth of **10.4%** and **11.6%** respectively.
  - **Industry** credit growth improved steadily to **3.8%**, after entering into a negative phase in 2020, with Medium industries seeing highest growth of **48.7%**.
  - **Services** credit growth remained subdued at **3.6%**.

Growth (YoY) in Sectoral Credit



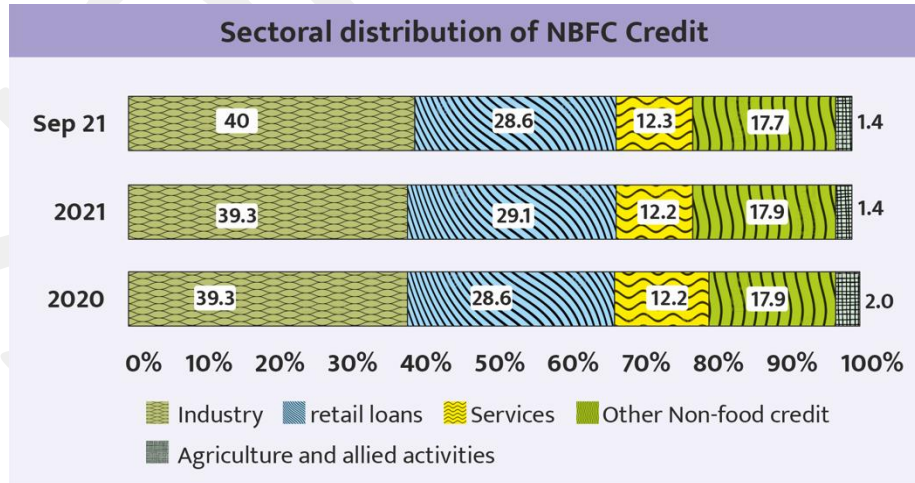
### Digital Payments and Digital Payment Platforms

- The **Digital Payments Index** of RBI, which captures the extent of digitization of payments across the country on **five parameters** (see image), continued its high growth.
- It increased from **100** in **March 2018** (base period) to **304.06** in **September 2021**.
- Digital payment systems and avenues for making digital payments also increased.
- Presently, **Unified Payments Interface (UPI)** is the **largest retail payment system** of country, recording-
  - **4.6 billion transactions** worth **₹8.26 lakh crore** in **December 2021** alone with nearly 50% UPI payments **below ₹200**,
  - Processed over 24.26 million **one-time mandate** transactions of value **₹44,381 crore**,
  - Recently, Bhutan became the **first country to adopt UPI standards** for its **QR code**.
  - It is also the **second country** after **Singapore** to have BHIM-UPI acceptance at **merchant locations**. **RBI and Monetary Authority of Singapore** are also working to **link UPI and PayNow by July 2022**.
- **Immediate Payment Service (IMPS)**, a real-time fund transfer platform available 24x7x365, processing transactions worth ₹29,349 billion in April-December 2021.
- **e-RUPI**, launched in 2021, a person specific and purpose specific digital voucher to work on basic phones and areas of lack of internet connection with no need for customers to have bank account.



### Non-Banking Financial Companies (NBFCs) Sector

- **Credit Growth of NBFCs:** Remained sluggish with marginal increase in total credit from **₹27.53 lakh crore** in March 2021 to **₹28.03 lakh crore** in September 2021.
- **Credit intensity of NBFCs, i.e., NBFC credit as a ratio of GDP:** Consistently increasing and reached **13.7** at end **March 2021 (8.6 in 2013)** with **Industry** as **largest recipient** of credit from NBFCs, followed by **retail loans** and **services** (see image).



- **Total NBFCs Assets:** Increased from **₹36.37 lakh crore** in September 2020 to **₹42.05 lakh crore** in September 2021.
- **Banks and NBFCs:** Increased banks' exposure to NBFCs (bank lending and investment) at a YoY growth of 8.5%, reaching **₹9.16 lakh crore** in September 2021.
- **External Liabilities:** NBFCs external liabilities in the form of secured and unsecured borrowings and public deposits increased by 7.95%.
- **GNPA, NPA and CRAR:** GNPA ratio increased to **6.55%** while NPA ratio remained same at 2.93% at end-September 2021. CRAR of NBFCs stood at 26.64% against regulatory requirement of 15%

**Factoring in India [Factoring Regulation (Amendment) Act, 2021]**

- Factoring is a transaction where an entity sells its receivables (dues from a customer) to a third party (a 'factor' like a bank or NBFC) for immediate funds.
- An important source of liquidity worldwide, especially for MSMEs facing liquidity issues, the **Factoring Regulation Act, 2011** provides for a legal framework on factoring.
- It allows **four types** of entities to engage in factoring business, i.e. **Banks, NBFCs, Statutory Corporations and Companies**.
- But only 7 NBFCs (called **NBFC-Factors**) received factoring business registration from RBI due to condition of **factoring as principal business**, i.e. NBFCs need to have its-
  - Financial assets in the factoring business constitute at least 50% of its total assets and income derived from factoring business is not less than 50% of its gross income.
- To liberalize the restrictive provisions and ensure strong regulatory mechanism, the amendment act was enacted (in line with recommendations of **UK Sinha Committee** or **Expert Committee on MSMEs**) with RBI notifying its significant regulations.
- **Major Amendments by it:**
  - **Removing the factoring as principal business criteria** to increase number of NBFCs eligible for factoring business,
  - **Streamlining factoring process** to prevent dual financing frauds and empower government to specify time period for registration of invoice and satisfaction of charge upon it,
  - **Allow Trade Receivable Discounting System (TReDS) platforms to register charge directly** with Central Registry of Securitization Asset Reconstruction and Security Interest (CERSAI) on behalf of the factors using the platform.
    - ✓ It will improve the operational efficiency of the process, promote TReDS and reduce procedural burden on factors.
  - **Amend definitions** of "assignment", "factoring business" and "receivables" to bring them in consonance with international definitions.
  - **Gave RBI regulation making power** on the manner of granting certificate of registration under Section 3, and the manner of filing of particulars of transactions with the Central Registry by TReDS entities on behalf of factors under Section 19.

**Development in Capital Markets**

- **Primary Market (Equity):** increased resource mobilization through **Initial Public Offerings (IPOs)** with **75 companies listing IPOs** in April-November 2021, raising **₹89,066 crore**, in comparison to 29 companies raising **₹14,733 crore** in April-November 2020.
  - **Amount raised through rights issue** and by **Qualified Institutional Placements (QIP)** reduced significantly by 62.6% and 52.9% respectively.
- **Primary Market (Debt):** Debt mobilization through Corporate Bond Market slowed with mobilization of around **₹3.7 lakh crore** in April-November 2021 in comparison to around **₹4.92 lakh crore** in April-November 2020.
  - Diversification of fund raising was visible with utilization of new instruments such as hybrids & convertibles, Real Estate Investment Trusts (REITs), Infrastructure Investment Trusts (InvITs) etc.
- **Significant rise in retail participation** with addition of nearly **221 lakh individual demat accounts** in April-November 2021.
- **Secondary Market (Mutual Funds):** Net Assets Under Management (AUM) of the mutual fund industry rose by **24.4%** to **₹37.3 lakh crore** (end of November 2021) from **₹30.0 lakh crore** (end of November 2020).

**MSCI Emerging Markets Index and India's Weight**

- MSCI is an acronym for Morgan Stanley Capital International, an investment research firm providing stock indexes, portfolio risk and performance analytics, and governance tools to institutional investors and hedge funds.
- **MSCI Emerging Market Index** (launched in **2001**), is one of globally popular indices which captures equity performance of large and mid-cap companies across 25 emerging market countries including India.
- **India's weight in the MSCI EM index increased to 12.45%** (as of December 2021) from 8.3% in August 2020 with 106 listed Indian entities.
  - In 2020-21, Indian equity markets witnessed FPI inflows of over **₹2.74 lakh crore**.

### Investment by Foreign Portfolio Investors (FPIs)

- **Decreased** by 82.8% in **April-November 2021** over the same period previous year with cumulative net FPIs investment of US\$288.4 billion (end November 2021), a rise of 9.2% from November 2020.

### Indian Benchmark Indices

- Among major emerging market economies, Indian markets outperformed its peers (**18.1%** growth in **Nifty 50** and **17.7%** in **S&P BSE Sensex**).
- **Sensex and Nifty 50** scaled up to touch its peak of 61,766 and 18,477 on October 18, 2021, driven by **good corporate earnings, sharp rise in COVID-19 vaccination and opening up of business establishment** across the country.
- **India VIX**, indicating market's expectation of volatility in near term i.e. next 30 calendar days, decreased by 21.4% during April-December 2021.

### Insurance Sector

- Based on international parameters of insurance penetration and insurance density, assessing the potential and performance of the insurance sector, the-
  - **Insurance penetration in India increased to 4.2%** in 2020 (3.2% in life insurance and 1% in non-life insurance) from 2.71% in 2001.
    - ✓ Globally, insurance penetration in life insurance is 3.3% (India almost at par with it) and in non-life insurance it is 4.1% (India lagging behind).
  - **Insurance Density in India increased to \$78** in 2020 (\$59 in Life insurance and \$19 in Non-Life insurance) from \$11.5 in 2001.
    - ✓ It is much lower than the global insurance density of **\$360** for the **life segment** and **\$449** for the **non-life segment** respectively in 2020.

### Pension Sector

- Total number of subscribers under **New Pension Scheme (NPS)** and **Atal Pension Yojana (APY)** increased by **23.7%**, rising from **374.32 lakh** (Sept. 2020) to **463 lakh** (Sept. 2021).
- The **overall contribution under the NPS grew by more than 29%** during same period with maximum contribution growth in All Citizen Model, followed by Corporate Sector and so on.
- Asset Under Management (AUM) under NPS and APY also increased by 34.8% to reach **₹6.67 lakh crore**.
- Under APY, enrolment from young ages increased and gender gap narrowed with female subscribers increasing from 37% in March 2016 to 44% in September 2021.
- **Sector Reforms:** Limit of aggregate holding of equity shares by a foreign company in Pension Funds has been revised up from 49% to 74%; NPS subscribers joining after 60 years can remain invested till 75 years of age (earlier 70 years); Government co-contribution was increased from 10% to 14% for its employees.

#### Voluntary Liquidation of Corporates

- Voluntary liquidation is the closure of a company despite viable operations.
- It can be due to personal reasons, merging of subsidiaries etc.
- Presently, it can be done either through-
  - **The Registrar of Companies (RoC) under section 248 of the Companies Act, 2013**, or
  - Under **Section 59 of the IBC, 2016** along with the **IBBI (Voluntary Liquidation Process) Regulations, 2017**.
- Both of them have long pendency and suffer from various procedural issues which makes the voluntary liquidation process complex and time consuming.
- To improve the ease of exit of business, the steps in processes need simplification with- Creation of a single window for entire process, portal to combine all the liquidation steps.

### Insolvency and Bankruptcy Code (IBC)

- IBC has created a cohesive and comprehensive insolvency ecosystem with-
  - **Two benches of National Company Law Appellate Tribunal as Appellate Authority**,
  - **15 benches of National Company Law Tribunal as Adjudicating Authority**,
  - **Insolvency and Bankruptcy Board of India as Regulator**, and
  - **Increasing Service providers with insolvency profession and valuation profession** helping in professionalization of insolvency services.
- In view of the COVID-19 pandemic, the Insolvency and Bankruptcy (Amendment) Ordinance, 2020 was promulgated- suspending initiation of Corporate Insolvency Resolution Process (CIRP) of a corporate debtor (CD) for any default arising on or after 25th March 2020.

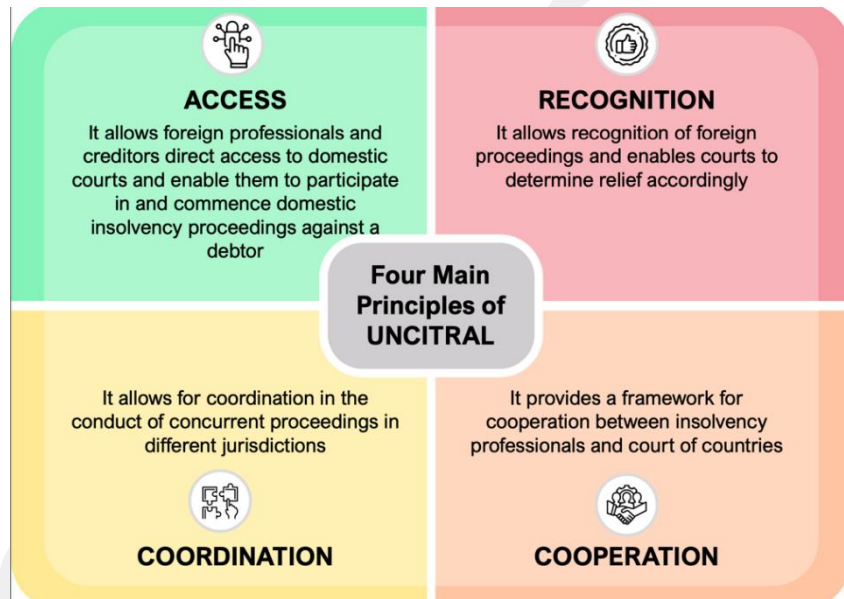
- Further, the suspension of the Code was extended twice for 3 months to provide relief to the firms undergoing stress due to the pandemic.
- Relaxations combined with continued resolutions led to reduction in pending cases. As of September 2021, it increased to 1640 cases with nearly 75% pending for over 270 days.
- **Rescue of Distressed assets:** IBC has rescued 421 CDs through resolution plans, **realizing ₹2.55 lakh crore against assets** valuing ₹1.48 lakh crore when they entered the CIRP.
- **Liquidations:** Referred 1419 CDs for liquidation (with assets valuing ₹0.52 lakh crore). It has completed liquidation of 264 CDs, realizing ₹1,983 crore against ₹2,025 crore of assets.
- **Time and Cost:** The resolved 421 CIRPs took an average 428 days in process conclusion while the 1419 orders for liquidation took an average of 375 days.
- **Behavioral Change:** Debtors are resolving distress in the earlier stages, to avoid gradual decline in distressed assets value and consequences of the resolution process.

**IBC Code Amendment**

- In 2021, through an Ordinance, IBC Code, 2016 was amended to provide for a Pre-Packaged Insolvency Resolution Process (PPIRP) for corporate MSMEs.

**Cross Border Insolvency**

- It represents special circumstances in which an insolvent debtor has assets and/or creditors in more than one country.
- Regulated by Section 234 and 235 of IBC, they are **ad-hoc in nature** and **susceptible to delay**.
  - **Section 234** empower **Central Government** to enter into **bilateral agreements** with other countries to resolve situations about cross-border insolvency, and
  - **Section 235** allows **Adjudicating Authority** to issue a **letter of request** to a court or competent authority to deal with a request for evidence or action in connection with insolvency proceedings under IBC in countries with agreement under Section 234.
- The absence of standardized cross border insolvency framework gives rise to complexities and raises number of issues such as:
  - **Extent of access to assets** held in a foreign country for an insolvency administrator,
  - **Priority of payments**, i.e. whether local creditors to have access to local assets before funds go to the foreign administration or not,
  - **Recognition of the claims of local creditors** in a foreign administration,
  - **Recognition and enforcement of local securities**, taxation system over local assets where a foreign administrator is appointed etc.
- Based on **Insolvency Law Committee** of 2018 recommendations, a robust cross border insolvency framework by adopting the United Nations Commission on International Trade Law (UNCITRAL) with certain modifications to suit Indian context.



Glossary	
<b>Liquidity Adjustment Facility (LAF)</b>	It is a monetary policy tool, primarily used by the RBI, which allows banks to borrow money through repurchase agreements (repos) or make loans to the RBI via reverse repo agreements.
<b>Variable Rate Reverse Repo (VRRR)</b>	It is a sub-type of reverse repo used by RBI to absorb money from the banking system with Variable Rate or Reverse Repo.
<b>Weighted average lending rate (WALR)</b>	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.

<b>G-Sec Acquisition Programme (G-SAP)</b>	G-SAP is a dedicated liquidity window through which RBI buys sovereign papers to infuse cash into the banking system. Closely related with Open Market Operations, G-SAP involves upfront commitment to purchase a specific quantum of government securities, enabling a stable and orderly evolution of yield curve.
<b>Term Spread</b>	It is the difference between interest rates on short- and long-dated government securities.
<b>Trade Receivables Discounting System (TReDS)</b>	It is an <b>electronic exchange</b> to allow transparent and online selling of receivables by MSMEs. On TReDS, sellers get multiple financiers to choose from, option of various interest rates, and sell without any collateral.
<b>Insurance Penetration</b>	It is measured as the <b>percentage of insurance premium to GDP</b> .
<b>Insurance Density</b>	It is measured as the <b>ratio of premium to population</b> (measured in US\$ for convenience of international comparison).

#### CHAPTER AT A GLANCE

<b>Monetary Policy Committee (MPC) maintained status quo</b> on the policy repo rate (4%) with an accommodative monetary policy stance
<b>The system liquidity remained in surplus.</b> RBI undertook various measures to further provide liquidity and resumed normalization of liquidity in a phased manner
<b>Reserve money (M0) and Broad Money (M3) recorded growth of 13% and 9.9%</b> respectively with Money Multiplier recording a slight improvement after being in decline since 2017-18.
Commercial Banking system <b>weathered the economic shock of the pandemic</b> well with YoY rise in Bank Credit Growth
<b>Gross Non-Performing Advances ratio and Net Non-Performing Advances ratio for Scheduled Commercial Banks (SCBs) declined</b> while Capital to risk-weighted asset ratio increased
<b>Return on Assets and Return on Equity for Public Sector Banks continued to be positive</b> for the period ending September 2021
<b>Capital markets witnessed an exceptional year</b> with stupendous rise of 504.5% in fund mobilization. Indian markets outperformed its peers with Sensex and Nifty touching peak
<b>A pre-packaged insolvency resolution process was provided</b> under IBC as an alternative insolvency resolution process for corporate Micro, Small and Medium Enterprises

# PERSONALITY

## DEVELOPMENT PROGRAMME

### CIVIL SERVICES EXAMINATION 2021

#### Programme Features

- ★ DAF Analysis Session with senior faculty members of Vision IAS
- ★ Mock Interview Session with Ex-Bureaucrats/ Educationists
- ★ Interaction with Previous toppers and Serving bureaucrats
- ★ Performance Evaluation and Feedback



**CHAPTER 4****Testing your remembering skills & Understanding skills****Q1. Which of the following can aid in transmission of Monetary Policy?**

1. Surplus Liquidity
2. Accommodative stance
3. External benchmark system for pricing of loans

Select the correct answer using the code given below.

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

**Q2. Which of the following is/are correct regarding National Asset Reconstruction Company Limited (NARCL)?**

1. It is setup by the banks for resolution of stressed assets.
2. Majority of stake in NARCL is owned by Private Sector Banks.

Select the correct answer using the code given below.

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

**Q3. Which of the following measures can be used for normalization of liquidity in an economy?**

1. Variable Rate Reverse Repo (VRRR) auctions by Central Bank
2. Reducing Cash Reserve Ratio
3. Purchase of G-Secs by RBI

Select the correct answer using the code given below.

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

**Q4. With reference to Deposit Insurance and Credit Guarantee Corporation (DICGC) (Amendment) Act, 2021, consider the following statements:**

1. It is applicable only for Scheduled Commercial Banks.
2. The act provides for interim payments to depositors
3. It imposes a ceiling of premium at 15 paise.

Which of the statements given above is/are correct?

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

**Q5. Consider the following statements:**

1. Factoring is a financial transaction that allows a business to obtain immediate funds.
2. Factoring business in India is regulated by SEBI.

**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. Adopting UNCITRAL (United Nations Commission on International Trade Law) model law under The Insolvency and Bankruptcy Code, 2016 will address the rising complexities and issues related to absence of standardized cross border insolvency framework. Discuss.**

**Q2. Despite various resolution mechanisms a large stock of legacy NPAs are yet to be resolved. In this context, discuss how the recent setting up of National Asset Reconstruction Company Limited (NARCL) and India Debt Resolution Company Limited (IDRCL) entities will address this issue.**

**ENGLISH** | 22 Mar 5 PM  
Medium

**हिन्दी** | 29 Mar 5 PM  
माध्यम

- Specific targeted content: oriented towards Prelims exam
- Doubt Clearing sessions and mentoring
- Complete coverage of The Hindu, Indian Express, PIB, Economic Times, Yojana, Economic Survey, Budget, India Year Book, RSTV, etc from May 2021 to April 2022
- Live and online recorded classes that will help distance learning students and who prefers flexibility in class timing

**One Year**  
**CURRENT AFFAIRS**  
FOR PRELIMS 2022 IN 60 HOURS

# CHAPTER 5: PRICES AND INFLATION

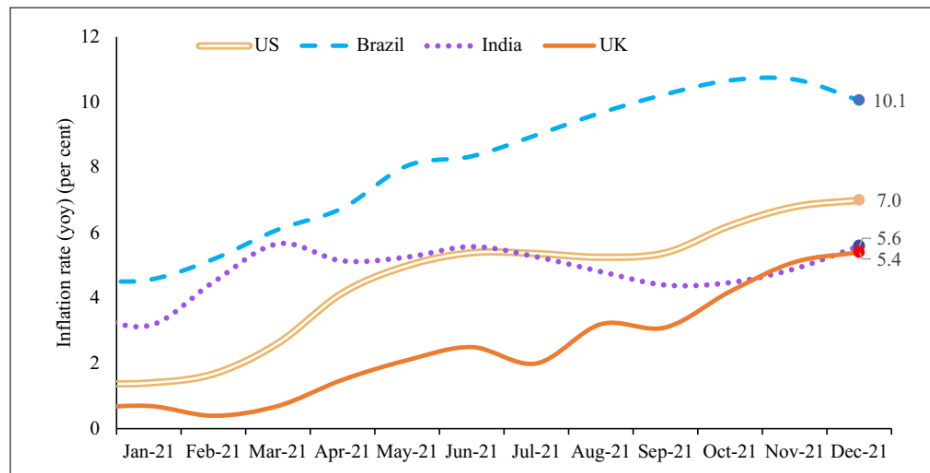
## Introduction

With rising economic activities, rising global inflation became a fresh challenge to the global economy in 2021. Though consumer price inflation increased in **advanced economies** and **Emerging Markets and Developing Economies (EMDEs)**, it remained range bound in India.

## Global Inflation

- In 2021, economic activities revived with the opening-up of economies, leading to global increase in **Consumer Price Inflation rates**.
- It was **3.1%** in **advanced economies** and **5.7%** in **EMDEs**, due to factors such as:
  - **COVID-19 related stimulus spending**, mainly in the form of discretionary handouts to households in major economies.
  - **Pent up demand** fueling consumer spending.
- The surge in energy, food, non-food commodities, disruption of global supply chains, rising freight costs etc. stoked inflation across the globe during the year.
  - Increased Crude Oil demand and supply cuts from the Organization of the Petroleum Exporting Countries and its allies (OPEC+) lead to increased oil prices.
- In comparison, it remained range bound in India due to proactive steps from the government for effective supply management.

Consumer Price Inflation in select countries

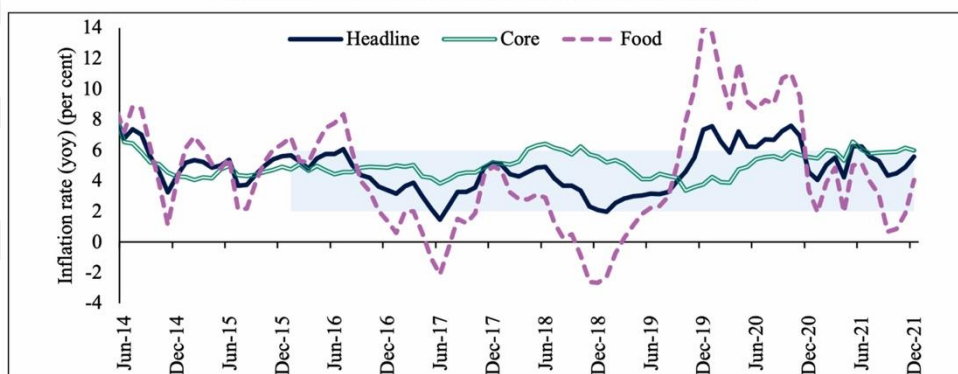


Source: Organisation for Economic Co-operation and Development; Office for National Statistics, UK

## Domestic Inflation

- Retail Inflation, measured by **Consumer Price Index-Combined (CPI-C)** inflation, moderated at **5.2%** in **2021-22** (April-December) from **6.6%** in the corresponding period of **2020-21**.

Trends in CPI-C Headline, Core and Food inflation



Source: NSO, MoSPI

- In comparison, **Wholesale Price Index (WPI)** saw a sharp uptick to **12.5%** during 2021-22 (April-December), attributed to:
  - Low base in the previous year, pick-up in economic activities, sharp increase in global commodity prices and other imported inputs and high freight cost.

## Current Trends in Inflation and its Drivers

- **Recent trends in Retail inflation:**
  - Since **July 2021**, **average retail inflation** is well within its tolerance band of 4% +/-2.
  - This decline was led by the easing of food inflation, averaging at a low of 2.9% in 2021-22 (April-December) as against 9.1% in the corresponding period last year.

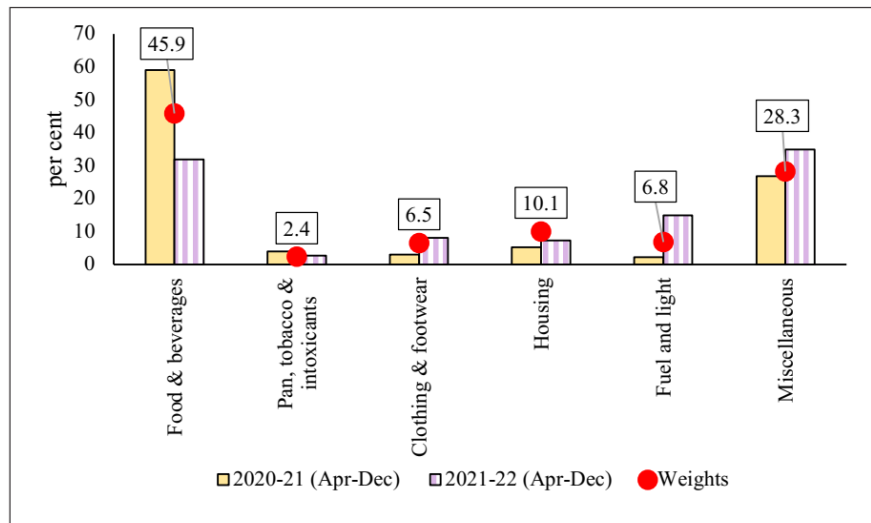
- In the current FY, **average core inflation** (inflation excluding ‘food and beverages’ and ‘fuel and light’) has shown a **rising trend**.
- To address anomalies of fuel items, ‘**Refined Core**’ inflation has been constructed by excluding main fuel items, i.e. ‘petrol for vehicle’, ‘diesel for vehicle’ and ‘lubricants & other fuels for vehicles’, in addition to ‘food and beverages’ and ‘fuel and light’ from the headline retail inflation.

- Since June 2020, refined core inflation has been much below the conventional core inflation, indicating the impact of inflation in fuel items in the “conventional” core inflation measure.

- **Major Drivers of Retail Inflation:**

- In 2021-22, the overall contribution of **miscellaneous** to inflation increased from 26.8% to 35%, and **fuel & light** from 2.9% to 14%.
- On the other hand, the contribution of **food & beverages** declined from 59% to 31.9%.

**Contribution of groups to overall CPI-C inflation in 2020-21 (April-December) and 2021-22 (April-December) in per cent**



Source: NSO, MoSPI

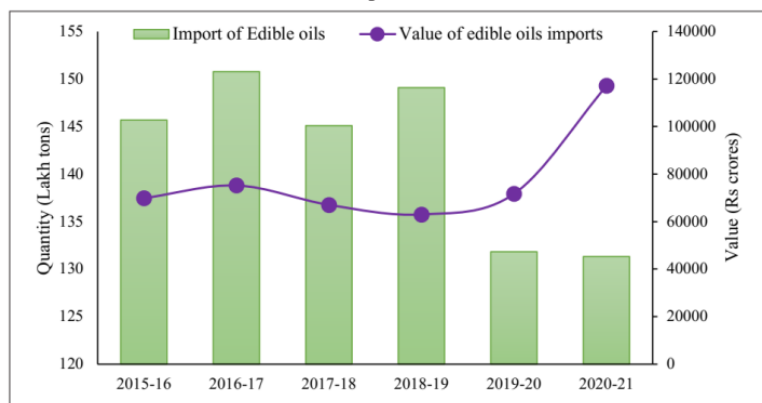
**What has Driven Retail Inflation and Why?**

Major Groups	Inflation Drivers
<b>Food and Beverages</b>	<b>60% inflation by Oils and fats</b> due to spike in international edible oils prices. Inflation in cereals and products remained negative <ul style="list-style-type: none"> <li>● India imports around 60% of its consumption of edible oils.</li> </ul>
<b>Fuel &amp; light</b>	High international crude oil, petroleum product prices and higher taxes
<b>Miscellaneous</b>	Transport and Communication, followed by health
<b>Clothing &amp; Footwear</b>	Higher production and input costs (including imported inputs), revival of consumer demand

- **Steps taken to manage inflation:**

- Reduction in central excise and subsequent cuts in Value Added Tax by most States to ease petrol and diesel prices.
- Effective supply-side management of most essential commodities. E.g.
  - ✓ **Onions:** Creation of buffer stocks for effective intervention on price rise,
  - ✓ **Pulses:** Tur and Urad in ‘free’ import category, Zero import duty on Masur and reduction in Agriculture Infrastructure and Development Cess on it,
  - ✓ **Edible Oils:** Reduced basic duty on edible oils, steps to reduce speculation and hoarding, production of alternates and addition of soyameal in essential commodities.
  - ✓ **Perishable Essential Commodities:** Expansion of **Operation Greens** from **TOP** (Tomato, Onion and Potato) to **TOTAL** (41 perishables), Kisan Rail etc.

**Import of Edible oils**



Source: Solvent Extractors Association of India

### Rural-Urban inflation differential

- Large gap witnessed between rural and urban CPI inflation from July 2018 to December 2019 declined in 2020, with CPI-Urban moving closer to CPI-Rural inflation.
- Two main Divergence points- November 2020 to March 2021, and in September 2021 onwards, were observed with food and beverages as the main factor behind divergence.

### Trends in Wholesale Price Index based Inflation

- As discussed earlier, **WPI inflation** has shown an **increasing trend** and remained high during the current financial year touching 12.5% during 2021-22 (April – December), driven by:
  - Crude petroleum & natural gas sub group with very high inflation and stood at 55.7% in December 2021.
  - Minerals and manufacture of basic metals also witnessed inflation.
  - In manufactured food products, edible oils were major contributor with 36.4%.

#### Price Trends

##### Agricultural Commodities

- In agricultural commodities, **seasonality** and **irregular shocks** (rain, delay in crop etc.) are main contributors to **price variations**.
- It is **more prominent** in **perishable commodities** such as **tomato** and **onion**. E.g. Due to **seasonality**,
  - Upward pressure in tomato price from July to November every year and downward pressure in March.
  - Downward pressure in onion price during Rabi harvest (December-January to March-May) and upward pressure in the rest of the months.
- **Solution:** Incentivize production during lean season; investments in food processing and storage infrastructure; reduce production wastage with better supply chain management.
- **Existing Steps:** Mission for Integrated Development of Horticulture (MIDH); Agricultural Marketing Infrastructure (AMI); direct onion purchase from farmers for buffer; Operation Greens; Kisan Rail etc.

##### Petroleum Products Prices

- **Petroleum products** prices in India are linked to the price of respective products in the international market. E.g. **Liquefied Petroleum Gas (LPG)** prices are based on Saudi Contract Price (CP), the benchmark for international prices of LPG.

### Divergence between WPI and CPI based Inflation rates

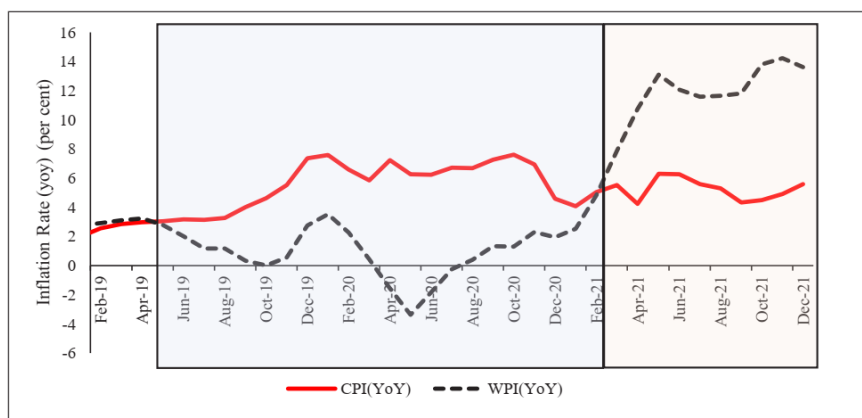
- YoY inflation rate based on the WPI and the CPI-C has recorded divergence since June 2019 with WPI being lower than retail inflation till February 2021, peaking to 9.6 percentage points in May 2020.

- This year there was a reversal in divergence with retail inflation falling below wholesale inflation by 8.0 percentage points in December 2021.

### Reasons for Divergence and WPI inflation being higher than CPI inflation:

- **Variations due to base effect:** WPI with low base while CPI inflation remained high,
- **Conceptual difference in their purpose and design:** CPI reflects price movement at retail levels while WPI represents wholesale transactions (1<sup>st</sup> point of sale).
- **Significant variations of items and weights of specific commodities:** In CPI, food and beverages have the highest weight (45.9) while in WPI it is manufactured group (64.2) with food articles weight at 24.4. Similarly, weight of fuel in CPI is 6.8 as compared to 13.2 in WPI; etc.
- **Lagging demand pick up:** While production has gradually picked up in 2021-22 to reach the pre-pandemic levels, consumption demand is yet to normalise fully.
- With gradual waning of base effect in WPI, divergence between WPI and CPI inflation is expected to narrow down.

Divergence between YoY inflation in CPI and WPI



Source: NSO, MoSPI and OEA, DPIIT

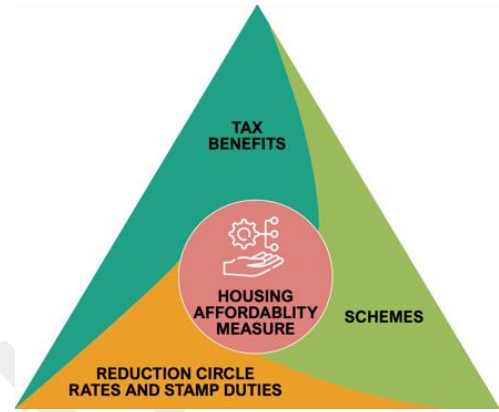
Global Commodity Prices and Domestic Inflation			
Commodity	Global Price Trend	Major Reasons	Domestic Inflation Correlation (measured via WPI)
Aluminium	Increasing	Rise in demand and curtailed production from China (Major Exporter).	Positive and high correlation
Copper	Increasing	Rise in demand with falling inventories and threats of strike in Chile and Peru.	Positive and high correlation
Crude Oil	Increasing	Rise in Demand and production cut by OPEC+	Positive and high correlation
Cotton	Increasing	Improved demand post Covid-19.	Positive and high correlation

### Housing Prices

- Increasing transactions, after significant fall in demand and supply due to Covid-19, due to pent up demand and government measures to increase affordability.
- Number of unsold residential units witnessed a significant drop during the second wave of the pandemic.

### Pharmaceutical Pricing

- To ensure availability and accessibility of medicines at affordable rates, the government regulates drug prices through National Pharmaceutical Pricing Authority (NPPA), an attached office of the Department of Pharmaceuticals (DoP).
- Covid-19 Initiatives:**
  - Capping of trade margin on Oxygen Concentrators at 70% on Price to Distributor (PTD) level,
  - Capping of trade margins on Pulse Oximeter, Glucometer, Blood Pressure Monitor, Nebulizer and Digital Thermometer as well,
  - Ceiling Price on scheduled drugs for Covid Management and voluntary reduction from manufacturers/marketers on few non-scheduled drugs for Covid (e.g., Ramdesivir).
  - Multi-pronged approach to monitor and coordinate equitable distribution of Remdesivir, Tocilizumab and Amphotericin etc.



### Long Term Perspective for Management of Supply Side Factors

- With supply-side factors having predominance in the determination of inflation in India, the survey suggests certain long-term policies to manage inflation.
- Benefits:**
  - Changing Production Patterns:** It will help in becoming self-reliant in pulses and oilseeds; diversification of crops; and helping government to maintain realistic buffer stocks of rice and wheat.
    - ✓ **Initiatives:** Priority to pulses and oilseeds production through area expansion, productivity through HYVs, MSP support and procurement.
  - Calibrated Import Policy:** Long-term consistent approach will help to avoid- sending wrong signals to domestic producers; creating an environment of uncertainty.
    - ✓ **Initiatives:** Signing of 5-year MOUs on pulses import with Myanmar, Malawi and Mozambique.
  - Focus on transportation and storage infrastructure for perishable commodities:** Better storage and supply chain will ensure- availability in lean season; reduced wastage of produce, avoid distress sales and lower seasonal consumer price spikes.
    - ✓ **Initiatives:** Operation Greens, Kisan Rail etc.

Glossary	
<b>Inflation</b>	It represents general rise in goods and services prices in an economy over time
<b>Consumer Price Index (CPI) or Retail Inflation</b>	Released by <b>National Statistical Office (NSO)</b> , Ministry of Statistics and Programme Implementation (MoSPI), CPI reflects the price movements at the retail level based on the household consumption patterns using NSS Household Consumer Expenditure Survey.
<b>Wholesale Price Index (WPI)</b>	Released by the <b>Office of the Economic Adviser (OEA)</b> , Department for Promotion of Industry and Internal Trade (DPIIT), WPI based inflation rate is based on the share of the respective items in total wholesale transactions in the economy at the first point of sale.

CHAPTER AT A GLANCE
• <b>Headline CPI-Combined inflation moderated</b> to 5.2% in 2021-22 (April-December), led by easing of food inflation because of effective supply-side management.
• <b>Wholesale inflation (based on WPI) saw a sharp uptick</b> to 12.5%, attributed to low base, pick-up in economic activities and spike in international prices of Crude oil, edible oils etc.
• The <b>divergence between WPI and CPI-C peaked to 9.6 percentage</b> points in May 2020 with a reversal in divergence.
• The divergence between two indices is explained by factors like base effect along with difference in scope, coverage, items covered etc. by two indices.
• Government intervened to <b>manage Housing and Pharmaceutical pricing as well.</b>
• With continued volatility in situation, <b>India needs to have long-term policies to manage inflation.</b>

## CHAPTER 5



### Testing your remembering skills & Understanding skills

**Q1. Refined Core Inflation is a new term coined by the Economic Survey 2021-22. In this context, consider the following statements:**

1. It has been constructed by excluding only the fuel items of petrol and diesel for vehicles from the average retail core inflation.
2. The refined core inflation is below the conventional core inflation due to substantial impact of fuels in retail inflation.

**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 is/are the reasons for WPI inflation being higher than CPI inflation as recorded in the Economic Survey 2021-22?**

1. Low base of the preceding year
2. Reopening up of the economies worldwide
3. Conceptual differences in their designs.

**Select the correct answer using the code given below.**

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

**Q3. Economic Survey 2021-22 has revealed a positive and high co-relation of domestic inflation and global commodity prices. In this context, consider the following pairs:**

- | Commodity    | Reason for high prices                |
|--------------|---------------------------------------|
| 1. Aluminium | : Threats of strike in Chile and Peru |
| 2. Copper    | : Curtailed production from China     |
| 3. Crude Oil | : Production cut by OPEC+             |
| 4. Cotton    | : Improved demand post COVID          |

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

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

**Q4. Which of the following bodies releases WPI?**

- (a) NITI Aayog
- (b) National Statistical Office (NSO)
- (c) Department of Economic Adviser, Ministry of Finance
- (d) Office of Economic Adviser, Ministry of Commerce and Industry

**Q5. As mentioned in the Economic Survey 2021-22, Government took proactive steps in order to rangebound inflation in the country. In this context, which of the following steps by government worked efficiently to rangebound the inflation?**

1. Reduction in central excise and value added tax by states.
2. Creation of buffer stocks
3. Expansion of Operation Greens
4. More items in free import category

**Select the correct answer using the code given below.**

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



### Self-Assessment: To practice Question for Answer Writing skills

**Q1. Throw some light on the trends of retail inflation. Also, discuss how the drivers of retail inflation have changed since last year and the reasons behind it.**

**Q2. Highlight the reasons for divergence between WPI and CPI based Inflation rates. Also, comment on the need to have long-term policies to manage the volatility in inflation.**

## ALL INDIA TEST SERIES

Get the Benefit of Innovative Assessment System from the leader in the Test Series Program

### PRELIMS

- **General Studies** (हिन्दी माध्यम में भी उपलब्ध)
- **CSAT** (हिन्दी माध्यम में भी उपलब्ध)
- › VISION IAS Post Test Analysis™
- › Flexible Timings
- › ONLINE Student Account to write tests and Performance Analysis
- › All India Ranking
- › Expert support - Email/ Telephonic Interaction
- › Monthly Current Affairs

for **PRELIMS 2022: 13 Feb**

प्रारंभिक 2022 के लिए **13 फरवरी**

for **PRELIMS 2023: 20 Feb**

प्रारंभिक 2023 के लिए **6 मार्च**

### MAINS

- **General Studies** (हिन्दी माध्यम में भी उपलब्ध)
- **Essay** (हिन्दी माध्यम में भी उपलब्ध)
- **Philosophy • Sociology • Political Science & IR**

for **MAINS 2022: 13 Feb**

मुख्य 2022 के लिए **13 फरवरी**

for **MAINS 2023: 6 FEB**

मुख्य 2023 के लिए **6 फरवरी**

Scan the QR CODE to download **VISION IAS** app





# CHAPTER 6: SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE

## Introduction

- This chapter highlights India’s progress towards achievement of Sustainable Development Goals (SDGs) using outcomes of NITI Aayog SDG India Index Report and Dashboard 2020-21.
- The chapter then provides an overview of state of the environment across land, water and air in India and studies India’s commitment, progress and challenges with respect to its climate change goals.
- It also discusses several initiatives taken in the area of sustainable finance by the Ministry of Finance, RBI and SEBI.

**Sustainable Development Goals**

- In 2015, **193 countries** including India committed to the SDGs as detailed in the UN resolution, “**Transforming our world: the 2030 Agenda for Sustainable Development**”.
- The SDGs with its **17 Goals and 169 associated targets**, comprehensively cover social, economic and environmental dimensions and build on the Millennium Development Goals (MDGs), which covered the earlier fifteen-year period from 2000 to 2015.

**Benefits of the NITI Aayog SDG India Index**

- Enable States/UTs to learn from peers
- Highlights gaps in statistical systems
- Supports States/UTs in identifying priority areas Promotes competition among the States/UTs in line with NITI Aayog approach of competitive federalism

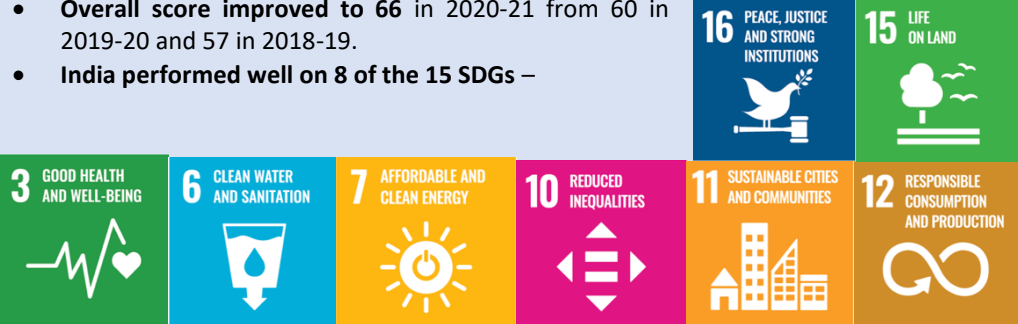
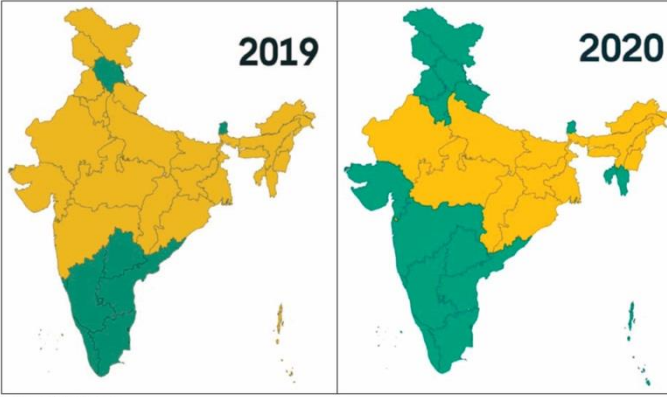
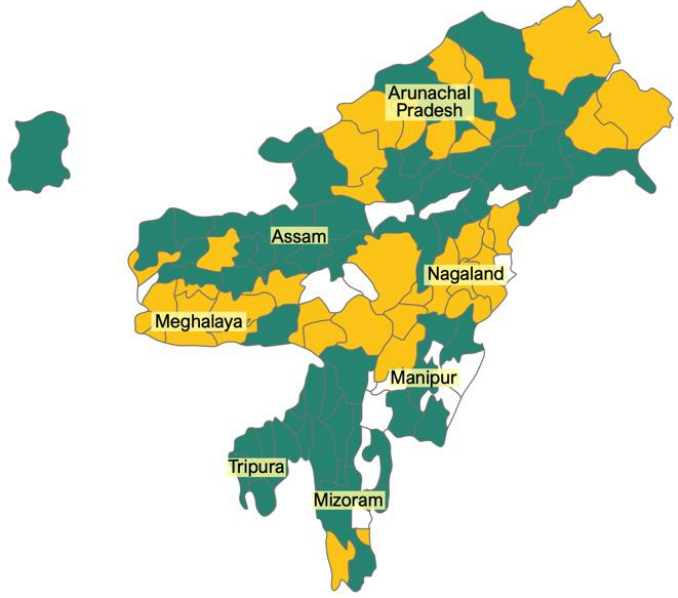
## INDIA’S PROGRESS ON SUSTAINABLE DEVELOPMENT GOALS

The NITI Aayog SDG India Index Report and Dashboard 2020-21 provides an insight into the achievements of India on its path to fulfilling SDGs.

- It is the **world’s first** government-led sub-national measure of SDG progress.
- It has been published **annually since 2018**.
- The third edition of the NITI Aayog SDG India Index (2020-21) computes **goal-wise scores on the 16 SDGs** for each state and UT, and a **qualitative assessment on Goal 17**.
- **Overall state and UT are scored between 0–100** based on their goal-wise scores across the 16 SDGs to measure aggregate performance.

Categorisation of States/UTs based on their scores	Score	Category
	100	Achiever
	65-99	Front Runner
	50-64	Performer
	0-49	Aspirant

Evolution of the NITI Aayog SDG Index		
Baseline report - 2018	V2.0 report - 2019-20	V3.0 report - 2020-21
13 Goals	16 goals + qualitative analysis on goal 17	16 goals + qualitative analysis on goal 17
39 Targets	54 targets	70 targets
62 Indicators	100 indicators	115 indicators
Goal-wise ranking on States/UTs	Goal-wise ranking on States/UTs + State/UT profiles	Goal-wise ranking on States/UTs + State/UT profiles
Preceded National Indicator Framework (NIF)	Aligned with NIF: 68 indicators completely aligned, 20 refined, 12 new to cover goals 12, 13, and 14	Aligned with NIF: 76 indicators completely aligned, 31 refined, 8 in consultation with the line ministries

<b>Parameter</b> <b>Performance of India as a whole</b>	<b>Achievements</b> <ul style="list-style-type: none"> <li>Overall score improved to 66 in 2020-21 from 60 in 2019-20 and 57 in 2018-19.</li> <li>India performed well on 8 of the 15 SDGs –</li> </ul> 
<b>Performance of States</b>	<ul style="list-style-type: none"> <li><b>Number of Front Runners increased to 22 states/UTs in 2020-21 from 10 in 2019-20</b> (See infographic).</li> <li><b>All remaining states and UTs were Performers.</b></li> <li><b>Top 3 Scorers:</b> Kerala (75), Tamil Nadu (74), Himachal Pradesh (74)</li> <li><b>Lowest Scorers:</b> Bihar (52), Jharkhand (56), Assam (57)</li> <li><b>Mizoram, Haryana, and Uttarakhand are the top gainers in 2020-21, in terms of improvement in score from 2019.</b></li> </ul> <p style="text-align: center;"><b>Performance of States/UTs on the NITI Aayog SDG India Index (2019 and 2020)</b></p>  <p><small>Source: NITI Aayog Note: Yellow indicates Performer (Score 50-64), Green indicates Front Runner (Score 65-99)</small></p>
<b>Performance of UTs</b>	<ul style="list-style-type: none"> <li><b>Seven of the Eight UTs are in the Front Runner Category</b> topped by Chandigarh and followed by Puducherry, Lakshadweep, Delhi, Andaman and Nicobar Islands, Jammu and Kashmir and Ladakh.</li> <li><b>Dadra and Nagar Haveli &amp; Daman and Diu is in the Performer category.</b></li> </ul>
<b>Performance on SDG 14 (life below water)</b>	<ul style="list-style-type: none"> <li><b>Odisha and Andhra Pradesh (Front Runner)</b> topped the coastal states ranking with <b>Tamil Nadu as the worst performer.</b></li> <li><b>Scores for SDG 14 is calculated only for the nine coastal states – Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha and West Bengal.</b></li> </ul>
<b>Performance of North-Eastern Region</b>	<p style="text-align: center;"><b>District-wise overall performance on the NITI Aayog NER District SDG Index 2021-22</b></p> 

## STATE OF THE ENVIRONMENT

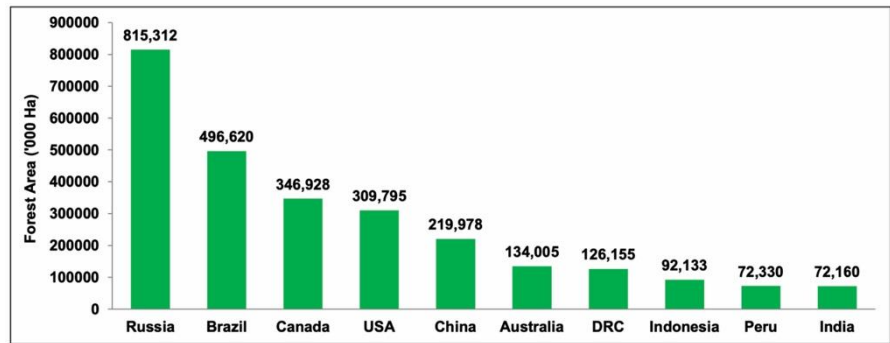
### Land Forests

India has increased its forest area significantly over the past decade, highlighted through the findings of India State of Forest Report 2021.

### Global Standing

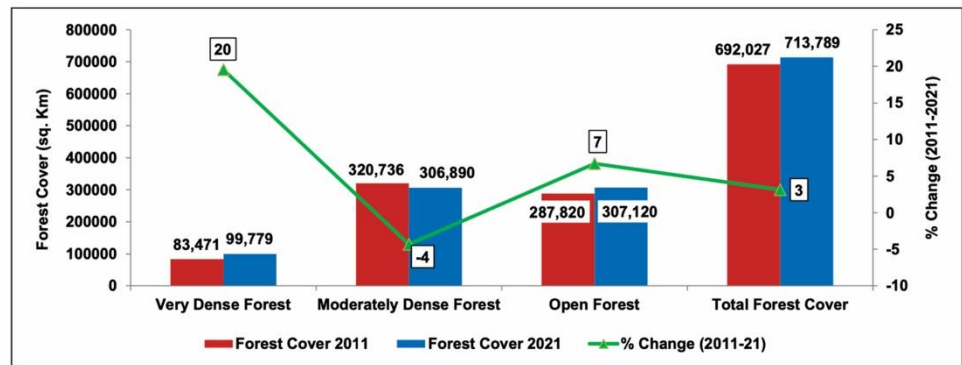
- **Global ranking:** In 2020, India was the tenth largest country by forest area (see chart).
- **Forest Area:** India's Forests accounts for **2% of the world's total forest area in 2020**, covering **24 % of India's total geographical area**.
- **Gain in forest:** It ranks **third globally in average annual net gain in forest area** between 2010 to 2020, adding an average 2,66,000 ha of additional forest area every year during the period.

Top Ten Countries by Forest Area in 2020



Source: India State of Forest Report 2021  
Note: DRC: Democratic Republic of the Congo

Forest Cover of India (2011 and 2021)

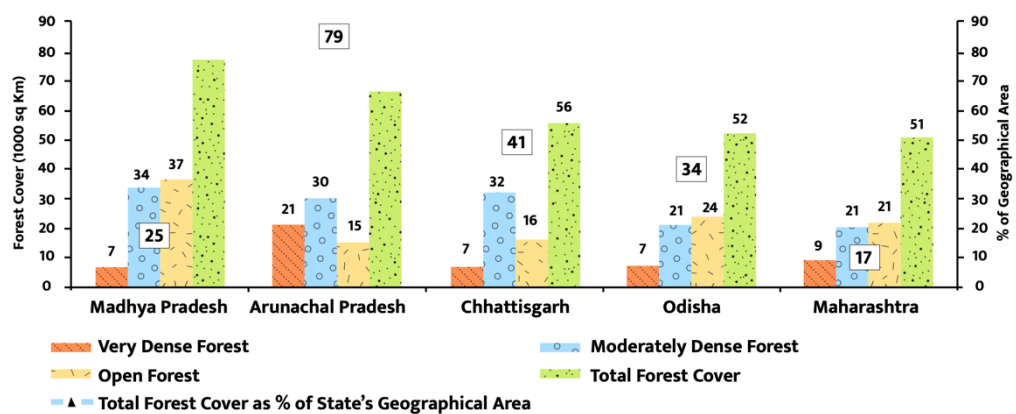


Source: India State of Forest Report 2021 and 2011

### Domestic achievements and findings

- **Increase in Forest Cover:** India's total forest cover increased from 21.05% of the country's geographical area in 2011 to 21.71% in 2021 (3.14% increase).
  - This increase in is mainly attributed to increase in very dense forest. While Open Forest also improved, moderately dense forest declined (see chart).
- **State wise performance** (see infographic)

Top Five States in India by Forest Cover; 2021



### Plastic Waste Management and Elimination of Identified Single Use Plastics

#### Recent Actions taken

- **Target:** Phase-out single use plastic by 2022.
- **Domestic regulatory actions taken in 2021:**
  - **Plastic Waste Management Amendment Rules, 2021** which prohibits identified single use plastic items, which have low utility and high littering potential, by 2022.

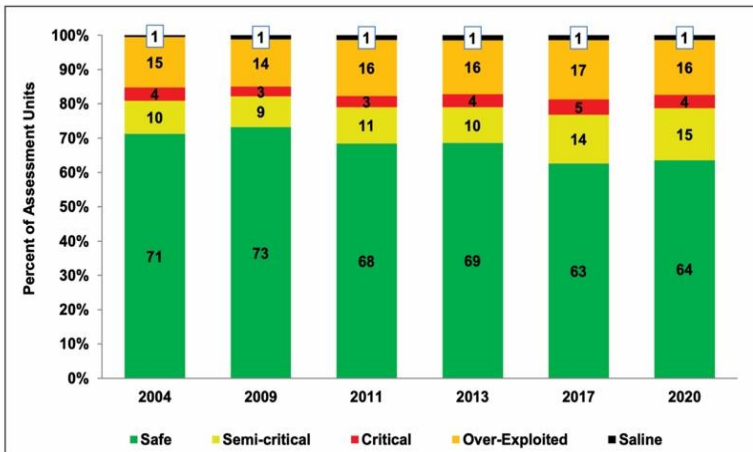
- **Thickness of plastic carry bags to be increased** from 50 microns to 75 microns with effect from September 30, 2021 and to 120 microns with effect from December 31, 2022.
- Plastic packaging waste not covered under the phase out of identified single use plastic items, to be collected and managed in an environmentally sustainable way through the **Extended Producer Responsibility of the Producer, Importer and Brand Owner (PIBO)**, as per Plastic Waste Management Rules, 2016.
- **Guidelines for Extended Producer Responsibility given legal force** through Plastic Waste Management Amendment Rules, 2021 for effective implementation.
- **Draft Regulations on the Extended Producer Responsibility for plastic packaging** notified by the MoEFCC, with proposals like mandating reuse, minimum level of recycling of plastic packaging waste, use of recycled plastic content etc.
- **Steps taken for elimination of single use plastics and effective implementation of Plastic Waste Management Rules, 2016-**
  - **All States/UTs requested to constitute a Special Task Force.**
  - **National Level Taskforce** constituted by the MoEFCC, with members from all States/UTs and concerned central ministries, for taking coordinated efforts.
- **Other Steps-**
  - **The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016** as amended regulate the import of identified plastic waste into the country by SEZ and EOUs.
  - **India piloted a resolution on "Addressing Single Use Plastic Product Pollution"** adopted by the Fourth United Nations Environment Assembly held in 2019.
  - **Swachh Bharat Mission** for strengthening Waste management infrastructure in the States/UTs.

**Water**

**Ground Water:** threatened by Unsustainable extraction.

- **Annual ground water extraction** in India has been in the range of 58-63 % during 2004-2020 as per Ground Water Resources Assessment of states/UTs.
- **Over-exploitation** of ground water resources is concentrated in north-west and parts of southern India.
- **Extent of ground water extraction across ground water assessment units:**

Categorization of Ground Water Resource Assessment Units (2004-2020)



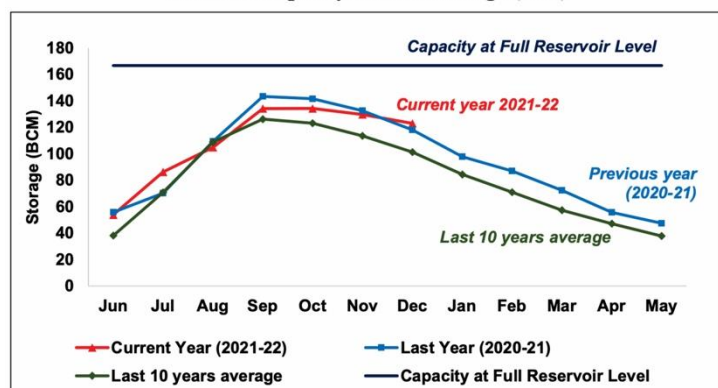
Source: National Compilation on Dynamic Ground Water Resources of India, 2020

Categorisation of ground water assessment units (blocks/ taluks/ mandals/ tehsil/ firkas etc.)	
Criteria	Category
Stage of Extraction (SoE) less than 70 %	Safe
SoE in the range of 70 % to 90 %	Semi-critical
SoE in the range of 90 % to 100 %	Critical
SoE greater than 100 %	Over-exploited
Unit in which the ground water resources are entirely saline	Saline

**Reservoir capacity and live storage (bcm)**

**Reservoirs:** prone to seasonality, and are impacted by rainfall and temperature patterns.

- Reservoir storage is at its **peak during monsoon months and lowest in summer months**, requiring careful planning and coordination of storage, release and utilization of reservoirs.



Source: India Water Resources Information System, Ministry of Jal Shakti

**Rivers: Namami Gange Mission (NGM)**

- **Aim:** to protect, conserve and rejuvenate the Ganga River Basin.
- **Major Milestones:**
  - **2014:** Clean Ganga Fund (CGF) established with the contributions received from the residents of the country, NRIs/ PIO, corporates and organizations.
    - ✓ **Total Funds received under the CGF** (as of 31st December 2021): 561.58 crore
  - **2015:** Mission approved for a period of five years (2015-2020).
  - **2016:** National Mission for Clean Ganga (NMCG) notified as an authority under Environment Protection Act to act as the nodal agency responsible for monitoring and implementing the NMG.

**Steps taken and achievements under 4 Pillars of the NGM**

<b>Nirmal Ganga (Unpolluted Flow)</b>	<ul style="list-style-type: none"> <li>• <b>160 sewerage projects have been sanctioned</b> as of December 31, 2021 to create a cumulative treatment capacity of 5,024 MLD (ten-fold increase from 463 MLD through 28 projects in 2014).</li> <li>• <b>Regular monitoring of Grossly Polluting Industries (GPIs)</b> along River Ganga have led to-           <ul style="list-style-type: none"> <li>○ <b>Reduction in effluent discharge.</b></li> <li>○ <b>Improvement in compliance status</b> of GPIs from 39 per cent in 2017 to 81 per cent in 2020.</li> </ul> </li> </ul>
<b>Aviral Flow (Continuous Flow)</b>	<ul style="list-style-type: none"> <li>• Notification mandating the <b>minimum flow of Ganga</b> released in 2016.</li> <li>• <b>Afforestation</b> of 29,000 Ha.</li> <li>• First of its kind <b>river bio-diversity assessment</b> for the main stem of Ganga River.</li> <li>• <b>Identification of 279 wetlands</b> for conservation.</li> <li>• Preparation of <b>integrated management plan for 118 wetlands.</b></li> </ul>
<b>Jan Ganga (People-River Connect)</b>	<ul style="list-style-type: none"> <li>• <b>Ganga Quest 2021.</b></li> <li>• <b>Ganga Utsav 2021</b> celebrated for the first time as a river festival extending beyond Ganga basin cities.</li> <li>• <b>River City Alliance</b> launched in 2021.</li> </ul>
<b>Gyan Ganga (Research and Knowledge Management)</b>	<ul style="list-style-type: none"> <li>• <b>Ganga Knowledge Centre</b> set up to support the NMCG.</li> <li>• <b>Centre for Ganga Management &amp; Study</b> set up at IIT Kanpur for long term basin studies and technology development.</li> </ul>

**Air**

**Key Interventions**

- **National Clean Air Programme (NCAP):** aims to achieve 20-30 per cent reduction in particulate matter (PM) concentrations by 2024 across the country keeping 2017 as the base year.
  - **Coverage:** 132 cities, including 34 million plus cities / urban agglomerations identified by the Fifteenth Finance Commission (XV-FC) and eight other million plus cities, which fall under XV-FC grant for receiving performance based grant for air quality improvement.

SOURCE WISE INITIATIVES

<div style="text-align: center;"></div> <p><b>Vehicular Emission</b></p> <ul style="list-style-type: none"> <li>○ Shift from BS-IV to BS-VI norms for fuel and vehicles.</li> <li>○ Metro rail networks for public transport.</li> <li>○ Introduction of Cleaner/ alternate fuels like CNG, LPG and ethanol blending in petrol.</li> <li>○ Phase-II of FAME Scheme.</li> </ul>	<div style="text-align: center;"></div> <p><b>Industrial Emission</b></p> <ul style="list-style-type: none"> <li>○ Stringent emission norms for coal based thermal power plants.</li> <li>○ Ban on use of imported pet coke.</li> <li>○ Online continuous emission monitoring devices installed in highly polluting industries.</li> <li>○ Brick kilns shifted to zig-zag technology.</li> </ul>	<div style="text-align: center;"></div> <p><b>Air Pollution due to dust and burning of waste</b></p> <ul style="list-style-type: none"> <li>○ Six waste management rules covering solid waste, plastic waste, e-waste, bio-medical waste, construction and demolition, waste and hazardous waste.</li> <li>○ Extended producer responsibility for plastic and e-waste management.</li> <li>○ Ban on Burning of biomass/ garbage.</li> </ul>	<div style="text-align: center;"></div> <p><b>Monitoring of Ambient Air Quality</b></p> <ul style="list-style-type: none"> <li>○ Expansion of Air quality monitoring network under schemes like National Air Monitoring Programme.</li> <li>○ Air Quality Early Warning System in Delhi, Kanpur and Lucknow.</li> </ul>
--	--	---	---

**Key measures taken for reducing air pollution in Delhi / NCR**

- **Establishment of Commission on Air Quality Management** in NCR and Adjoining Areas.

- Central Government Scheme on ‘**Promotion of Agricultural Mechanization for in-situ management of Crop Residue** in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi’.
- **Ban on all diesel vehicles older than 10 years** and all **petrol vehicles older than 15 years**.
- **Operationalisation of Expressways & Highways**.
- **Installation of Online Monitoring of Industrial Emission & Effluent systems** in red category industries.

#### Achievements in reduction of Air pollution

- **96 cities showed a decreasing trend of PM10 concentration** in 2020-21 as compared to 2019-20.
- **Increase in Number of cities within the prescribed National Ambient Air Quality Standard** (PM10 less than 60 µg/m<sup>3</sup>) from 18 in 2019-20 to 27 in 2020-21.
  - However, 36 cities showing an increasing trend in PM10 concentration in 2020-2021 as compared to 2019-2020.
- **Improvement in air quality of Delhi:** Annual concentration of PM has decreased gradually since 2016, with approximately 22 per cent reduction in PM2.5 and 27 per cent reduction in PM10 in 2021 as compared to 2016.

#### Climate Change

##### Major developments under the NAPCC

Missions	Major objective/Target	Progress
<b>National Solar Mission (NSM)</b>	<ul style="list-style-type: none"> <li>• Achieve <b>100 GW of solar power</b> in seven years starting from 2014-15.</li> </ul>	<ul style="list-style-type: none"> <li>• Installed <b>solar power capacity of 49.35 GW</b> (as of December 2021)</li> </ul>
<b>National Mission for Enhanced Energy Efficiency (NMEEE)</b>	<ul style="list-style-type: none"> <li>• Mandating reduction in energy consumption in large energy consuming industries,</li> <li>• Financing for PPP to reduce energy consumption through demand-side management programs in the municipal, buildings, and agricultural sectors.</li> <li>• Energy incentives, including reduced taxes on energy-efficient appliances.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>PAT Cycle I</b> (2012-2015) resulted in annual <b>energy savings of 8.67 Million Tonne of Oil Equivalent (MTOE)</b>.</li> <li>• <b>PAT Cycle II</b> (2016-17 to 2018-19) achieved <b>annual energy savings of 14.08 MTOE</b>.</li> <li>• Result of PAT Cycle III are awaited and PAT Cycle IV is under implementation.</li> </ul>
<b>National Mission for a Green India (GIM)</b>	<ul style="list-style-type: none"> <li>• Improved ecosystem services by <b>Increasing forest/tree cover by 5 m ha</b> and improving <b>quality of forest cover on another 5 m ha</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Afforestation activities</b> over an area of 1,17,757 ha taken up.</li> </ul>
<b>National Mission on Sustainable Habitat (NMSH)</b>	<ul style="list-style-type: none"> <li>• Development of <b>sustainable habitat standards</b>.</li> <li>• Promoting energy efficiency as a core component of urban planning by <b>extending the existing Energy Conservation Building Code (ECBC)</b>.</li> <li>• Strengthening the enforcement of <b>automotive fuel economy standards</b>.</li> <li>• Using pricing measures to <b>encourage the purchase of efficient vehicles</b> and incentives for the use of public transportation.</li> </ul>	<ul style="list-style-type: none"> <li>• The mission is being implemented through programmes like: Atal Mission on Rejuvenation and Urban Transformation, Swachh Bharat Mission, and Smart Cities Mission.           <ul style="list-style-type: none"> <li>○ Under Smart Cities Mission, <b>Climate Smart Cities Assessment Framework 2019</b> has been launched.</li> <li>○ <b>Urban Swachh Bharat Mission 2.0</b> will be implemented.</li> </ul> </li> <li>• <b>Energy Conservation Building Rules 2018 made mandatory</b> for commercial buildings having connected load of 100 KW or above.</li> </ul>
<b>National Water Mission (NWM)</b>	<ul style="list-style-type: none"> <li>• Focuses on monitoring of <b>ground water, aquifer mapping, capacity building, water quality monitoring</b> and other baseline studies.</li> <li>• Focusing <b>attention on overexploited areas</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>15640 ground water observation wells are being monitored</b> by Central Ground Water Board.</li> <li>• Five States have completed the <b>first phase of State Specific Action Plan (SSAP)</b> for the water sector.</li> </ul>

	<ul style="list-style-type: none"> <li>Promoting <b>basin-level integrated water resources management</b>, etc.</li> </ul>	
<b>National Mission for Sustainable Agriculture</b>	<ul style="list-style-type: none"> <li>Enhancing food security by making <b>agriculture more productive, sustainable, remunerative, and climate resilient</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Formation of National Innovations on <b>Climate Resilient Agriculture</b>, a network project of the Indian Council of Agricultural Research.</li> </ul>
<b>National Mission for Sustaining Himalayan Ecosystems</b>	<ul style="list-style-type: none"> <li>To continuously assess the <b>health status of the Himalayan Ecosystem</b>.</li> <li><b>Enable policy bodies</b> in their policy formulation functions.</li> <li><b>Regional cooperation</b> with neighbouring countries in <b>Glaciology</b>.</li> </ul>	<ul style="list-style-type: none"> <li><b>Glaciologists trained</b> under Indo- Swiss Capacity Building Programme in glaciology.</li> <li><b>Inter-University Consortium</b> of 4 universities on Himalayan Cryosphere and Climate Change formed.</li> <li><b>Glacial lake outburst floods R&amp;D studies</b> for vulnerability assessment conducted for <b>Sikkim</b>.</li> </ul>
<b>National Mission on Strategic Knowledge for Climate Change (NMSKCC)</b>	<ul style="list-style-type: none"> <li>To gain a better understanding of climate science, formation of <b>knowledge networks among the existing knowledge institutions</b> engaged in research and development, etc.</li> </ul>	<ul style="list-style-type: none"> <li><b>State Climate Change Cells</b> established in 11 out of 12 Himalayan States and in 11 non-Himalayan States.</li> <li>6 lead institutions now conduct <b>training on climate change science</b>, impacts and adaptation.</li> </ul>

<b>Other Major Initiatives and Achievements</b> <ul style="list-style-type: none"> <li><b>Extension of Climate Change Action program (CCAP)</b>, a central sector scheme, up to 2025-26.</li> <li><b>30 projects sanctioned under National Adaptation Fund on Climate Change (NAFCC)</b> from 2015-19.</li> <li><b>National Hydrogen Mission:</b> Hydrogen is being blended with CNG for use as transportation fuel as well as an industrial input to refineries.</li> <li><b>Target of 20 per cent ethanol blending in petrol by 2025:</b> 8.5 per cent ethanol blending reached as of September 2021.</li> <li><b>Net Zero Carbon Emission by 2030 target set by Indian Railways:</b> Initiatives include-                     <ul style="list-style-type: none"> <li><b>100 per cent electrification</b> of its network by December 2023,</li> <li>use of <b>three phase technology for regenerative braking</b>,</li> <li>use of <b>renewable energy source</b> (133.26 MW solar and 103 MW wind installed capacity),</li> <li>provisioning of <b>LED lights at all railway installations</b>, etc.</li> </ul> </li> <li><b>Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM):</b> As of December, 2021 over 77000 standalone solar pumps, 25.25 MW capacity solar power plants and over 1026 pumps were solarised.                     <ul style="list-style-type: none"> <li>RBI has included its components under Priority Sector Lending Guidelines for easing availability of finance.</li> </ul> </li> <li><b>Other solar power initiatives:</b> <ul style="list-style-type: none"> <li><b>Development of Solar Parks and Ultra Mega Solar Power Projects:</b> 50 solar parks have been sanctioned with a combined capacity of 33.82 GW in 14 states.</li> <li><b>Roof Top Solar programme Phase-II:</b> Cumulative 5.87 GW solar roof top projects set up.</li> <li><b>Scheme for setting up 12 GW Grid-Connected Solar PV Power Projects by government entities</b> sanctioned around 8.2 GW of projects.</li> <li><b>Phase-III of the Off-Grid Solar PV Applications Programme for Solar Street Lights, Solar Study Lamps and Solar Power Packs.</b></li> </ul> </li> <li><b>Notification of the offshore Wind Energy Policy and wind solar hybrid policy:</b> Capacity of around 4.25 GW of wind-solar hybrid have been awarded.</li> </ul>		
---	--	--

### Major decisions at the COP26 Climate Summit, Glasgow

- India further **sought for the just transition for the developing countries** with adequate time frame so that the green economy benefits are shared with all.
- Outcomes adopted on all pending issues of the “Paris Rule Book”**, including market mechanisms, transparency, and common timeframes for NDCs.
- Standing Committee on Finance** (a technical committee under UNFCCC) mandated to work towards arriving at definitions of climate finance.
- Glasgow Climate Pact** signed with emphasis on adaptation, mitigation, finance, technology transfer, capacity-building, loss and damage.
- Launch of a two-year Glasgow–Sharm el-Sheikh work programme** on the global goal on adaptation.
- Glasgow Dialogue** between Parties, relevant organisations and stakeholders on loss and damage established to explore the ways to fund loss and damage due to climate change.

- **Annual high-level ministerial round table on pre-2030 ambition** convened, beginning at the fourth session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

### India and its Nationally Determined Contribution (NDC)

- Prime Minister of India announced **ambitious targets to be achieved by 2030** to enable further reduction in emission.
- **Apex Committee for the Implementation of Paris Agreement (AIPA)** was established as a high-level inter-ministerial institutional framework to generate a coordinated response and ensure that India is on track towards meeting its obligations under the Paris Agreement.

### Progress of India's NDCs

INDCs	Progress
Reduce the <b>emission intensity of GDP by 33 to 35 per cent by 2030</b> as compared to 2005 level.	During 2005-2016, India <b>reduced emission intensity of its GDP by 24 percent.</b>
Create an <b>additional carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent</b> through additional forest and tree cover by 2030.	The carbon stock in forest has <b>increased by 79.4 million tonnes</b> as compared to the last assessment of 2019.
Achieve about <b>40 per cent cumulative electric power</b> installed capacity from <b>non-fossil fuel energy</b> resources by 2030.	As per Central Electricity Authority, as of December 2021, the <b>share of non-fossil sources</b> in installed capacity of electricity generation was <b>40.20 per cent.</b>

## FINANCE FOR SUSTAINABLE DEVELOPMENT

### Dealing with Financial Risks associated with Climate Change

- **Reserve Bank of India (RBI) set up a new unit– ‘Sustainable Finance Group’ (SFG)** within its Department of Regulation for leading the regulatory initiatives in the areas of sustainable finance and climate risk.
- **RBI is preparing a consultative discussion paper** to assess the progress of its regulated entities in managing climate risk.

### Augmenting Finance for Sustainable Development

- **Task Force on Sustainable Finance** set up by the Department of Economic Affairs, Ministry of Finance, for defining the framework for sustainable finance in India.
- **RBI joined the Central Banks and Supervisors Network for Greening the Financial System (NGFS)** as a member in 2021.
- **Liberalised External Commercial Borrowings (ECB) norms of RBI** helped the Indian renewable energy companies and other firms in raising finance through green bonds and sustainable bonds.
- **Bilateral and global sustainable finance initiatives:** RBI is a member of a Task Force on Climate-related Financial Risks set up by the Basel Committee on Banking Supervision, and the International Platform on Sustainable Finance.

### Investing in Resilience for Sustainable Development

- **SEBI issued new sustainability reporting requirements** as per the Business Responsibility and Sustainability Report (BRSR) which shall replace the existing Business Responsibility Report (BRR).
  - It will be **applicable to the top 1000 listed entities** (by market capitalisation) on a mandatory basis from FY 2022–23; entities can adopt it on a voluntary basis from FY 2021–22.
  - It will bring in **greater transparency through disclosure of ESG-related information** and by enabling market participants to identify and assess sustainability-related risks and opportunities.

### India's Initiatives at the International Stage

<b>Lifestyle for Environment (LIFE)</b>	<ul style="list-style-type: none"> <li>• Proposed as a one-word movement by India's PM at the <b>COP 26 in Glasgow.</b></li> <li>• It envisions to take lifestyle for environment forward as a <b>campaign and as a mass movement for environmentally conscious life style</b> in a manner that revolutionizes many sectors and diverse areas such as fishing, agriculture, wellness, dietary etc.</li> </ul>
<b>International Solar Alliance (ISA)</b>	Recent developments include- <ul style="list-style-type: none"> <li>• <b>Launch of Green Grids Initiative-One Sun One World One Grid (GGI –OSOWOG)</b> at the World Leaders' Summit in Glasgow.</li> </ul>



	<ul style="list-style-type: none"> <li>• <b>Attained a Permanent Observer Status</b> at the UN General Assembly.</li> <li>• <b>Signed a Memorandum of Understanding with UNFCCC</b> at COP 26 to support ISA membership in developing a roadmap for, and implementing, their respective NDCs under the Paris Agreement.</li> </ul>
<b>Coalition for Disaster Resilient Infrastructure</b>	<ul style="list-style-type: none"> <li>• Since its launch in 2019, its membership has expanded to <b>28 countries and seven multilateral organizations</b>.</li> <li>• Recent initiatives launched under CDRI include- <ul style="list-style-type: none"> <li>○ <b>Third International Conference on Disaster Resilient Infrastructure (ICDRI)</b> launched by, the Prime Ministers of India, UK, Italy and Fiji which discussed key global issues around resilience of critical infrastructure sectors as well as urban infrastructure systems and disaster risk financing.</li> <li>○ <b>Infrastructure for Resilient Island States (IRIS)</b> launched by the Prime Ministers of India, UK, Australia, Fiji, Jamaica and Mauritius. This is a dedicated initiative for Small Island Developing States (SIDS) that provides quality technical and financial services to make SIDS infrastructure resilient to climate change and disaster events.</li> <li>○ <b>CDRI's Global Flagship Report on Disaster and Climate Resilient Infrastructure</b> to engage and focus global attention on the critical and multi-faceted challenges posed to disaster and climate-resilient infrastructure.</li> <li>○ <b>DRI Connect</b>, a "network of networks" enabling stakeholder access to knowledge resources and collaborative opportunities with their peers and other actors.</li> </ul> </li> </ul>
<b>Leadership Group for Industry Transition (LeadIT Group)</b>	<ul style="list-style-type: none"> <li>• <b>Launched by India and Sweden, with the support of the World Economic Forum</b> at the <b>UN Climate Action Summit in New York in September 2019</b>, as one of the nine action tracks identified by the UN Secretary-General to boost climate ambitions and actions to implement the Paris Agreement.</li> </ul>

### Recommendations

- Going forward, there is need to **further improve forest and tree cover**. Social forestry could play a significant role in this regard.
- **States/UTs need to improve management of its ground water resources** through improving its recharge and by stemming its over-exploitation, and to prevent the critical and semi-critical assessment units from further worsening.
- **There is a greater thrust on climate action** following the announcement of India's target of becoming Net Zero by 2070.
- **Climate finance will remain critical to successful climate action by developing countries**, including India.

Glossary	
<b>Forest Area</b>	Area recorded as forest in government records and is also called "recorded forest area."
<b>Forest cover</b>	Comprises all lands, more than one hectare in area, with a tree canopy density of more than 10 %, irrespective of ownership and legal status. Such lands may not necessarily be a recorded forest area, and also include orchards, bamboo and palm plantations.
<b>Very dense forest</b>	All lands with tree canopy density of 70 % and above.
<b>Moderately dense forest</b>	All lands with tree canopy density between 40-70 %.
<b>Open forest</b>	All lands with tree canopy density between 10-40 %.
<b>Stage of Extraction (SoE)</b>	Ratio of annual ground water extraction and annual extractable resources i.e. utilization vs availability expressed in per cent.
<b>Over-exploitation of ground water resources</b>	Extraction of ground water resources exceeding the annually replenishable ground water recharge.
<b>Paris Rule Book</b>	It is the procedures for implementation of the Paris Agreement.

Chapter at a Glance
<b>India's performance on the NITI Aayog SDG India Index has improved</b> from an overall score of 60 in 2019-20 to 66 in 2020-21.
The number of Front Runners (scoring 65-99) increased to 22 states and UTs in 2020-21 from 10 in 2019-20.
<b>India has been making significant strides in increasing its forest area, ranking third globally in net gain in forest area during the decade (2010-20).</b>
With the help of initiatives taken under Namami Gange Mission (NGM), there has been a <b>reduction in effluent discharge in river Ganga</b> from 349.13 millions of liters per day (MLD) in 2017 to 280.20 MLD in 2020.
<b>Annual ground water extraction in India has been in the range of 58-63 % during 2004-2020.</b>

<b>96 cities showed a decreasing trend of PM10 concentration in 2020-21 as compared to 2019-20.</b>
<b>Several initiatives have been launched in India</b> to further its commitments under NDCs and deal with Climate Change including NAPCC, National Hydrogen Mission, PM-KUSUM, Roof Top Solar programme Phase-II etc.
Major outcomes of the <b>COP26 Climate Summit</b> , Glasgow include- <b>finalization of pending issues of the “Paris Rule Book”, Glasgow Climate Pact, Glasgow–Sharm el-Sheikh work programme, Glasgow Dialogue on loss and damage etc.</b>
<b>Several initiatives were taken in the area of sustainable finance</b> by the Ministry of Finance, RBI and SEBI.
<b>India continued exercising significant climate leadership</b> at the international stage under the ISA, CDRI and LeadIT Group and proposed one-word movement Lifestyle for Environment (LIFE).

## CHAPTER 6



### Testing your remembering skills & Understanding skills

#### Q1. Consider the following statements with reference to the India State of Forest Report 2021:

1. India had the largest average annual net gain in forest area globally in the last decade.
2. The increase in total forest cover and tree cover is mainly attributed to increase in moderately dense forest.
3. Among states, Madhya Pradesh had the largest forest cover, in terms square kilometres.

#### Which of the statements given above is/are correct?

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

#### Q2. Which of the following statement correctly describes the stage of total ground water extraction?

- (a) It is the ratio of annual ground water extraction and annual extractable resources
- (b) It is the extraction of ground water resources exceeding the annually replenishable ground water recharge
- (c) It is the ratio of annual ground water recharge and annual groundwater extraction
- (d) It is the extraction of groundwater from the underground aquifers replenished through rainwater.

#### Q3. Consider the following statements with reference to the sustainability reporting requirements issued by SEBI:

1. It will be applicable to the top 1000 listed companies by market capitalisation on a mandatory basis from FY 2022–23.
2. It will be implemented in addition to the existing Business Responsibility Report (BRR).

#### Which of the statements given above are correct?

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

#### Q4. Consider the following statements with respect to Sustainable development financing:

1. Task Force on Sustainable Finance is set by Department of Expenditure under Ministry of Finance for defining the framework for sustainable finance in India.
2. Reserve Bank of India (RBI) set up ‘Sustainable Finance Group’ (SFG) within its Department of Regulation for leading the regulatory initiatives in the areas of sustainable finance and climate risk.

#### 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

**Q5. Arrange the following initiatives of India in the field of sustainable development at the international stage in the correct chronological order:**

1. International Solar Alliance
2. Lifestyle for Environment
3. Leadership Group for Industry Transition (LeadIT Group)

**Select the correct answer using the code given below.**

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



**Self-Assessment: To practice Question for Answer Writing skills**

**Q1. The utility and economic value of 'Single Use Plastics' must be borne in mind while framing policy action on them. Discuss in context of the initiatives taken by the government in this regard.**

**Q.2. Despite major thrust on climate action, their effectiveness is critically dependent on their financing. Discuss.**

“ **The Secret To Getting Ahead Is Getting Started** ”



**ALTERNATIVE CLASSROOM  
PROGRAM** *for*

**GENERAL STUDIES**

**PRELIMS & MAINS 2024 & 2025**

**DELHI: 1<sup>Mar</sup><sub>9 AM</sub> | 9<sup>Mar</sup><sub>1 PM</sub> | 11<sup>Jan</sup><sub>5 PM</sub>**

- Approach is to build fundamental concepts and analytical ability in students to enable them to answer questions of Preliminary as well as Mains examination
- Includes comprehensive coverage of all the topics for all the four papers of GS Mains , GS Prelims and Essay
- Includes All India GS Mains, Prelims, CSAT and Essay Test Series of 2023, 2024, 2025
- Our Comprehensive Current Affairs classes of PT 365 and Mains 365 of year 2023, 2024, 2025 (Online Classes only)
- Includes comprehensive, relevant and updated study material
- Access to recorded classroom videos at personal student platform

Scan the QR CODE to  
download **VISION IAS** app



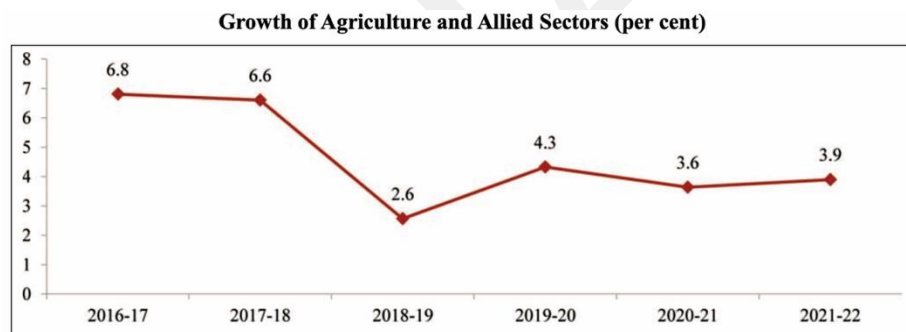
# CHAPTER 7: AGRICULTURE & FOOD MANAGEMENT

## Introduction

- The chapter provides an overview of Agriculture and allied sectors in India.
- It further examines measures taken by the Government to augment production and domestic supply of oilseeds and edible oils, interventions made in the sugar sector and promotion of crop diversification.
- The chapter also highlights the need for sustainable agriculture through water conservation in irrigation and natural farming and need to promote research and development to improve crop productivity, mechanization, etc.
- It also discusses how Minimum Support Price (MSP) policy is being used to promote crop diversification.
- In addition to this, some important findings of the latest Situation Assessment Survey (SAS) have also been discussed.
- A review of India's fertilizer sector and food management programme including food procurement, allocation, storage, and the issue of food subsidy along with various Government measures for effective food and nutritional security is also presented at length in the chapter.

## Overall Growth in Agriculture and allied Sector

- The agriculture and allied sectors grew at a positive rate of 3.6 per cent during 2020-21 and 3.9 per cent in 2021-22.
- The growth was a result of good monsoon and Atma Nirbhar Bharat (ANB) Abhiyan coupled with various



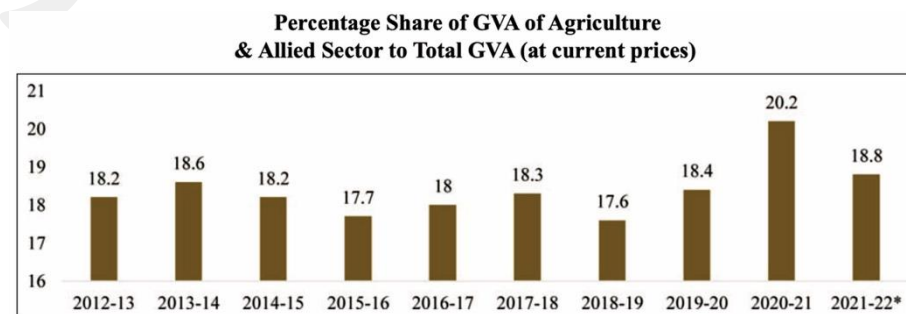
Source: First Advance Estimates of National Income, 2021-22

government measures to enhance credit availability, improve investments, create market facilities, promote infrastructure development in the agriculture sector and increase provision of quality inputs to the sector.

- **Buoyant growth in Livestock and fisheries** has helped the sector perform well.
  - For instance, in 2018-19 the growth in the agriculture was buoyed by the performance of livestock and fisheries even though the growth of GVA for crops was -1.6 per cent.

## Gross Value Added (GVA) in Agriculture

- **Trends:**
  - The share of the agriculture & allied sector in total GVA, improved to 20.2 per cent in the year 2020-21 and 18.8 per cent in 2021-22 from the long-term trend of around 18 per cent.



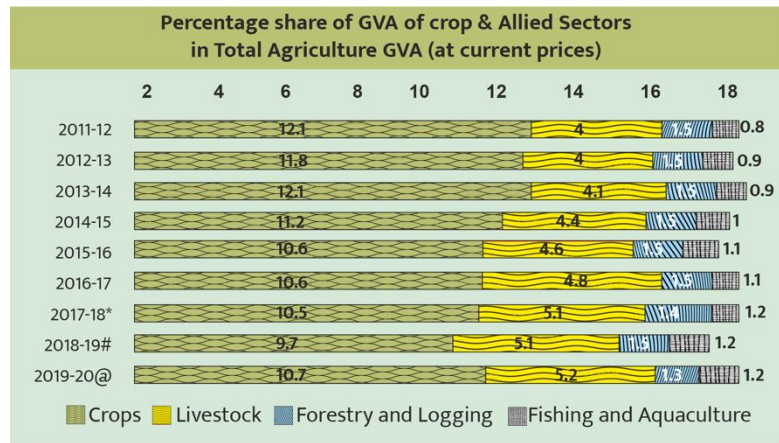
Source: Based on data of DAFW.

\*As per 1st Advance Estimates of National Income, 2021-22.

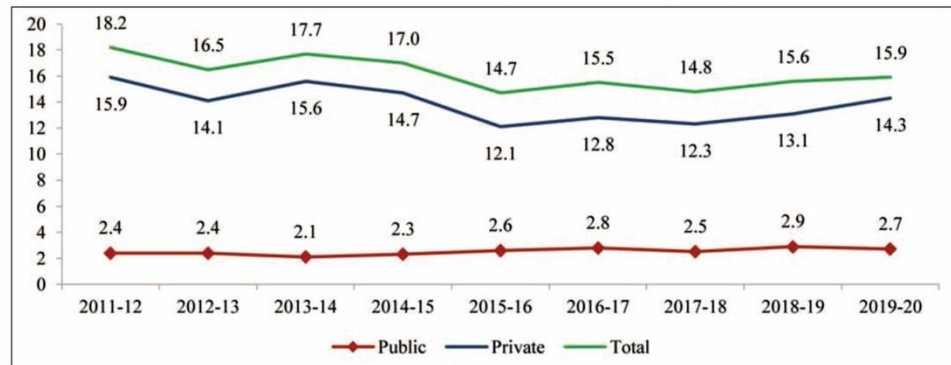
- The share of the livestock and fishing & aquaculture in total agricultural GVA has been improving.
- **Recommendation of the Committee on Doubling Farmers' Income (DFI, 2018)** focused on dairying, livestock, poultry, fisheries, and horticulture with a concomitant support system.

### Investment in Agriculture and Allied Sectors

- **Fluctuating Gross Capital Formation (GCF)** in agriculture and allied sectors relative to GVA due to wide fluctuations in private investment in agriculture and allied sectors.
- **Suggestions for improving private investment in agriculture:**
  - Higher access to concessional institutional credit to farmers.
  - Greater participation of private corporate sector.
  - Crowding in of Private corporate investments by offering an appropriate policy framework and increase in public investment along the entire agricultural value system.



Percentage Share of GCF in Agriculture and Allied Sectors Relative to Its GVA (at 2011-12 basic prices)

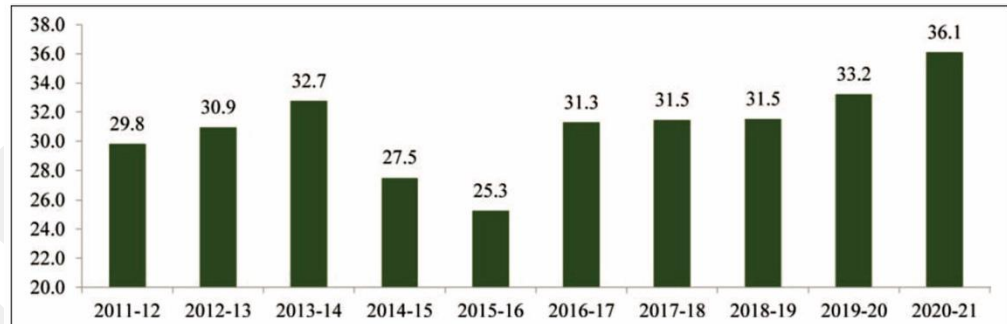


Source: Based on data of DAFW and Agricultural Statistics at a Glance, 2020.

### Agricultural Production

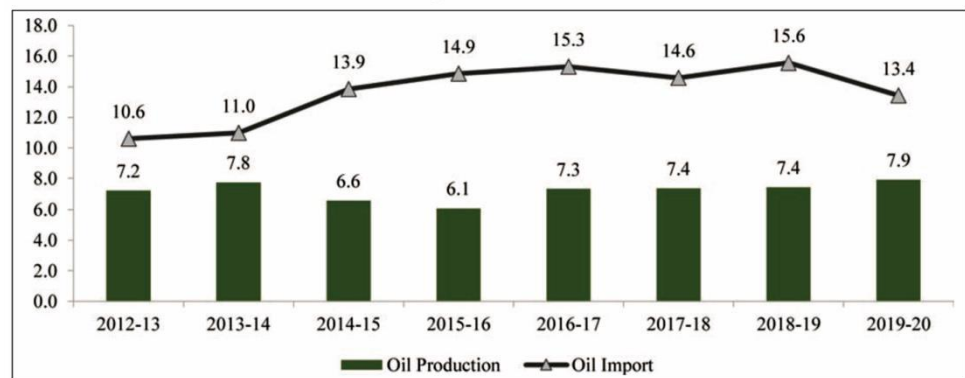
- **Total foodgrain production in the country:** 308.65 million tonnes (11.15 million tonnes higher than during 2019-20).
- **Compound annual growth rates (CAGR) of rice, wheat and coarse cereals production during 2015-16 to 2020-21:** 2.7, 2.9 and 4.8 per cent respectively.
- **CAGR for pulses, oilseeds, and cotton during 2015-16 to 2020-21:** 7.9, 6.1 and 2.8 percent, respectively.

Trend in Production of Oilseeds (Million Tonnes)



Source: Based on data of 4th Advanced Estimates as on Directorate of Economics & Statistics Website.

Production & Import of Oil (Million Tonnes).

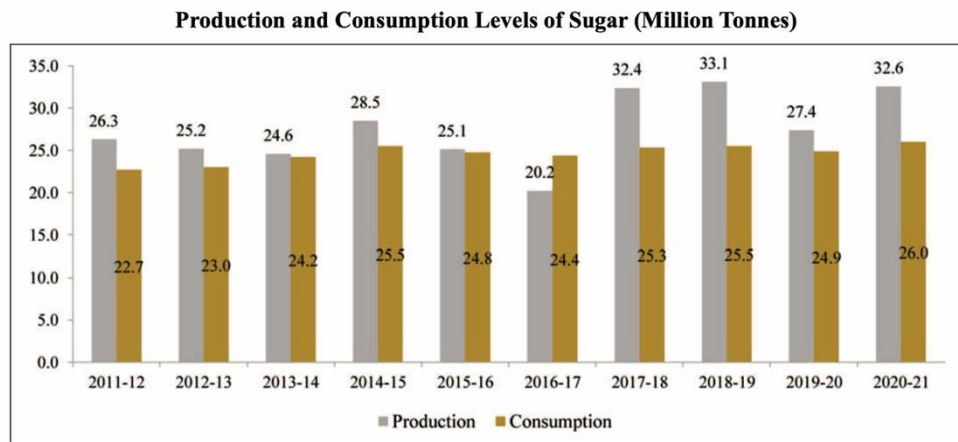


Source: Based on data of Agricultural Statistics at a Glance, 2020.

**Edible Oils:** India is the world's second largest consumer and number one importer of vegetable oil.

- **Trend:** Oilseed production in India has steadily increased since 2016-17 onward.
  - **Increase in Oilseed production:** almost 43 per cent from 2015-16 to 2020-21.
- **Concerns:** Production of oilseeds lags behind its consumption necessitating import of edible oils. E.g., around 98 per cent of Crude Palm Oil (CPO) is being imported.
- **Steps taken and achievements:**

- **National Food Security Mission-Oilseeds (NFSM-Oilseeds):** 36 oilseeds seed hubs set up during 2018-19 and 2019-20.

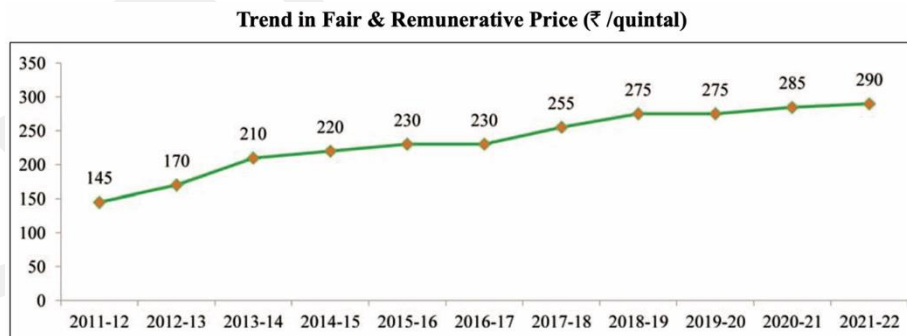


Source: Based on data of CACP Report on Sugarcane.

- **MSP regime** providing price signal for crop diversification towards production of oil seed.
- **National Mission on Edible Oils - Oil Palm (NMEO-OP)** launched to augment the availability of edible oil in the country by harnessing area expansion and through price incentives like Viability Price (VP) to protect the farmers from the fluctuations of the international CPO prices.

**Sugar Sector:** India is the largest consumer and the second-largest producer of sugar in the world and sugar industry is the second largest agro-based industry, next to cotton.

- **Average annual production of sugarcane** is around 35.5 crore tonnes, which is used to produce around 3 crore tonnes of sugar.
- **Trends:** Since 2010-11, production has outstripped consumption except in 2016-17 (see graph).



Source: Based on data of CACP website.

- **Steps taken to insure and protect sugarcane farmers against price risk:**
  - **Fair and Remunerative Price (FRP)** has steadily increased since 2011-12 and doubled in a span of ten years.
  - **State Advised Price (SAP)** announced by state governments at levels higher than FRP.
  - Sugar mills are mandated to purchase sugarcane crops from farmers within a specified radius known as the **Cane Reservation Area**.
- **Steps to handle the surplus production and enhance liquidity of mills:**
  - Incentives for sugar mills to divert excess sugar cane/sugar to ethanol production.
  - Providing financial assistance for transport to sugar mills to facilitate export of sugar.
- **Achievements:**
  - **About 70 LMT of sugar has been exported** in sugar season 2020-21 against 59.60 LMT of sugar export in sugar season 2019-20.

DID YOU KNOW?

Oil palm produces 10 to 46 times more oil per hectare compared to other oilseed crops and has yield of around 4 tons oil per ha.

- Revenue of about ₹ 35000 crore generated by sugar mills/distilleries from sale of ethanol to Oil Marketing Companies in the past four sugar seasons ending 2020-21.

**Price Policy: Minimum Support Price (MSP):** Based on the the principle established in the **Union Budget for 2018-19** (to keep MSP at the level of one and half times of the cost of production), Government has announced increase in MSP for all mandated kharif and rabi crops of year 2021-22

**About MSP**

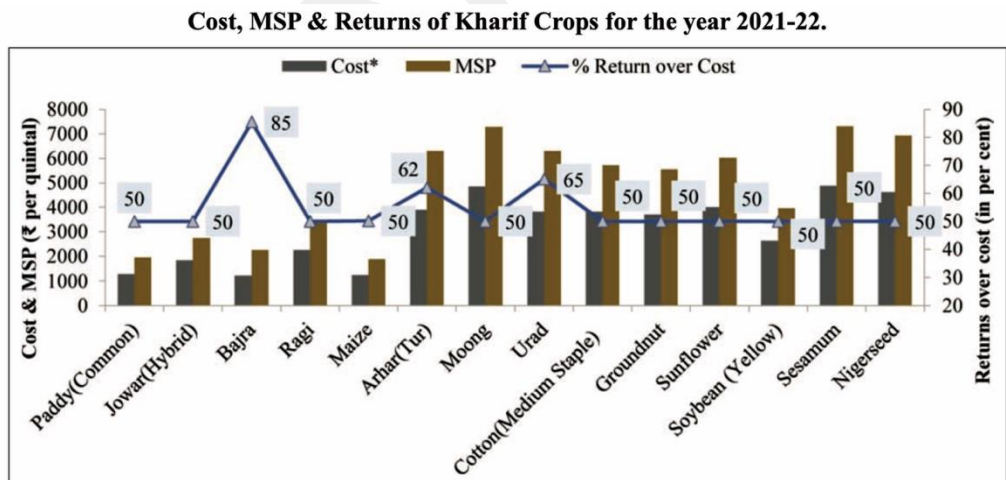
- Government fixes MSP of 22 mandated agricultural crops on the basis of the **recommendations of Commission for Agricultural Costs & Prices (CACP)** and after due **consideration of the views of State Governments and the concerned Central Ministries/ Departments.**
- While recommending MSPs, CACP considers important factors like-
  - cost of production,
  - overall demand-supply conditions,
  - domestic and international prices,
  - inter-crop price parity,
  - terms of trade between agricultural and non-agricultural sectors,
  - the likely effect on the rest of the economy,
  - ensuring rational utilization of land, water and other production resources and
  - a minimum of 50 per cent as the margin over cost of production.

### 22 MANDATED CROPS

14 Kharif crops	6 Rabi crops	2 Commercial crops
▶ Paddy	▶ Wheat	▶ Jute
▶ Jowar	▶ Barley	▶ Copra
▶ Bajra	▶ Gram	
▶ Maize,	▶ Masur (lentil)	
▶ Ragi Tur (arhar)	▶ Rapeseed and Mustard	
▶ Moong	▶ Safflower	
▶ Urad		
▶ Groundnut		
▶ Soybean (yellow)		
▶ Sunflower		
▶ Seed		
▶ Sesamum		
▶ Nigerseed		
▶ Cotton		

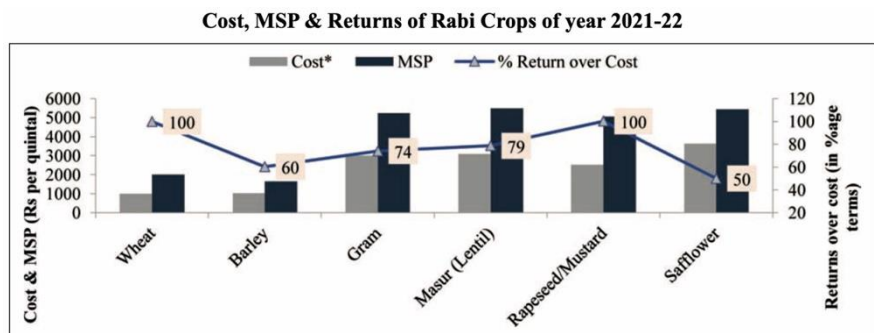
### Crop Diversification

- **Benefits:** Promotion of sustainable agriculture through water use efficiency and sustainability of soil health, reduction in import dependence and higher incomes for the farmers.



Source: DAFW

- **Concerns:** Existing cropping pattern is skewed towards cultivation of sugarcane, paddy and wheat which has led to depletion of fresh ground water resources at an alarming rate in many parts.



Source: DAFW

- **Steps taken:**
  - **Crops Diversification Programme (CDP),** sub scheme of Rashtriya Krishi Vikas Yojana (RKVY), with aim to shift **area under paddy cultivation** (in Punjab, Haryana and Western UP) and area under tobacco farming (in tobacco growing States) towards less water requiring crops such as oilseeds, pulses, coarse cereals, nutri-cereals, cotton, etc.
  - Incentive structure provided under MSP regime.

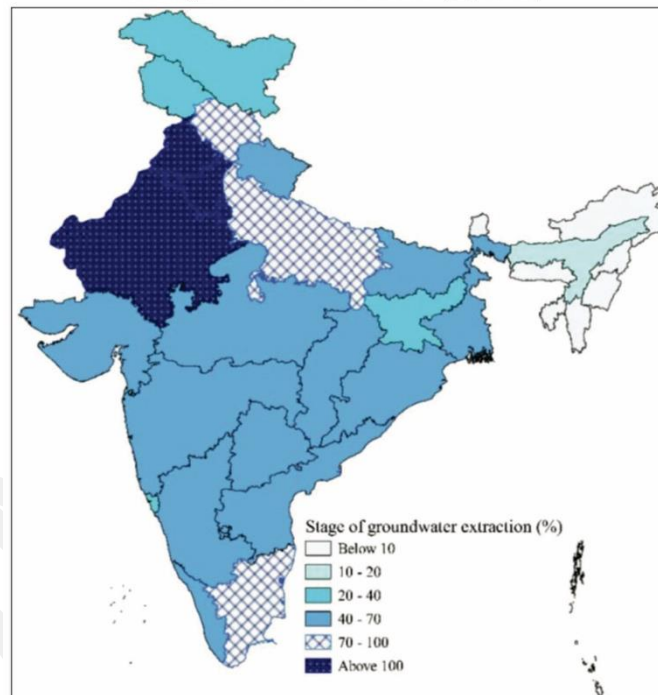
## Agricultural Credit

- **Agriculture credit flow for the year 2020-21:** ₹ 15,75,398 crore against the target of ₹ 15,00,000 crore for the year.
- **Steps taken:**
  - **2 lakh crore concessional credit boost to 2.5 crore farmers through Kisan Credit Cards (KCCs)** announced as a part of the ANB announcement.
  - **Facility of KCC extended to fisheries and animal husbandry farmers** in 2018-19.
- **Achievements:**
  - **KCC issued to 2.70 crore eligible Farmers** (till 17th January 2022).

## Water and Irrigation

- **Agriculture accounts for about 80 per cent of the current water use** in the country.
- **Share of net irrigated area** accounts for about **49 per cent of the total net sown area** in the country and out of which, about **40 per cent is irrigated through canal systems and 60 per cent through groundwater.**
- **Concerns:** Rate of extraction of ground water, is very high (more than 100 per cent) in the states of Delhi, Haryana, Punjab, and Rajasthan.
- **Steps taken and achievements:**
  - **Micro Irrigation Fund (MIF) with corpus of 5000 crore** created with National Bank for Agriculture and Rural Development (NABARD).
  - **Per Drop More Crop component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY-PDMC)** for promoting micro irrigation viz. Drip and Sprinkler Systems.

State of groundwater extraction in 2020 (in per cent)\*



Source: Ground water yearbook, 2019-20

**Agricultural Marketing:** Wholesale agricultural marketing is undertaken by the network of 6946 regulated wholesale markets, set up under the provision of respective State Agricultural Produce Market Committee (APMC) Act.

- **Steps taken and achievements:**
  - **APMCs recognized an eligible entity under Agriculture Infrastructure Fund (AIF)** enabling them to receive interest subvention for a loan up to ₹ 2 crores for each project of different infrastructure types e.g. cold storage, sorting, grading and assaying units, silos, etc.
  - **National Agriculture Market (e-NAM) Scheme:** As of December 2021, 1000 mandis of 18 States and 3 UTs have been integrated with e-NAM platform.
  - **Central Sector Scheme of "Formation and Promotion of 10,000 Farmer Producer Organizations (FPOs)":** FPOs focuses on "One District One Product" to enable product specialization. As of January 2022, a total of 1963 FPOs have been registered.
  - **Full-fledged Ministry of Cooperation** established in 2021 with a view to provide greater focus to the cooperative sector.

### Sweet Revolution: National Beekeeping & Honey Mission (NBHM)

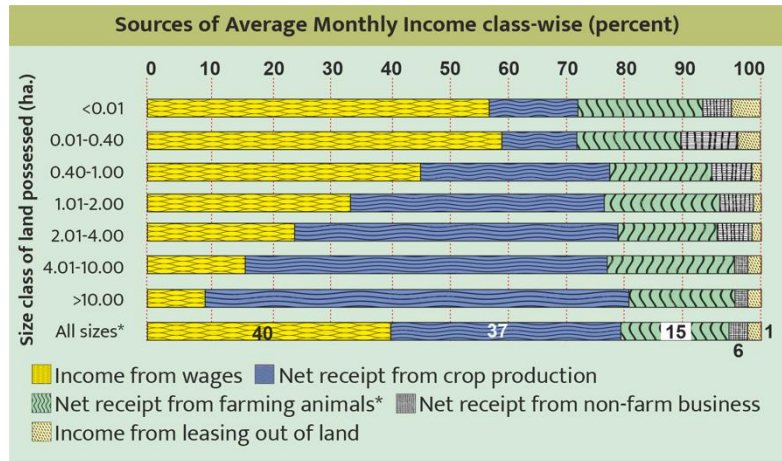
- Announced as a **part of the ANB scheme for three years (2020-21 to 2022-23)**.
- **Aim:** overall promotion & development of scientific beekeeping in the country to achieve the goal of 'Sweet Revolution' which is being implemented through National Bee Board (NBB).
- **Benefits of beekeeping:** Useful in pollination of crops, thereby, increasing income of the farmers/beekeepers by way of increasing crop yield and providing honey and other high value beehive products, viz.; bee wax, bee pollen, propolis, royal jelly, bee venom, etc.



**SITUATION ASSESSMENT SURVEY (SAS):**

The “Land and Livestock Holdings of Households and Situation Assessment of Agricultural Households” survey carried out by the National Statistical Office (NSO) in its 77th round of survey in the rural areas of India is referred as SAS. The Report was released in September 2021 and last SAS was published in 2014. Its key findings-

- **Increase in average monthly income per agricultural household,** as per paid out expenses approach: ₹ 10218 in SAS, 2021 against ₹6426 in SAS, 2014.
- **Crop income continues to be an important source of farmer’s income** (share of 37 per cent) although there is a visible diversification in the sources of income of the farmers.
- **Fragmentation of holdings:** The average size of household ownership holdings has declined from 0.725 hectare in 2003 to 0.592 hectare in 2013 and further to **0.512 hectare in 2019.**
- **Suggestions:** Focus on the measures like development of small farm technology, boosting non-farm businesses and development of allied activities including animal husbandry, dairying and fisheries.

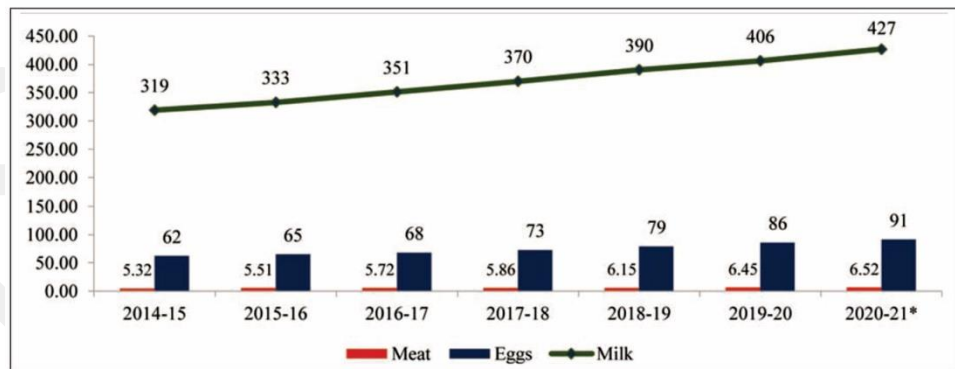


**Allied Sectors: Animal Husbandry & Dairying**

**Livestock Sector**

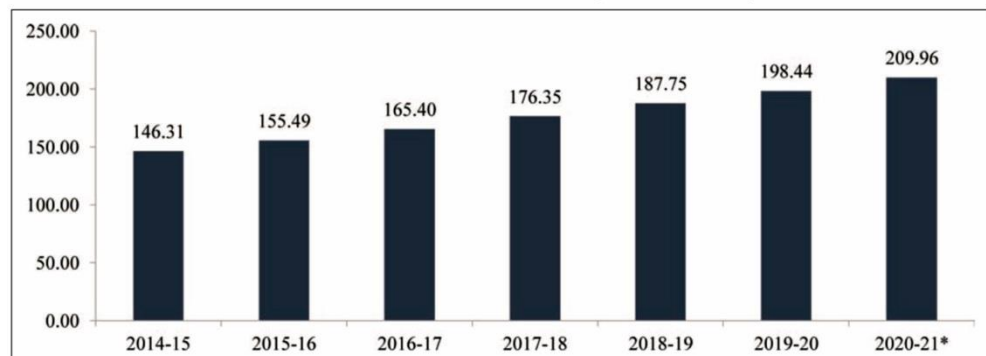
- **Growth rate:** CAGR of 8.15 per cent during 2014-15 to 2019-20 (at constant prices).
- **Contribution in total agriculture and allied sector GVA (at constant prices):** increased from 24.32 per cent (2014-15) to 29.35 per cent (2019-20).
- **Livestock contribution in total GVA:** 4.35 per cent of total GVA in 2019-20.

**Per Capita Availability of Milk (gram per day), Meat (kg per year) and Eggs (number per annum)**



Source: Based on data received from Department of Animal Husbandry & Dairying

**Trend of Milk Production in India (Million Tonnes)**



Source: Based on data taken from the National Dairy Development Board and DAHD.

\*Data is provisional

**Dairy Sector:** India is ranked **1st in milk production** contributing 23 per cent of global milk

production. **Single largest agricultural commodity** contributing 5 per cent of the national economy and employing more than 8 crore farmers directly.

- **Growth rate:** CAGR of 6.2 per cent in 2020-21.
- **Trend:** Milk production increased steadily since 2014-15.

**Egg and Meat Production:** India ranks **3rd in Egg Production** and **8th in meat production** in the world.

- **Egg production increased** from 78.48 billion in 2014-15 to 122.11 billion Nos. in 2020-21.
- **Meat production increased** from 6.69 million tonnes in 2014-15 to 8.80 million tonnes in 2020-21.

#### Recent Initiatives in Animal Husbandry and Dairy Sector and their achievements

- **National Animal Disease Control Programme:** Foot & Mouth Disease (FMD) vaccination has been completed in 11 States, 5 crore animals have been vaccinated against FMD and 27.8 lakh animals vaccinated against brucellosis till December 2021.
- **Animal Husbandry Infrastructure Development Fund (AHIDF):** As of December 2021, a total of 76 projects have been approved. The amount of interest subvention released under the scheme was ₹ 12.74 crore during 2020-21 and ₹ 6.40 crore during 2021-22.

**FISHERIES:** India is the **second largest** fish producing country in the world accounting for 7.56 per cent of global production.

- **Contribution to India's GVA:** 1.24 per cent.
- **Contribution to the agricultural GVA:** 7.28 per cent.
- **Average annual growth:** 10.87 per cent since 2014-15 with record fish production of 145 lakh tons in FY 2020-21.
- **Employment:** Supports the livelihood of over 28 million people in India.
- **Export earnings from the sector:** ₹46,662.85 crore during 2019-20.
- **Steps taken and achievements:**
  - **Extension of the facility of KCC to fisheries:** As on 31st December 2021, a total of 1,04,157 KCCs have been issued to fishers and fish farmers.
  - **Pradhan Mantri Matsya Sampada Yojana (PMMSY):** Project proposals with total outlay of ₹ 5584.74 crores have already been approved.

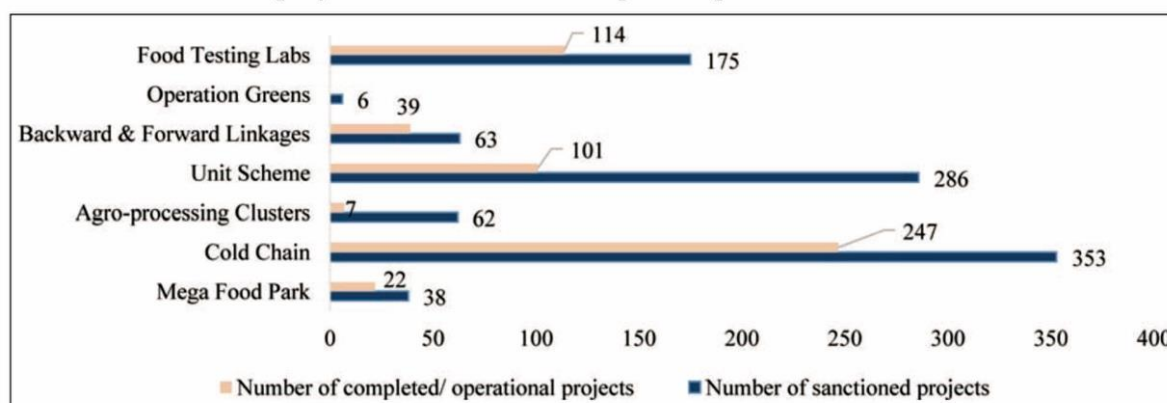
#### Agricultural Research and Education

- **Role:** Development of an environmentally sustainable global food system, ensuring food and nutritional security and increasing farm income by cost minimization and yield maximization.
  - **World's food system** contributes to about **one-fifth of global greenhouse gas (GHG) emissions.**
- **Recent Developments:**
  - Indian Council of Agricultural Research (ICAR) during 2020 and 2021 notified/released a total of 731 **new varieties/ hybrids of field crops** and 98 of horticultural crops.
  - Department of Agricultural Research & Education (DARE) developed **35 special trait varieties** including **biofortified and stress tolerant** varieties of field and horticulture crops during 2021-22.
  - ICAR designed and developed an **Agri-voltaic system of 105 kW** for crop production and electricity generation from a single land use system.
- **Mechanization: Indian tractor industry is the largest** in the world accounting for one-third of the total global production.
  - **Penetration of powered machines in various farm activities:** Around 40 to 45 per cent.
  - **Steps taken and achievements:**
    - ✓ **Sub Mission on Agricultural Mechanization (SMAM):** During 2014-15 to 2020-21, a total of 27828 Custom Hiring Centre (CHC) and during 2020-21 alone, 9432 CHC were established.
    - ✓ **Multilingual Mobile App called Farm Machinery Solutions (FARMS)** launched to help farmers in getting rented farm machinery and implements through CHC in their area.
- **Crop Residue Management (CRM): 'Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi'** launched for the period from 2018-19 to 2020-21.

### Food Processing Sector

- **Average annual growth rate:** around 11.18 per cent.
- **Contribution to GVA in manufacturing:** 9.87 per cent in 2019-20 at 2011-12 prices.
- **Employment:** Share of 12.38 per cent in the employment generated in all Registered Factory sector in 2017-18.
- **FDI:** Equity inflow of US\$ 4.99 billion during the period April 2014 to September 2021.
- **Schemes and achievements:**
  - **Prime Minister-Formalization of Micro Food Processing Enterprises (PM-FME):** One District One Product (ODOP) status for 137 unique products in 710 districts of 35 States/ UTs has been approved.
  - **Pradhan Mantri Kisan SAMPADA Yojana (PMKSY):**

#### Status of projects sanctioned and completed/operational under PMKSY



Source: Based on data received from MoFPI.

- **Tomato, Onion and Potato (TOP) Scheme:**
  - ✓ **Long term Value Chain Development Projects:** Scope has been expanded from TOP to Twenty-Two Perishable products.
  - ✓ **Short term Price Stabilization Measures:** Transportation subsidy under the scheme was also extended to Kisan Rail Scheme. Scope of short-term measures extended from TOP to TOTAL (41 notified fruits and vegetables) in ANB announcement.

### Food Management

- **Objectives:** Procurement of foodgrains from farmers at remunerative prices; distribution of foodgrains to consumers, particularly the vulnerable sections of society at affordable prices and maintenance of food buffer stock for food security and price stability.

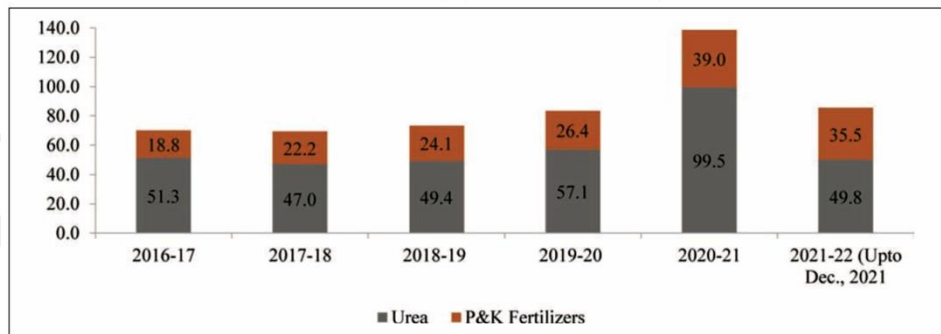
Category	Initiatives and achievements
Allocation of Foodgrains	<ul style="list-style-type: none"> <li>• <b>Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) extended to Phase V</b> covering December 2021 to March 2022.</li> </ul>
Fortification of Rice and its Distribution	<ul style="list-style-type: none"> <li>• <b>Centrally Sponsored Pilot Scheme 'Fortification of Rice and its Distribution under Public Distribution System'</b> launched in 15 Districts</li> <li>• <b>Under Integrated Child Development Scheme and PM Poshan:</b> Nearly 19.79 LMT of fortified rice has been procured.</li> </ul>
One Nation One Ration Card	<ul style="list-style-type: none"> <li>• <b>One Nation One Ration Card (ONORC) System</b> launched under "Integrated Management of Public Distribution System": Facility of national/inter-State portability is enabled in 34 States/UT covering nearly 75 crore beneficiaries (94.3 per cent of total NFSA population).</li> </ul>
Open Market Sale Scheme	<ul style="list-style-type: none"> <li>• <b>Special dispensation for supply of foodgrains to all the charitable or non-governmental organizations etc.</b> engaged in relief or running community kitchens for migrant labourers/vulnerable groups due to the present lock down condition was introduced.</li> </ul>
Food Subsidy	<ul style="list-style-type: none"> <li>• <b>As a pro-poor measure, Central Issue Price (CIP) for NFSA beneficiaries have not been revised</b> since the commencement of the NFSA.</li> </ul>

<b>Food Subsidy (in ₹ thousand crore) and Annual Growth in Food Subsidy (in per cent)</b>																																											
<table border="1"> <caption>Food Subsidy and Annual Growth Data</caption> <thead> <tr> <th>Year</th> <th>Food Subsidy (₹ thousand crore)</th> <th>Annual Growth (per cent)</th> </tr> </thead> <tbody> <tr><td>2009-10</td><td>58.2</td><td>33.37</td></tr> <tr><td>2010-11</td><td>62.9</td><td>8.05</td></tr> <tr><td>2011-12</td><td>72.4</td><td>15</td></tr> <tr><td>2012-13</td><td>84.6</td><td>16.83</td></tr> <tr><td>2013-14</td><td>89.7</td><td>6.13</td></tr> <tr><td>2014-15</td><td>113.2</td><td>26.11</td></tr> <tr><td>2015-16</td><td>134.9</td><td>19.22</td></tr> <tr><td>2016-17*</td><td>130.7</td><td>-3.15</td></tr> <tr><td>2017-18**</td><td>140.0</td><td>7.12</td></tr> <tr><td>2018-19***</td><td>171.1</td><td>22.24</td></tr> <tr><td>2019-20</td><td>108.5</td><td>-36.59</td></tr> <tr><td>2020-21#</td><td>398.7</td><td>541.1</td></tr> <tr><td>2021-22 &amp;</td><td>194.1</td><td></td></tr> </tbody> </table>		Year	Food Subsidy (₹ thousand crore)	Annual Growth (per cent)	2009-10	58.2	33.37	2010-11	62.9	8.05	2011-12	72.4	15	2012-13	84.6	16.83	2013-14	89.7	6.13	2014-15	113.2	26.11	2015-16	134.9	19.22	2016-17*	130.7	-3.15	2017-18**	140.0	7.12	2018-19***	171.1	22.24	2019-20	108.5	-36.59	2020-21#	398.7	541.1	2021-22 &	194.1	
Year	Food Subsidy (₹ thousand crore)	Annual Growth (per cent)																																									
2009-10	58.2	33.37																																									
2010-11	62.9	8.05																																									
2011-12	72.4	15																																									
2012-13	84.6	16.83																																									
2013-14	89.7	6.13																																									
2014-15	113.2	26.11																																									
2015-16	134.9	19.22																																									
2016-17*	130.7	-3.15																																									
2017-18**	140.0	7.12																																									
2018-19***	171.1	22.24																																									
2019-20	108.5	-36.59																																									
2020-21#	398.7	541.1																																									
2021-22 &	194.1																																										
Source: Based on data received from DFPD.																																											
<b>Ethanol blending</b>	<ul style="list-style-type: none"> <li>• <b>Ethanol Blended with Petrol (EBP) Programme:</b> Ethanol supply has increased to 173.3 crore liters during Ethanol Supply Year (ESY) 2019-20 from 38 crore liters in ESY 2013-14.</li> <li>• Government has <b>allowed production of ethanol from different feed stocks viz B-Hy &amp; C-Hy molasses, cane juice, sugar syrup, sugar and damaged food grains</b> including surplus FCI rice, maize, etc. by the distilleries either attached with sugar mills or standalone.</li> <li>• Financial assistance in the form of <b>interest subvention</b> is also provided to eligible distilleries.</li> </ul>																																										
<b>Storage</b>	<ul style="list-style-type: none"> <li>• <b>Private Entrepreneurs Guarantee Scheme:</b> A capacity of 144.34 LMT created through construction of godowns undertaken in PPP mode.</li> <li>• <b>Central Sector Scheme for construction of godowns:</b> A total capacity of 82,760 MT created since 2017.</li> <li>• <b>Action plan/road map for construction of steel silos in the country in Public Private Partnership (PPP):</b> Upto December 2021, 29.25 LMT capacity in various locations throughout the country have been awarded.</li> </ul>																																										

**FERTILIZERS**

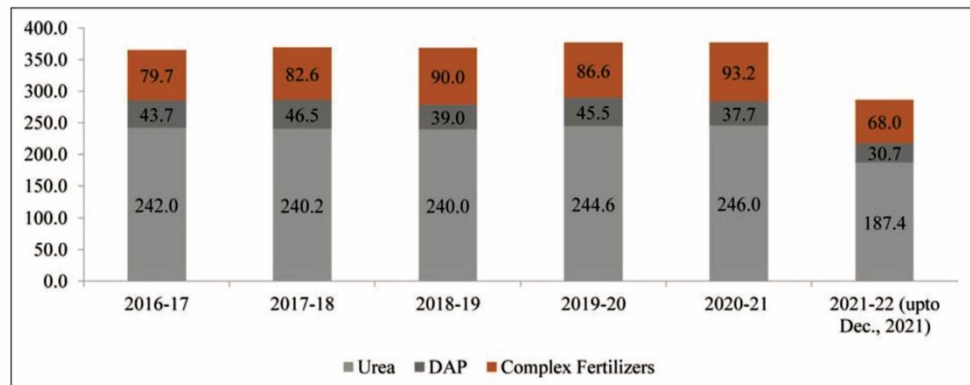
- **Concerns:** Import dependency, growing subsidy, lack of transparency.
- **Steps taken:**
  - **Notification of New Urea Policy-2015** for maximizing indigenous production, promoting energy efficiency in production, and rationalizing subsidy burden on the government.
  - Mandatory for all the domestic producers of urea to produce only **neem coated urea**.

**Fertilizer Subsidy (in ₹ thousand crore)**



Source: Based on data received from the Department of Fertilizers.

**Production of Fertilizers (LMT)**



Source: Based on data received from the Department of Fertilizers.

- **Potash Derived from Molasses (PDM)** brought under Nutrient Based Subsidy (NBS) scheme.
- **Latest technologies** such as coal gasification; implementation of Direct Benefit Transfer for providing benefits to farmers through Point-of-Sale machines, etc.

Following **observations and suggestions** were made-

- Shifting more towards **harnessing the potential of allied activities**.
- **Development and implementation of small holding farm technologies** for improving productivity of small and marginal farmers.
- **Prioritizing Crop diversification** towards oilseeds, pulses, and horticulture by addressing the core issues of irrigation, investment, credit and markets in their cultivation.
- **Coordinated action from the State Governments** to facilitate the shift to high value and less water consuming crops.
- **Increasing agriculture R & D** to improve productivity in the crop and allied sectors.
- **Exploring options and promote use of alternative fertilizers** such as Nano Urea and organic fertilizer which protect the soil, are more productive and contribute to higher nutrient use efficiency.
- **Promoting use of new technology** including drones and AI based decision support systems, reduction in use of chemical fertilizers and use of low-cost organic inputs and supporting start-ups for innovations.

<b>Chapter at a glance</b>
<b>The agriculture and allied sector grew at 3.6 per cent in 2020-21 and improved to 3.9 per cent in 2021-22.</b>
<b>Growth in allied sectors including livestock, dairying and fisheries has been the major drivers of overall growth in the sector.</b>
<b>Gross Capital Formation (GCF) in agriculture and allied sectors relative to GVA has been fluctuating due to wide fluctuations in private investment.</b>
<b>Oilseed production in India has steadily increased since 2016-17 onward.</b>
<b>Since 2010-11, sugar production has outstripped consumption except in 2016-17</b>
<b>Existing cropping pattern is skewed towards cultivation of sugarcane, paddy and wheat which has led to depletion of fresh ground water resources.</b>
<b>There is a need to prioritize Crop diversification towards oilseeds, pulses, and horticulture by addressing the core issues of irrigation, investment, credit and markets in their cultivation</b>
<b>As revealed by the latest SAS, the sector has been stable source of income across groups of agricultural households accounting for about 15 per cent of their average monthly income.</b>
<b>In view of increasing fragmentation of landholdings, there is a need to develop and implement small holding farm technologies for improving productivity of small and marginal farmers.</b>
<b>The livestock sector has grown at a CAGR of 8.15 per cent over the last five years ending 2019-20.</b>
<b>Milk production increased steadily since 2014-15.</b>
<b>Fisheries sector has demonstrated an outstanding double-digit average annual growth of 10.87 per cent since 2014-15.</b>
<b>The Government has further extended the coverage of food security network through additional provisions of foodgrains through the schemes like PM Gareeb Kalyan Yojana (PMGKY).</b>

**CHAPTER 7****Testing your remembering skills & Understanding skills**

**Q1. Consider the following statements with respect to the Irrigation in the Agriculture sector in India:**

1. The share of net irrigated area accounts for less than 30 percent of the total net sown area in the country.
2. Out of the net irrigated area, more area is irrigated through groundwater than Canal system.
3. The rate of extraction of groundwater is more than 100 per cent in the states of Punjab and Haryana.

**Which of the statements given above is/are correct?**

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

**Q2. Arrange the following agricultural and allied sectors' production in terms of ranking of India in the world starting with a better (lower) rank to a higher rank:**

1. Meat production
2. Milk production
3. Egg Production

**Select the correct answer using the code given below.**

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

**Q3. As per Economic Survey 2021-22, consider the following statements with reference to Agriculture and allied sector:**

1. The agriculture and allied sectors grew at a higher positive rate during 2021-22 than in 2020-21.
2. The share of the agriculture & allied sector in total GVA has increased in 2021-22 as compared to the share in 2020-21.
3. The share of the livestock and fishing & aquaculture in total agricultural GVA has been improving.

**Which of the statements given above are correct?**

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

**Q4. With reference to the Situation Assessment Survey, consider the following statements:**

1. It is the 'Land and Livestock Holdings of Households and Situation Assessment of Agricultural Households' survey carried out by the National Statistical Office (NSO).
2. The survey reported a decrease in average monthly income per agricultural household.
3. The average size of household ownership holdings has declined leading to fragmentation of land holdings.

**Which of the statements given above are correct?**

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

**Q5. Consider the following statements with reference to Ethanol Blended Petrol (EBP) Programme:**

1. Surplus Food Corporation of India rice is allowed by the government to be used for the production of Ethanol.
2. Financial assistance in the form of interest subvention is provided to eligible distilleries.

**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. What steps have been taken to reduce the import dependency and to make the subsidy regime more efficient? What other measures should be taken in this regard.**

**Q2. Crop diversification can be used as a tool to promote sustainable agriculture, reduction in import dependence and higher incomes for the farmers. In this context, discuss various measures that have been taken by the government.**

# ESSAY

## ENRICHMENT PROGRAMME 2022

**13 FEBRUARY | 5 PM**

- ▶ Introducing different stages from developing an idea into completing an essay
- ▶ Practical and efficient approach to learn different parts of essay
- ▶ Regular practice and brainstorming sessions
- ▶ Inter disciplinary approaches
- ▶ **LIVE / ONLINE** Classes Available

# CHAPTER 8: INDUSTRY AND INFRASTRUCTURE

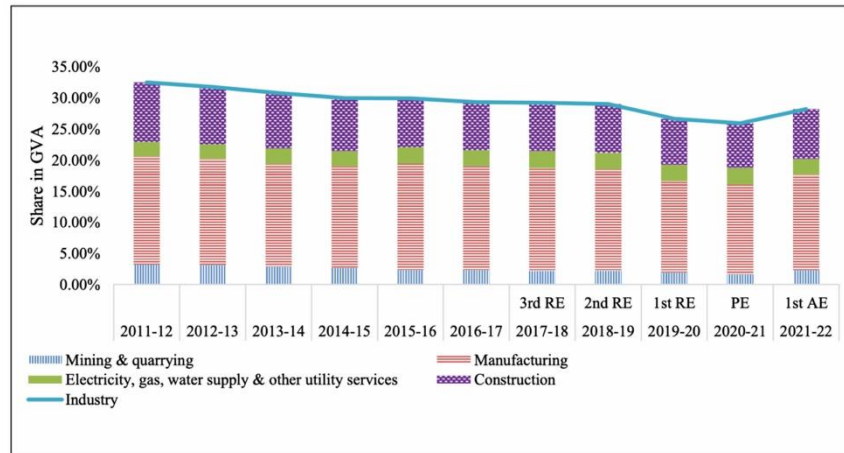
## Introduction

- The chapter talks about the **overall health of the industrial sector** along with a **sectoral analysis for major sectors** like Steel, Coal, MSMEs, Textiles, Electronics and Pharmaceuticals.
- It also highlights the **developments of the infrastructure sector** broken down in sectors Roads, Railways, Civil Aviation, Ports, Inland Waterways, Telecom, Petroleum, Crude and Natural Gas and Electricity.

## Overview of Industrial sector

- **Share of the industrial sector in the nominal GVA (at current prices) in 2020-21:** 25.9 percent.
- In 2020-21, electricity, gas, water supply and other utility services was the **only sub sector experiencing a positive growth.**
- **Growth of the industrial sector:** 22.9 percent in the first half of 2021-22 vis a vis the corresponding period of 2020-21.

Share of Industry and its components in Gross value added



Source: Survey calculations based on MoSPI data. Data at current prices.

- **Predictions for 2021-22 as per advance estimates:** Growth at 11.8 percent and increase in industry's share in GVA to 28.2 percent.
- **Index of Industrial Production (IIP):**
  - IIP recorded a **negative growth of 8.4 percent** in 2020-21 due to the impact of the pandemic.
  - **Significant improvement in performance in 2021-22:** In April-November 2021-22 the IIP grew by 17.4% as compared to (-15.3%) in the corresponding period of the previous year.
- **Index of Eight Core Industries (ICI):** Grew 13.7 percent during April-November 2021-22 as compared to (-11.1) percent in the corresponding period of last financial year.
  - Reasons for growth - improved performance in the steel, cement, natural gas, coal, and electricity.
  - Fertilizers and crude oil registered a negative growth.
- **Capacity utilization (CU):** Decreased substantially during the first quarter of 2020-21 due to severe restrictions imposed during the COVID-19 pandemic. It was, however, less severe during the second wave of COVID-19 (Q1:2021-22) due to flexible lockdown measures.
- **RBI's Business Expectation Index (BEI):** Remained stable with only a slight downturn in the second quarter of 2020-21 owing to the onset of the pandemic. Since then, it has been on an upswing.
- **Gross fixed capital formation (GFCF):** Aggregate GFCF (at constant prices) and industrial GFCF grew by 5.4 per cent and 3.7 per cent respectively in 2019-20.
- **Gross bank credit to the industrial sector recorded a growth** of 4.1 percent in October 2021 (Y-o-Y basis) compared to a negative growth of 0.7 growth in October 2020.
  - Certain industries such as mining, textiles, petroleum, coal products and nuclear fuels, rubber, plastic, and infrastructure have shown consistent improvement in credit growth.
- **FDI in Industries:**
  - **Highest ever annual FDI inflow** of US\$ 81.97 billion (provisional) in the 2020-21 reflecting a growth of 10 percent as compared to the previous year.

FDI Policy reforms and Other Measures during the Covid-19 Pandemic period	
Measures taken to allow greater foreign participation	<ul style="list-style-type: none"> <li>• <b>Defence Sector:</b> FDI allowed through <b>automatic route increased up to 74 per cent</b> (from 49 percent) for companies seeking new industrial licenses.</li> <li>• FDI <b>beyond 74 percent and up to 100 per cent</b> will be permitted <b>under Government route.</b></li> </ul>



	<ul style="list-style-type: none"> <li>• <b>Insurance Sector:</b> Permissible FDI limit increased <b>from 49 percent to 74 percent</b> under the automatic route and <b>allow foreign ownership</b> and control with safeguards.</li> <li>• <b>Petroleum &amp; Natural Gas sector:</b> FDI permitted <b>up to 100 percent under the automatic route</b> in cases where the Government has accorded an 'in-principle' approval for strategic disinvestment of a Public Sector Undertaking (PSU).</li> <li>• <b>Telecom sector:</b> FDI permitted <b>up to 100 percent under automatic route.</b></li> </ul>
<b>Curbing opportunistic acquisitions/takeovers</b>	<ul style="list-style-type: none"> <li>• An entity or beneficial owner of an <b>investment lying in a country sharing land</b> can invest <b>only under the Government route.</b></li> <li>• Also <b>transfer of ownership</b> of any existing or future FDI in an entity in India, directly or indirectly to such entities also <b>require Government approval.</b></li> </ul>
<b>Other Measures</b>	<ul style="list-style-type: none"> <li>• <b>Amendment of the Standard Operating Procedure (SOP)</b> to improve ease of <b>processing FDI proposals.</b></li> <li>• <b>'FDI Monitoring Cell'</b> to follow up with applicant/ investor, to expedite FDI proposals with a view identify and hurdles if any.</li> <li>• <b>Inter-Ministerial Committee (IMC)</b> constituted under the Chairpersonship of Secretary, Department for Promotion of Industries and Internal Trade (DPIIT) to take appropriate decision on delayed proposals and those escalated by Administrative Ministries/ Departments.</li> </ul>

- **Performance of Central Public Sector Enterprises: Net profit of operating 256 CPSEs** during 2019-20 at Rs. 93,295 crore.
  - **Government notified the new Public Sector Enterprise (PSE) Policy** in February 2021 for strategic disinvestment of public sector enterprises. Its key features include-
    - ✓ **Classification of CPSEs into-**
      - **Strategic Sectors:** where only a bare minimum presence of CPSEs is to be maintained.
      - **Non-Strategic Sectors:** which will be privatized or otherwise closed.
    - ✓ **Certain CPSEs exempt from the scope of the Policy** such as those setup as not-for-profit companies under the Companies Act, 2013 or those supporting vulnerable and weaker sections of society.

**Strategic sectors as per the new Public Sector Enterprise (PSE) Policy:** atomic energy; space and defense; transport and telecommunication; power; petroleum; coal and other minerals; banking, insurance, and financial services.

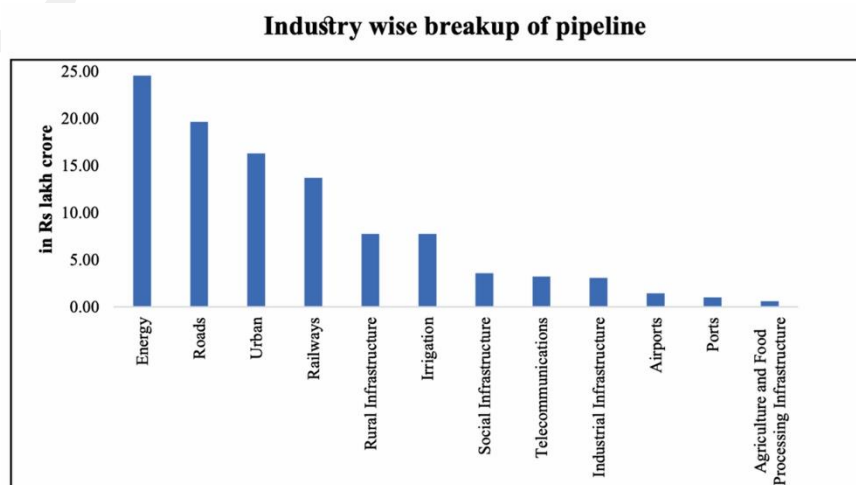
### Sector wise Performance and Initiatives

Sector	Developments in the sector	Initiatives taken
<b>Steel</b>	<ul style="list-style-type: none"> <li>• <b>Cumulative production</b> of crude and finished steel in 2021-22 <b>increased by 25.0 percent and 28.9 percent</b> respectively over corresponding period last year.</li> <li>• <b>Consumption of finished steel also increased</b> by 25.0 percent in same period.</li> </ul>	<ul style="list-style-type: none"> <li>• PLI Scheme for specialty steel; Domestically Manufactured Iron and Steel Products (DMI&amp;SP) Policy; Quality Control Order (QCO) covering carbon steel, alloy steel, tin plate, tin free steel and stainless steel and a R&amp;D scheme viz. "Promotion of R&amp;D in Iron &amp; Steel Sector".</li> </ul>
<b>Coal</b>	<ul style="list-style-type: none"> <li>• Most abundant fossil fuel in India and <b>accounts for 5 percent of the country's energy need.</b></li> <li>• <b>Coal production increased</b> by 12.24 percent in April-October 2021 as compared to (-) 3.91 percent in April-October 2020.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Measures taken by the coal lignite producing PSUs to reduce their carbon footprints.</b></li> <li>• <b>Opening up of coal mining for private sector:</b> 27 coal mines have been auctioned to private companies.</li> </ul>
<b>Micro Small Medium Enterprise</b>	<ul style="list-style-type: none"> <li>• <b>Share of MSME GVA in total GVA (current prices)</b> for 2019-20 was 33.08 per cent.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Revision in the definition of MSMEs</b> as part of the AtmaNirbhar Bharat package;</li> <li>• Launch of the new <b>Udyam Registration Portal</b> in July 2020;</li> <li>• The retail and wholesale trades including street vendors included as MSMEs and allowed to be registered on Udyam Registration Portal and avail the benefit of priority sector lending.</li> </ul>

		<ul style="list-style-type: none"> <li>Launch of <b>Champions Portal</b>, an ICT based technology system for making the smaller units big by helping and handholding them.</li> </ul>
<b>Textiles</b>	<ul style="list-style-type: none"> <li><b>Second largest employment generator</b> in the country after agriculture employing about 105 million people directly and indirectly.</li> <li><b>Showed remarkable recovery</b> reflected by IIP of 3.6 percent during April- October 2020.</li> </ul>	<ul style="list-style-type: none"> <li>Production-Linked Incentive (PLI) Scheme for Man Made Fiber (MMF) segment and technical textiles; setting up of <b>7 PM MEGA INTEGRATED TEXTILES REGION AND APPAREL PARK (MITRA)</b>.</li> </ul>
<b>Electronics</b>	<ul style="list-style-type: none"> <li>Had shown lackluster demand during the lockdown period but has since been on the path of revival.</li> </ul>	<ul style="list-style-type: none"> <li>Release of <b>National Policy on Electronics 2019 (NPE 2019)</b>;</li> <li>Notification of <b>PLI scheme</b> for Large Scale Electronics Manufacturing and for IT Hardware;</li> <li>Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (<b>SPECS</b>);</li> <li>Modified Electronics Manufacturing Clusters 2.0 (<b>EMC 2.0</b>) scheme;</li> <li><b>PARAKH - A Unified Laboratory Network</b>: to map accredited, certified and recognised laboratories in the country on a Geographic Information System (GIS).</li> </ul>
<b>Pharmaceuticals</b>	<ul style="list-style-type: none"> <li>Indian Pharmaceutical industry ranks <b>third in the world in pharmaceutical production by volume</b>. India is the <b>largest supplier of generic medicines</b> with a <b>20% share</b> in the global supply.</li> <li><b>Sudden spurt in FDI in 2020-21</b> vis a vis the previous year showing a 200% increase.</li> <li><b>Higher export</b>: During 2020-21, total pharma export stood US\$ 24.4 Bn against the total pharma import of US\$7.0Bn.</li> </ul>	<ul style="list-style-type: none"> <li>Scheme for Promotion of Bulk Drug Parks; Production linked incentive (PLI) scheme for Bulk drugs, for Pharmaceuticals, and for Promoting Domestic Manufacturing of Medical Devices.</li> </ul>

**INFRASTRUCTURE:** vehicle for social and economic transformation.

- National Infrastructure Pipeline (NIP):** launched to provide world-class infrastructure across the country and improve the quality of life for all citizens.
  - Total Viability Gap Funding (VGF) amount of Rs. 2943 crores** disbursed between 2014-15 to 2020-21.
- National Monetisation Pipeline (NMP):** Total indicative value of NMP for core assets of the Central Government has been estimated at Rs 6.0 lakh crore over 4-year period (5.4 percent of total infrastructure investment envisaged under NIP).



Source: Survey calculations based on data from the Report of the Task Force on National Infrastructure Pipeline for 2019-2025

## Sectoral Developments

- **Road Transport:**
    - **Road network** (National and State Highways, District, Rural, Urban and Project Roads) of over 63.71 lakh km of roads as on March 2019, **second-largest in the world**, after the United States.
    - **Increase in pace of road construction** in 2020-21 to 36.5 kms per day from 28 kms per day in 2019-20 (**rise of 30.4 percent**).
    - **Increase in public expenditure** by 29.5 percent in 2020-21 compared to the previous year.
  - **Railways: Third largest network** in the world under single management and with over 68,102 route kms.
    - **Traffic:** During FY21, IR carried **1.23 billion tonnes of freight and 1.25 billion passengers**.
    - **Safety:** Train accidents has come down from **59 in 2018-19** to 55 in 2019-20 (pre-Covid) and further to **22 in 2020-21**.
    - **Capital Expenditure** increased to Rs. 2,15,058 crores during 2021-22 (BE).
    - **Initiatives to upgrade Indian railways (IR):**
      - ✓ **Adopting indigenous new technology** such as KAVACH, Vande Bharat trains and redevelopment of stations.
      - ✓ **Kisan Rail:** as of December 2021, 1,841 Kisan Rail services, transporting approximately 6.0 lakh tonnes of perishables including fruits and vegetables.
      - ✓ **Projects connecting difficult terrain** such as Rishikesh -Karnaprayag line as also the rail network to connect all capitals of northeast states.
      - ✓ **Wi-fi facility:** As of December 2021, total **6,087 Railway Stations** equipped with Wi-Fi facility
      - ✓ **National Rail Plan:** Plans to **increase the modal share of railways in freight to 40-45%** from the present level of **26-27%**, achieve 100% electrification of its network by December 2023 etc.
  - **Civil Aviation:** one of the fastest growing aviation markets in the world.
    - **Domestic traffic more than doubled** from around 61 million in 2013-14 to around 137 million in 2019-20, registering a **growth of over 14 percent per annum**.
    - **Initiatives to boost the aviation sector:**
      - ✓ introduction of **air transport bubbles or air travel arrangements** with specific countries,
      - ✓ **disinvestment of Air India,**
      - ✓ **privatization and modernization/** expansion of airports,
      - ✓ boost to the **regional connectivity scheme - UDAN,**
      - ✓ incentivization of **maintenance, repair and overhaul (MROs)** operations.
  - **Ports:**
    - **Capacity of 13 major ports increased by 79 percent** to 1,560.61 MTPA by the end of March 2021 since March 2014.
    - **Traffic handled at major ports declined** by 4.57 percent between 2019-20 and 2020-21, on account of the worldwide disruptions in international trade due to the pandemic.
    - **Average turnaround time at major ports reduced** from 62.11 hours in 2019-20 to 55.99 hours in 2020-21.
    - **Indian fleet is just 1.2 percent of world's fleet** in terms of capacity and **carries only 7.8 percent (for 2018-19) of India's EXIM trade**.
    - **Initiatives taken by the government:**
      - ✓ **Scheme providing subsidy support to Indian shipping companies** in global tenders floated by Ministries and CPSEs over five years to promote flagging of merchant ships in India.
      - ✓ **Sagarmala**, a National Programme aimed at port modernization & new port development, connectivity enhancement, port-led industrialization, coastal community development, coastal shipping, and Inland water transport.
- Privatization in the Aviation sector**

  - **Disinvestment of Air India:** 100% equity shareholding in Air India along with equity shareholding of Air India in Air India Express Ltd. and Air India SATS awarded to the highest bidder.
  - **Privatization of Airports:**
    - **Airports Authority of India (AAI) awarded 6 airports to the highest bidder** namely, Ahmedabad, Jaipur, Lucknow, Guwahati, Thiruvananthapuram and Mangalore for Operations, Management and Development.
    - **As per National Monetization Pipeline (NMP), 25 AAI airports have been earmarked for asset monetization** over the years 2022 to 2025.

- ✓ **Major Port Authorities Act 2021** enacted for inter alia regulation, operation, and planning of major ports.
- ✓ **Captive Policy for Port Dependent Industries** prepared to address the challenges of renewal of concession period, scope of expansion, and dynamic business environment.
- ✓ **Maritime India Vision 2030 (MIV 2030)** released as a blueprint to ensure coordinated and accelerated growth of India's maritime sector in the next decade.

**PM Gati Shakti**

- It is an integrated plan ensuring **multi-modal and seamless connectivity for people, goods and services**.
- It **covers 16 ministries and infrastructure initiatives** like Bharatmala, Sagarmala, inland waterways, dry/land ports, UDAN etc.
- It is also expected to **include social infrastructure** like hospitals and universities.

- **Inland waterways:** Initiatives taken-
  - **Regulatory amendment through the Inland Vessels Act, 2021**, which replaced Inland Vessels Act, 1917 to promote economical, safe transportation and trade through inland waters.
  - **Jal Marg Vikas Project** from Varanasi to Haldia stretch of Ganga-Bhagirathi-Hooghly River System for augmentation in navigation capacity of National Waterway-1 (NW-1).
  - Completion of construction of **multi-modal terminals at Varanasi and Sahib Ganj**.
  - **Multimodal terminal at Haldia and the Navigational Lock at Farakka** achieved substantial progress.
- **Telecom:** India is the **world's second-largest** telecommunications market.
  - **Total telephone subscriber base in India:** 1200.88 million in March 2021.
  - **Rural-Urban share:** 45 percent of subscribers were based in rural India and 55 percent in urban areas in March 2021.
  - **Narrowband-Broadband share:** with only 4 percent of subscribers having narrowband and 96 percent with broadband connections in June 2021.
  - **Average wireless data usage:** increased to 14.1 GB per data user per month in Q1:FY22 from just 1.24 GB per month in Q1:FY18.
  - **Initiatives:**
    - ✓ **BharatNet project:** 5.46 lakh km Optical Fiber Cable has been laid and a total of 1.73 lakh Gram Panchayats (GP) have been connected by Optical Fiber Cable (OFC). In addition, **4173 GPs have been connected over satellite media**.
    - ✓ **Comprehensive Telecom Development Plan (CTDP) for the North-Eastern Region and Comprehensive Telecom Development Plan for Islands** to provide mobile connectivity in the uncovered villages and along National Highways in the North-east.

**Reforms in the Telecom Sector****Structural Reforms:**

- **Rationalization** of Adjusted Gross Revenue, Bank Guarantees (BGs) against License Fee (LF), Interest rates and Penalties.
- **Reforms in Future Auctions -**
  - **No BGs required to secure instalment payments.**
  - **Tenure of spectrum** increased from **20 to 30 years**.
  - **Surrender of spectrum permitted** after 10 years for spectrum acquired.
  - **No Spectrum Usage Charge (SUC) for spectrum acquired.**
- **Spectrum sharing encouraged:** Additional SUC of 0.5 percent for spectrum sharing removed.

**Procedural Reforms:**

- **Ease of doing business:** Auction calendar fixed, self-declaration of licenses under Customs Notification for wireless equipment allowed.
- **Know Your Customers (KYC) reforms:** Self-KYC (App based) permitted.
- **Digitization of Customer Acquisition Forms (CAF).**
- Standing Advisory Committee on Radio Frequency Allocation (SACFA) clearance for telecom towers eased.
- **Addressing Liquidity requirements of TSPs:**
  - Moratorium/Deferment of up to four years in annual payments of dues arising out of the AGR Judgement.
  - Option to the TSPs to pay the principal and the interest amount arising due to the said moratorium/deferment of payment by way of equity.

- **Petroleum, Crude and Natural gas:** India depends on imports to meet more than 80 per cent of its requirements.

- **Production of Crude oil and condensate, Natural Gas and petroleum products and Processing of Crude Oil all decreased**

during the year 2020-21 in comparison to 2019-20.

- ✓ This can be attributed to declining production from old and marginal fields, unplanned shutdown and operational losses from few producing wells and lower demand of petroleum products due to COVID-19.

- **Initiatives:**

- ✓ **Lakshya Bharat Portal launched for promoting transparency:** It requires all oil and gas organizations to upload details of various items procured by them including the future requirements.

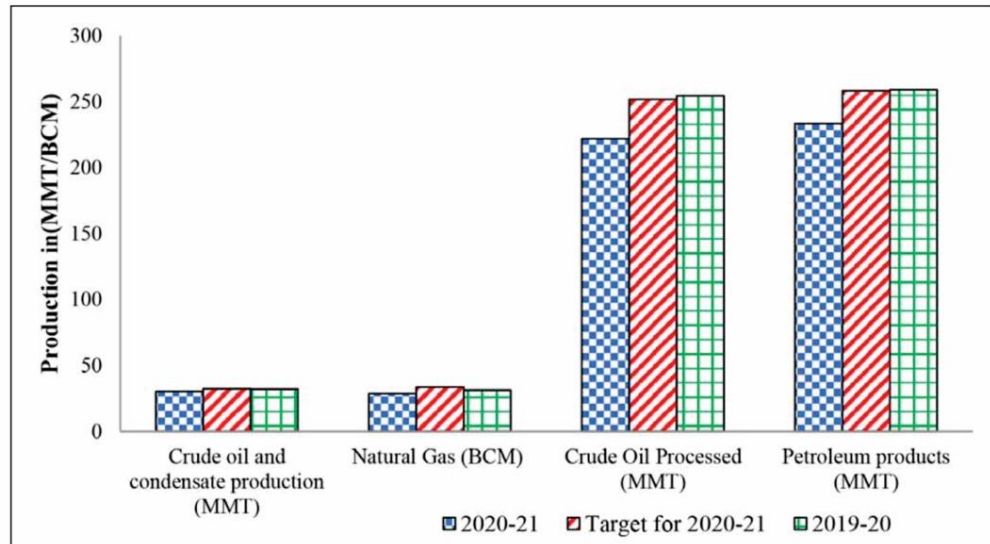
- ✓ **Ujjwala 2.0 launched on pan India basis** to provide additional one crore LPG connections along with free first refill and stove.

- ✓ Measures taken to develop the **national gas grid and city gas distribution network.**

- **Electricity:**

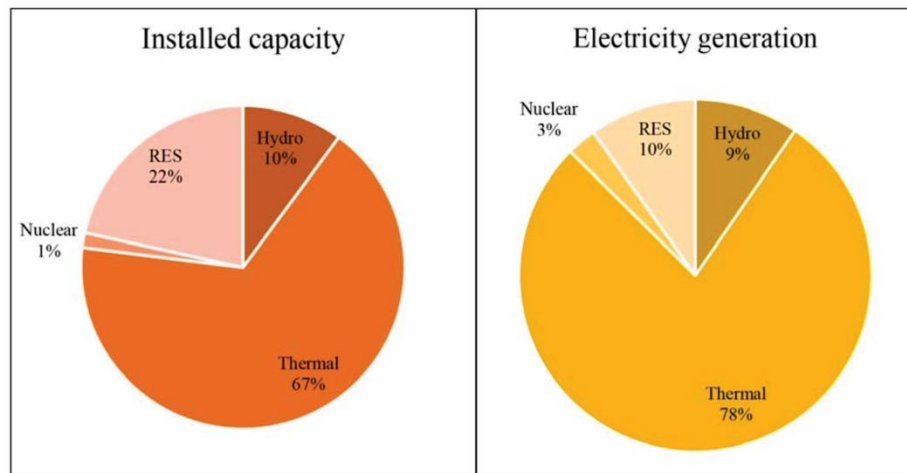
- **Total installed power capacity and captive power plant** (industries having demand of 1MW and above) was 459.15 GW in 2021, registering a **growth of 2.87 percent** since last year.

**Production of Petroleum, crude and natural gas**



Source: M/o PNG

**Source of Installed Capacity and electricity generation 2020-21**



Source: Survey Calculations based on data from Central Electricity Authority. Includes both Utilities and captive plants. Thermal includes gas, steam and diesel.

**Transitioning to clean energy: World bank report 'Minerals for Climate Action'**

- **Suggestion for mitigation action to achieve net-zero carbon ambition-**
  - **Building storage for intermittent electricity generation** from solar PV and wind farms to ensure on-demand energy supply.
  - **Prepare for supply of essential mineral:** Minerals and metals like copper, aluminium, iron, manganese, nickel etc are critical for developing clean energy sources.
  - **Encourage R&D** to ensure effortless switch to renewable sources of energy including focus on developing technology that recycles, reuses and repurposes minerals.
  - Having a **diversified mix of sources of energy.**

- **Renewable energy – Solar, Wind, Biomass, and small hydro energy** constitutes over **24.71 percent of the country’s installed power capacity** and around **10.7 percent of the electrical energy generation** for year 2020-21.
- **Energy losses** in transformation, transmission, and distribution during the year 2019-20 was at **20.46 percent for all India** (highest for the Northeast region - 29.98 percent).
- **Initiatives:**
  - ✓ **Green Energy Corridor (GEC)** launched aimed at synchronizing electricity produced from renewable sources, such as solar and wind, with conventional power stations in the grid.
  - ✓ Government has mandated electricity distribution companies to undertake **quarterly energy accounting through a certified energy manager to minimize losses.**

Glossary	
<b>Index of Eight Core Industries (ICI)</b>	It measures collective and individual performance of production in selected eight core industries like <b>Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement and Electricity</b> comprising 40.27 percent of the weight in IIP.
<b>Capacity utilization (CU)</b>	Capacity Utilization in the context of power generation is the <b>percentage representing the extent to which a generating unit fulfilled its capacity in generating electric power</b> over a given time period.
<b>RBI’s Business Expectation Index (BEI)</b>	This index <b>gives a glimpse of the demand conditions in the manufacturing sector</b> by combining parameters which include overall business situation, production, order books, inventory of raw material and finished goods, profit margin, employment, exports and capacity utilization.
<b>Gross fixed capital formation (GFCF)</b>	It is the <b>gross addition to fixed assets</b> like machinery and equipment, intangible assets and indicates the state of investments in the economy.

Chapter at a glance
<b>Gradual unlocking of the economy</b> , record vaccinations, improvement in consumer demand, continued policy support towards industries by the government in the form of AtmaNirbhar Bharat Abhiyan and further reinforcements in 2021-22 have led to an upturn in the performance of the industrial sector.
<b>The industrial performance has shown</b> improvement as reflected in the cumulative growth of the IIP.
<b>Buoyant FDI inflows</b> amid improvements in overall business sentiments, foretells a positive outlook for the industry.
<b>The introduction of the production linked incentive scheme (PLI)</b> to encourage scaling up of industries and major boost provided to infrastructure-both physical as well as digital– combined with continued measures to reduce transaction costs and improve ease of doing business, would support the pace of recovery.
<b>Several initiatives such as the National Infrastructure Pipeline (NIP), National Monetization Plan (NMP)</b> , amongst others, have been taken to propel the infrastructure investment.
<b>Capital expenditure for the Indian Railways has been substantially increased.</b>
<b>The Government has also heralded a major boost to the electronics hardware sector</b> and brought in structural and procedural reforms in the telecom sector.

## CHAPTER 8



## Testing your remembering skills &amp; Understanding skills

**Q1. In the context of Industrial sector, which of the following has not witnessed a negative growth of Gross Value Added in the last five years?**

- (a) Mining & quarrying
- (b) Manufacturing
- (c) Electricity, gas, water supply & other utility services
- (d) Construction

**Q2. Numerous reforms were undertaken to support the economy during COVID-19 pandemic. In this context, in which of the following sectors has FDI limit been raised to more than 49 percent through automatic route?**

- 1. Defence sector
- 2. Insurance sector
- 3. Petroleum & Natural Gas sector

**Select the correct answer using the code given below.**

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

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

- 1. Net profit of the CPSEs during 2019-20 has been more than five lakh crore.
- 2. Currently less than 100 CPSEs are in operation in the country.
- 3. As per the new Public Sector Enterprise (PSE) Policy, Banking is categorized as a strategic sector.

**Which of the statements given above is/are correct?**

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

**Q4. With reference to the Industrial Sector, consider the following statements:**

- 1. Share of Construction in Industrial sector GVA is more than Mining and Quarrying.
- 2. Manufacturing occupies the largest share in Industrial sector GVA.

**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

**Q5. Consider the following statements regarding the Pharmaceutical sector in India:**

1. Indian Pharmaceutical industry ranks first in the world in pharmaceutical production by volume.
2. India is the largest supplier of generic medicines with a 40 percent share in the global supply.
3. For the year 2020-21 Pharma exports have been more than 20 billion dollars.

**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

**Q6. Consider the following statements regarding the Shipping sector in India:**

1. Currently there are 11 major ports in India.
2. Share of Indian shipping fleet as a percentage of the world's fleet is just over one percent.
3. Captive Policy for Port Dependent Industries has been abolished.

**Which of the statements given above is/are correct?**

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

**Q7. Business Expectation Index (BEI) gives a glimpse of the demand conditions in the manufacturing sector is released by-**

- (a) The Small Industries Development Bank of India
- (b) The Reserve Bank of India
- (c) The National Institute for Micro, Small and Medium Enterprises
- (d) The Employees' Provident Fund Organisation

**Self-Assessment: To practice Question for Answer Writing skills****Q1. Telecom sector has done an outstanding job in meeting the challenges during COVID times.**

**Discuss. In this context, there is need to not only expand the telecom infrastructure, but also to take a number of measures to bring about structural and procedural reforms.**

**Q2. Comment on the reforms brought in the FDI policy to improve foreign participation, curb opportunistic takeovers and enhance transparency and rationalization of processes to monitor and expedite implementation.**



# CHAPTER 9: SERVICES

## Introduction

Services sector contributes over 50 per cent to India's GDP. The sector has been the worst affected among all the sectors due to COVID. However, within the services sector, the effect of Covid-19 has been varied depending on the nature of service. While the sector as a whole has mostly recovered now and grew by **10.8%** in the **first half of 2021-22**, although some of the sub-sectors continue to be impacted.

## Impact Of Covid-19 and Sequential Recovery

- **Varied Impact across sub sectors:** Non-contact services such as information, communication, financial, professional and business services have remained resilient, while the impact has been much severe on contact based services such as tourism, retail trade, hotel, entertainment and recreation, etc.
- **Contraction in the sector:** The services sector contracted by 8.4 per cent in 2020-21 driven by a sharp contraction of 18.2 per cent in the sub-sector 'Trade, hotels, transport, communication & services related to broadcasting'.
- **Gross Value Added (GVA) of services sector:** Share of services sector in India's Gross Value Added (GVA) declined from 55 per cent in 2019-20 to **53 per cent in 2021-22**. However, GVA of services sector is estimated to **grow by 8.2 per cent in 2021-22 with high uncertainty for near term** owing to the spread of Omicron variant.
  - **GVA of 'Public administration, defence & other services' sub-sector witnessed a robust recovery** as a result of increased government expenditure in the wake of Covid-19.

## Trends in High Frequency Indicators

- **Growth in indicators** such as Purchasing Managers Index (PMI) Services Index, Freight traffic (rail, air and port) and Passenger Traffic point to a pickup in economic momentum. Important highlights regarding the same are as follows:
  - **Services PMI:** After initial contraction since March 2020, PMI Services recorded strongest jump in over 10 years to 58.4 in October 2021 moderating to 55.5 in December 2021.
  - **Freight traffic:** Indian railways recorded almost 16 per cent increase in freight loading as compared to the corresponding period during the pre-pandemic year (2019-20)
  - **Passenger Traffic:** While air passenger traffic is gradually reaching the pre-pandemic levels. Railway passenger traffic is still much below the pre-pandemic levels.
- **Slowdown in growth has been witnessed in Bank credit to services sector** largely on account of the lower growth in credit to 'Tourism, Hotel & Restaurants', 'Transport Operators' and Trade- Retail as well as Wholesale.
- **Corporates have raised more money through capital markets** than banking capital in 2021-22 so far. (See Chapter 4 Monetary Management and Financial Intermediation for details).

## Services Sector Share at the State and UT Level

The services sector accounts for more than 50 per cent of the Gross State Value Added (GSVA) in 12 out of the 33 states and UTs. Due to the Covid-19 pandemic and restrictions in movement, **GSVA in services sector declined in 2020-21**.

- **Maharashtra and Karnataka are the top two contributors** to services GSVA.

## FDI Inflows into Services Sector

- Services sector is the **largest recipient of Foreign Direct Investment (FDI)** inflows in India.
- According to the World Investment Report 2021 by the UN Conference on Trade and Development (UNCTAD), **India was the fifth-largest recipient of FDI in 2020** improving its rank by four places, from ninth position in 2019.

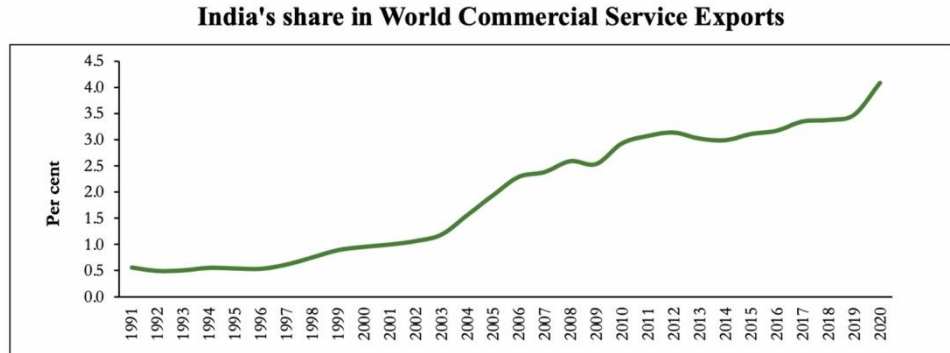
## Trade in Services Sector

### • Services Exports

- **Global Scenario and India's share:** World trade in commercial services plummeted in 2020. WTO expects global services trade to grow at a slower pace than goods trade in 2021.
  - ✓ India has a dominant presence in global services exports (**4.1% share**). It remained **among the top ten services exporter** countries in 2020.

### ○ Impact across different

**services:** India's software exports (with a share of 48.5 per cent in total services exports) remained relatively resilient during Covid-19 period



Source: World Bank

with higher demand for digital support, cloud services and infrastructure modernisation catering to the new pandemic challenges. While the impact was much severe in travel exports, which fell almost 72 per cent in 2020-21.

✓ Overall, an **increase of 22.8 per cent in net exports of services** was registered in H1 2021-22.

- **Services Export vs Merchandise Export:** The impact of Covid-19 on India's services exports was less severe as compared to merchandise exports.

- **Services imports:** India's services imports exhibited **sharper decline of 8.4 per cent** in 2020-21 in comparison with services exports primarily on account of fall in travel and transportation payments.

### Major Services: Sub-sector wise Performance and Recent Policies

Sub-Sector	Performance	Major Govt. Policies/Initiatives
<b>Tourism</b>	Foreign tourist arrivals Foreign exchange earnings from tourism reduced by nearly 75% in 2020-21 with restrictions on travel, low consumer confidence and a global struggle to contain the Covid-19 spread.	<ul style="list-style-type: none"> <li>• <b>Vande Bharat Mission:</b> Special international flights have been operating under the mission to help expats fly back home.</li> <li>• <b>Transport Bubble:</b> India has transport bubbles with 35 nations under which over 47,000 inbound and outbound flights have been carrying over 63.55 lakh passengers.</li> </ul>
<b>IT-BPM Services</b>	<ul style="list-style-type: none"> <li>• According to NASSCOM, <b>IT-BPM revenues (excluding e-commerce) reached US\$ 194 billion</b>, growing by 2.26 per cent, <b>adding 1.38 lakh employees</b> during 2020-21.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Relaxation of Other Service Provider regulations</b> (See Box 1 for details),</li> <li>• Telecom Sector Reforms</li> <li>• Consumer Protection (e-commerce) Rules, 2020.</li> </ul>
<b>Space</b>	<ul style="list-style-type: none"> <li>• <b>Capabilities have been developed in the space sector across all domains.</b> This includes indigenous space transportation systems; space assets, satellite communication, meteorology, space science &amp; navigation; ground infrastructure among others.</li> <li>• The sector has been witnessing <b>increasing participation of private sector</b> – not only in the traditional vendor role but also in taking up end-to-end space activities.</li> <li>• <b>Number of startups in the space sector has increased</b> from 11 in 2019 to 47 in 2021.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Empowering New Space India Limited (NSIL)</b>-the Public Sector Undertaking (PSU) in this sector –to “own” the operational launch vehicles and space assets of ISRO.</li> <li>• Creation of <b>Indian National Space Promotion and Authorization Centre (IN-SPACe)</b>, an independent nodal agency under the Department of Space, which shall act as the promotor and regulator of space activities in India by NGPEs (Non-government/private entities).</li> <li>• <b>SpaceCom and SpaceRS policies</b>, further liberalizing the traditional Satellite</li> </ul>

	<ul style="list-style-type: none"> <li>India <b>accounts for only about 2 per cent of the space economy</b>, much behind the major players – USA and China.</li> </ul>	<p>Communication and Remote Sensing sectors.</p> <ul style="list-style-type: none"> <li><b>Liberalised Drone Rules 2021</b> (See Box 2 for details)</li> </ul>
<b>Start Ups</b>	<ul style="list-style-type: none"> <li>During 2021, the Government recognised over <b>14,000 new startups</b>. (Total more than 61,400 startups) <ul style="list-style-type: none"> <li><b>Maharashtra has the highest number</b>(11,308 ) of recognised startups.</li> </ul> </li> <li>India overtook UK to emerge as the <b>third highest country in number of unicorns</b> after US and China.</li> </ul>	<ul style="list-style-type: none"> <li><b>Start Up India</b> which includes handholding, tax benefits, incentives and incubation opportunities.</li> <li><b>Other schemes</b> include Stand Up India, opportunities through Make in India, Atal Innovation Mission among others.</li> </ul>
<b>Patents</b>	<ul style="list-style-type: none"> <li>The <b>number of patents filed in India has gone up</b> from 39,400 in 2010-11 to 58,502 in 2020-21 and the <b>patents granted in India has gone up</b> from 7,509 to 28,391 during the same time period.</li> <li>Further, the <b>number of patents application are increasingly coming from Indian residents</b> rather than MNCs.</li> <li>Consequently, <b>India's ranking in Global Innovation Index has climbed 35 ranks</b>, from 81<sup>st</sup> in 2015-16 to 46<sup>th</sup> in 2021.</li> </ul>	<ul style="list-style-type: none"> <li>National <b>Intellectual Property Rights (IPR) Policy</b>: Creative India, Innovative India.</li> <li>Scheme for Facilitating <b>Start-Ups Intellectual Property Protection</b>.</li> <li><b>Intellectual Property Facilitation Centre</b> in National Research Development Council, Department of Defence Production and FICCI.</li> </ul>

**Box 1**  
**Relaxation of Other Service Provider regulations**  
**About OSPs:** IT and IT enabled service companies carrying out services like tele-medicine, e-commerce, call centre, network operation centre and other IT Enabled Services, by using Telecom Resources provided by Authorised Telecom Service Providers were required to be registered as Other Service Provider (OSP). These OSPs had to comply with the onerous obligations of the OSP Regulations.  
**The revised guidelines resolve these issues through following provisions:**

- Clear definition of OSP:** The applicability of new guidelines is limited to entities that provide "Voice based BPO services" to its customers.
- Removal of registration requirement** for OSP centres.
- Removal of requirement of bank guarantee.**
- Removal of distinction between domestic and international OSPs** with introduction of **one single OSP category**.
- Work from home** and remote locations allowed.
- Interconnectivity between OSPs** allowed.
- Sharing the infrastructure:** Infrastructure sharing among OSPs is now allowed.

**Box 2**  
**Drone Rules 2021**  
Government repealed the Unmanned Aircraft Systems (UAS) Rules, 2021 which were considered too stringent and restrictive and replace the same with the liberalised Drone Rules, 2021.  
**Key features of Drone Rules 2021 include:**

- Several approvals such as unique authorisation number, certificate of manufacturing etc. abolished;** with the total forms to be filled reduced from 25 to 5.
- Type of fees reduced from 72 to 4.**
- Extended applicability of rules:** Drones up to 500 kg are now subject to regulations, compared to the earlier limit of 300 kg.
- Simplified and accessible certification process:** **Digital Sky platform** is being developed as a single-window platform.
- Prior security clearance removed.**
- Expanded area of drone operations:** The **perimeters of Red, Yellow and Green zones have been liberalised** to increase freely accessible airspace under the green category.
- Relaxations on foreign companies** to conduct drone operations in India.
- No remote pilot licence required for micro drones and nano drones.**
- Reduction in penalties** from Rs. 5 Lakh to Rs. 1 Lakh.

**CHAPTER AT A GLANCE**

- **Services sector has been the worst affected due to COVID** with varied impact across sub sectors. Recovery across most of the sectors has been registered now as the sector as a whole grew by 10.8% in the first half of 2021-22.
- **Services sector GVA is expected to grow by 8.2% in 2021-22.**
- **Foreign tourist arrivals** and Foreign exchange earnings from tourism both **reduced by nearly 75% in 2020-21.**
- India has become the **3rd largest start-up ecosystem** in the world after the US and China.
- India's ranking in **Global Innovation Index** has climbed 35 ranks, from 81<sup>st</sup> in 2015-16 to **46<sup>th</sup> in 2021.**
- **IT-BPM revenues grew by 2.26 per cent** adding 1.38 lakh employees during 2020-21.
- The **number of patents filed in India has gone up** from 39,400 in 2010-11 to 58,502 in 2020-21. The patents granted during the same period have gone up from 7,509 to 28,391.

**CHAPTER 9****Testing your remembering skills & Understanding skills****Q1. Consider the following statements regarding the Service sector of India:**

1. The Service sector accounts for more than 50 percent of the Gross State Value Added (GSVA) in 25 states and union territories.
2. India's share in global services exports is close to 4 percent.
3. Service sector has been the largest recipient of Foreign Direct Investment (FDI) inflows in India

**Which of the statements given above is/are correct?**

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

**Q2. With reference to the Start Ups in India, consider the following statements:**

1. Karnataka has the highest number of recognized Start Ups in India
2. India ranks third in the world in terms of number of Unicorn Start Ups.

**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 regarding the Space sector in India:**

1. Number of startups in the space sector has increased in the past two years from 11 to 49.
2. New Space India Limited (NSIL) has been set up to promote and regulate space activities in India by private entities.
3. At present, India accounts for only about 10 percent of the space economy of the world.

**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. Consider the following statements regarding the Research and Development in India.**

1. In India, of late, the number of patents applications are increasingly coming from the Indian residents than foreign companies.
2. Number of patents filed in India has been more than 50,000 in 2021.
3. India has been ranked in the top 10 in Global Innovation Index (2021).

**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 the Drone Rules 2021, consider the following statements:**

1. Drones now up to 500 kg are subject to regulations.
2. Foreign companies cannot conduct drone operations in India.
3. Nano drones are banned in India.

**Which of the statements given above is/are not 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. Within the services sector in India, the effect of the COVID-19 pandemic has been varied depending on the nature of service. Elaborate.**

**Q.2. Give a brief overview of the performance of the space sector in India and discuss the government policies related to it. Also, state the key features of the Drone Rules, 2021.**

**ETHICS**  
Case Studies Classes  
**25 FEBRUARY | 1 PM**

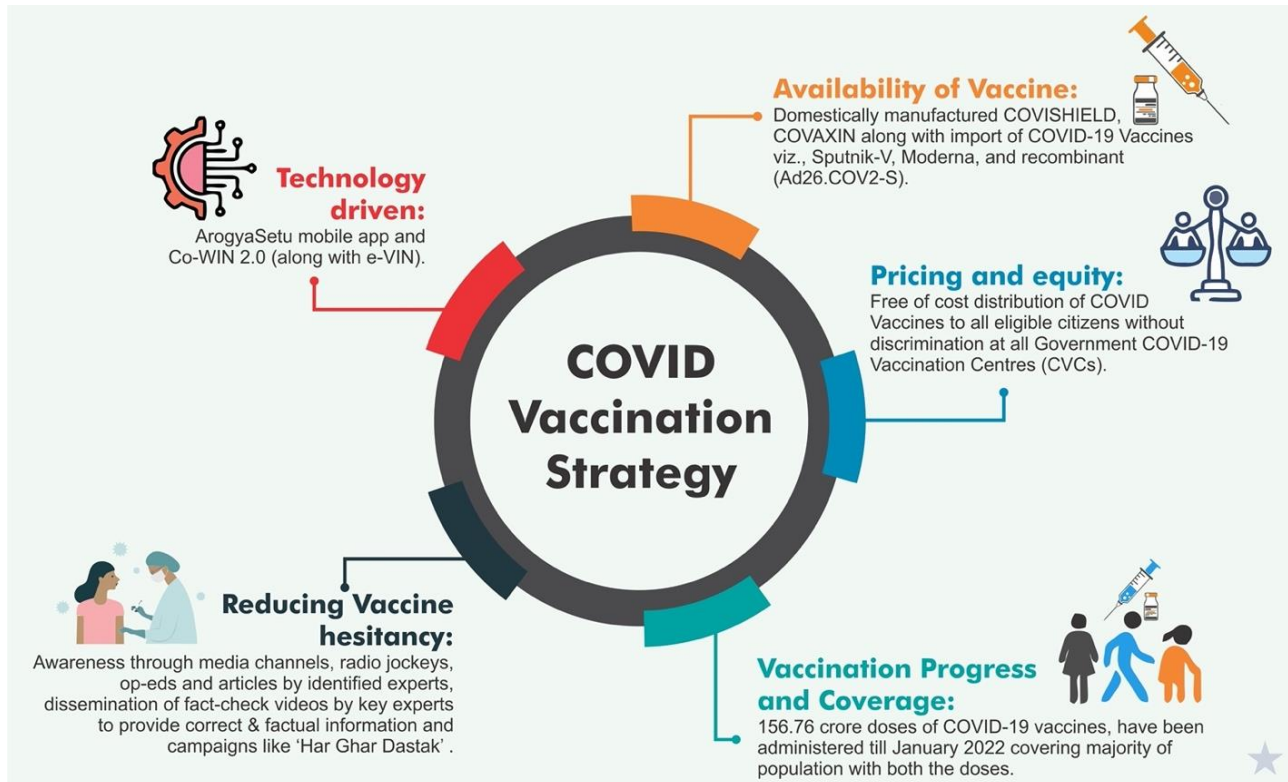
- Emphasis on conceptual clarity to train the aspirants for developing an understanding to solve ethics case study from basic to advance level
- Case studies covers all the exclusive topics from contemporary and current issues as well as previous Year UPSC Paper Case studies
- To discuss on Various techniques on writing scoring answers.
- One to one mentoring session
- Focus on contemporary issues and interlinking case studies with topics of current interest.
- Regular Doubts clearing session and personal guidance for the ethics paper throughout your preparation
- Daily Class assignment and discussion
- Comprehensive & updated ethics material

# CHAPTER 10: SOCIAL INFRASTRUCTURE AND EMPLOYMENT

## Introduction

The need for a strong and resilient social infrastructure became even more important during the ongoing COVID-19 pandemic. India, adopted a multi-pronged approach to save lives and livelihoods.

## India's Health Response to the Covid-19



## Other Initiatives taken to fight against COVID-19

- **Laboratory network:** India conducted more than 70 crore total COVID tests.
- **Medical Oxygen Plants:** These plants were designed and developed based on the spin-off technology of Onboard Oxygen Generation System (OBOGS) of India's indigenous fighter aircraft Tejas.
- **Oxy-Care System:** DRDO developed SPO2 based Oxygen Cylinder Controller (SPOCC) based Medical Oxygen Cylinders to optimally use the available medical oxygen for COVID-19 patients. This system supplies quantity of oxygen based on individual's SPO2 levels.
- **Anti-COVID Drug:** Drug 2-deoxy-D-glucose (2- DG) in collaboration with Dr. Reddy's Laboratories, Hyderabad was formulated.

## Trends in Social Sector Expenditure

- In 2021-22 (BE), Centre and State governments earmarked an aggregate of ` **72 lakh crore (27 percent of the total Government expenditure)** for spending on social service sector an increase of 9.8 percent over 2020-21.
  - Social services accounted for **about 25 percent of the total Government expenditure** (Centre and States taken together) **during the last five years.**
- **As a percentage of GDP,** expenditure on social services (health, education and others) increased from 6.2% in 2014-15 to **8.6% in 2021-22 (BE)** by Centre and States.

## Education

Expenditure on education sector **increased by nearly 20 percent** in 2020-21 (presently, **3.1 % of GDP**).

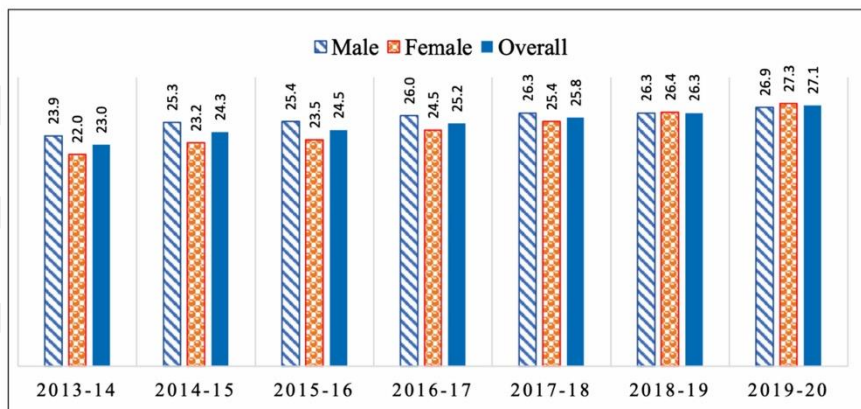
### Primary and Secondary Education

<b>School Infrastructure</b>	<b>Major Achievements:</b> <ul style="list-style-type: none"> <li>• <b>Toilets (girls or boys), drinking water, and hand-washing facilities</b> are now available in most of Government schools (10.32 lakh).</li> <li>• Establishment of <b>smart classrooms, and ICT labs in schools</b>, including support for hardware, educational software and e-content for teaching.</li> <li>• Availability of teachers, measured by <b>Pupil Teacher Ratio, has improved at all levels continuously</b> from 2012-13 to 2019-20.</li> </ul>
<b>School Drop Outs</b>	<ul style="list-style-type: none"> <li>• As per UDISE+ database, <b>dropout rates declined at primary, upper-primary, and secondary levels in 2019-20.</b></li> </ul> <p>Since the data from Ministry of Education is only available up to 2019-20, <b>data from Annual Status of Education Report (ASER) 2021, have been taken for reference</b> to assess the impact during pandemic for the education sector in rural areas. As per the report,</p> <ul style="list-style-type: none"> <li>• During pandemic, <b>children (age 6-14 years) 'not currently enrolled in schools' increased</b> from 2.5 percent in 2018 to 4.6 percent in 2021.</li> <li>• <b>Children in rural areas have moved out of private to government schools</b> due to reasons such as shut down of low-cost private schools, financial distress of parents, and families migrating back to villages.</li> <li>• <b>Students in lower grade found it difficult to do online activities compared to higher-grade students.</b></li> </ul>
<b>Major Initiatives for Students during COVID-19 pandemic</b>	<ul style="list-style-type: none"> <li>• <b>PM e-VIDYA</b> that unifies all efforts related to digital/online/ on-air education to enable coherent multi-mode access to education.</li> <li>• <b>For the differently-abled:</b> Specific DTH channel and Digitally Accessible Information System (DAISY) and in Sign Language.</li> <li>• <b>Blueprint of National Digital Education Architecture (NDEAR)</b> was released or development of digital infrastructure.</li> <li>• <b>Vidyanjali portal</b> that enables the community/volunteers to interact and connect directly with schools to share their knowledge and skills and contribute in the form of assets/material/equipment.</li> </ul>

### Higher Education

Gross enrolment ratio in higher education **slightly improved** from nearly 26% in 2018-19 to 27% in 2019-20.

**Gross Enrolment Ratios in Higher Education for age 18-23 years (in percent)**



### Recent Initiatives in Higher Education

- **National Apprenticeship Training Scheme (NATS) has been extended for the next five years:** The scheme provides apprenticeship in the emerging and frontier technology such as Artificial Intelligence, drone technology etc. The **scope of the NATS has been broadened** to give apprentices to students from humanities, commerce and science besides engineering stream.
- **Academic Bank of Credit :** Launched in 2021, it would digitally store the academic credits earned from various recognized Higher Educational Institutions (HEI) such that credits so earned can be accounted for award of degree by any given HEI.

Source: All India Survey on Higher Education (AISHE) report 2019-20, Ministry of Education

### Government Initiatives to Revolutionize Higher Education

- Enabling higher vocationalisation.
- Great multi-disciplinary research.
- Providing multiple entry and exit point.
- Promotion globalisation of education.
- Leveraging ICT potential in teaching and learning process for all learners. ★

- **e-PG Pathshala** boosting mainstreaming of Massive Online Open Courses (MOOCs).
- **Unnat Bharat Abhiyan:** The objective of the scheme is to engage reputed higher educational institutions (central and state; public and private) to understand and work in rural areas.
- **Scholarships for weaker sections**

### Skill Development

As per Periodic Labour Force Survey (PLFS) 2019-20 formal vocational / technical training among youth (age 15-29 years) and working population (age 15-59 years) have improved from 2.4% in 2018-19 to 3.2% in 2019-20.

### Steps taken

<b>Key Targets under National Education Policy 2020</b>	<ul style="list-style-type: none"> <li>• <b>At least 50 percent of school learners to get exposure</b> to vocational education by 2025.</li> <li>• <b>Secondary schools to collaborate</b> with ITIs, polytechnics, local industry.</li> <li>• Higher educational institutions to conduct <b>short-term certificate courses in various skills</b> including soft skills.</li> <li>• <b>Making vocational knowledge developed - 'Lok Vidya'</b> to students through integration into vocational education courses.</li> <li>• <b>Vocational courses through Open Distance Learning (ODL) mode.</b></li> <li>• Ministry of Education to constitute a <b>National Committee for the Integration of Vocational Education (NCIVE).</b></li> <li>• <b>National Skills Qualifications Framework</b> for each discipline vocation and profession.</li> </ul>
<b>Important initiatives under Skill India Mission that focuses on re-skilling and up-skilling in prominent trades.</b>	<ul style="list-style-type: none"> <li>• <b>Pradhan Mantri Kaushal Vikas Yojana (PMKVY) :</b> Under Pradhan Mantri Kaushal Kendras (PMKKs), from 2016- 17 to 2021-22, 16.35 lakh persons were trained and over 78 percent of them were certified. <ul style="list-style-type: none"> <li>○ <b>PMKVY also provided training to Shramiks</b> (migrant labourers) affected by COVID-19 (1.26 lakh migrants have been trained / reoriented).</li> </ul> </li> <li>• <b>Jan Shikshan Sansthan (JSS) Scheme:</b> JSS aims to provide vocational skills to non-literate, neo-literates, persons with rudimentary level of education up to 8th and school dropouts up to 12th standard in the age group of 15-45 years.</li> <li>• <b>National Apprenticeship Promotion Scheme (NAPS)</b></li> <li>• <b>Craftsmen Training Scheme (CTS)</b></li> </ul>
<b>Aatmanirbhar Skilled Employees Employer Mapping (ASEEM) portal</b>	<ul style="list-style-type: none"> <li>• <b>Created to match supply of skilled workforce with the market demand</b>, acts as a directory of skilled workforce.</li> <li>• More than <b>1.38 crore candidates have been registered on the portal</b> till date including around 26.7 lakh migrants.</li> </ul>
<b>India International Skill Centre (IISC) Network</b>	It is <b>catering to the needs of foreign countries where Indian manpower is in demand</b> by providing incremental skill training on international standards and assessment of skills for overseas employment.
<b>Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi Yojana (PM-DAKSH)</b>	PM-DAKSH Yojana is a <b>national action plan for skilling of marginalized persons</b> including scheduled castes, backward classes and safai karamcharis.

### Trends of Employment

#### Trends in Urban employment using Quarterly Periodic Labour Force Survey (PLFS) data

- After rising to 20.8 percent in the Q1 of 2020-21, **unemployment rate (UR) for urban sector gradually declined to 9.3 per cent in Q4 of 2020-21** with the revival of economy.

- The **LFPFR and WPR in urban sector also declined** significantly during the Q1 (36.4% and 43.7% respectively) but showed a swift recovery in the subsequent quarters (47.5% and 43% respectively).

- **Labour Force Participation Rate (LFPFR)** is defined as the percentage of population in the labour force. Labour force comprises of persons who were either working (employed) or seeking work (unemployed).
- **Worker population ratio (WPR)** is defined as the percentage of employed persons in the total population.
- **Unemployment rates (UR)** is defined as the percentage of unemployed persons in the labour force.



In the absence of annual PLFS data for 2020-21, other proxies such as subscriptions of EPFO scheme and demand for work under MGNREGA, have been used by the survey.

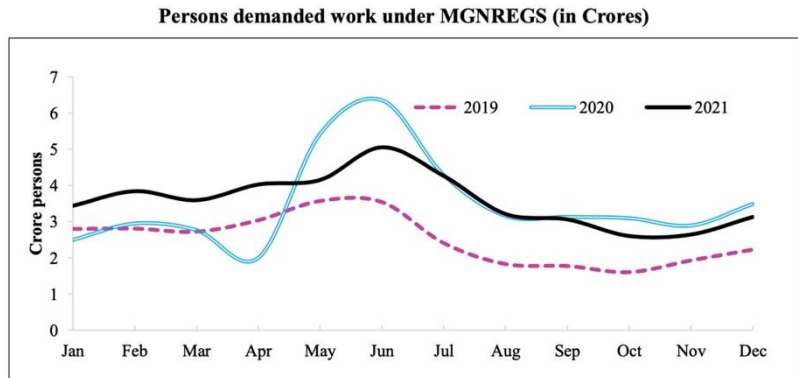
**Trends in Urban Employment using Employees’ Provident Fund Organisation (EPFO) Payroll Data**

- The EPFO data covers the low paid workers in medium and large establishments of formal sector. The **net addition in EPFO subscriptions is an indicator of the extent of formalisation of the job market**, and the coverage of social security benefits to the organized/ semi-organized sector workforce.
  - The latest EPFO data suggests **14 lakh net addition to EPF subscribers in November 2021** which translates into **growth of 109 percent** from November 2020.

**Trends in data on demand for work under MGNREGS**

The demand for work under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is an **indicator of rural labour markets**. Recent trends are as follows:

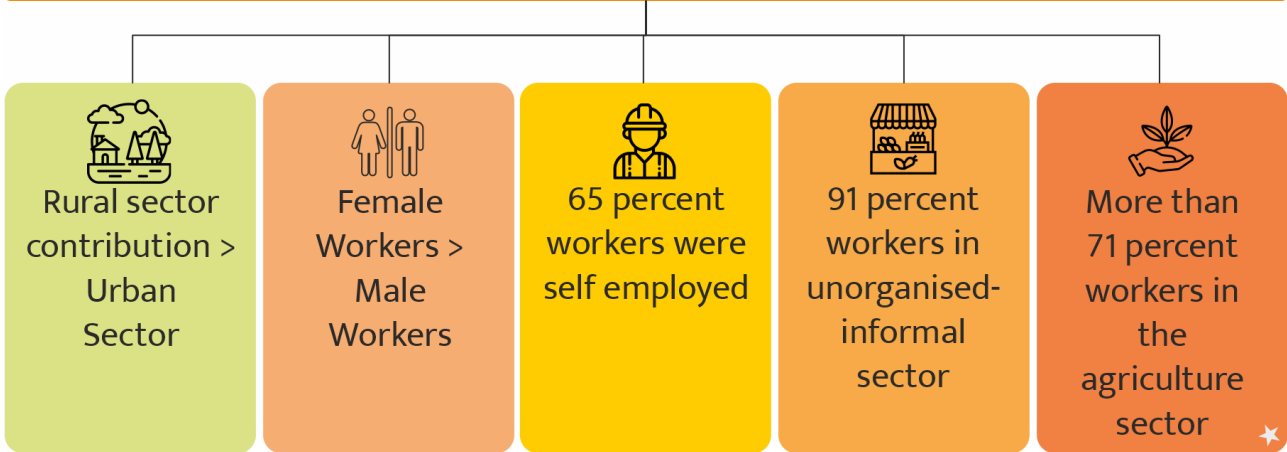
- The **demand for MGNREGS work has stabilized** after the second COVID wave;
- **Aggregate MGNREGS employment is still higher** than pre-pandemic level.



Source: MGNREGA portal, D/o Rural Development

**Long-term trends in employment using annual PLFS data**

**Between 2018-19 and 2019-20, about 4.75 crore additional persons joined the workforce**



**Policy responses to boost rural livelihood**

<b>Incentives for job creation</b>	<p><b>Aatmanirbhar Bharat Rojgar Yojana (ABRY)</b> was announced as a part of Aatmanirbhar Bharat 3.0 package to increase the employment generation in post COVID recovery phase.</p> <ul style="list-style-type: none"> <li>• Under ABRY, the Government of India is <b>contributing employees’ and employers’ share of PF contribution.</b></li> </ul>
<b>Wage employment</b>	<ul style="list-style-type: none"> <li>• <b>Allocation to MGNREGS in FY 2021-22 increased</b> to ` 73,000 crore, from ` 62,000 crore in FY 2020-21.                             <ul style="list-style-type: none"> <li>○ In FY 2021-22 over <b>8 crore individuals were provided work</b> so far.</li> </ul> </li> <li>• <b>Garib Kalyan Rojgar Abhiyaan</b> was launched to boost employment and livelihood opportunities for returnee migrant workers.</li> </ul>
<b>Boosting Self-employment</b>	<ul style="list-style-type: none"> <li>• <b>Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM)</b> that seeks to alleviate rural poverty by linking rural poor to sustainable livelihoods opportunities.                             <ul style="list-style-type: none"> <li>○ Till December, 2021, <b>8 crore households are mobilized into SHGs.</b></li> </ul> </li> </ul>

<b>Social protection</b>	<ul style="list-style-type: none"> <li>• <b>Pradhan Mantri Shram Yogi Maan-Dhan (PM-SYM) Yojana</b>, a voluntary and contributory pension scheme for providing monthly minimum assured pension of ` 3000 on attaining the age of 60 years.</li> <li>• <b>e-SHRAM Portal</b>: launched to create a National Database of Unorganized Workers (UWs) so as to facilitate <b>delivery of Social Security Schemes</b> by Central &amp; State Ministries             <ul style="list-style-type: none"> <li>○ Till January 2022, over <b>22 crore workers have been registered</b> on the e-SHRAM portal.</li> </ul> </li> </ul>
--------------------------	---

### Status of Labour Reforms

- **29 Central Labour laws were amalgamated, rationalized and simplified into four labour codes:**
  - Code on Wages, 2019
  - Industrial Relations Code, 2020
  - Code on Social Security, 2020
  - Occupational Safety, Health & Working Conditions Code, 2020
- **The new laws were in tune with the changing labour market trends** and accommodating the minimum wage requirement and welfare needs of the unorganized sector workers, including the self-employed and migrant workers, within the framework of legislation.

### Health

- Expenditure on health sector (worst hit sectors during COVID) **increased by nearly 73 percent** in 2020-21
- **As a percentage of GDP**, expenditure increased from 1.3% in 2019-20 to **2.1% in 2020-21**. (Target as per National Health Policy, 2017- 2.5 percent of GDP by 2025).

### Programmes and Schemes for Health Sector

<b>Ayushman Bharat</b>	To achieve the universal health coverage, it adopts a continuum of care approach, comprising of two inter-related components: <ul style="list-style-type: none"> <li>• <b>Ayushman Bharat Health and Wellness Centres (AB-HWCs)</b>: Creation of 1,50,000 Health and Wellness Centres (HWCs).</li> <li>• <b>Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)</b>: Till January 2022, total of <b>17.5 crore Ayushman Cards have been issued under AB PM-JAY</b>.</li> </ul>
<b>PM-Ayushman Bharat Health Infrastructure Mission (PM-ABHIM)</b>	It is a mission to <b>develop the capacities of primary, secondary, and tertiary care health systems</b> , strengthen existing national institutions, and create new institutions, to cater to detection and cure of new and emerging diseases.
<b>Pradhan Mantri Swasthya Suraksha Yojana (PSSY)</b>	It is being implemented to <b>correct regional imbalances in the availability of affordable reliable tertiary healthcare services</b> and to augment facilities for quality medical education in the country.
<b>e-Sanjeevani</b>	e-Sanjeevani application would <b>enable patient-to-doctor tele-consultation to ensure continuum of care and facilitate health services to all citizens</b> in the confine of their homes free of cost.

### Health Outcome Indicators

As per latest National Family Health Survey (NFHS)-5, social indicators such as total fertility rate, sex ratio and health outcome indicators viz., infant mortality rate, under-five mortality rate, institutional birth rates have improved over year 2015-16.

#### Child Health Indicators

Indicator	2015-16	2019-21
<b>Under Five Mortality Rate (U5MR)</b>	49.7 percent	41.9 percent
<b>Infant Mortality Rate (IMR)</b>	40.7 per 1000 live births	35.2 per 1000 live births
<b>Stunting</b>	38 percent	36 percent
<b>Wasting</b>	21 percent	19 percent
<b>Underweight</b>	36 percent	32 percent
<b>Important initiatives</b>	POSHAN Abhiyaan, Swachh Bharat Mission (SBM), special vaccination drives like Mission Indradhanush, Intensified Mission Indradhanush, Gram Swaraj Abhiyaan (GSA), Extended GSA etc.	

• **Life Expectancy**

<b>Life expectancy at birth was 69.4 years for the period 2014-18 (increased by 0.4 years from 2013-17)</b>		
<b>Lowest in Chhattisgarh (65.2), highest in Kerala and Delhi (75.3).</b>	<b>Higher in urban areas (72.6 years) than in rural areas (68.0 years).</b>	<b>Females are expected to live longer (70.7 years) compared to males (68.2 years).</b>

• **Total Fertility rate**

The total fertility rate has come down <b>below the replacement level of fertility</b> (2.1 children per woman) in the country.	In all the States/UTs except for <b>Manipur, Meghalaya, Bihar, Jharkhand and Uttar Pradesh</b> the replacement level of fertility has been achieved.
<b>Reasons:</b> Increasing use of contraceptives, better family planning and girl education, access to better health infrastructure and increase in institutional delivery.	
<ul style="list-style-type: none"> <li>• <b>Institutional delivery has increased to 88.6% in 2019-21</b> compared to 78.9% in 2015-16.</li> </ul>	

• **Sex Ratio**

	2015-16	2019-20
<b>Sex Ratio</b> (number of females per 1000 males)	991	1020
<b>Sex Ratio at birth</b> (female children per 1000 male children)	919	929
<b>Reasons: Beti Bachao Beti Padhao (BBBP) Scheme.</b>		

**Drinking Water and Sanitation**

**Major initiatives**

- **Jal Jeevan Mission (JJM):** It envisioned to **provide adequate safe drinking water through individual household tap connections** to all households in rural India by 2024.
  - Till 2022, out of about 18.93 crore families in rural areas, **about 5.5 crore (30 percent) rural have been provided with tap water supply.**
  - **Special features of Jal Jeevan Mission are:**
    - ✓ **Shift of focus for water supply** from ‘habitations (hand pumps, public standposts, etc. at a reasonable distance) to households’ (functional tap in house).
    - ✓ **Not limited only to creation of water supply infrastructure**, focus is on assured supply of potable water –‘service delivery’ & ‘functionality’ –to every home.
    - ✓ **Local village community owns, operates & maintains water supply system** to ensure assured water supply to every home.
    - ✓ **Central role of women** where minimum 50 percent members of Village Water & Sanitation Committee (VWSC)/ Pani Samitis are to be women.
    - ✓ **Technological interventions** for transparency and accountability.
    - ✓ **Inventive to states.**
    - ✓ **Surveillance of water quality.**

**Swachh Bharat Mission (Grameen) [SBM-G]:**

- More than **10 crore toilets have been built in rural India** and more than **2000 villages have been declared as ODF Plus.**
- As per NFHS-5, population living in households that **use an improved sanitation facility has increased from 48 percent in 2015-16 to 70 percent in 2019-21.**

**Electricity and Clean Cooking Fuel**

- As per NFHS-5, 59 percent of households were using clean fuel for cooking in 2019-21, a significant increase from 44 percent in 2015-16.’
- As NFHS-5, households with electricity have increased from 88 percent in 2015-16 to 97 percent in 2019-21. SAUBHAGYA Yojana to ensure ‘Power for all played a key role in this.

**Rural and Human Development Linkage**  
 World Bank (2019) in an evaluation of the scheme found that **PMGSY roads had a positive impact on human capital formation in rural India.**

- Children in middle or high school had **0.7 more years of schooling** in 2017;
- **Share of babies delivered at home decreased** by 30 percent in connected habitations;
- **Vaccination among children under the age of four increased** by 15 percentage points, with boys and girls benefiting equally.

### Rural Development

- **Pradhan Mantri Awaas Yojana-Gramin (PMAY-G):** It aims to provide assistance for construction of 2.95 crore houses. 2.17 crore houses have been sanctioned and 1.69 crore houses completed against a target of 2.63 crore houses till 2021-22.
- **Pradhan Mantri Gram Sadak Yojana (PMGSY):** Till 2022, a total of 1,82,506 roads measuring 7,82,844 km have been sanctioned and 1,66,798 roads measuring 6,84,994 km have been completed.
- **Multidimensional Poverty:** As per NITI Aayog Multidimensional Poverty Index, in 2015-16, **25 percent households were found to be multidimensional poor in India** largest (51.91%) in Bihar followed by Jharkhand, Uttar Pradesh and Madhya Pradesh.

Chapter at a glance
<ul style="list-style-type: none"> <li>• <b>India, adopted a multi-pronged approach to save lives and livelihoods</b> amid the ongoing COVID crises where providing a safety-net to the vulnerable segments of society and coherent response to health consequences of pandemic remained key focus areas of the government.</li> </ul>
<ul style="list-style-type: none"> <li>• India's health response to the COVID comprised of a sound Vaccine Strategy, infrastructure for COVID testing, production of medical oxygen and development for anti-COVID drug.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Expenditure on social services (health, education, and others) increased from 6.2% in 2014-15 to 8.6% in 2021-22 (BE)</b> by Centre and States as a proportion of GDP.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Total Fertility Rate (TFR) came down to 2</b> in 2019-21 from 2.2 in 2015-16;</li> </ul>
<ul style="list-style-type: none"> <li>• Improvement in school infrastructure with increased school enrolment and decline in school dropout. <b>The Gross Enrollment Ratio (GER) in higher education also reached 27.1% in 2019-20.</b></li> </ul>
<ul style="list-style-type: none"> <li>• Under Jal Jeevan Mission (JJM), <b>83 districts have become 'Har Ghar Jal' districts.</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Increased funds allotment to Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).</b></li> </ul>

*Heartiest Congratulations*

to all candidates selected in CSE 2020

**1**  
AIR  
CSE 2020



**SHUBHAM KUMAR**

(GS FOUNDATION BATCH CLASSROOM STUDENT)

**10 IN TOP 10 SELECTIONS IN CSE 2020**

from various programs of *Vision IAS*

**2**  
AIR



**JAGRATI AWASTHI**  
(ALL INDIA TEST SERIES)

**3**  
AIR



**ANKITA JAIN**  
(ALL INDIA TEST SERIES)

**4**  
AIR



**YASH JALUKA**  
(ABHYAAS TEST SERIES)

**5**  
AIR



**MAMTA YADAV**  
(ALL INDIA TEST SERIES)

**6**  
AIR



**MEERA K**  
(ALL INDIA TEST SERIES)

**7**  
AIR



**PRAVEEN KUMAR**  
(ALL INDIA TEST SERIES, EASSY TEST, ABHYAAS, PDP)

**8**  
AIR



**JIVANI KARTIK NAGJIBHAI**  
(GS FOUNDATION BATCH CLASSROOM STUDENT)

**9**  
AIR



**APALA MISHRA**  
(ABHYAAS TEST SERIES)

**10**  
AIR



**SATYAM GANDHI**  
(ALL INDIA TEST SERIES, EASSY TEST)

## CHAPTER 10



## Testing your remembering skills &amp; Understanding skills

**Q1. Consider the following statements regarding the trends in higher education (18-23) in India:**

1. Currently Gross Enrolment Ratio in higher education is more than 40 percent.
2. Gross Enrollment Ratio in higher education for females is more than males.

**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. India has made significant progress in improving its health outcomes over the last two decades as seen in the National Family Health Survey (NFHS)-5. In this context, consider the following statements regarding the Health Outcome Indicators of India:**

1. Infant Mortality Rate is less than 20.
2. Stunting, Wasting and Underweight indicators of Children are above 30 percent.
3. Life expectancy at birth is lowest in Bihar.

**Which of the statements given above is/are not correct?**

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

**Q3. Consider the following pairs:**

- | Initiative   | Aim  |
|--|--|
| 1. ASEEM portal                                    | ----- To provide information regarding skilled workforce   |
| 2. India International Skill Centre (IISC) Network | -----To provide skill training on international standards and assesses skills for overseas employment. |
| 3. PM-DAKSH Yojana                                 | -----To provide skill training to minorities   |

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

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

**Q4. Consider the following statements regarding the trends in Government's social expenditure (Centre and States taken together):**

1. Social services accounted for about 25 percent of the total Government expenditure during the last five years.
2. Expenditure on Education sector as a percentage of GDP is less than 2 percent.
3. Expenditure on Health sector as a percentage of GDP is more than 3 percent.

**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. In which of the following states, replacement level of fertility has not been achieved?**

- (a) Rajasthan
- (b) Meghalaya
- (c) Gujarat
- (d) Assam



**Self-Assessment: To practice Question for Answer Writing skills**

**Q1. Unemployment is considered as a major factor behind widespread youth disillusionment in India. Discuss. Also, write the measures taken by Government to reduce this disillusionment.**

**Q2. Discuss the multi-pronged strategy used by India in successfully implementing the COVID-19 vaccination Programme throughout the country.**

**CSAT**  
**कलासेस**  
**2022**

ENGLISH MEDIUM  
11 January

हिन्दी माध्यम  
22 December

लाइव/ऑनलाइन

कक्षाएं भी उपलब्ध



# CHAPTER 11: TRACKING DEVELOPMENT THROUGH SATELLITE IMAGES & CARTOGRAPHY

## Introduction

Geo-spatial data and cartographic techniques have been used in India– to track economic activity and compare and represent longer term developments.

Geospatial maps not only lets users visualize data but also helps users to better understand trends, relationships and patterns. Cartographic technology on the other hand allows for better representation of the information.

Major observations are as follows:

Indicator	Now	Trend
National Highway Network Length	1.4 Lakh km (August,2021)	Almost doubled from 2011 to 2021.
Number of Operationalised Airports in India	130 (December, 2021)	More than doubled from 2016 to 2021.
Commercial Bank Branches	1.2 lakh (March, 2021)	Grew 1.65 times from 2011 to 2021.
Net Sown Area in India	157 million ha (2020-21)	Grew 1.25 times from 2006 to 2021.

### Revised Guidelines for Acquiring and Producing Geospatial Data

Geospatial data was previously heavily regulated and required licenses to be obtained for its use. Given the increase in freely and publicly available geospatial data and services, the erstwhile restrictions had become redundant and severely hampered technological innovation in the sector, which specifically affected domestic players.

The newly released guidelines aim to build a more permissive regime which opens up the industry to collaboration and progress, while supporting Indian companies operating in this sector. **Some key changes under the guidelines are as follows:**

- **Introduction of a self-certification regime** as opposed to obtaining prior approval or licenses.
- **Relaxation of restricted areas:** Mapping activities are prohibited only for specific attributes of highly sensitive locations,
- **Specific permissibility for Indian Entities:** Non-Indian companies are not permitted to undertake certain activities related to geo spatial data.
- **Relaxation on export restrictions:** The guidelines permit the export of maps with resolutions up to a 1:100 resolution thereby relaxing the previous threshold of 1:250000.
- **Open access to publicly funded geo spatial data** for scientific, economic and developmental purposes.

**CHAPTER 11**



**Testing your remembering skills & Understanding skills**

**Q1. Which of the following is correct regarding information related to India collected through cartography and satellite images?**

1. The length of national highway in India has quadrupled between 2011 and 2021.
2. The net sown area in the last fifteen years has increased by 1.25 times.
3. The number of Operationalized Airports in India has more than doubled in the last five years.

**Select the correct answer using the code given below.**

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



**Self-Assessment: To practice Question for Answer Writing skills**

**Q1. The guidelines for a acquiring and producing Geospatial Data has been revised in accordance with the need of the hour. Discuss.**

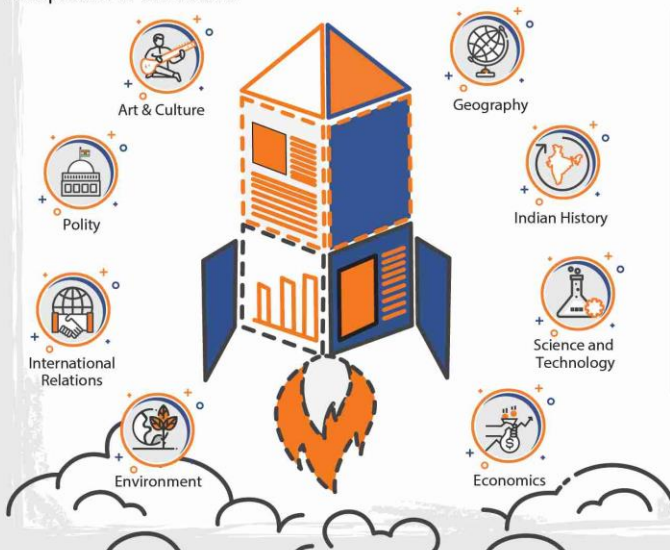
**Q.2. Geo-spatial data and cartographic techniques play a significant role in tracking economic activities. Elaborate.**

**FAST TRACK COURSE 2022  
GENERAL STUDIES PRELIMS**



**PURPOSE OF THIS COURSE**

The GS Prelims Course is designed to help aspirants prepare for & increase their score in General Studies Paper I. It will not only include discussion of the entire GS Paper I Prelims syllabus but also that of previous years' UPSC papers along with practice & discussion of Vision IAS classroom tests. Our goal is that the aspirants become better test takers and can see a visible improvement in their Prelims score on completion of the course.



**INCLUDES**

- Access to recorded live classes at your personal student platform.
- Comprehensive, relevant & updated Soft Copy of the study material for prelims syllabus.
- Access to PT 365 classes
- Sectional mini test and Comprehensive Current Affairs.

COURSE BEGINS	TOTAL NO OF CLASSES
<b>18 JANUARY</b>	<b>60</b>



**ANSWER KEY****Chapter 1**

Q1	Q2	Q3	Q4	Q5
b	c	d	b	a

**Chapter 2**

Q1	Q2	Q3	Q4	Q5
b	b	c	c	d

**Chapter 3**

Q1	Q2	Q3	Q4	Q5
b	d	a	c	d

**Chapter 4**

Q1	Q2	Q3	Q4	Q5
d	a	c	d	a

**Chapter 5**

Q1	Q2	Q3	Q4	Q5
b	b	a	d	d

**Chapter 6**

Q1	Q2	Q3	Q4	Q5
b	a	a	b	a

**Chapter 7**

Q1	Q2	Q3	Q4	Q5
c	a	a	c	c

**Chapter 8**

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

**Chapter 9**

Q1	Q2	Q3	Q4	Q5
a	b	a	b	a

**Chapter 10**

Q1	Q2	Q3	Q4	Q5
b	d	b	a	b

**Chapter 10**

	Q1	
	a	

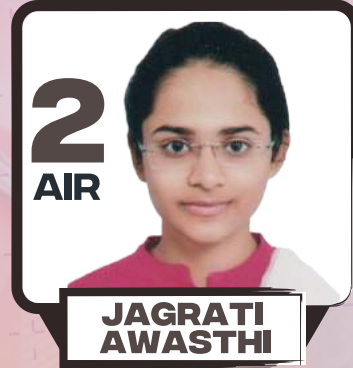
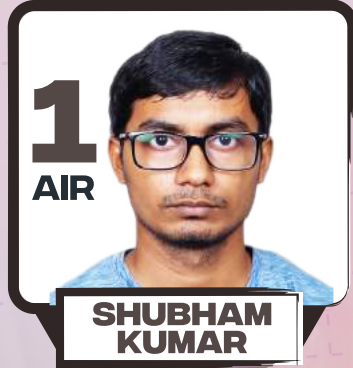
**Copyright © by Vision IAS**

All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Vision IAS.

*Heartiest Congratulations to all successful candidates*

**10 IN TOP 10 SELECTIONS IN CSE 2020**

FROM VARIOUS PROGRAMS OF VISION IAS



8468022022

WWW.VISIONIAS.IN



DELHI | JAIPUR | PUNE | AHMEDABAD | HYDERABAD | CHANDIGARH | LUCKNOW | GUWAHATI