APTI PLUS
Academy for Civil Services Pvt. Ltd.

ECONOMIC SURVEY 2021

Volume -II

For UPSC Prelims and Mains

Salient features:

Coverage of all the major charts which prominently feature in prelims paper.

All the examples of major schemes have been covered in text box for better understanding.

Survey has been further broken in parts to make understanding better and crisp.

All the aspects of survey has been covered.

Introduction part has been simplified to make clear understanding of dilemma. It will be helpful in essay as well ethics papers.

Relevant boxes of survey has been simplified to give better information.

IASGYAN
PREDICT THE UNPREDICTABLE

Chapter 01- State of the Economy 2020-21: 01 A Macro View

"Doing the right things at the right time, is the rope which binds the wealth, making it boundless." – Thirukkural, Chapter 49, Verse 482.

The year 2020 witnessed unrivalled turmoil with the novel COVID-19 virus and the resultant pandemic emerging as the biggest threat to economic growth in a century. The exponential rise in the number of daily cases compelled the WHO to title this outbreak a pandemic on 11th March, 2020 - within a period of three months of its emergence.

SPREAD OF THE PANDEMIC

Global Spread

- Since its first outbreak in Wuhan, China, COVID-19 has infected all continents, including Antarctica (in December, 2020), and more than 220 countries.
- The pandemic quickly intensified in number of Emerging Market and Developing Economies (EMDEs) such as Brazil, India, Mexico, Russia and Turkey.
- AEs (Advanced Economies) witnessed higher confirmed cases and deaths on per capita basis too as compared to EMDEs . The third wave in AEs has proven to be more lethal with fatalities exceeding by 5.3 times compared to the second wave and surpassing the level during the first wave in December itself.

Spread of Pandemic in India:

- The confirmed cases in India have touched more than 1.06 crore, representing around 11 per cent of the world's total case load.
- India's share in new cases load globally has drastically come down from 31 per cent in September, 2020 to 4 per cent in December, 2020.
- The festive season during October and November led to a second wave of infections in the northern region.
- The total death toll in India, as on 31st December, 2020, was 1.48 lakh with more than 50 per cent of the fatalities occurring in western and southern zones of the country.

Ramping up Testing

- As the first step towards timely identification, prompt isolation & treatment, testing was identified as an effective strategy to limit the spread of infection.
- Testing policy has been continuously evolving since the beginning of the pandemic with countries rapidly gearing up the testing capacity to curb the pace of spread
- In January 2020, India had only one laboratory testing for COVID-19, at the National Institute of Virology, Pune.
- Today there are more than 2300 laboratories across the country, performing molecular tests for its diagnosis - an unparalleled achievement in the history of the Indian health system.
- Keeping the focus on "Test, Track and Treat", India has tested nearly 18.5 crore cumulative COVID-19 samples with cumulative test positivity rate at 5.6 per cent, as on 31st December, 2020.

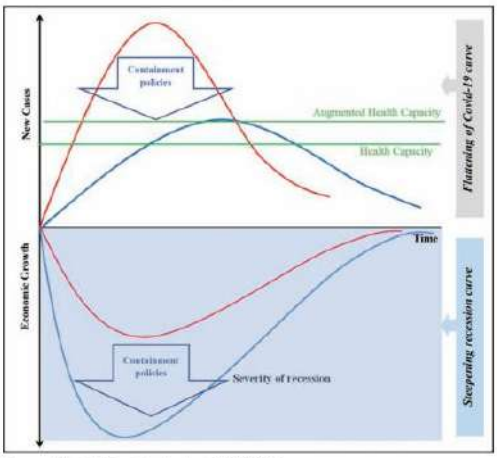
POLICY DILEMMAS UNDERLYING COVID-19

'Lives Vs Livelihoods'

- Given the fast spread of the pandemic, the immediate public health policy priority was, 'flattening the epidemiological curve' to mitigate the impact of the spread.

- Countries, accordingly, across the globe adopted various non-pharmaceutical interventions (NPIs) like social distancing measures via work & school closures, travel bans, cancellations of public events and restrictions of internal movement and, by social isolation measures via quarantining infected people from the population, tracing infected persons contacts and enhanced testing.
- Even if no containment measures were implemented, a recession would have been fuelled by the precautionary and/or panic behaviour of households and firms faced with the uncertainty of dealing with a pandemic that had no cure.
- The public health measures, adopted to contain the spread, engendered sizeable immediate economic costs as they led to almost full suspension of economic activity, curbed consumption and investment, as well as restricted labour supply and production.

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

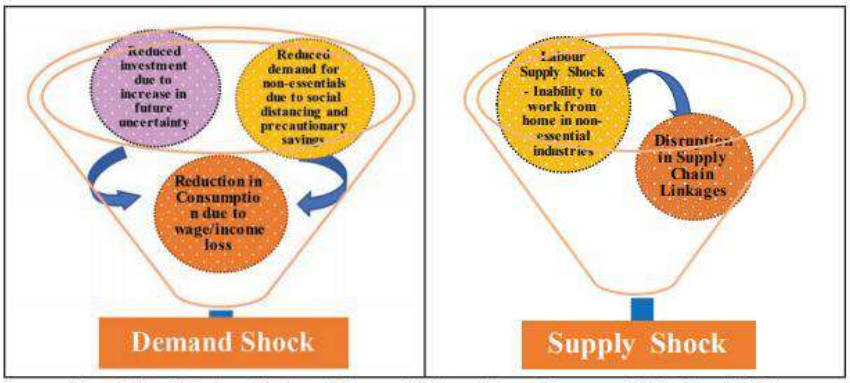


Source: Adapted from Gourinchas, P-O (2020)

Demand-side and Supply-side Shocks

- Increased uncertainty, lower confidence, loss of incomes, weaker growth prospects, fear of contagion, curtailment of spending options due to closure of all contact-sensitive activities, the triggering of precautionary savings, risk aversion among businesses and resultant fall in consumption and investment – leading to the first order demand shock.
- The first order supply side disruptions potentially created second round effects on both demand and supply.
- The initial supply shock, resulting in wage and income loss, could impact aggregate demand and impair productive capacity leading to supply shocks.
- These effects were further amplified through international trade and financial linkages, dampening global activity and pushing commodity prices down.
- The feedback loops of demand and supply generated potential hysteresis effects - when households demand less, firms get reduced revenues, which feeds into reduced activity by firms, and thus reduced household income.

Figure 11: Twin Economic Shocks by the Pandemic



Source: Adapted from Estupinan, Xavier and Sharma, Mohit and Gupta, Sargam and Birla, Bharti (2020)

DISRUPTION OF GLOBAL ECONOMY BY THE PANDEMIC

- Since 2018, the growth momentum in global output was on a weakened footing owing to various factors like trade tensions, political instability, slowed demand and reduction in industrial activity.
- Economic activity has been belaboured by :
  - reduced mobility, owing both to official restrictions and private decisions;
  - uncertainty regarding the post-pandemic economic prospects and policies has impacted investment;
  - disruptions in education have decelerated human capital accumulation;
  - concerns about the viability of global value chains;
  - the adverse impact on international trade and tourism

- The Global composite Purchasing Managers Index (PMI) was in contraction for five months before July, 2020.
- The recovery in oil prices was more modest amid concerns over the pandemic's lasting impact on oil demand.
- As a result of weak demand and subdued energy prices, inflation moderated in most part of the world, deflationary pressure emerged in major AEs.
- Global financial conditions have remained accommodative on the back of continued policy support via unprecedented swift interventions by Central banks.
- Some sectors (such as airlines, hotels, energy, and financials) have been more affected by the lockdown and social distancing, whereas those that are less contact-intensive (information technology, communications) have fared better.
- Sizeable discretionary support, along with a sharp contraction in output and an ensuing fall in revenues has led to a surge in government debt and deficits.
- Debt levels have reached historic highs, making the global economy particularly vulnerable to financial market stress.
- Going forward, an effective vaccination campaign, restoration of consumer and business confidence as well as continued monetary and fiscal support are expected to lift the global output by 4.5 – 5.5 per cent in 2021.

Figure 22: Foodgrain Production in India

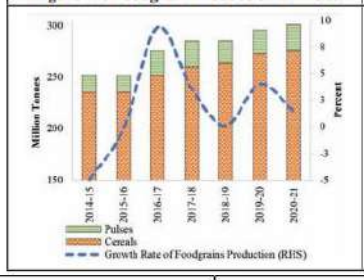


Figure 23: Procurement of Rice and Wheat

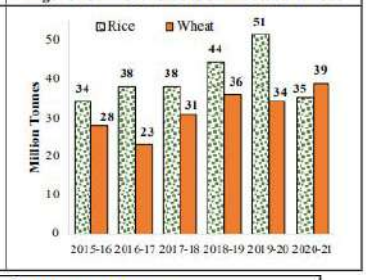
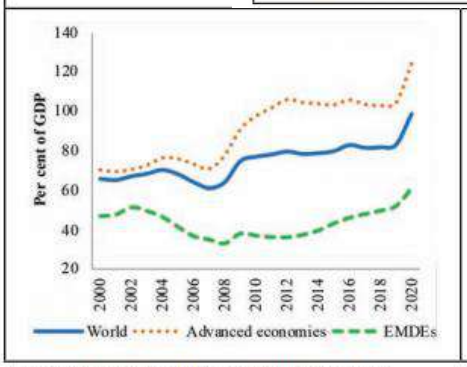
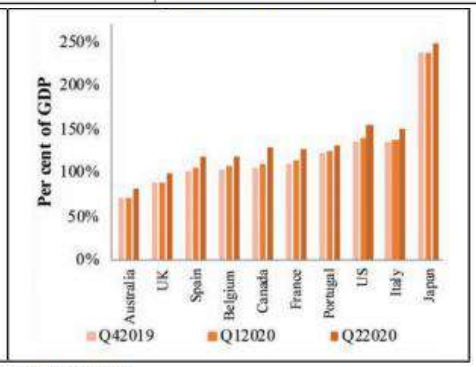


Figure 19: Governme



Source: World Bank, Data for 2020 is Estimates



Source: OECD

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

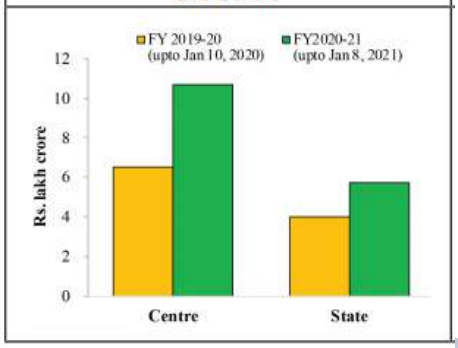
- The economy witnessed a sharp contraction of 23.9 per cent in Q1: FY 2020-21 and 7.5 per cent in Q2: FY 2020-21 due to the stringent lockdown imposed during March-April, 2020.
- As India's mobility and pandemic trends aligned and improved concomitantly, indicators like E-way bills, rail freight, GST collections and power consumption not only reached pre-pandemic levels but also surpassed previous year levels.

Sectoral Trends:

- Agriculture is set to cushion the shock of the COVID-19 pandemic on the Indian economy in 2020-21 with a growth of 3.4 per cent in both Q1 and Q2.
- This indicates that agricultural activities for rabi harvesting and kharif sowing were largely unaffected by the covid 19-induced lockdown.
- Critical steps such as PM-KISAN, adoption of cost plus 50 per cent formula for MSP, focus on irrigation via PM KrishiSinchaiYojana, micro-irrigation scheme, promoting economies of scale through FPOs, and institutionalizing e-NAM (Electronic national agricultural market), and promotion of agricultural mechanization through subsidies and custom hiring centres, have contributed to nourishing a vibrant agricultural sector.
- A palpable V-shaped recovery in industrial production was observed over the year. Manufacturing rebounded and industrial value started to normalize.

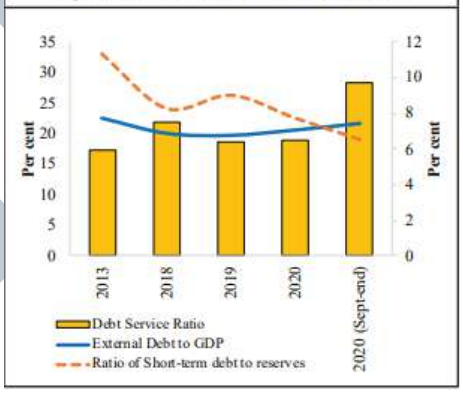
- Revitalized inter and intra-state movement along with a sustained spurt in industrial and commercial activity heralded the economy's returning to normalcy.
- E-way bills, electronic toll collection, rail freight and port cargo traffic not just recovered but surpassed previous year levels in Q3.
- High food prices remained a major driver of inflation in 2020. However, inflation in December, 2020 fell back into the RBI's target range of 4 +/- 2 per cent to reach 4.6 per cent year-on-year as compared to 6.9 per cent in November.
- Bank credit remained subdued in FY 2020-21 amid risk aversion and muted credit appetite.

Figure 31: Gross Market Borrowings by States and Centre



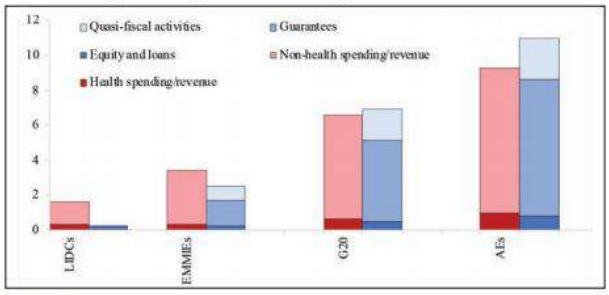
- On the non-bank financing side, assets under management (AUM) of mutual funds grew at 17.73 per cent during April to November 2020.
- During April-December 2020 (Flash estimates), total non-debt receipts of Central Government fell by 4.7 per cent YoY.
- However, on the states' front, total receipts of state governments during April-October 2020, contracted by 13.7 per cent.
- Total expenditure of the Central Government recorded a growth of 11 per cent during April-December 2020), with capital expenditure growing by 24.1 per cent and revenue expenditure by 9.2 per cent year-on-year.
- As on 8th January 2021, the Central Government gross market borrowing for FY2020-21 reached Rs10.72 lakh crore, while State Governments have raised Rs5.71 lakh crore.

Figure 36: External Debt Comfortable



- Government and RBI led liquidity support measures, increase in limits of ways and means advances, and relaxation of rules governing withdrawals from the Consolidated Sinking Fund (CSF) enabled bond markets to absorb pressures of increased government borrowings and added to their buoyancy.
- India recorded a current account surplus of 3.1 per cent of GDP in the first half of the year largely supported by strong services exports.

Figure 37: Types of Fiscal Support across the Globe



Source: IMF
EMMIEs = Emerging Market and Middle-Income Economies; G20 = Group of Twenty; LIDCs = Low-Income Developing Countries

- India remained a preferred investment destination in FY 2020-21. FDI poured in amidst global asset shifts towards equities and prospects of quicker recovery in emerging economies.
- During April December 2020, equities witnessed inflow of at USD 30.0 billion, five times its previous year value - India was the only country among emerging markets to receive equity FII inflows in 2020.
- Combined with a rise in gold reserves and foreign currency assets, India's foreign exchange reserves climbed to a new high of US$ 586.08 billion as on 8th January, 2020, covering more than 18 months of imports.

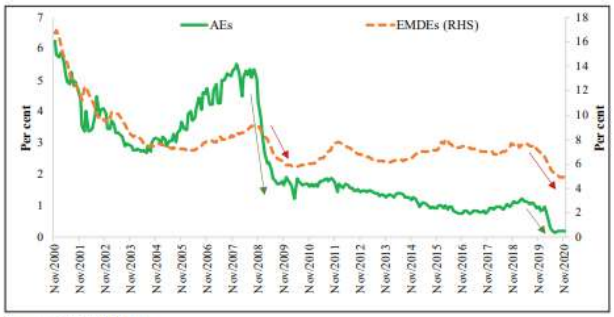
POLICY RESPONSE TO COVID-19

Global

- Social distancing measures with public information campaigns, broadbased testing, and contact tracing of individuals who were potentially exposed to known cases.

- Governments and Central Banks, the world over, have deployed various measures to stimulate the economy through liquidity support and regulatory changes. An unprecedented fiscal response at $11.7 trillion globally, or close to 12 per cent of global GDP (as of September 11, 2020), has provided lifelines to vulnerable households and firms.
- Monetary authorities across the world have eased monetary conditions with broad-based cuts in short-term policy rates and reserve requirements to support activity and provided emergency liquidity support to stabilize financial markets.

Figure 38: Trend in Global Policy Rates



Source: World Bank

India's Strategic Multi-Pronged Policy Response

- India adopted a graded four-pronged pre-emptive, and pro-active strategy consisting of
  - (i) containment measures,
  - (ii) calibrated fiscal support focussed on essentials during lockdown and demand push during the unlock phase,
  - (iii) financial measures
  - (iv) structural reforms to combat COVID-19
- A three-tier arrangement of health facilities was created for appropriate management of COVID-19 cases,
  - (i) COVID Care Center with isolation beds for mild or pre-symptomatic cases;
  - (ii) Dedicated COVID Health Centre (DCHC) with oxygen supported isolation beds for moderate cases
  - (iii) Dedicated COVID Hospital (DCH) with ICU beds for severe cases has been implemented.
- GaribKalyanRojgarAbhiyaan (GKRA) was launched on 20th June, 2020 for a period of 125 days in 116 districts of 6 States to boost employment and livelihood opportunities for migrant workers who had returned to their villages.
- To ameliorate corporate stress, Government suspended the initiation of fresh insolvency proceedings under Section 7, 9 and 10 of Insolvency & Bankruptcy Code 2016.
- The Atmanirbhar Bharat Mission was, accordingly, a composite package announced with welfare measures to address the short-term distress of individuals and firms; and structural reforms to alleviate the long-term distress on the economy.

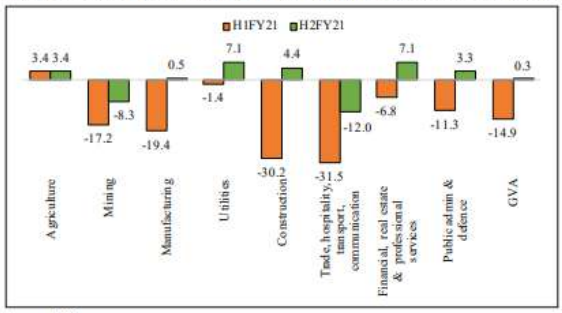
Table 1: Policy Package in India to Combat COVID-19

Measures	Nature	Policy Tools
Containment measures	• Containment and Closure Policy • Transmission prevention	• School closure • Complete Nation-wide lock-down for 21 days • Travel bans/restrictions • Closure of public places/cancellation of public events • Curtailment of non-essential economic activities • Risk profiling of districts into Red Zones (hot spots), Orange and Green Zones • Social distancing norms • Mandatory use of masks
Fiscal Policy Measures	• Health • Welfare • Tax Measures • Demand push • Investment push	• Emergency health fund (INR 150 billion) • Pradhan Mantri Garib Kalyan Yojana - Financial assistance and food security • Increment in daily wage under MGNREGS • Garib Kalyan Rojgar Abhiyaan – livelihood creation in rural areas • Tax & contribution policy changes • Support to States, linking borrowings to Reforms **Aatma Nirbhar Bharat Package 1** • Emergency Credit Line Guarantee Scheme (ECLGS) for MSMEs • Subordinate Debt for Stressed MSMEs and Equity Infusion through Fund of Funds for MSME
Fiscal Policy Measures	• Health • Welfare • Tax Measures • Demand push • Investment push	• Extension of Partial Guarantee Scheme to help NBFCs & MFIs • Special Credit Facility to Street Vendors • Liquidity Injection for DISCOMs • Special liquidity Scheme for NBFC/HFC/MFIs • Interest Subvention for MUDRA Shishu Loans • Housing Credit Linked subsidy Scheme - MIG • Additional Emergency Working Capital through NABARD • Additional credit through KCC • Creation of Agri Infrastructure Fund, Animal Husbandry Infrastructure Development Fund • Promotion of Herbal Cultivation • Beekeeping Initiative • Viability Gap Funding Scheme for Social Infrastructure projects **Aatma Nirbhar Bharat Package 2** • Boost Capital Expenditure • LTC voucher Scheme • Festival Advance **Aatma Nirbhar Bharat Package 3** • Boost for Atma Nirbhar Manufacturing - Production Linked Incentives • Boost for Rural Employment • R&D Grant for COVID Suraksha – Indian vaccine development • Atma Nirbhar Bharat Rozgar Yojana • Industrial Infrastructure, Industrial Incentives and Domestic Defence Equipment • Support for Agriculture – Fertiliser Subsidy • Housing for All - PMAY-U • Boost for Infrastructure-equity infusion in NIIF Debt PF • Boost for Project Exports – Support for EXIM Bank
Monetary measures	• Policy Rates • Liquidity • Asset Purchases • Loan moratorium	• Lowering of Repo and reverse repo rate by 115 and 155 bps respectively. • Injection of durable liquidity through Open Market Operation (OMO) • Targeted Long Term Repo Operations (TLTROs) of up to three years' • Reduction in the CRR requirement of banks • Raised bank's borrowing limit • Working capital support- term loan moratorium, deferment of interest and easing of financing requirements • Enhanced WMA borrowing limits and relaxation of CSF withdrawal rules • Easing of compliance to stressed asset classify • Deferment, easing of capital buffer & liquidity coverage requirements • Deferring compliance requirements for FPIs under Voluntary Retention Route (VRR)
Structural reforms	• Agriculture • MSMEs • Labour • Business Process Outsourcing (BPO) • Power • Privatization of PSUs • Mineral Sector • Industry • Space • Defence	**Agriculture** • Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 • Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020 • Essential Commodities (Amendment) Act, 2020 **MSMEs** • New MSME definition covering almost 99 per cent of all firms enabling MSMEs to grow in size and create jobs • Removal of artificial separation between manufacturing and service MSMEs **Labour** • Enactment of four labour codes namely, Wage Code, Industrial Relations Code, 2020, Code on Occupational Safety, Health & Working Conditions Code, 2020 & Social Security Code, 2020 • 'One labour return, one licence and one registration'
Structural reforms	• Agriculture • MSMEs • Labour • Business Process Outsourcing (BPO) • Power • Privatization of PSUs • Mineral Sector • Industry • Space • Defence	**Business Process Outsourcing (BPO)** • Simplification of the Other Service Provider (OSP) guidelines of the Department of Telecom. Several requirements, which prevented companies from adopting 'Work from Home' and 'Work from Anywhere' policies have been removed. **Power** • Tariff Policy Reform: DISCOM inefficiencies not to burden consumers, Progressive reduction in cross subsidies, Time bound grant of open access, etc. • Privatization of Distribution in UTs **Privatization of PSUs** • PSUs in only strategic sectors • Privatization of PSUs in non-strategic sectors **Mineral Sector** • Commercial Mining in Coal Sector • Introduction of a seamless composite exploration-cum-mining-cum-production regime. **Industry** • Production Linked Incentive (PLI) Scheme **Space** • Level-playing field provided to private companies in satellites, launches and space-based services • Liberal geo-spatial data policy for providing remote-sensing data to tech-entrepreneurs **Defence** • Corporatization of Ordnance Factory Board • FDI limit in the Defence manufacturing under automatic route will be raised from 49 per cent to 74 per cent.

V-SHAPED Economic RECOVERY

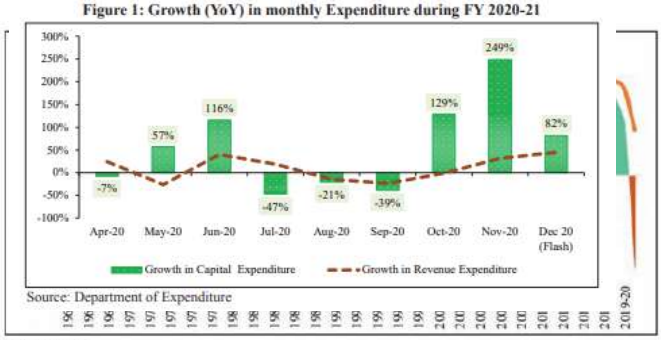
- NSO has estimated a contraction of real GDP by 7.7 per cent in 2020-21 as compared to a growth of 4.2 per cent in 2019-20. This is the fourth contraction in India's GDP since 1960-61.
- A positive growth in value addition of most of the sectors in second half is an encouraging sign for the economy.

Figure 45: V-shaped Recovery in H2: FY 2020-21 in Most Sectors Constituting GVA



Source: NSO

Figure 1: Growth (YoY) in monthly Expenditure during FY 2020-21



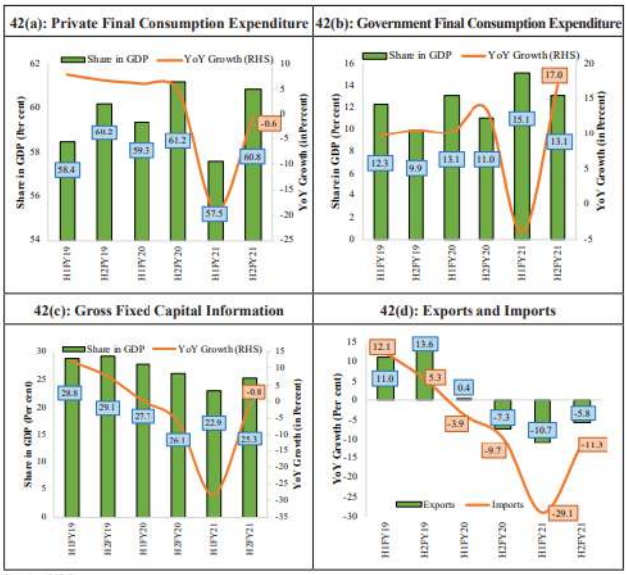
Source: Department of Expenditure

Source: NSO

OUTLOOK

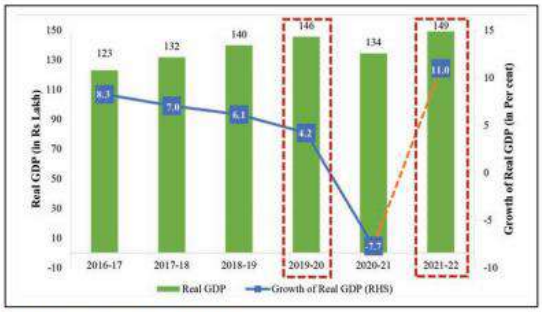
- After an estimated 7.7 per cent pandemic-driven contraction in 2020-21, India's real GDP is projected to record a growth of 11.0 percent in 2021-22 and nominal GDP by 15.4 per cent.
- This will further be supported by supply-side push from reforms and easing of regulations, push to infrastructural investments, boost to manufacturing sector through the Productivity Linked Incentive Schemes, recovery of pent-up demand for services sector, increase in discretionary consumption subsequent to roll-out of the vaccine and pick up in credit given adequate liquidity and low interest rates.
- India initiated the mega vaccination drive on 16th January, 2020. The COVID Vaccine Intelligence Network (Co-WIN) system – a digitalised platform - provides real-time information of vaccine stocks, their storage temperature and individualised tracking of beneficiaries of the vaccine on a real-time basis.

Figure 42: Half-Yearly Trends in Growth of Components of GDP



Source: NSO

Figure 47: Projections of Real GDP for 2021-22



Source: NSO and Survey Calculations

Chapter 2 : Fiscal Developments

"Precision Beats Power, and Timing Beats Speed" — By Conor McGregor

INTRODUCTION

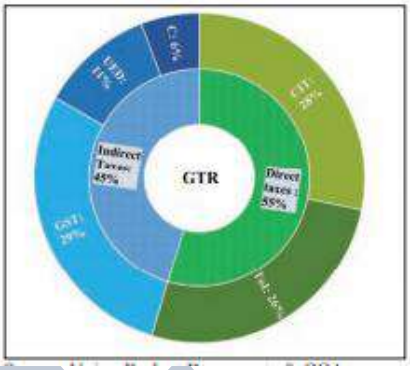
- Unlike many other countries that chose a front-loaded grand stimulus package for revival of the economy, Government of India adopted a step-by-step approach.

- This included the world's largest food programme, direct transfers to Jan Dhan accounts, as well as government guarantees for credit, postponement of financial deadlines etc.

FISCAL SITUATION AND RESPONSE TO COVID-19 PANDEMIC

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

Figure 10: Composition of taxes in Gross Tax Revenue in 2020-21 BE



- With the easing of movement and health-related restrictions in the third quarter, the pace of government expenditure has picked up sharply.
- Monthly GST revenues for the month of December 2020 stood at Rs 1.15 lakh crore, after registering a 12 per cent growth in the GST revenues over December 2019.
- Fiscal deficit of the Central Government at end November 2020 stood at 135.1 per cent of the BE compared to 114.8 per cent during the same period in 2019-20.
- The non-debt receipts have been adversely hit by the slump in economic activity after the pandemic outbreak.
- The Gross Tax Revenue during the first eight months of 2020-21 was Rs10.26 lakh crore, 42% of BE, 12.6 per cent lower than in the same period last year.
- The adverse market conditions arising due to COVID-19 have also negatively impacted the Government's plans to achieve the target for disinvestment receipts, which is a major component of Non-debt Capital receipts.
- In order to support the creation of long term assets and infrastructure, the Central Government had enhanced the budget provision for Capital Expenditure on roads, defence, water supply, urban development and domestically produced capital equipment by Rs 25,000 crore for FY 2020-21.
- The Government recognizes the need for opening up all the sectors to the private sector while public sector enterprises play an important role in strategic areas.

Table 2: Expenditure on major subsidies

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

Source: CGA Monthly Accounts

REFORMS IN TAX ADMINISTRATION

- The Government has consistently adopted reform measures aimed at the long term benefits of a more transparent, efficient and tax-payer friendly tax administration.
- The platform for 'Transparent taxation- Honouring the Honest' was launched in August 2020 with an objective to impart greater efficiency, transparency and accountability, and to eliminate physical interface between taxpayers and tax officers. The key features of the platform are
  - (i) Usage of technology, data analytics and Artificial Intelligence
  - (ii) Recognizing taxpayers as partners in nation-building
- The Platform stands on 3 pillars of tax administration reforms namely, Faceless assessment, Faceless appeal, and Taxpayers' charter.

Faceless Assessment Scheme 2020

- The Faceless Assessment Scheme, 2019 (earlier called the e-assessment Scheme and renamed in August 2020) was based on the idea that automated random allocation of cases across Income Tax teams with dynamic jurisdiction and elimination of face-to-face contact.
- It will lead to an efficient, non-discretionary, unbiased single window system of assessment.
- The scheme establishes a National Faceless Assessment Centre (NFAC) in Delhi, headed by Principal Chief Commissioner of Income Tax, as the sole point of contact between the Department and the taxpayer.

Faceless Appeals Scheme 2020

- All Income Tax appeals will be finalised in a faceless manner under the faceless ecosystem with the exception of appeals relating to serious frauds, major tax evasion, sensitive & search matters, International tax and Black Money Act.

Introduction of Taxpayer Charter

The introduction of taxpayer charter by Government of India as a part of the 'Honoring the Honest' platform is, thus, an important step in this direction, as it emphasizes the importance of fair, courteous and reasonable treatment to taxpayer.

Commitment of Tax Department:

- Courteous, fair and reasonable treatment to taxpayers.
- Treatment of taxpayers as honest unless the department has a reason to believe otherwise.
- Fair and impartial appeal procedure and review mechanism.
- Accurate and complete information for fulfilling tax compliance obligations under the law.
- Timely decisions in every income tax proceeding (within the time prescribed under law).
- Collection of the correct amount of tax due as per the law.
- Respect for taxpayer's privacy by following due process of law, and ensuring no more intrusive than necessary in inquiry, examination, or enforcement action.
- Maintaining confidentiality by not disclosing any information provided by taxpayer to the department unless authorized by law.
- Ensuring accountability for the actions of the tax authorities.
- Provision to allow taxpayer to choose an authorized representative of his choice.
- Provision for a mechanism to lodge complaint and ensure its prompt disposal thereof.
- Fair and impartial system and resolving the tax issues in a time-bound manner
- Publishing the service standards and report periodically by the Tax Department.

The taxpayers' obligations specified under the Charter are:

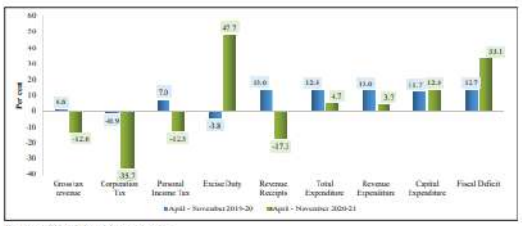
- Taxpayer is expected to honestly disclose full information and fulfil his compliance obligations
- Taxpayer is expected to be aware of his compliance obligations under tax law and seek help of department if needed.
- Taxpayer is expected to keep accurate records required as per law.
- Taxpayer is expected to know what information and submissions are made by his authorised representative.
- Taxpayer is expected to make submissions as per tax law in a timely manner.
- Taxpayer is expected to pay amount due as per law in a timely manner

TRENDS IN GOVERNMENT FINANCES: CENTRE, STATES AND GENERAL GOVERNMENT

Central Government Finances

- As a result the Fiscal Deficit for 2019-20 Provisional Actuals stood at 4.6 per cent of GDP, which was 0.8 percentage points higher than the Fiscal Deficit envisaged in 2019-20 RE.
- The effective Revenue Deficit which captures the shortfall in current receipts over current expenditure also increased by 1 per cent of GDP to reach 2.4 per cent of GDP in 2019-20.
- The Medium Term Fiscal Policy (MTFP) Statement presented with Budget 2020-21 pegged the fiscal deficit target for FY 2020-21 at 3.5% of GDP.

Figure 4: Growth rate of fiscal indicators in 2020-21 (up to November 2020)



Source: CGA Monthly Accounts

Trends in Receipts

- Central government receipts can broadly be divided into

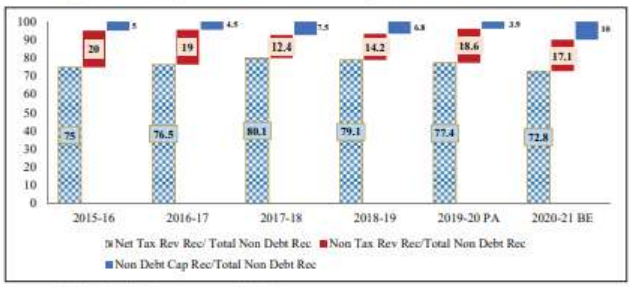
Non-debt and debt receipts.

- The Non-debt receipts comprise of tax and Non-Tax revenue, and Non-debt Capital receipts like recovery of loans and disinvestment receipts.

Tax Revenue:

- Budget 2020-21 estimated the Gross Tax Revenue (GTR) to be Rs24.23 lakh crore which is 10.8 per cent of GDP.
- The direct taxes, comprising mainly of corporate and personal income tax, constitute around 55 per cent of GTR.
- As against the 2020-21 BE of Rs16.36 lakh crore for Net Tax Revenue to the Centre, the actual realization up to November 2020 has been Rs6.88 lakh crore, which is 42.1 per cent of BE.

Figure 12: Composition of Non-debt receipts of Central Government



Non-Tax Revenue:

- Non-Tax revenue comprises mainly of interest receipts on loans to States and Union Territories, dividends and profits from Public Sector Enterprises including surplus of Reserve Bank of India (RBI) transferred to Government of India, receipts from services provided by the Central Government and external grants.

Table 8 : Major Items of Revenue Expenditure

Items	2015-16	2016-17	2017-18	2018-19	2019-20 PA	2020-21 BE
	(in ₹ Lakh crore)					
Revenue Expenditure of which	15.38	16.91	18.79	20.07	23.50	26.30
	(4.8)	(9.9)	(11.1)	(6.8)	(17.0)	(11.9)
a. Salaries (pay & allowances)	1.45	1.77	1.94	2.11	2.38	2.48
	(7.9)	(22.6)	(9.2)	(9.0)	(12.7)	(4.0)
b. Pensions	0.97	1.31	1.46	1.60	1.84	2.12
	(3.4)	(35.8)	(10.9)	(9.9)	(14.6)	(15.3)
c. Interest payment	4.42	4.81	5.29	5.83	6.11	7.08
	(9.7)	(8.8)	(10.0)	(10.2)	(4.9)	(15.9)
d. Major subsidies	2.42	2.04	1.91	1.97	2.23	2.28
	(-2.9)	(-15.6)	(-6.3)	(2.9)	(13.4)	(2.1)
e. Defence Services	1.46	1.65	1.86	1.96	2.08	2.09
	(3.9)	(13.3)	(12.5)	(5.1)	(6.1)	(0.9)

Non-debt Capital receipts

- Non-debt Capital receipts mainly consist of recovery of loans and advances, and disinvestment receipts.
- The Non-debt Capital receipts have been pegged at Rs2.3 lakh crore that is 1 per cent of GDP in 2020-21 BE.

Trends in Expenditure

- Budget 2020-21 estimated total expenditure at Rs30.42 lakh crore, comprising revenue expenditure of Rs26.3 lakh crore and capital expenditure of Rs4.12 lakh crore, which work out to be 11.7 per cent and 1.7 per cent of GDP, respectively.

Figure 13: Trends in components of Total Expenditure

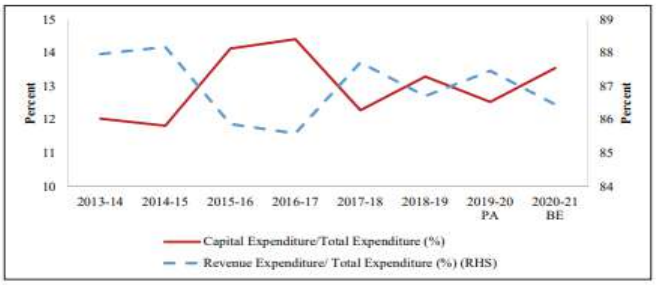


Figure 9: Trends in Deficits

Source: Union Budget Documents & CGA

- Revenue Expenditure, which constitutes over 87 per cent of the total expenditure was envisaged to grow at 11.9.
- The focus of expenditure restructuring and management measures is targeted on the non-committed component such as subsidies.
- With a low tax to GDP ratio, Central Government faces the challenge of providing sufficient funds for investment and infrastructure expansion while staying within the bounds of fiscal prudence.
- Apart from budgetary spending, Extra Budgetary Resources (EBR) have also been mobilized to finance infrastructure investment since 2016-17. EBRs are those financial liabilities that are raised by public sector

undertakings for which repayment of entire principal and interest is done from the Central Government Budget.

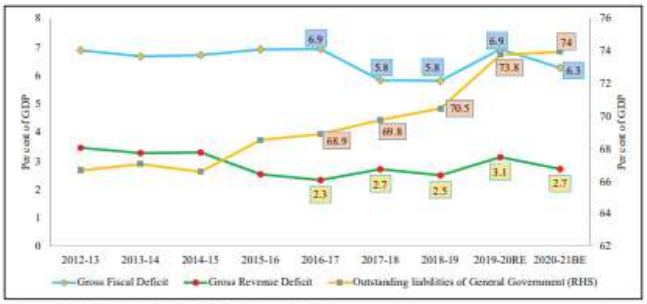
Transfer to States

- Out of the corpus of Rs90,000 crore allocated as grant for local bodies in the year 2020-21, 32.5 per cent have been recommended for urban local bodies and the remaining for rural local bodies.
- Due to a decline in the Gross Tax Revenue collections during 2019-20, a moderation in the states' share in Central taxes is seen in 2019-20 RE relative to 2018-19.

Table 10: Transfers to States (in ₹ lakh crore)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20 RE	2020-21 BE
Devolution of States' share in Taxes	5.06	6.08	6.73	7.61	6.56	7.84
Finance Commission Grants	0.85	0.96	0.92	0.94	1.24	1.50
CSS and Other Transfers	2.39	2.77	3.16	3.32	3.80	4.09
Total transfers to States	**8.29**	**9.81**	**10.81**	**11.87**	**11.60**	**13.43**

Figure 17: Trends in General Government Debt and Deficits (as a per cent of GDP)



Central Government Debt

- Total liabilities of the Central Government include debt contracted against the Consolidated Fund of India, technically defined as Public Debt, as well as liabilities in the Public Account.
- Total liabilities of the Central Government at end March 2020 stood at Rs97.05 lakh crore.
- Out of these, 88.67 per cent was public debt and the remaining 10 per cent catered to Public Account liabilities, which include National Small Savings Fund, State Provident Funds, Reserve Funds and Deposits and other Accounts.
- Central government debt is characterised by low currency and interest rate risks. This is owing to low share of external debt in the debt portfolio and almost entire external borrowings being from official sources.
- The proportion of dated securities maturing in less than five years has seen consistent decline in recent years.

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

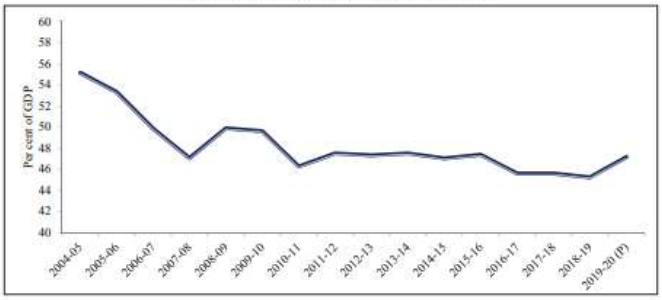
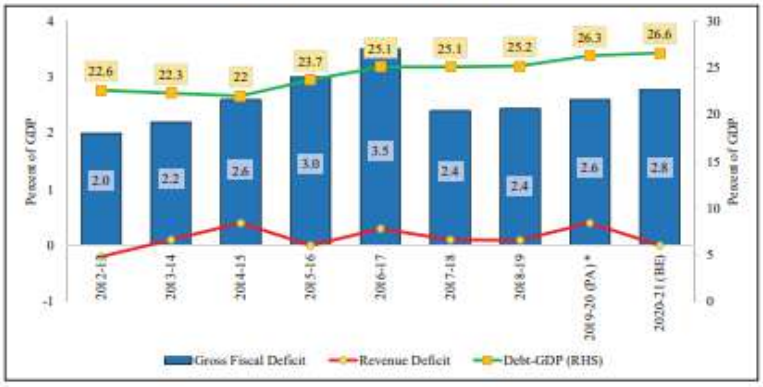


Figure 16: Major deficit and debt indicators of States



State Finances

- The average Gross Fiscal Deficit Budget Estimate for states that presented their budgets before the outbreak of COVID-19 was 2.4 per cent of GSDP, while the average for budgets presented post-lockdown was 4.6 per cent of GSDP.
- The States' combined own Tax revenue and own Non-Tax revenue were anticipated to grow at 11.8 per cent and 12.1 per cent respectively over 2019-20 RE, higher than the growth displayed in 2019-20 RE.
- The RBI Study on State Finances highlights the decline in actual capital spending relative to BE observed in the states for the last 3 years.

- Net borrowing ceilings of the 28 States for the year 2020-21 had been fixed at Rs6.41 lakh crore in line with the fiscal deficit target of 3 per cent of respective State Gross State Domestic Product (GSDP) as recommended by FC-XV.

General Government Finances

- The General Government finances give an overview of fiscal position of the Government sector as a whole.
- However in the wake of the global pandemic outbreak, the General Government (Centre plus States) is expected to register a fiscal slippage on account of the shortfall in revenue and higher expenditure requirements.

OUTLOOK

- Based on the trends available for April to November 2020, there is likely to be a fiscal slippage during the year. The fiscal policy response of the Government has been a combination of demand and supply side policies under the ambit of 'AtmaNirbhar Bharat' to cushion against the pandemic shock.

Chapter 3: External Sector

The air that blows off a small lamp becomes the friend of a jungle fire! Power garners support! – Subhashita

GLOBAL ECONOMIC ENVIRONMENT

- The contraction in GDP has been much stronger in the current recession when compared to the fall in trade which has been more moderate.
- In advanced economies (AEs), the contraction for GDP as well as trade volume is projected to be more severe than for the emerging markets and developing economies (EMDEs).
- In 2020 (upto Q3), AEs suffered the steepest decline in exports by 12.9 per cent and imports by 10.8 per cent, while EMDEs witnessed lower contraction in exports by 7.6 per cent and in imports by 10.1 per cent.
- While trade in agricultural products fell less than the world average in the second quarter of 2020 (-5 per cent versus -21 per cent), it fell precipitously for fuels and mining products (-38 per cent) as prices collapsed.
- As per IMF's October Global Financial Stability Report 2020, near-term global financial stability risks have been contained for now due to the unprecedented and timely policy responses to maintain the flow of credit to the economy and avoided adverse macro-financial feedback loops, thereby creating a bridge to recovery.

The comfortable external balance position of India has been supported by surplus current account balances over three consecutive quarters, resumption of portfolio capital inflows, robust FDI inflows and sustained build-up of foreign exchange reserves.

DEVELOPMENTS IN INDIA'S BALANCE OF PAYMENTS (BOP)

Merchandise Trade

- The decline in imports outweighed that in exports – leading to smaller trade deficit of US$ 9.8 billion as compared to US$ 49.2 billion in Q1 last year.
- India registered a trade surplus in the month of June, 2020 after a gap of 18 years.
- India had the most favourable trade balance with USA followed by Bangladesh and Nepal.
- The highest trade deficit is with China followed by Iraq and Saudi Arabia during April-November, 2020-21 and AprilNovember, 2019-20.

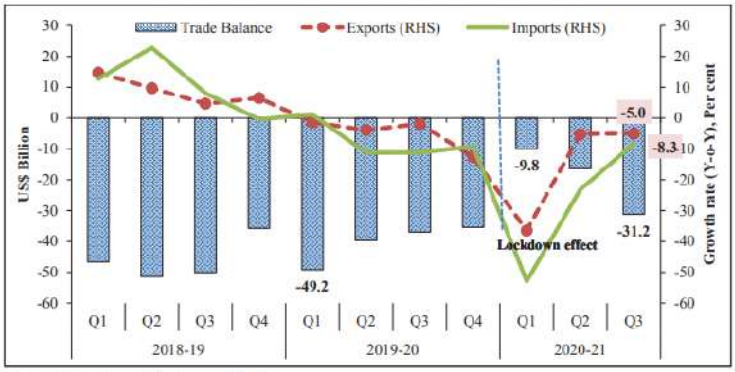
Merchandise Exports

- Total exports during April-December, 2020-21 amounted to US$ 200.8 billion contracted by (-) 15.7 per cent as compared with (-) 2.4 per cent during the same period of the previous year.
- Drug formulations, biologicals have consistently registered positive growth and highest increase in absolute terms in recent months.

Merchandise Imports

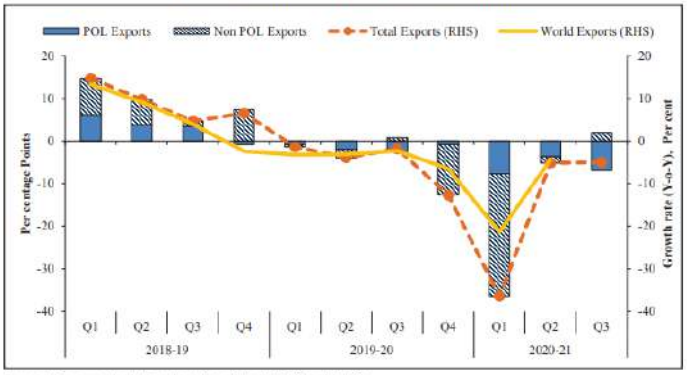
- The total imports during April-December, 2020 amounted to US$ 258.3 billion contracted by (-) 29.1 per cent, as compared with (-) 7.2 per cent during the same period last year.
- Among the top 10 countries for import origin, China continues to be the largest import source for India in April-November, 2020, with share of imports rising to 17.7 per cent, up from 14.5 per cent in April-November, 2019.

Figure 3: Merchandise Trade Balance, Exports and Imports



Source: Department of Commerce (DoC)

Figure 4: Relative Contribution in Exports Growth



Source: Survey calculations based on data of DoC and WTO

India's Potential to be Pharmacy of World:

- Indian pharmaceutical industry is third largest in the world, in terms of volume, behind China and Italy and 14th largest in terms of value.
- India was at 11th position in terms of share in world pharma exports in 2019 with Germany, Switzerland and USA occupying the top three positions.
- Indian pharmaceutical industry is currently valued at US$ 41 billion and is expected to grow to US$ 65 billion by 2024 and about US$ 120-130 billion by 2030.
- Further, India is the only country with largest number of US-FDA compliant pharma plants (more than 262 including APIs) outside of USA.
- During April-October, 2020, India's pharmaceutical exports totaling US$ 11.1 billion witnessed an impressive growth of 18.0 per cent, as against US$ 9.4 billion during the corresponding period a year ago.

Challenges

- The pandemic, however, exposed the excessive dependence of Indian pharmaceutical industry on China for sourcing Active Pharmaceutical Ingredients (APIs) and Key Starting Materials (KSMs).
- There is a disproportionate dependence of Indian pharma exports on USA and generics.

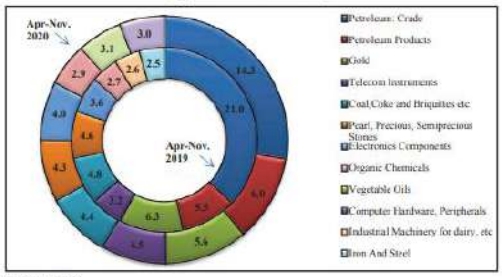
Government Steps

- To get over this challenge, pharmaceuticals drugs have been identified as one of the ten key sectors for introducing Production Linked Incentive (PLI) Scheme for enhancing India's manufacturing capabilities and exports.
- PLI schemes have been notified for bulk drugs and medical devices, which aim to provide a boost to domestic manufacturing for critical KSMs/ Drug Intermediates (DIs), APIs and medical devices.

Way Forward:

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

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

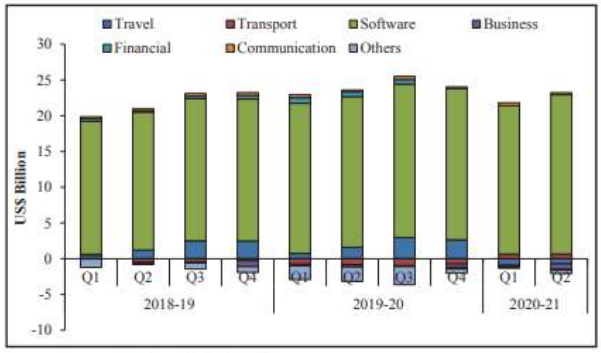


Source: DoC

Invisibles

- Net services receipts amounting to US$ 41.7 billion remained stable in April-September, 2020 as compared with US$ 40.5 billion in corresponding period a year ago, notwithstanding a sharp contraction in travel receipts owing to the international mobility restrictions imposed at the onset of the pandemic and falling remittances.
- Resilience of the services sector was primarily driven by software services, which accounted for 49 per cent of total services exports.

Figure 12b: Composition of Net Services Exports



Source: Reserve Bank of India (RBI)

- Net private transfer receipts, mainly representing remittances by Indians employed overseas, totalling US$ 35.8 billion in H1: FY 2020-21 declined by 6.7 per cent over the corresponding period of previous year.
- Net private transfer receipts, mainly representing remittances by Indians employed overseas, totalling US$ 35.8 billion in H1: FY 2020-21 declined by 6.7 per cent over the corresponding period of previous year.

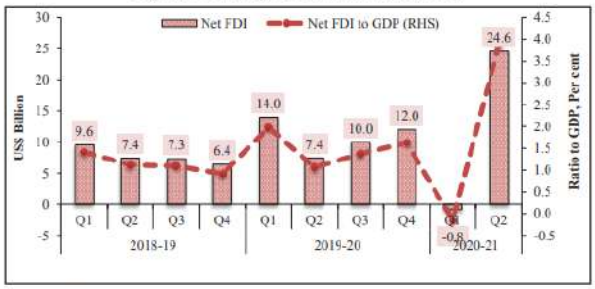
Current Account of BOP

- India's current account deficit averaged 2.2 per cent of GDP in the last 10 years.
- Reversing this trend, current account balance turned into surplus (0.1 per cent of GDP) in Q4: FY 2019-20 on the back of, among others, a lower trade deficit and a sharp rise in net invisible receipts.
- Given the trend in imports of both goods and services, it is expected that India will end with an annual current account surplus of atleast 2 per cent of GDP – after a period of 17 years.

India vs Bangladesh Export Performance:

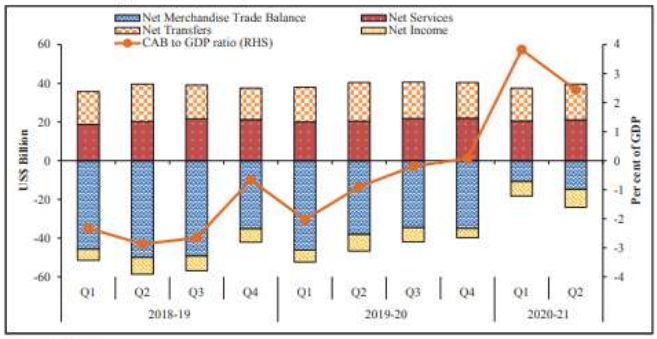
- Bangladesh exports posted an impressive compound annual growth rate (CAGR) of 8.6 per cent during 2011-2019, higher than 0.9 per cent for India, and 0.4 per cent for the world.
- Bangladesh witnessed its share in world exports increase from 0.1 per cent in 2011 to 0.3 per cent in 2019.
- The top five export commodities, account for more than 90 per cent of total exports of Bangladesh since 2015.
- These five commodities mainly pertain to textiles & apparels and footwear industry, which are highly labour-intensive and employs unskilled and semi-skilled labour.
- In case of India, on the other hand, export performance is more broadbased as the top five export commodities jointly contribute around 40 per cent of total exports (Figure B2.2) and these commodities are capital and technology-intensive.

Figure 14: Foreign Direct Investment (FDI)



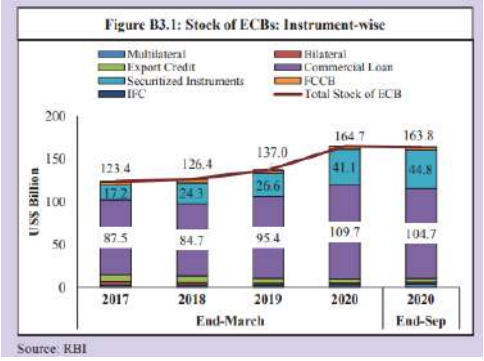
Source: RBI
Note: The net FDI inflows in Oct 2020 were to the tune of US$ 4.6 billion.

Figure 13: Composition of Current Account Balance



Source: RBI

External Commercial Borrowing (ECB):



Source: RBI

- Research identifies both country-specific idiosyncratic (push) factors as well as generic and global (pull) factors as drivers of ECBs in the Indian context.
- The country-specific factors include domestic real economic activity, exchange rate, interest rate and inflation, status of domestic corporate bond market, degree of openness in terms of capital account and the regulatory framework.
- Global financial conditions including rates of interest, global growth and inflation are among the pull factors.

Capital/ Financial account of BOP

- Net capital flows was modest in H1: FY 2020-21 at US$ 16.5 billion, as against US$ 40.0 billion in HI: FY 2019-20, mainly accounted for by net repayments of external commercial borrowings (ECBs) and decline in banking capital.
- During April-October, 2020, net FDI flows recorded an inflow of US$ 27.5 billion, 14.8 per cent higher as compared to first seven months of 2019-20.
- Foreign portfolio investment (FPI) witnessed strong rebound especially in equity inflows, recording net FPI flows of US$ 28.5 billion during AprilDecember, 2020 as against US$ 12.3 billion in corresponding period of last year.
- Among other forms of capital flows, banking capital recorded a net outflow of US$ 8.9 billion in H1: FY 2020-21, higher than the net outflow of US$ 5.7 billion, in first half of 2019- 20.

External Debt:

- At end-September 2020, India's external debt was placed at US$ 556.2 billion recording a decrease of US$ 2.0 billion (0.4 per cent) over the level, as at end-March 2020.
- ECBs, the largest component of external debt, at US$ 207 billion as at end- September 2020, contracted by 5.8 per cent over the level as at endMarch 2020.
- While the stock of NRI deposits, the second largest component, rose 5.1 per cent to US$ 137.3 billion over the level as at end-March 2020.
- (import-financing) trade credit, the third largest component at US$ 99.4 billion shrank by 2.0 per cent.
- External debt as a ratio to GDP rose marginally to 21.6 per cent as at end-September 2020 from 20.6 per cent at end-March 2020.

- Share of short-term debt (original maturity) in the total stock of external debt, which is an important metric to analyze potential debt vulnerability, has also improved.

Table 4: External Debt Vulnerability Indicators (Per cent, unless indicated otherwise)

Indicator	End-March				End-September 2020 P
	2013	2018	2019	2020 R	
Total External Debt (US$ billion)	409.4	529.3	543.1	558.2	556.2
External Debt to GDP	22.4	20.1	19.8	20.6	21.6
Short term debt (original maturity) to total debt	23.6	19.3	20	19.1	18.5
Short term debt (residual maturity) to total debt	42.1	42.0	43.4	42.4	44.6
Concessional debt to total debt	11.1	9.1	8.7	8.8	9.0
Reserves to total debt	71.3	80.2	76	85.2	97.4
Ratio of Short-term debt to reserves	33.1	24.1	26.3	22.5	19.0
Short term debt (residual maturity) to reserves	59	52.3	57	49.5	45.5
Debt Service Ratio	5.9	7.5	6.4	6.5	9.7

Source: RBI and Ministry of Finance
Note: R: Revised; P: Provisional.

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

- The US is the most heavily indebted country in the world with 23.9 per cent of the total external debt stock.
- India is placed at 23rd position globally with an estimated stock at US$ 554.4 billion as at end-June 2020.
- Foreign debt has a positive impact on investment and growth up to a certain threshold level; beyond this level, however, its impact turns adverse.
- Countries with good policies and strong institutions tend to have higher thresholds and countries with bad and poor policies and weak institutions have lower thresholds.
- The India's external debt to GDP ratio has been well below the optimal zone over the years as it came down from 38.7 per cent as at end-March 1992 to as low as 17.1 per cent as at end-March 2006.

Figure B4.1: Ratio of External Debt to GDP in India and Select Developing Countries*: Optimal Range@ vs. Actual

Overall BOP

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

Indian Rupee Exchange Rate:

- The Rupee appreciated by 1.9 per cent against US$ between end-October 2019 and end-March 2020.
- The appreciation of the rupee, however, was modest as compared with its emerging market peers.
- RBI's policy on the exchange rate of the rupee has been to allow it to be determined by market forces, with interventions only to maintain orderly market conditions by containing excessive volatility in the exchange rate, without reference to any pre-determined target level or band.

- Large stimulus by central banks in advanced economies has resulted in heightened capital flows into emerging markets such as India, causing asset price inflation as well as stronger local currencies.

Foreign Exchange Reserves:

- Robust capital flows, particularly FDI and FPI, in subsequent months largely drove foreign exchange reserves to an all-time high of US$ 586.1 billion.
- India is the fifth largest foreign exchange reserves holder among all countries of the world after China, Japan, Switzerland and Russia.
- This forex reserve accretion entailed a concomitant release of domestic liquidity and aided the large-scale government borrowing without entailing any implications for monetary policy as long as inflation was benign.
- Faced with a large BoP surplus, the RBI is faced with two options: absorb the surplus and accumulate more forex reserves or let the rupee appreciate.
- With inflation largely attributed to supply-side disruptions and expected to stabilize, RBI chose to intervene in the forex market, accumulate reserves, prevented one-sided appreciation of Rsand supplemented expansionary monetary policy.
- The current account balance, in economic terms, is synonymous with the Savings-Investment balance. A current account surplus implies a higher level of national savings relative to investment.

The sustainable way for a healthy external sector balance is by enhancing the earnings through exports – which also give a boost to economic growth.

INITIATIVES TAKEN BY GOVERNMENT TO BOOST EXPORTS

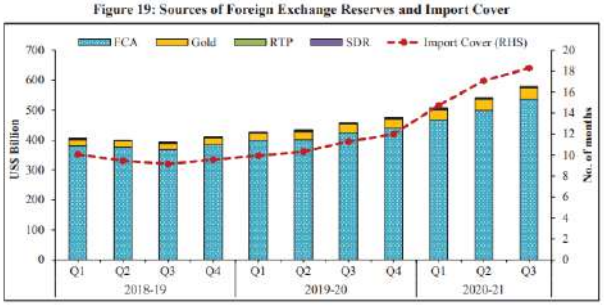
Trade Facilitation

- The Trade Facilitation Agreement (TFA), negotiated at WTO, came into force on 22nd February 2017.
- A National Committee on Trade Facilitation (NCTF) was constituted with the Cabinet Secretary as the Chair.
- Methods for trade facilitation:
  - Establishment of a Single Window
  - Risk Management for clearance of goods
  - The transparency notifications covering information on import and export procedures, enquiry points, single windows
  - Undertaking initiatives aimed at maximizing predictability and automation in trade.

Remission of Duties and Taxes on Exported Products (RoDTEP)

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

Figure 19: Sources of Foreign Exchange Reserves and Import Cover



Production-Linked Incentive (PLI) Scheme:

- This Scheme aims to give incentive to companies on incremental sales from products manufactured in domestic units.
- The ten-identified champion sectors under PLI scheme are advanced chemistry cell (ACC) battery (approved financial outlay over a five year period of Rs18,100 crore), electronic/technology products (Rs.5,000 crore), automobile and auto component (Rs.57,042 crore), pharmaceuticals drugs (Rs.15,000 crore), telecom and

networking products (Rs.12,195 crore), textile products (Rs.10,683 crore), food products (Rs.10,900 crore), high efficiency solar photovoltaic modules (Rs.4,500 crore), white goods (ACs and LEDs) (Rs.6,238 crore) and specialty steel (Rs.6,322 crore).

- Need of the Scheme:
  - make Indian manufacturers in these ten sectors globally competitive,
  - attract investment in the areas of core competency and cutting-edge technology;
  - ensure efficiencies;
  - create economies of scale;
  - establish backward linkages with MSMEs;
  - enhance exports
  - make India an integral part of the global supply chain
  - incentivize global, capital-rich companies to set up capacities in India.
  - Establish backward linkages with the MSME sector in the country.

This will lead to overall growth in the economy and create huge employment opportunities.

Trade Related Logistics

- India's rank has improved significantly in trading across borders parameter of 'Ease of Doing Business' index from 146 in 2018 to 68 in 2020.
- India was ranked 44 out of 160 countries in 2018 vis-à-vis rank of 54 in 2014 under logistics performance index released by world bank.
- Steps of promote logistics:
  - reduction in waiting time for inter-state border crossing due to GST,
  - revision in axle load norms for heavy vehicles leading to better carrying capacity,
  - introduction of paperless EXIM trade process through E-Sanchit,
  - faceless assessment by 'Turant Customs' by Central Board of Indirect Taxes and Customs (CBIC),
  - installation of scanners at major ports, implementation of Port Community System 1X at all important ports,
  - Radio Frequency Identification (RFID) tagging of all EXIM containers for track and trace,
  - mandatory electronic toll collection system (FASTag) for reducing time loss at time toll plaza

Logistics sector Issues:

- highly fragmented ownership;
- few large players;
- lack of consolidation in operations;
- sub-optimal modal share with freight movement highly skewed towards road sector;
- lack of an integrated approach by user sectors (multiple line ministries and agencies);
- absence of consistent policies and regulations

Ongoing Infrastructure initiatives:

- BharatmalaPariyojana : building more than 80,000 Km of roads, highways, greenfield expressways, bridges with an investment of around US$ 107 billion.
- Sagarmala aims at Port Modernization & New Port Development, Port Connectivity Enhancement, Port-linked Industrialization, Coastal Community Development and giving impetus to Coastal Shipping.
- Multi-Modal Logistics Parks shall act as hubs for freight movement enabling freight aggregation, distribution and multi-modal transportation.
- Dedicated Freight Corridors (DFCs) aims at reduction in unit cost of transportation with higher speed of freight trains and better turnaround of wagons.
- Trade Infrastructure for Export Scheme (TIES) aims to assist creation of appropriate infrastructure for growth of exports from the States

Digital/Technological Initiatives:

- Logistics Planning and Performance Monitoring Tool (LPPT) shall allow real-time monitoring of operational performance and asset utilization of various logistics infrastructure.
- Indian Customs EDI Gateway (ICEGATE) and Single Window Interface for Trade (SWIFT) developed for trade facilitation;
- Port Community System (PCS) for cargo handling at seaports;
- Freight Operations Information System (FOIS) by Indian Railways
- VAHAN (National Vehicle Registration System) by Ministry of Road Transport and Highways.

Other Initiatives:

- It is estimated that logistics sector employs 12 million workforce, involved mainly in land transportation, warehousing (storage and packaging), supply chain and courier and express services.
- In order to impart right set of skills to them, a curriculum on logistics and supply chain is being developed for classes 9 and 10 at the school level.

INDIA'S ENGAGEMENT WITH WTO

The broad elements of India's proposal include:

- Preserving the core values of the Multilateral Trading System;
- (ii) Resolving the impasse in the Dispute Settlement System;
- (iii) Safeguarding development concerns;
- (iv) Transparency and Notifications

Challenges to efficacy of WTO:

- Increasing protectionism,
- inadequate members in the Appellate Tribunal for dispute resolution,
- increasing number of Regional Trade Agreements (RTAs) and Free Trade Agreements (FTAs)

Issue of Appellate system in WTO:

- The WTO's Appellate Body (AB) is a permanent body intended by the Dispute Settlement Understanding (DSU) to resolve appeals on issues of law.
- Comprised of 7 members
- Since July 2017, the United States has been stalling AB appointments on the pretext that it has not been functioning in accordance with the DSU norms – precipitating the 'Appellate Body crisis'
- In the wake of this crisis, around 23 WTO members have created a Multiparty Interim Arbitration (MPIA) mechanism that closely replicates the substantive and procedural aspects of appellate review under the AB.
- India has not joined MPIA yet.
- India supports the restoration and preservation of the normal functioning of the two-stage binding WTO dispute settlement mechanism.

Agriculture at WTO:

- India along with many other developing countries, have been demanding a permanent solution on the issue of public stockholding for food security purposes.
- India has also been raising the issue of imbalances and asymmetries in the existing Agreement on Agriculture (AoA) and their implications for developing countries.
- WTO Members agreed to continue to engage constructively to frame disciplines on fisheries subsidies by the next Ministerial Conference (MC12) in 2020.

E-commerce at WTO:

- WTO members agreed not to impose customs duties on electronic transmissions in 1998 and since then, the moratorium has been extended periodically at the ministerial meetings.

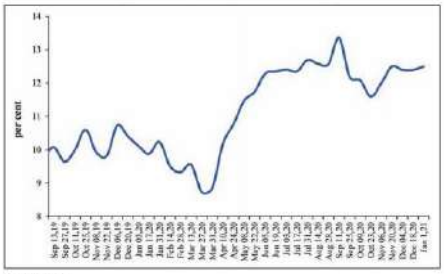
- In response to the failure to obtain a multilateral mandate for rule-making in e-commerce, in January, 2019, a Joint Statement on e-commerce was issued on behalf of seventy-six WTO members supporting rule-making on e-commerce.
- India believes that developing countries need to focus on improving domestic physical and digital infrastructure, creating supportive policy and regulatory frameworks and developing digital capabilities to bridge the digital divide and enable shared benefits of digitalization.

Chapter 4: Monetary Management and 04 Financial Intermediation

MONETARY DEVELOPMENTS DURING 2020-21:

- Since March 27, 2020, the policy repo rate has been reduced by 115 basis points (bps) from 5.15 per cent to 4.0 per cent so far.
- It created an asymmetrical corridor to make it unattractive for banks to passively deposit funds with the Reserve Bank and nudge them to use these funds for on-lending to productive sectors of the economy.
- While the inflation hovered above the tolerance zone for a few months, the committee was of the view that the underlying factors keeping inflation elevated were essentially supply shocks that should dissipate over time as the economy unlocks, supply chains restore and activity normalises.
- RBI in its latest MPC meeting revised upwards the projected the GDP growth from (-) 9.5 per cent to (-) 7.5 per cent in 2020-21.

Figure 2: Broad money growth (YoY)



Source: RBI

- Among the sources of M0 – comprising of net domestic assets (NDA) [net Reserve Bank credit to the government, banks and commercial sector] and net foreign assets (NFA) - the main driver for increase in M0 during 2020-21 was NFA.
- Banks' higher investments in liquid and risk-free assets such as SLR securities and G-secs, resulted in higher net bank credit to the government.
- Money multiplier has declined from the recent peak of 5.8 in October 2018 to 5.5 as on January 1, 2021. This shows that the money supply has responded only partially to reserve money growth, reflecting that the liquidity transmission in the economy remains impaired.

LIQUIDITY CONDITIONS AND ITS MANAGEMENT

- The main drivers of liquidity during 2020-21 have been Currency in Circulation (CIC), Government cash balances and the Reserve Bank's forex operations.
- In order to ensure better monetary transmission through a more even distribution of liquidity across tenors, 14 simultaneous sale-purchase OMO auctions for Rs10,000 crore each were conducted in the financial year 2020-21.

DEVELOPMENTS IN THE G-SEC MARKETS

- During the first half of 2020-21, the 10-year benchmark G-sec yield traded with a softening bias tracking lower policy rates, subdued crude oil prices and surplus liquidity.
- The yields continued to harden, tracking higher than expected CPI print for July 2020 and a pause in rate cut by MPC.
- RBI has undertaken various measures to even out the yield curve including measures such as simultaneous sale-purchase OMO auctions various times in last year.

BANKING SECTOR

- Gross Non-Performing Advances (GNPA) ratio (i.e. GNPAs as a percentage of Gross Advances) of Scheduled Commercial Banks decreased from 8.2 per cent at the end-March 2020 to 7.5 per cent at end-September 2020.

- GNPA ratio of Public Sector Banks (PSBs) decreased from 10.25 per cent at the end-March 2020 to 9.4 per cent at end-September 2020.
- The focus on resolution of stressed assets had to take a backseat during the year on account of the outbreak of the Covid-19 pandemic.
- Government had suspended the initiation of fresh insolvency proceedings under Section 7, 9 and 10 of Insolvency & Bankruptcy Code 2016 for defaults arising on or after March 25, 2020 till March 25, 2021.
- Notably, the Supreme Court issued an interim order dated September 3, 2020 specifying that "the accounts which were not declared NPA till 31.08.2020 shall not be declared NPA till further orders".
- The above measures, which provided asset classification reliefs to borrowers, would affect the true recognition of financial stress on the borrower accounts.

MONETARY POLICY TRANSMISSION

- The transmission of policy repo rate changes has been weak on quantity of credit.

Rate structure

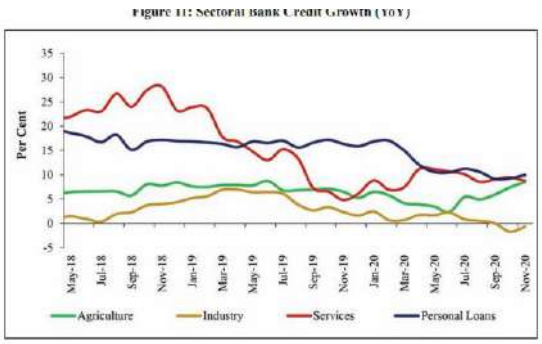
- The transmission of policy repo rate changes to deposit and lending rates of scheduled commercial banks (SCBs) has improved since March 2020 reflecting the combined impact of policy rate cuts, large liquidity surplus with accommodative policy stance, and the introduction of external benchmark-based pricing of loans.
- Across bank groups, Private Sector Banks exhibited greater transmission in terms on fresh loans, however Public Sector Banks exhibited greater transmission on outstanding loans for the entire easing cycle.
- Decline of saving deposit rates bodes well for monetary transmission to lending rates.

Credit Growth

- Credit growth (YoY) stood at 14.8 per cent in February 2019 and had declined to 5.1 per cent as on October 23, 2020.

Term Structure

- The reduction in policy rates and surplus liquidity helped in bringing down both the short term and long term interest rates.
- However, the impact has been much smaller on longer term interest rates.
- The lower policy rates have transmitted to corporate bonds and the yield has come down substantially from March 2020.



Regulatory Measures in Banking Sector

Commercial Banks

- Merger of PSBs: Consolidation among another 10 PSBs, with Punjab National Bank, Canara Bank, Union Bank of India and Indian Bank as anchor banks came into effect from April 1, 2020.
- Restructuring of MSME loans: A one-time restructuring of loans to MSMEs that were in default but 'standard' as on January 1, 2019, was permitted.
- Increase in Large Exposure Framework
- Enhancement of time for Export Credit
- Monetary policy transmission – external benchmarking of loans: the banks were mandated to link all new floating rate personal or retail loans and floating rate loans extended to MSMEs to external benchmarks such as repo rate, Treasury Bill Rate and any external benchmark published by Financial Benchmarks India Pvt Ltd (FBIL).

Co-operative Bank

- Increase in the target of Priority Sector Lending
- Inclusion of co-operative banks as eligible member lending institutions under interest subvention scheme for MSMEs.
- Reporting of large exposures to Central Repository of Information on Large Credits (CRILC)
- Limits on exposure to single and group borrowers and large exposures:
- Amendments to the Banking Regulation Act, 1949: Banking Regulation (Amendment) Act, 2020:
  - The Reserve Bank has been given powers over the management of the UCBs.
  - The Reserve Bank has been vested with powers of approval of the appointment / removal of statutory auditors of UCBs.
  - Provisions of the revised Act will enable UCBs to raise capital by issue of equity/ preference/special shares and debentures/bonds/like securities subject to such conditions as the Reserve Bank may specify in this behalf.
  - The Reserve Bank has been empowered to supersede theBoard of Directors of a UCB.

NON-BANKING FINANCIAL COMPANIES (NBFC)s

- Credit growth of NBFCs continued to slow down. Credit growth (YoY) of the NBFC sector was close to 3 per cent in June 2020.
- There was some shift in sources of funding for the NBFC sector in 2019-20. Banks' total exposure to NBFCs increased from Rs7.01 lakh crores in March 2019 to Rs8.04 lakh crores in March 2020, and further to Rs8.17 lakh crores in June 2020.

Digital Payments:

- Overall transactions worth Rs19.35 lakh crore have been done via UPI and Rs1.02 lakh crore via RuPay cards in 2020-21.

DEVELOPMENTS IN CAPITAL MARKETS

Primary Markets (Equity)

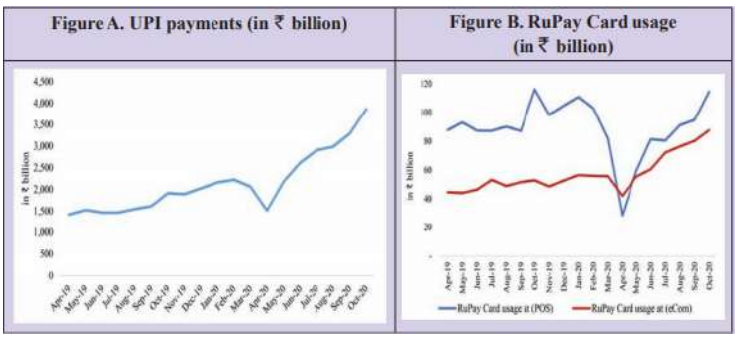
- The year 2020-212 (upto December) witnessed an increase in resource mobilization through public issue compared to the similar period for previous year.

Private Placement

- The year 2020-21 (upto December) witnessed a decrease in resource mobilization through private placement route compared to that during the similar period for previous year.

Primary Markets (Debt)

- The total debt issuance in primary market increased by 29.7 per cent to Rs 5.99 lakh crore during 2020-21 (upto December) as compared to Rs 4.63 lakh crore in the corresponding period of the previous year.



Mutual Fund Activities

- There was a net inflow of Rs 2.76 lakh crore into the mutual funds industry during 2020-21 (upto December), as compared to a net inflow of Rs 1.82 lakh crore in the corresponding period of last year.

INVESTMENT BY FOREIGN PORTFOLIO INVESTORS

- There were net inflows to the tune of Rs2.1 lakh crore on account of the foreign portfolio investors (FPIs) in the Indian capital market during 2020-21 (up to December), as compared to net inflows of Rs 0.81 lakh crore during the same period in 2019-20.

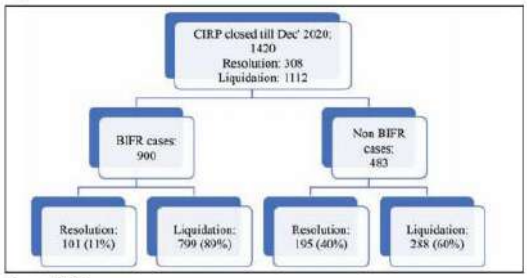
MOVEMENT OF INDIAN BENCHMARK INDICES

- During 2020-21 (upto January 20, 2021), India's benchmark indices, namely, Nifty50 and S&P BSE Sensex index reached record highs of 14,644.7 and 49,792.1 respectively on January 20,2021.

INSURANCE SECTOR

- The performance and potential of insurance sector is assessed using two indicatorsInsurance penetration and Insurance Density.
- Insurance penetration is calculated as percentage of insurance premium to GDP and insurance density is calculated as ratio of insurance premium to population.

Figure 20: CIRP outcomes based on BIFR and non-BIFR classification



Source: IBBI

- In India, Insurance penetration which was 2.71 per cent in 2001 has steadily increased to 3.76 per cent in 2019. In contrast, insurance penetration in Asia, i.e., Malaysia, Thailand and China was 4.72, 4.99 and 4.30 per cent respectively in 2019.
- The insurance density in India which was US$ 11.5 in 2001 reached to approximately US$ 78 in 2019. The comparative figures for Malaysia, Thailand and China in 2019 were much higher at US$ 536, US$ 389 and US$ 430 respectively.
- Within non-life category, motor and health segments primarily are the main contributors to industry to report this growth.

PENSION SECTOR

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

INSOLVENCY AND BANKRUPTCY CODE

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

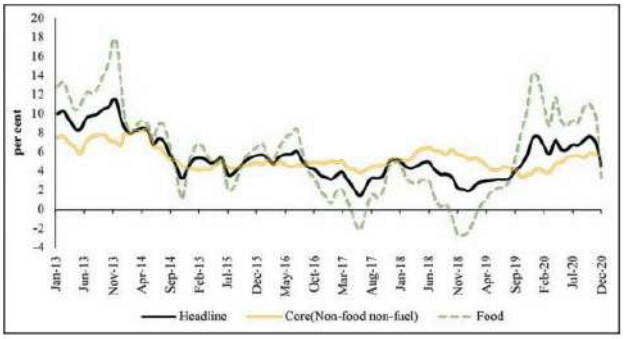
Figure 19: Status of CIRPs since its inception (as on December 30, 2020)

Admitted	•CIRPS AT THE BEGINNING OF PERIOD -	4,117
Closure by	•APPEAL/REVIEW SETTLED -	549
	•WITHDRAWAL UNDER SECTION 12 A -	348
	•APPROVAL OF RESOLUTION PLAN -	308
	•COMMENCEMENT OF LIQUIDATION -	1,112
Ongoing	•CIRPS AT THE END OF PERIOD -	1,800

Source: IBBI

- In view of COVID-19 pandemic, the Insolvency and Bankruptcy (Amendment) Ordinance, 2020 was promulgated on June 5, 2020 which suspended initiation of the CIRP of a corporate debtor (CD) under section 7 for any default arising on or after March 25, 2020.
- Manufacturing Sector, Real Estate and Construction are among the top three sectors initiating CIRP (Figure 22) with 39 per cent, 20 per cent and 11 per cent of the ongoing CIRPs respectively.
- Resolution: The Code has rescued 308 CDs as on December 2020 through resolution plans. They owed Rs 4.99 lakh crore to creditors. However, the realisable value of the assets available with them, when they entered the CIRP, was only Rs 1.03 lakh crore. Under the Code, the creditors recovered Rs 1.99 lakh crore, which is more than 193 per cent of the realisable value of these CDs.
- Liquidation – Although the Code has rescued 308 CDs, 1112 CDs went into liquidation.
- Time – The 308 CIRPs, which have yielded resolution plans by the end of December 2020, took on average 441 days for the conclusion of the process.
- Cost - The cost works out on average 0.79 per cent of liquidation value and 0.42 per cent of resolution value.
- Behavioural Change –
    - The inevitable consequence of a resolution process(the control and management of the firm move away from existing promoters and managers, most probably, forever) deters the management and promoter of the firm from operating below the optimum level of efficiency.
    - Further, it encourages the debtors to settle default expeditiously with the creditor at the earliest, preferably outside the Code.
    - There have been many instances where debtors have been settling their debts on their own or settling immediately on the filing of an application with the National Company Law Tribunal (NCLT) before it is admitted.

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



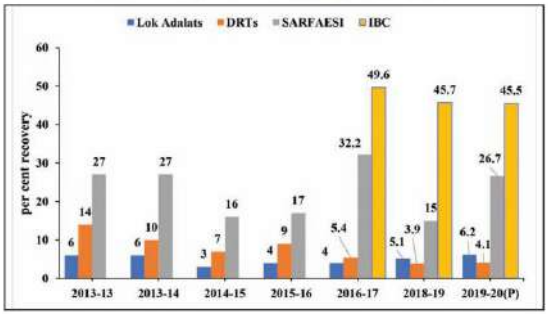
Source: NSO.

Chapter 5 : Prices and Inflation

Introduction:

- At the domestic level, two opposing forces were at play. On the one hand, there was a dampening of demand owing to lower economic activity. On the other hand, supply chain disruptions have caused spikes in food inflation that have continued to persist during the unlocking of the economy, though the effect has softened in the recent months.

Figure 23: NPAs of SCBs Recovered through Various Channels



CURRENT TRENDS IN INFLATION:

- CPI Core (non-food non-fuel) inflation declined from 5.8 per cent in 2018-19 to 4.0 per cent in 2019- 20 and averaged 5.4 per cent in 2020-21.
- Headline inflation based on CPI-Combined (CPI-C) was on a downward path from 2014 to 2018.

- WPI inflation declined from 4.3 per cent in 2018-19 to 1.7 per cent in 2019-20 and further to (-) 0.1 per cent in 2020-21.
- The rural-urban difference in CPI inflation, which was high in 2019, saw a decline in 2020. From July 2018 to December 2019, CPI-Urban inflation was consistently above CPI-Rural inflation, mainly on account of the differential rates of food inflation between rural and urban areas witnessed during this period.

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

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

- CPI-IW is a price index released by the Labour Bureau to measure the impact of price rise on the cost of living for working class families spread across certain select industries.

Base Revision of Consumer Price Index for Industrial Workers (CPI-IW)

- The CPI-IW is compiled and disseminated by the Labour Bureau on a monthly basis.
- It measures changes in the retail prices of a fixed basket of goods and services being consumed by an average working-class family.
- Apart from serving as a guide for policy formulations, these index numbers are utilized for fixing/revising wages, regulating the dearness allowances paid to large number of manual workers and Central/ State Govt. employees.

Refinements in CPI-IW base updation 2016

	Old series	New ser
Base	2001=100	2016=1
Coverage of States/UTs	25	28
Coverage of Centres	78	88
Coverage of Markets	289	317
Working Class families covered in the base year survey	41040	48384
Number of Items	392	463
Compilation of Indices	Arithmetic Mean of price relatives	Geomet Mean of p relativ

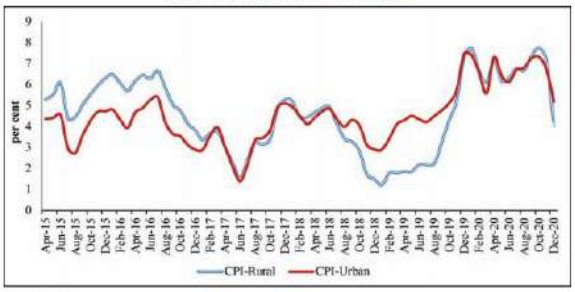
Figure 3: Trends in WPI All commodities, Core and Food inflation

Source: Office of the Economic Adviser, DPIIT

INFLATION TREND: MOMENTUM AND BASE EFFECT

- Inflation trends are usually interpreted using the twelve-month change in the index to eliminate the effect of seasonal fluctuations.
- When changes in the CPI in the base month have a considerable effect on changes in YoY inflation, this is referred to as base effect.

Figure 4: CPI Rural and Urban inflation



Source: NSO.

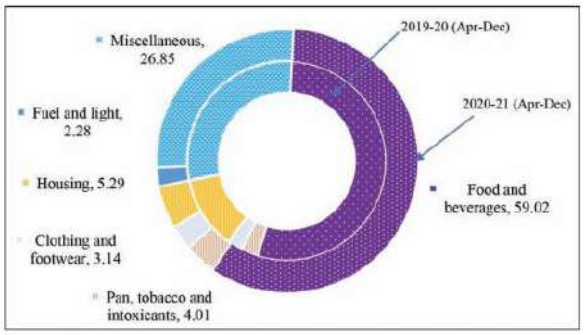
- Base effects are therefore the contribution to changes in the annual rate of measured inflation from abnormal changes in the CPI in the base period.
- CPI headline and CPI core inflation from April 2020 to October 2020 was driven mostly by substantial increase in price momentum i.e., increase in recent price index was pushing up the inflation each month.
- In both cases, positive base effect helped moderate the inflation.

- In the 'food and beverages' group, a similar pattern is observed as in the case of CPI headline and CPI core. In November 2020, decline in price momentum along with high base effect helped ease food inflation.

IMPACT OF INFLATION: THE PRODIGIOUS IMPACT OF FOOD INFLATION

- The major driver of CPI-C inflation was the food and beverages group, though its contribution has increased to 59.0 per cent in 2020-21 (Apr-Dec) compared to 53.7 per cent in 2019-20.
- The contribution of food sub-groups to CFPI shows that 'vegetables', 'meat & fish', 'oils & fats' and 'pulses &products' were the major contributors to food inflation in the current year.
- The estimated production of pulses in 2019-20 and 2020-21 has been less than the target.
- Imports can add to the availability of any commodity and thus moderate prices in case of shortfalls in domestic supply. In the case of pulses, it is seen that import is highly negatively correlated with production.
- Each year, import policy is changed according to the level of production. However, such frequent changes in import policy adds to confusion of market participants owing to uncertainty in policy regime.
- India is the largest importer of edible oils. Demand for edible oils is rising in India, while domestic production is almost stagnant, due to which dependence on imports has increased over the years.
- Effective measures to increase domestic production are necessary to reduce import dependency.
- Imports in 2020 were affected as Malaysia and Indonesia imposed export tariffs on crude palm oil.

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



Source: NSO

INFLATION IN STATES

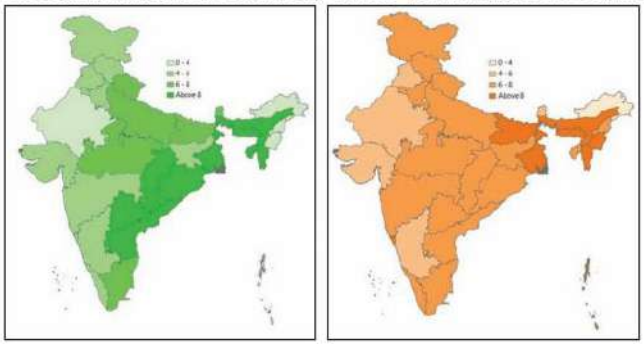
- CPI-C inflation increased in most of the states in the current year. However, regional variation persists.

Headline inflation or core inflation as target for monetary policy:

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

- Research contend that while under complete markets, the choice of targeting strict core inflation is the best policy, with incomplete markets, headline inflation targeting is welfare improving relative to core inflation targeting.
- RBI paper finds heterogeneity in the extent of price stickiness among food products. The prices of food items change, on average, in 1.29 months. Vegetable prices change at higher frequency than others (almost twice a month on average).
- Given this finding of wide variations in the price stickiness of food items, the paper suggests that it is important to pay attention to the sticky component of food inflation in addition to core inflation.

17b. CPI- Rural Inflation in 2020-21 (Jun-Dec) 17c. CPI- Urban Inflation in 2020-21 (Jun-Dec



- In 17 States/UTs, overall inflation is below the all-India average in the current year with Delhi having the lowest inflation, followed by Dadra & Nagar Haveli.

WHICH MEASURE OF INFLATION reflected economic activity better IN 2020-21?

- The previous two sections indicate the role of supply-side constraints, especially in the case of perishable vegetables contributing to inflation.
- For the period April 2020 to November 2020, CPI-C is weakly related to IIP growth .
- WPI inflation and CPI-C Core inflation are positively and strongly related to IIP growth. Therefore, core CPI-C inflation and WPI Inflation, have been more in sync with the demand conditions in the economy
- A tight monetary policy may have a role in managing inflation in case of excess demand driving high inflation. However, the current scenario presents a different picture. The current spike in CPI inflation driven by spike in food prices is mainly a supply-side phenomenon.
- Further, the weights of all items in CPI-C are based on NSO Household Consumption Expenditure Survey 2011-12. Weight of food items in the index might have significantly decreased over the decade since 2011-12.

INFLATION EXPECTATIONS

- The one year ahead inflation expectation for CPI-C inflation has risen during the current year.
- Inflation expectations survey of households conducted by RBI also pointed to a slight rise in inflation expectations from 9.1 per cent in March 2020 to 9.7 per cent in November 2020.

Global commodity prices

- The largest impact of COVID-19 has been on energy prices driven by fall in crude oil prices. Energy prices have seen some rebound since the pandemic owing to production cuts by OPEC+ countries.
- Growth in prices of agricultural commodities, metals and minerals and fertilizers have now returned to the positive territory.
- Gold prices rose as investors turned to gold as a safe haven investment amid COVID-19 induced economic uncertainties.

REGULATION OF DRUG PRICES

- Drug prices in India are regulated to ensure continued availability and affordability of essential lifesaving drugs with improved access to consumers.
- National Pharmaceutical Pricing Authority (NPPA), which is an independent regulator for pricing of drugs and to ensure availability and accessibility of medicines at affordable prices.
- It invoked extraordinary powers in public interest to ensure that policy enhances access to life saving drugs like Heparin and Medical Oxygen.
- NPPA also invoked extraordinary powers in public interest under Drug Price control Order, 2013 and National Disaster Management Act to cap the price of Liquid Medical Oxygen (LMO) and the Oxygen Inhalation (Medicinal gas) for six months.
- Timely intervention by NPPA eased the situation of Medical Oxygen availability throughout the country, especially in distant and far-flung areas. In order to ensure availability of N95 mask at affordable prices in the country.
- NPPA fine-tuned its interventions during the COVID-19 pandemic to strike at profiteering tendencies by manufacturers/marketers in public interest.

NHB RESIDEX

- The Housing Price Indices (HPIs) are a broad measure of movement of residential property prices observed within a geographic boundary.
- The National Housing Bank (NHB) RESIDEX captures two housing price indices viz. HPI@ Assessment Prices and HPI@ Market Prices.

- It is observed that sales have retrieved in affordable segments, reflecting economic recovery in the real estate sector.

MEASURES TO CONTROL INFLATION

- The Government reviews the price situation regularly and has taken number of measures from time to time to stabilize prices of food items. Involved Policy Measures:
  - Banning the export of onion
  - Easing of restrictions on imports, facilitating imports at integrated check-posts, issuance of licenses for imports and reduction in import duties.
  - Implementation of Price Stabilization Fund (PSF) Scheme
  - The balance stock is disposed in market, based on considerations like shelf life, efficient buffer management, market prices etc.
- Creation of buffer stock of pulses has helped in moderating pulses prices. Lower prices of pulses lead to consumer savings.

Buffer Stocks for Pulses:

- Creation of a dynamic buffer of up to 20 lakh tonnes of pulses for appropriate market intervention.
- All Ministries/Department having schemes with nutrition component or providing food/ catering/hospitality services would utilize pulses from the central buffer. Pulses from the buffer are utilised for PDS distribution, in Midday Meal Scheme and in ICDS Scheme.
- Pulses from the buffer are being utilized to meet the requirement of Army and Central Para-Military Forces.
- Built buffer also led to remunerative prices to farmers as procurement for buffer was undertaken at MSP or higher rates from them.
- Creation of buffer stock of pulses has helped in moderating pulses prices. Lower prices of pulses lead to consumer savings.
- This incentivized production which led to two successive years of bumper production taking country towards self-sufficiency and resulting in reduced imports and concomitant savings in forex.

- Government has decided that procurement at MSP would be under Price Support Scheme of Department of Agriculture, Cooperation and Farmers Welfare.
- States/UTs are also being encouraged to set up their own State level PSF.
- Government of India has entered into a MoU with Mozambique to ensure assured supply of pulses (Tur and other pulses) in India.
- Government of India maintains buffer stocks of onion under PSF for making appropriate price stabilizing market interventions.

Chapter 6: Sustainable Development and Climate Change

May all be happy; May all be without disease; May all have well-being; May none have misery of any sort — (Brihadaaranyaka Upanishad 1.4.14)

INTRODUCTION

- The year 2020 was supposed to be the year by which developed country Parties were to fulfill the goal of jointly mobilizing US$ 100 billion a year for climate finance, an essential component of the commitments made by the developed countries, which has remained elusive.

INDIA AND THE SDGs

- India has taken several proactive steps at both the national and the sub national level to mainstream the SDGs into the policies, schemes and programmes of the Government.
- In 2020, the highlight of India's SDG initiatives has been the Voluntary National Review (VNR) presented to the United Nations High-Level Political Forum (HLPF) on Sustainable Development.
- NITI Aayog presented India's second VNR to the HLPF in July 2020, which highlighted the country's accomplishments and the way forward on its journey towards achieving the SDGs.

Localization of the SDGs

- Essentially, localising SDGs involves the process of adapting, planning, implementing and monitoring the SDGs from national to local levels by relevant institutions and stakeholders.
- To accelerate SDG achievements, the country has adopted the approach of cooperative and competitive federalism which is based onCentre-State collaboration in nation building and healthy competition among the States in various development outcomes.

Onion prices and buffer stock policy:

Over the years, it has been observed that in the period August-November prices of onion skyrocket.

Why rise:

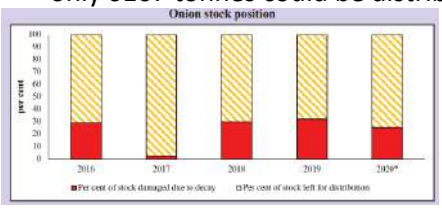
- Rabi harvesting takes place between March and May in most states and the crop is sold during June-July period, kharif harvesting takes place between October and November.
- The period between the two that is August to November is when we observe the prices of onion rise sharply.

Policy Measures of Govt:

- Stock limit on the onions was imposed under the Essential Commodities (Amendment) Act 2020.
- Stepped-up disposal of onion through the built-up onion buffer stock from the Rabi onion 2020 of 1 LMT.
- Facilitated the import by the private traders.

Effectiveness of government measures

- In 2019, NAFED created buffer stock of approx. 58288 tonnes, out of which around 18808 tonnes of onions were damaged, 33313 tonnes were distributed in the local market due to being of sub-standard quality and only 6167 tonnes could be distributed to states.



- NAFED stores its buffer stock of onion using traditional methods, as opposed to cold storage, leading to the wastage.
- Moreover, NAFED procures and stores onion mostly in three states- Maharashtra, Madhya Pradesh and Gujarat.
- This concentration of stock storage in just three states makes it more susceptible to adverse weather shocks.

Way Forward:

- There should be a transparent online platform where all information relating to requirement details by states should be made available for better planning and decision making.
- Traditional storage practices result in substantial losses in stored onions, hence use of improved storage structures as well as use of good storer varieties, judicious use of fertilizers, timely irrigation and post-harvest technology are essential to reduce the losses in stored onions.
- Develop an eVIN like tracking system.
- Use of dehydrated onions that has longer shelf life should be promoted for buffer stock purpose.

- The SDG India Index and Dashboard, designed and developed by NITI Aayog, is the principal tool to measure and monitor SDG performance at the national and sub-national levels.

Figure 2: SDG Localisation

Source: NITI Aayog

SDG related intervention of the Centre Governments during the pandemic

- The period of the pandemic has seen coordinated efforts of both the Centre and the State Governments in preserving and creating livelihoods, ensuring that food and nutritional requirements are met and that the health facilities are augmented to cope with the pressure created by the contagion.
- In addition several reforms measures have been brought in such asin agricultural labour and MSME reforms which will directly or indirectly impact the SDGs.

CLIMATE CHANGE

- India has been taking several proactive climate actions to fulfil its obligations as per the principles of common but differentiated responsibilities and respective capabilities and equity.
- The Nationally Determined Contribution (NDC) submitted by the country has been formulated keeping in mind the developmental imperatives of the country and is on a “best effort basis”.
- In its NDC:
  - reduce the emissions intensity of its GDP by 33 to 35 per cent below 2005 levels by the year 2030;
  - achieve 40 per cent of cumulative electric power installed capacity from non-fossil fuel sources by 2030;
  - enhance forest and tree cover to create additional carbon sink equivalent to 2.5 to 3 billion tons of carbon dioxide by 2030.
  - adoption of sustainable lifestyles based on traditional values of conservation and moderation,
  - adaptation to climate change, clean economic development and environmentfriendly technology, etc.

Prominent Government initiatives on mitigation & adaptation actions and their progress

Table 1: National Missions under NAPCC

Missions	Major objective/Target	Progress
1. National Solar Mission (NSM)	Achieve 100 GW of solar power in seven years starting from 2014-15.	The cumulative capacity of 36.9 GW was commissioned till November 2020. Around 36 GW solar energy capacity is under installation, and an additional 19 GW capacity has been tendered.
2. National Mission for Enhanced Energy Efficiency (NMEEE)	• To achieve growth with ecological sustainability. • Mandating reduction in energy consumption in large energy-consuming industries, • Financing for PPP to reduce energy consumption through demand-side management programs in the municipal, buildings, and agricultural sectors, • Energy incentives, including reduced taxes on energy-efficient appliances.	• The Perform Achieve and Trade (PAT) Scheme is one of the initiatives under the NMEEE, and was initiated in March 2012. • PAT Cycle I (2012-2015) has over-achieved the target, saving around 31 million tonnes of CO2 (Mt CO2). • PAT Cycle II (2016-17 to 2018-19)- emission reduction of 61.34 MtCO2 was achieved. • PAT Cycle III (2017-18 to 2019-20) concluded on 31 March 2020, results of this cycle are awaited. • Currently PAT Cycle IV is under implementation.

Missions	Major objective/Target	Progress
3. National Mission for a Green India (GIM)	Improved ecosystem services by Increasing forest/tree cover by 5 m ha and improving quality of forest cover on another 5 m ha (a total of 10 m ha).	A sum of ₹ 343.08 crore has been released to 13 states during the period 2015-16 to 2019-20 for undertaking afforestation activities over an area of 1.42 lakh ha.
4. National Mission on Sustainable Habitat (NMSH)	• Development of sustainable habitat standards. • Promoting energy efficiency as a core component of urban planning by extending the existing Energy Conservation Building Code (ECBC). • Strengthening the enforcement of automotive fuel economy standards, and • Using pricing measures to encourage the purchase of efficient vehicles and incentives for the use of public transportation.	• The mission is being implemented through three programmes: Atal Mission on Rejuvenation and Urban Transformation, Swachh Bharat Mission, and Smart Cities Mission. • Under the ECBC, 335 demonstration buildings have been supported with technical assistance for compliance in the states/UTs. Cumulative built-up area of 0.16 billion m^2 ensures an approximate energy saving of 0.17 BU. • Under the Smart Cities Mission, 1987 projects have already been completed so far, while 4375 projects are under completion. Smart Cities Mission requires cities to have at least 10 per cent energy coming from solar and at least 80 per cent buildings to be energy efficient and green. • Urban Transport Modal Shift: As on June, 2020, 700 km of metro rail was operational in 18 major cities and a Bus Rapid Transit (BRT) network of about 450 km was operational in 11 cities across the country carrying 10 million passengers daily. • Smart Cities Mission: As on June 2020, the value of tendered smart city projects was over ₹ 1,66,000 crores, including ₹ 1,25,000 crores of work orders issued and ₹ 27,000 crores of completed projects.

Missions	Major objective/Target	Progress
		• Smart roads, smart solar, smart water, PPPs and vibrant public spaces projects are being implemented under the Mission. • Swachh Bharat Mission: 6.2 million household toilets, against the mission target of 5.8 million, and 0.59 million community & public toilets, against the mission target of 0.50 million, have been constructed as in December 2020. Under the mission, 100 per cent door-to-door waste collection has been achieved in more than 83 thousand wards. • 4340 (99 per cent) of the total 4372 cities have been declared Open Defecation Free (ODF) in the country.
5. National Water Mission (NWM)	• Focuses on monitoring of ground water, aquifer mapping, capacity building, water quality monitoring and other baseline studies. • Promoting citizen and state action for water conservation, augmentation, and preservation. • Focusing attention on overexploited areas. • Promoting basin-level integrated water resources management.	• The National Institute of Hydrology is the nodal agency to get the State Specific Action Plan (SSAP) for the water sector for 16 selected states. Five States have completed the first phase of SSAP. • 6,376 new ground water monitoring wells created.
6. National Mission for Sustainable Agriculture	Enhancing food security by making agriculture more productive, sustainable, remunerative, and climate resilient.	• 7960 farm machinery banks established in 2018-19 to reduce crop residue burning. • Under Rainfed Area Development Programme, an area of about 74,175.41 ha and 55,902.92 ha was brought under different Integrated Farming System approach in 2018-19 and 2019-20 respectively. • During 2018-19 & 2019-20, an area of 4.14 lakh ha was covered under organic farming. At present, 25.34 lakh ha, is under organic farming.

Missions	Major objective/Targ
7. National Mission for Sustaining Himalayan Eco-systems	• To continuously assess status of the Himalayan E Enable policy bodies in th formulation functions. • Start of new centres relev mate change in the existi tions in the Himalayan Sta • Regional cooperation w bouring countries in Glaci
8. National Mission on Strategic Knowledge for Climate Change (NMSKCC)	• To gain a better und of climate science, forn knowledge networks an existing knowledge i engaged in resear development. • Development of nationa for modeling the region of climate change on ecological zones within th

Source: MoEFCC

- Government had revised the target of grid connected solar power projects from 20,000 MW by the year 2021-22 to 100,000 MW by the year 2021-22 under the National Solar Mission in 2015.
- The National Mission for a Green India (GIM) was introduced with the aim to protect, restore and enhance India's forest cover.
- The mission was started with the

Figure 5: The afforestation target and its achievement under various schemes including Green India Mission.

Source: Directorate of Green India Mission

Figure 4: Physical Target and Achievement of Grid connected Solar Projects under NSM

Source: Ministry of New and Renewable Energy

objective to increase forest/tree cover on 5 million hectares (m ha) of forest/non-forest land and improve quality of forest cover on another 5 m ha land area.

Figure 3: Target & Achievements under Off-grid Solar Programme

Source: Ministry of New and Renewable Energy

- The mission also targeted improvement of ecosystem services including biodiversity, hydrological services and carbon sequestration.
- Two important components of the Climate Change Action Plan (CCAP) scheme are the National Carbonaceous Aerosols Program (NCAP) and the Long-Term Ecological Observatories (LTEO).
    - NCAP is a multi-institutional program being implemented by a consortium of 17 institutions led by IIT Bombay.
    - LTEO is another project under the CCAP scheme for duration of 5 years and was started in the year 2019-2020.
- National Adaptation Fund on Climate Change (NAFCC) a Central Sector Scheme with National Bank for Agriculture and Rural Development (NABARD) as the National Implementing Entity was operationalized in 2015-16.
- The aim of NAPCC is to support concrete adaptation activities which are not covered under on-going activities through the schemes of State/UT and National Governments.
- The Government is implementing Faster Adoption and Manufacturing of (Hybrid&) Electric Vehicle in India (FAME India) scheme.
- Its aim is to encourage progressive induction of reliable, affordable and efficient electric and hybrid vehicles.
- Phase II aims to generate demand by way of supporting 7000 electric buses (e-bus), 5 lakh electric three wheelers (e-3W), 55000 electric four wheeler passenger cars (including strong hybrid) (e-4W)and 10 lakh electric two wheelers (e-2W).

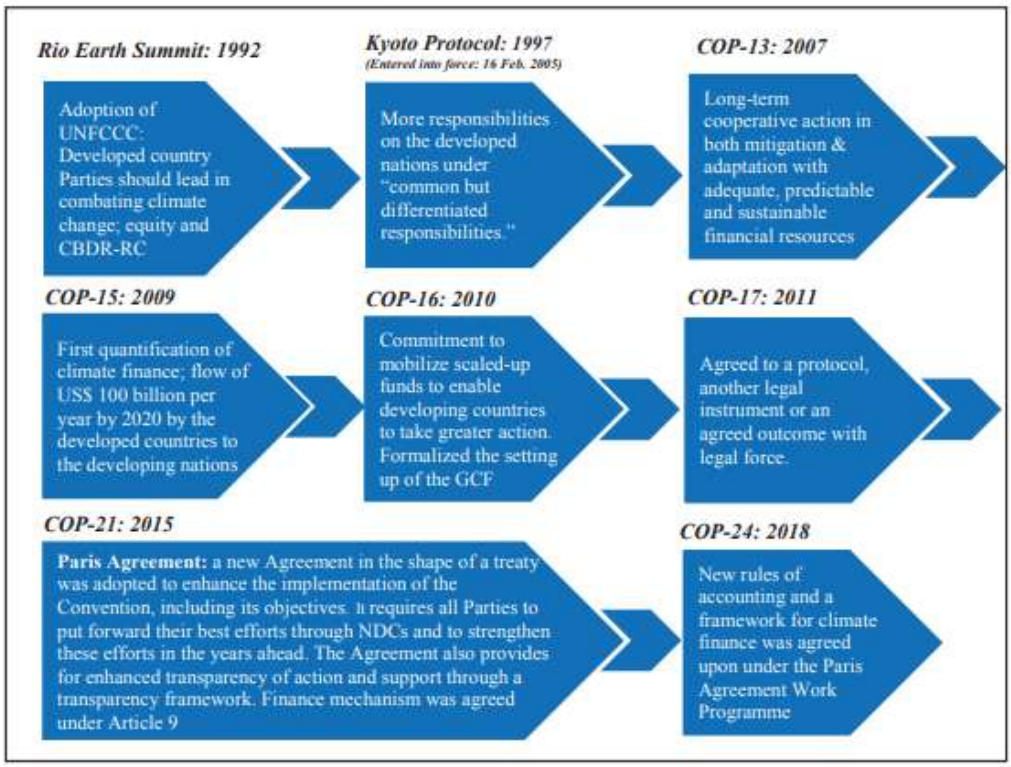
India's NDC and its forthcoming challenges

- A great deal of stress is also being laid upon the inter-generational equity in regard to the emerging climate actions proposed to be taken by the present generation. However, the imperatives of the intra-generational equity, i.e., eradication of poverty and equitable social and economic development cannot be brushed aside.
- The national circumstances demand that the first priority for India be adaptation, being a country highly vulnerable to extreme weather events.
- Hence, India's adaptation efforts will have to be further intensified and with that the adaptation costs will increase. The country is relying on domestic resources to implement adaptation and mitigation action on mission mode.
- Preliminary estimates provided by NDC indicates that India's climate change actions till 2030 will require financial resource of US$ 2.5 trillion.
- It is important to have a clearer assessment of the financial requirement for implementing India's NDC so that allocation of resources may be appropriate and efficient considering India's commitments and the fact that resources have competing uses.
- India has proactively pursued actions on climate change and achieved a reduction in emission intensity of GDP by 21 per cent over the period 2005-2014 as per India's second Biennial Update Report (BUR).

MULTILATERAL NEGOTIATIONS ON CLIMATE CHANGE

- Since the RioConference and the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, the multilateral regime on climate change has evolved.

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



25th Session of the Conference of Parties (COP 25)

- The decision also recalled the commitment made by the developed country Parties to the goal of mobilizing jointly US$ 100 billion per year by 2020 to address the needs of the developing country Parties.
- The decision also recalled the commitment made by the developed country Parties to the goal of mobilizing jointly US$ 100 billion per year by 2020 to address the needs of the developing country Parties.

26th Session of the Conference of Parties (COP 26) and Post 2020 Issues

- Due to COVID-19 pandemic, the COP 26 and the preceding UNFCCC subsidiary bodies' sessions has now been postponed to 2021.
- The other important issuesfor COP 26 include governance of Warsaw International Mechanism for loss and damage, continued work on pre-2020 implementation and launch of second periodic review of the long-term global goal under the Convention and of overall progress towards achieving it.

ALIGNING FINANCE WITH SUSTAINABILITY

Augmenting Finance for Sustainable Development

- National Voluntary Guidelines for Responsible Financing was finalized in 2015. These are financial sector-specific guidelines that combine and adapt international and national best practices.
- In 2015, the RBI included lending to social infrastructure and small renewable energy projects within the priority sector targets.
- The 'Voluntary Guidelines on Corporate Social Responsibility' were issued in 2009 to mainstream the concept of business responsibility.
- In order to reflect the NGRBC principles in the Business Responsibility Reporting (BRR) framework, a Committee was constituted to review and update the BRR for listed as well as unlisted companies.

- The Securities and Exchange Board of India (SEBI) through its 'Listing Regulations' in 2012 mandated the top 100 listed entities by market capitalization to disclose their performance against the NVGs using a Business Responsible Report (BRR) format8 from an environmental, social and governance perspective.
- Going beyond the innovative sustainability-themed capital market products such as Green Bonds or Social Impact Bonds, India is moving in the direction of creating a Social Stock Exchange (SSE), under the regulatory ambit of SEBI for raising capital by Social Enterprises working for the realization of a social welfare objective.
- The launch of green indices such as S&P BSE CARBONEX (in 2012), MSCI ESG India (in 2013), and S&P BSE 100 ESG Index (in 2017) allows passive and retail investors to invest in 'green' companies.

The cumulative issuance of global green bonds crossed US$ 1 trillion mark in 2020. Despite overall growth in the global bond markets, green bond issuance in the first half of 2020 slowed down from 2019.

- The 16-member jurisdiction platform accounts for 50 per cent of the world population, almost 50 per cent of global GDP and about 55 per cent of global GHG emissions.
- The Platform acknowledges that the global nature of financial markets has the great potential to help finance the transition to a green, low-carbon and climate resilient economy by linking financing needs to global sources of funding.

Investing in Resilience for Sustainable Development

- As per the Global Climate Risk Index, in 2018, India lost US$ 37 billion due to climate events such as cyclones battering the east coast and flooding and landslides in Kerala.
- International Labour Organisation's study concludes that India would lose 5.8 per cent of its working hours by 2030 due to heat stress.
- Although most of the impact in India will be felt in the agricultural sector, more and more working hours are expected to be lost in the construction sector, because of heat stress.

Climate Risk Insurance

- The basic risk faced by agriculturalists is that of weather variability and the uncertainty of crop yield.
- Thus, given the significant contribution of the agricultural sector in the Indian economy, coupled with looming "climatic aberrations," crop insurance becomes a necessity to mitigate the risks associated with a majority of the country's farmers.
- Insurance in Indian agriculture is challenging because of
    - a large number of small and scattered landholdings,
    - varying climatic and soil conditions,
    - lack of basic data,
    - variety of agricultural practices, making it practically impossible to implement the scheme on a wide scale.
- Further, there is widespread lack of knowledge about the nature and functions of crop insurance amongst the farmers, a majority of whom are illiterate and poor.
- Studies suggest moving towards parametric insurance that agrees to make payment on just the occurrence of a climate event, data for which is easily accessible.

Case Study:

- The example of the Karnataka State Natural Disaster Monitoring Centre's VarunaMitra which has not only benefitted 3.5 lakh farmers through its weather advisories but also provides data to insurers at panchayat scale to improve pay-outs to farmers (Manjunatha 2018) is a case in point.
- An example in this regard is the insurance bought by Wimbledon tennis tournament against a pandemic occurrence in 2003 following the SARS outbreak, thus receiving an insurance pay-out of US$ 142 million in 2020 which was utilised to pay the prize money and staff wages.

Developmental Schemes and Protection of Environment-Need for Convergence

- Many Central and State level incentive schemes (especially KUSUM and state solar policies) are promoting uptake of low carbon technologies such as decentralised solar systems for community scale water supply and irrigation as part of its agenda to build rural resilience in rainfed regions.

Issues with Schemes:

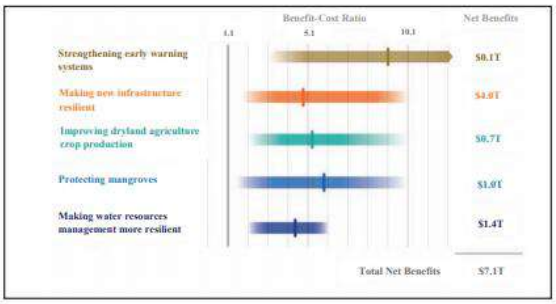
- These assessments do not consider climate projections for the regions.
- Similarly, solar irrigation pumps are being subsidised all over the country without any incentive for farmers to use ground water judiciously.
- Such schemes have an immense impact in reducing production losses during dry periods; but can also lead to unsustainable extraction of ground water.
- These incentive schemes need to be designed by considering cropping patterns, local environment, and climate projections, and should further incentivise farmers to adopt water conservation and rainwater harvesting practices.
- The Global Commission on Adaptation (GCA) (Figure 9) in its flagship report concluded that investing US$ 1.8 trillion globally in five areas i.e. strengthening early warning systems, making new infrastructure resilient, improving dryland agriculture crop production, protecting mangroves and making water resources management more resilient-from 2020 to 2030 could generate US$ 7.1 trillion in total net benefits, as overall rate of return on such investments is high with benefit-cost ratios ranging from 2:1 to 10:1.

INDIA'S INITIATIVES AT THE INTERNATIONAL STAGE

International Solar Alliance (ISA)

- International Solar Alliance (ISA) has recently launched two new initiatives – a 'World Solar Bank' and 'One Sun One World One Grid Initiative'.
- The proposed World Solar Bank would cater to the need for dedicated financing window for solar energy projects across the members of ISA.
- The 'One Sun One World One Grid' initiative aims to create an interconnected green grid that will enable solar energy generation in regions with high potential and facilitate its evacuation to demand centers.
- ISA's progress in solar rooftop programme has been equally noteworthy, with a demand of more than 1 GW aggregated from member countries.
- ISA's Framework Agreement mandates partnerships with various stakeholders, including public and private corporate sector, to promote sustainable, clean and affordable solar energy.
- ISA organized the First World Solar Technology Summit (WSTS) in September 2020 with an objective of showcasing to Member Countries the state of the art and next-generation solar technologies.

Figure 9: Benefits and Costs of Illustrative Investments in Adaptation



Coalition for Disaster Resilient Infrastructure

- CDRI is another expression of India's commitment to work with all the partners to address global challenges.
- TheCoalition functions as an inclusive multi-stakeholder platform led and managed by national governments, where knowledge is generated and exchanged on different aspects of disaster resilience of infrastructure.
- The CDRI is co-chaired by India and the United Kingdom (UK).
- The CDRI is working on enhancing the resilience of power sector in the state of Odisha, which was impacted by Cyclone Fani on the eastern coast of India in May 2019.
- The coalition has initiated the process to carry out the national level risk and resilience assessment of infrastructure to support better decision making and policy development and thus protect infrastructure investments from disasters and climate change.

CONCLUSION AND WAY FORWARD

- As per the second Biennial Update Report (BUR) submitted to UNFCCC in 2018, India's emission intensity of GDP reduced by 21 per cent in 2014 over the level of 2005.
- The effort of the International Solar Alliance in solar energy revolution is noteworthy and it has brought to fruition the 'One Sun One World One Grid'.
- India's proactive climate actions mainly rely on the domestic budgetary resources. Climate finance is critical to fulfil the execution of NDC targets submitted by India in a timely manner
- By 2020, the developed country partners had to fulfill the promised support of US$ 100 billion per year in the form of climate finance to the developing nations. This has not happened.

Chapter 7: Agriculture & Food Management

(Who have the shade of cornful crest Under their umbra umbrella rest.) —Thiruvalluvar

INTRODUCTION:

- The agriculture and allied sectors were the sole bright spot amid the slide in performance of other sectors, clocking a growth rate of 3.4 per cent at constant prices during 2020-21.
- Against all adversities due to COVID-19, continuous supply of agriculture commodities, especially staples like rice, wheat, pulses and vegetables, has been maintained thereby enabling food security.

Box 1: Major Announcements for Agriculture and Food Management under the Atma Nirbhar Bharat Abhiyan

Announcement	Objectives
₹ 1 lakh crores Agri Infrastructure Fund	Financing will be provided for funding agriculture infrastructure projects at farm-gate & at aggregation points and for financially viable post-harvest management infrastructure.
₹ 10,000 crores scheme for Formalisation of Micro Food Enterprises (MFE)	Aiding 2 lakh MFEs who need technical upgradation to attain FSSAI food standards, build brands and support marketing.
₹ 20,000 crores for fisherman through Pradhan Mantri Matsya Sampada Yojana (PMMSY)	It aims at integrated, sustainable and inclusive development of marine and inland fisheries by developing infrastructure such as fishing harbours, cold chain, markets, etc.
National Animal Disease Control Programme	It targets Foot and Mouth Disease (FMD) and Brucellosis by ensuring 100 per cent vaccination of cattle, buffalo, sheep, goat and pig population.
Animal Husbandry Infrastructure Development Fund - ₹ 15,000 crores	It is to support private investment in dairy processing, enable value addition and improved cattle feed infrastructure.
From 'TOP' to TOTAL	"Operation Greens" run by Ministry of Food Processing Industries (MOFPI) to be extended from tomatoes, onion and potatoes to ALL fruit and vegetables.
Reforms in Essential Commodities Act, Agriculture Marketing and Agriculture Produce Pricing and Quality Assurance	These legislative reforms seek to remove agricultural commodities such as cereals, pulses, oilseeds etc. from the list of essential commodities and aim to reform agricultural marketing.
PM Garib Kalyan Ann Yojana	The scheme aimed at ensuring food and nutritional security to around 80 crores ration card holders who were affected due to the COVID-19 induced national lockdown.
One Nation One Ration Card Scheme	This scheme will enable migrant workers and their family members to access PDS benefits from any fair price shop in the country.

OVERVIEW OF AGRICULTURE

Gross Value Added in Agriculture

- The share of agriculture and allied sectors in Gross Value Added (GVA) of the country at current prices is 17.8 per cent for the year 2019-20.

Items	Year					
	2014-15	2015-16	2016-17*	2017-18#	2018-19@	2019-20**
Share of GVA of Agriculture & Allied Sector in GVA of Total Economy (per cent)	18.2	17.7	18.0	18.0	17.1	17.8

Gross Capital Formation

- Gross Capital Formation (GCF) in the agriculture and allied sector as a proportion to GVA has been showing a fluctuating trend from 17.7 per cent in 2013-14 to 16.4 per cent in 2018-19, with a dip to 14.7 per cent in 2015-16.

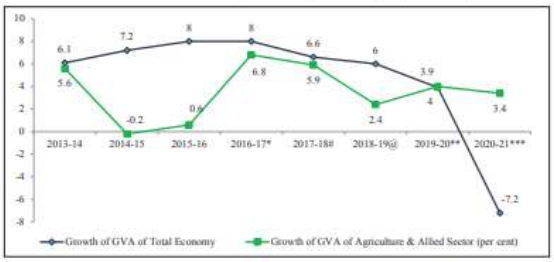
Production of Crops

- Total food grain production in the country is estimated at record 296.65 million tonnes which is higher by 11.44 million.

Agricultural Credit

- The agricultural credit flow target for the year 2019-20 was fixed at Rs 13,50,000 crores and against this target the achievement was Rs13,92,469.81 crores.

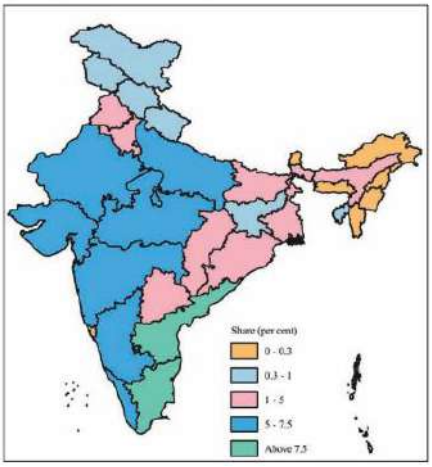
Figure 2: Growth of GVA of Economy and Agriculture & Allied Sectors at Constant (2011-12) Prices (In per cent)



International Trade in Agricultural Commodities

- In 2019-20, India's agricultural and allied exports amounted to approximately Rs 252 thousand crores.
- The major export destinations were USA, Saudi Arabia, Iran, Nepal and Bangladesh.
- The top agriculture and related products exported from India were marine products, basmati rice, buffalo meat, spices, non-basmati rice, cotton raw, oil meals, sugar, castor oil and tea.
- Since economic reforms began in 1991, India has remained a net exporter of agri-products, with agri-exports touching Rs2.52 lakh crores and imports at Rs1.47 lakh crores in FY 2019-20.
- The share of marine products in total agricultural export value has remained the largest over the period.

Map 1: Regional Distribution of Agricultural Credit in India in 2020-21



MSP of Kharif Crops

- The expected returns to the farmers over their cost of production are estimated to be highest in the case of bajra (83 per cent) followed by urad (64 per cent), tur (58 per cent) and maize (53 per cent).

MSP of Rabi Crops:

- The expected returns to the farmers over their cost of production are estimated to be highest in case of Wheat (106 per cent) followed by rapeseed & mustard (93 per cent), gram and lentil (78 per cent).

Crop Insurance

- Pradhan MantriFasalBimaYojana (PMFBY) is a milestone initiative to provide a comprehensive risk solution at the lowest uniform premium across the country for farmers.
- The average sum insured per hectare has increased from Rs 15,100 during the pre-PMFBY Schemes to Rs 40,700 under PMFBY.
- the scheme has been made voluntary for all farmers.
- The States have also been provided flexibility to rationalize the sum insured so that adequate benefits can be availed by farmers.
- As on 12th January, 2021, claims worth Rs 90,000 crores have already been paid out under the Scheme.
- Aadhar seeding has helped in speedy claim settlement directly into the farmer accounts.

PM-KISAN

- Under the Scheme, an amount of Rs 6000 per year is released in three instalments of Rs2000 each directly into the bank accounts of the beneficiaries.

Agriculture Infrastructure Fund:

- Government announced a Rs 1 lakh crore Agriculture Infrastructure Fund for creation of farm-gate infrastructure for farmers.
- This scheme is operational from the year 2020-21 to 2029-30.
- The scheme provides for medium to long term debt financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets Under the scheme.
- All loans under this financing facility will have interest subvention of 3 per cent per annum up to a limit of Rs 2 crores.

ALLIED SECTORS: ANIMAL HUSBANDRY, DAIRYING & FISHERIES

- Livestock sector is an important sub-sector of agriculture in the Indian economy. It grew at CAGR of 8.24 per cent during 2014-15 to 2018-19.

Milk

- Milk production in the country has increased from 146.3 million tonnes in 2014-15 to 198.4 million tonnes in 2019-20.
- The per capita availability of milk was 407 grams per day in 2019-20.

Livestock Population and Production

- The egg production in the country has increased from 78.48 billion in 2014-15 to 114.38 billion in 2019-20.
- Poultry production in India has taken a quantum leap in the last four decades, emerging from use of unscientific farming practices to commercial production systems with state-of-the-art technological interventions.
- India ranks 5th in meat production in the world.

RECENT INITIATIVES IN THE LIVESTOCK SECTOR

- Milk procurement in the cooperative sector increased because, as per their mandate, they could not reject milk supplied by the farmers.
- The cooperatives are faced with liquidity problems due to higher conversion into milk powder and white butter caused by higher milk procurement.
- Government provided interest subvention scheme to tide the crisis.

Animal Husbandry Infrastructure Development Fund (AHIDF):

- As a part of the AtmaNirbhar Bharat Abhiyan stimulus package, a Rs 15000 crores Animal Husbandry Infrastructure Development Fund (AHIDF) has been set up.
- The Government of India will provide 3 per cent interest subvention to eligible beneficiaries.
- The interest subvention would be released to banks every year by the Government based on entitlement claimed.
- The Government of India would also set up a Credit Guarantee fund of Rs750 crores to be managed by NABARD.

National Animal Disease Control Programme (NADCP)

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

FISHERIES

- India is the second largest fish producing country in the world and accounts for 7.58 per cent of the global production.

- The Government of India in October 2018 approved the establishment of a dedicated Fisheries and Aquaculture Infrastructure Development Fund (FIDF).
- total of 44,673 Kisan Credit Cards (KCCs) have been issued to fishers and fish farmers.

AGRICULTURAL RESEARCH AND EDUCATION

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

Natural Resource Management and Integrated Farming

- The Council has developed 60 location specific, cost effective, eco-friendly, socially acceptable multi-enterprise Integrated Farming System (IFS) models in farmers' participatory mode to reduce risk in farming, enhance farm productivity/profitability and secure livelihoods of resource poor small and marginal farmers.
- The Council has developed an agri-voltaic system to generate electricity in interspace area of crops and to harvest rainwater from top surface of photovoltaic (PV)-module has been designed.

Demonstration and Upscaling of Climate Resilient Technologies

- Climate resilient technologies are being demonstrated in 446 villages and up-scaled in about 300 cluster villages in the country.

Mechanization and Crop Residue Management

- Several measures have been taken to manage crop residue which include
  - i) Distribution of 1,52,579 machines to the farmers
  - ii) Awareness creation about in-situ crop residue management
  - iii) Replacement of long duration variety with short duration paddy.
  - Iv) Crop diversification leading to reduction in area under paddy

Reaching to the Farmers and Youth with Improved Technologies

- The improved technologies reached farmers fields through 34432 on-farm trials and 2.44 lakh frontline demonstrations by KVKs.

FOOD PROCESSING SECTOR

- During the last 5 years ending 2018-19, food processing industries (FPI) has been growing at an average annual growth rate of around 9.99.

New Initiatives in Food Processing Sector

Formalization of Micro Food Processing Enterprises:

- Government launched a new Centrally Sponsored Scheme, Prime Minister-Formalisation of Micro Food Processing Enterprises (PM-FME) with a total outlay of Rs 10,000 crores over the period 2020- 2025.
- The Scheme adopts One District One Product (ODOP) approach to reap benefit of scale in terms of procurement of inputs, availing common services and marketing of products.
- The scheme is expected to benefit 2 lakh micro food processing units through credit linked subsidy.

Pradhan MantriMatsyaSampadaYojana (PMMSY)

- PMMSY aims to enhance fish production to 220 lakh metric tons by 2024-25 at an average annual growth rate of about 9 per cent.
- The ambitious scheme will result in doubling export earnings to Rs 1,00,000 crores
- Generate direct and indirect employment opportunities of about 55 lakhs in the fisheries sector over a period of the next five years.
- PMMSY further intends to increase aquaculture productivity to 5 tonnes per hectare (up from national average of 3 tonnes per hectare),
- It will enhance domestic fish consumption and attract investments in fisheries sector from other sources.

- The Scheme also places focus on waste to wealth products, minor forest products and Aspirational Districts.
- FPOs/ SHGs/ producer cooperatives would be provided credit linked grant of 35 per cent of the eligible project cost for capital investment along the value chain.

Operation Greens

- MoFPI is implementing a central sector scheme "Operation Greens – A scheme for integrated development of Tomato, Onion and Potato (TOP) value chain" to provide support to farmers when prices of agri produce is low.
- Under the short term- price stabilization measures of the scheme, there is a provision for 50 per cent subsidy on cost of transportation and storage for evacuation of surplus production.
- Under AtmaNirbhar Bharat Abhiyan, this scheme has been extended from tomato, onion and potato (TOP) crops to the other notified horticulture crops (Total) for a period of six months.

Production-Linked Incentive (PLI) Scheme

- The approved financial outlay for the PLI scheme in food processing is Rs 10,900 crores.
- The food segments identified includes ready to eat/ready to cook, marine products, processed fruits & vegetables, mozzarella cheese, and innovative/organic products of SMEs.

Pradhan MantriKisan SAMPADA Yojana (PMKSY)

- Includes various component schemes which, inter-alia, includes
  - (i) Mega Food Parks,
  - (ii) Integrated Cold Chain and Value Addition Infrastructure,
  - (iii) Infrastructure for Agro-processing Clusters,
  - (iv) Creation of Backward and Forward Linkages
  - (v) Creation/ Expansion of Food Processing & Preservation Capacities,
  - (vi) Operation Greens

FOOD MANAGEMENT

The Central Government has undertaken the following measures:

- MSP of wheat and paddy has been increased to protect the interest of farmers.
- II. State Governments, particularly those undertaking Decentralized Procurement (DCP), are encouraged to maximize procurement of wheat and rice by state agencies.
- III. Strategic reserves of 5 million tons of food grains over the existing buffer norms have been maintained to be used in extreme situations.
- IV. Sale of wheat and rice is undertaken through OpenMarket Sale Scheme (OMSS)(Domestic) to check inflationary trend of food in market.

Procurement of Foodgrains

Figure 14: Procurements of Rice and Wheat over the Last Five Years (Lakh Tons)

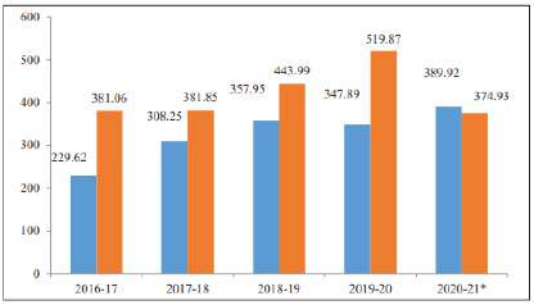
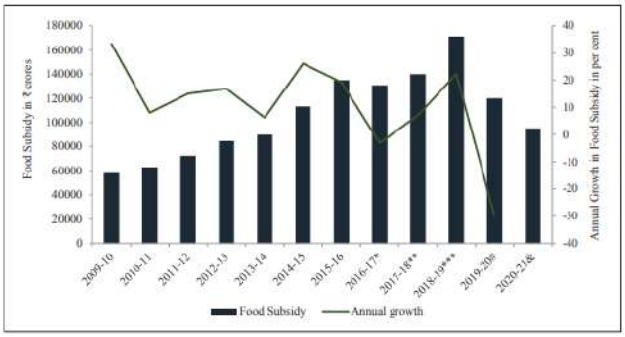


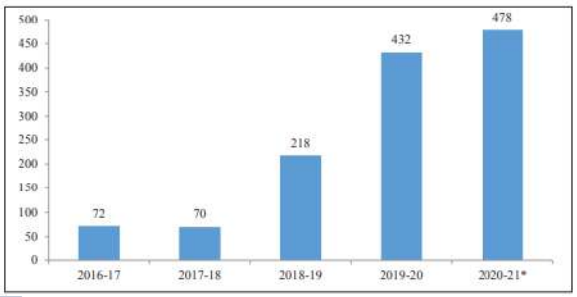
Figure 18: Trend in Food Subsidy Released by the Government of India since 2009-10



Allocation of Foodgrains

- During the Financial Year 2020-21, allocation of foodgrains has been done through two channels- under the National Food Security Act (NFSA) and the Pradhan MantriGaribKalyan Anna Yojana (PM-GKAY) scheme.
- Accordingly, about 121 LMT of foodgrain was allotted to approximately 80.96 crores beneficiaries entailing subsidy outgo of nearly Rs46061 crores.
- The PMGKAY scheme was extended for a further period of 5 months i.e. July – November, 2020.

Figure 15: Procurements of Coarse Grains over the Last Five Years (Thousand Tons)



Fortification of Rice and Its Distribution

- To address the issue of anaemia and micro-nutrient deficiency and to promote nutrition security in the country, a centrally sponsored pilot scheme on "Fortification of Rice & its Distribution under Public Distribution System" was approved for a period of 3 years beginning in 2019-20.

One Nation One Ration Card

- The main objective of the scheme is to introduce nation-wide portability of ration card under National Food Security Act (NFSA) through 'One Nation One Ration Card' System.
- This system will enable the ration card holders to lift their entitled foodgrains from any fair price shop (FPS) of their choice anywhere in the country by using their same/existing ration card.

Open Market Sale Scheme (Domestic)

- In addition to maintaining buffer stocks and for making a provision for meeting the requirement of the National Food Security Act (NFSA) and Other Welfare Schemes (OWS), the Food Corporation of India (FCI) on the instructions from the Government sells excess stocks out of Central Pool through Open Market Sale Scheme (Domestic).

Food Subsidy

- The difference between the per quintal economic cost and the per quintal Central Issue Price (CIP) gives the quantum of per quintal food subsidy.
- The CIP of wheat and rice for NFSA beneficiaries has not been revised since the introduction of the Act in 2013 from Rs 200 per quintal in case of wheat and Rs 300 per quintal in case of rice.

Storage

- Construction of godowns has been undertaken in PPP mode in 24 states under Private Entrepreneurs Guarantee (PEG) Scheme through the private sector.

Ethanol

- The Government has set 10 per cent blending target for mixing ethanol with petrol by 2022 & 20 per cent blending target by 2030.
- Government has also allowed conversion of surplus stock of rice with FCI and Maize to ethanol so that these targets of blending can be achieved smoothly.

recent agricultural reforms: A REMEDY, NOT A MALADY

The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020:

- The reform grants freedom to farmers and buyers to transact in agricultural commodities even outside notified APMC mandis ensuring competitive alternative trading channels to promote efficient, transparent and barrier-free interstate and intra-state trade.

The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020

- It seeks to provide for a national framework on contract farming that protects and empowers farmers in their engagement with agri-business firms, processors, wholesalers, exporters.

The Essential Commodities (Amendment) Act, 2020:

- It seeks to remove commodities like cereals, pulses, oilseeds, edible oils, onion and potatoes from the list of essential commodities.

Benefits of the Farm Reforms:

- It will empower farmers in their engagement with processors, wholesalers, aggregators, large retailers, exporters and will provide a level playing field.
- It will transfer the risk of market unpredictability from the farmer to the sponsor and also enable the farmer to access modern technology and better inputs.
- As part of this law, 10000 Farmer Producer Organizations are being formed throughout the country.
- These FPOs will bring together small farmers and work to ensure remunerative pricing for of produce.
- After signing the contract, farmer will not have to seek out traders as the purchasing consumer will need to take the produce directly from the farm.
- The Essential Commodities (Amendment) Act 2020 removes commodities like cereals, pulses, oilseeds, edible oils, onion and potatoes from the list of essential commodities.
- This aims to remove fears in private investors from excessive regulatory interference in their business operations.
- The freedom to produce, hold, move, distribute and supply will lead to harnessing of economies of scale and will attract private sector/foreign direct investment into the agriculture sector.

WAY FORWARD:

- Agriculture and allied activities engage almost half of India's workforce and contributes close to 18 per cent of the gross value added of the country.
- Both production and post production in agriculture needs urgent reforms to enable sustainable and consistent growth. Increase in area under irrigation, adoption of hybrid and improved seeds, increasing variety replacement ratio and augmentation in seed testing facilities will help address low productivity concerns.
- On the post-production front, measures like village level procurement centres, linkages between production and processing, development of rural markets, option of selling outside the APMC markets – warehouse upgradations and strengthening of railways freight operations, dedicated freight corridors among others are needed and are being taken up.
- While it is difficult to reduce the economic cost of food management in view of rising commitment towards food security, there is a need to consider the revision of CIP to reduce the bulging food subsidy bill.

Chapter 08: Industry and Infrastructure

"In the midst of every crisis, lies great opportunity." —Albert Einstein

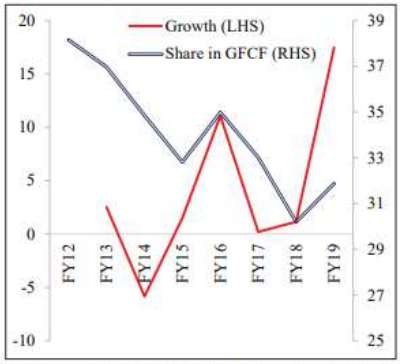
Table 1: Rate of Growth of GVA in Industry and Its Components (Per cent)

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

INTRODUCTION

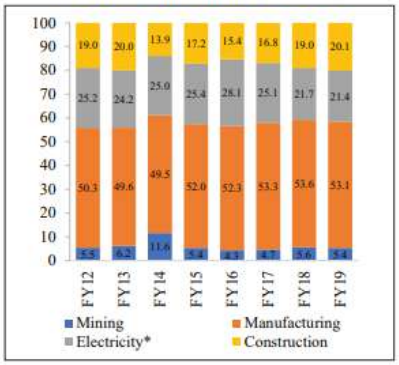
- India implemented policies aimed at reducing transaction costs, supporting Micro Small and Medium Enterprises (MSMEs), enhancing competition, fostering employment creation and securing sustenance through the Atmanirbhar Bharat Abhiyan.
- A bouquet of measures equivalent to Rs29.87 lakh crores or 15 per cent of India's GDP were introduced as a measure of relief and support to the economy.

Figure 10a: Growth of GFCF in Industry and its share in total GFCF (Per cent)



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

Figure 10b: Share of Different Sectors in Total GFCF of Industry (Per cent)



TRENDS IN INDUSTRIAL SECTOR

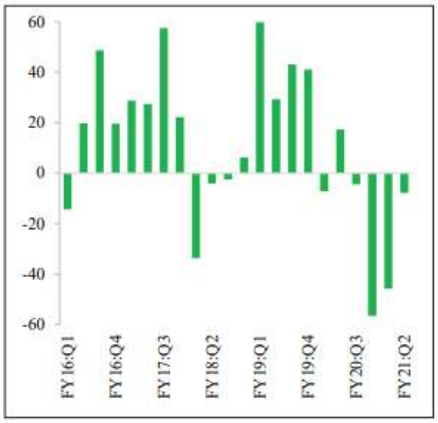
Index of Eight-Core Industries and Index of Industrial Production (IIP)

- The eight-core industries that support infrastructure, such as coal, crude oil, natural gas, refinery products, fertilizers, steel, cement, and electricity have a total weight of nearly 40 percent in the IIP.

Gross Capital Formation in the Industrial Sector

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

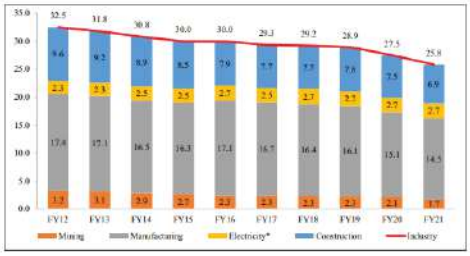
B. Net Profit



Credit to the Industrial Sector

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

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



Performance of Central Public Sector Enterprises (CPSEs)

- The inherent inefficiencies leading to low productivity in the PSEs, high-cost structure and strained public finances led the GoI to privatize the PSUs after 1991.
- Under the aegis of the Atmanirbhar Bharat Mission, the government has proposed to rationalise the participation of the CPSEs in commercial activities.

- Department of Public Enterprises has separately initiated revamping of Performance Monitoring system of the CPSEs to make it more objective and forward-looking based on sectoral indices/benchmarks.
- It has been argued that the existence of the CPSEsshould only be in the 'strategic sectors'.
- CPSEs are operating in 4 sectors –Agriculture, Mining & Exploration, Manufacturing, and Services.

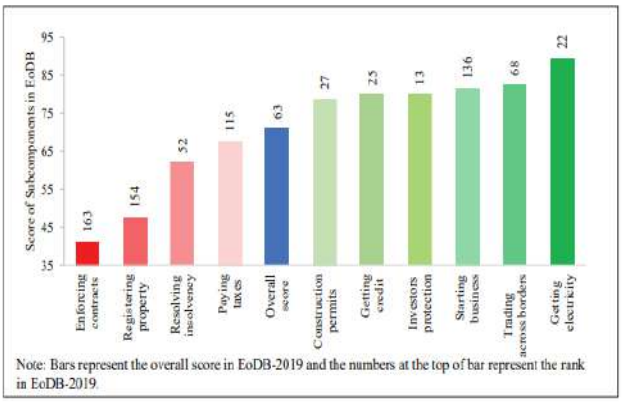
Corporate Sector Performance

- The recovery was led by iron and steel, food products, cement, automobile, and pharmaceutical companies.

Ease of Doing Business

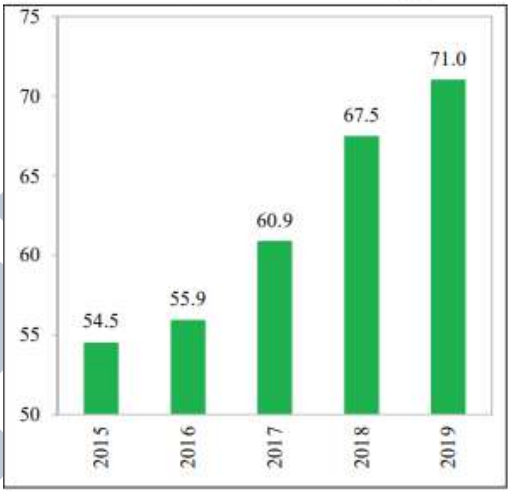
- As per the Doing Business Report (DBR), 2020, the rank of India in the Ease of Doing Business (EoDB) Index for 2019 has moved upwards to the 63rd position amongst 190 countries from a rank of 77 in 2018.

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



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

Figure 13b: India's Score in Ease of Doing Business (DB17-20 methodology)



Start-up India

- To facilitate the growth of startups, GoI had announced the "Startup India, Stand-up India" initiative.
- The action plan is based on the three pillars "Simplification and Handholding", "Funding Support and Incentives", and "Industry-Academia Partnership and Incubation".
- As on December 23, 2020, GoI has recognized a total of 41061 startups and 4,70,000 jobs have been reported by more than 39,000 startups.

Initiative Taken by GoI to Support Startups in India:

- Startups Intellectual Property Protection (SIPP) scheme enables a start-up to seek assistance from any empanelled facilitator to file and prosecute their application.
- The Fund of Funds for Startups (FFS) with a total corpus of Rs. 10,000 crores was established.
- So far 319 startups have been granted income tax exemptions till November-2020.
- start-up have been provided 80 per cent rebate in patent filing fees and 50 per cent rebate on trademark filing fees.

Foreign Direct Investment (FDI)

- The proactive policy measures and improvement in the ease of doing business in the country resulted in massive improvement in FDI inflows.
- The FDI equity flows have been on the upswing since FY13.
- The bulk of FDI equity flow is in the non-manufacturing sector leading to a reduction in the share of manufacturing in the FDI flows .
- Within the manufacturing sector, industries like automobile, telecommunication, metallurgical, non-conventional energy, chemical (other than fertilizers), food processing, and petroleum & natural gas get the bulk of FDI equity flows.

SECTOR WISE ISSUES AND INITIATIVES

Steel

- India is the second-largest producer of crude steel only after China. India is also the second largest consumer of steel.

Clean Coal

- Creating carbon sink: About 54500 ha land has been brought under green cover by planting 132 million trees - estimated carbon sink of 2.7 lakh tonnes of CO2 equivalent/year. Plan to cover 20000 ha of additional area by plantation of around 50 million trees by 2030.
- Two Coal Bed Methane (CBM) Projects with considerable potential for carbon footprint reduction are in the pipeline
- Surface coal gasification projects (100 million tonnes (MT) coal by 2030) with relatively lesser carbon footprint.
- First mile connectivity projects: transportation of coal from pitheads to dispatch points.

Micro, Small & Medium Enterprises (MSME):

- With more than 6 crores MSMEs, the sector has been the backbone of the economy and plays a crucial role in employment generation and in contribution to GDP.

Figure 17: FDI Equity Flow to Manufacturing and Non-Manufacturing Sector

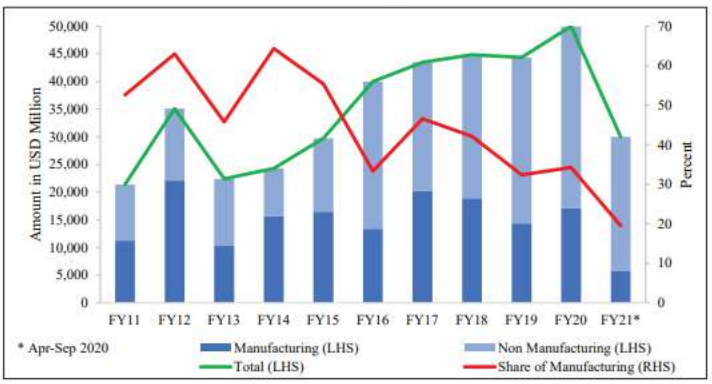


Table 9: Definition of MSME Se

Earlier MSME Classificatio

Criteria: Investment in Plant & Machiner		
Classification	**Micro**	**Small**
Manufacturing	Investment less than ₹ 25 lakhs	Investment gr than ₹ 25 lakh less than ₹ 5 c
Service	Investment less than ₹ 10 lakhs	Investment gr than ₹ 10 lal less than ₹ 2 c

Revised MSME Classificatio

Composite Criteria: Investment And An		
Classification	**Micro**	**Small**
Manufacturing & Services	Investment less than ₹ 1 crores and Turnover less than ₹ 5 crores	Investment great ₹ 1 crores & les ₹ 10 crores a Turnover greate ₹ 5 crores & les ₹ 50 crore

Source: Ministry of MSME.

Production Linked Incentive Scheme (PLI)

- The scheme will be implemented by the concerned ministries with an overall expenditure estimated at Rs 1.46 lakh crores and with sector specific financial limits.
- The scheme will make Indian manufacturers globally competitive, attract investment in the areas of core competency and cutting-edge technology; ensure efficiencies, create economies of scale, enhance exports, provide conducive manufacturing ecosystem, and make India an integral part of the global supply chain.

Sector in PLI	Estimated Expenditure (₹ Crores)
Advance Cell Chemistry Battery	18,100
Electronic/Technology Products	5,000
Automobiles & Auto Components	57,042
Pharmaceuticals Drugs	15,000
Telecom & Networking Products	12,195
Textile Products	10,683
Food Products	10,900
High Efficiency Solar PV Modules	4,500
White Goods (ACs & LED)	6,238
Specialty Steel	6,322
Total	1,45,980

Textile and Apparels:

- The textile and apparel industry contributed 2 per cent in the overall GDP and 11 per cent of total manufacturing GVA in FY20 and provided total direct and indirect employment of about 10.5 crore people.
- The GoI is implementing several schemes cutting across sectors such as the Amended Technology Upgradation Fund Scheme (ATUFS), Scheme for Integrated textiles park (SITP) and a scheme called Samarth.
- SITP is for providing world class infrastructure facilities. Of the 56 textile parks which were sanctioned under SITP, 23 have been completed so far.
- Samarth focusses on capacity building in the textile sector.
- India is the sixth-largest exporter of textile and apparel products after China, Germany, Bangladesh, Vietnam, and Italy.

INFRASTRUCTURE

- GoI launched the National Infrastructure Pipeline (NIP) for the FY 2020-2025 to facilitated world class infrastructure projects to be implemented.
- This first of its kind initiative will boost the economy, generate better employment opportunities, and drive the competitiveness of the Indian economy.
- It is jointly funded by the Central Government, State Government, and the private sector.

- The GoI set up the Public Private Partnership Appraisal Committee (PPPAC) responsible for the appraisal of PPP projects in the Central sector.
- The GoI approved the continuation of the revamped Infrastructure Viability Gap Funding (VGF) scheme till 2024-25.
- Revamping of the proposed VGF scheme will attract more PPP projects and facilitate the private investment in the social sectors (Health, Education, Waste Water, Solid Waste Management, Water Supply etc.).

Road Sector

- The road network is the backbone of the transport system in India and it is very well integrated with the multi-modal system of transportation, which provides crucial links with airports, railway stations, ports, and other logistical hubs.
- Total investment in the Roads and Highway sector has gone up more than three times in the six years period from FY15 to FY20.

Civil Aviation:

- India's domestic traffic has more than doubled from around 61 million in FY14 to around 137 million in FY20, a growth of over 14 per cent per annum.
- From the third largest domestic aviation market, it is expected to become the third largest overall (including domestic and international traffic) by the year FY25.

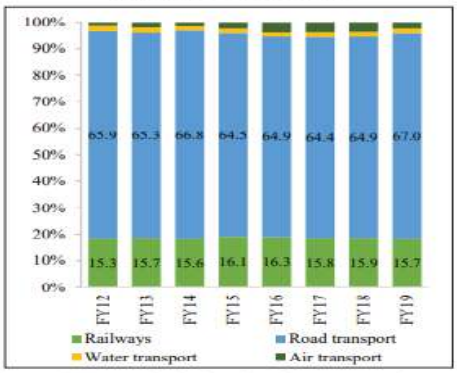
Port and Shipping:

- In India, around 95 per cent (68 per cent) of total volume (value) of international trade is transported by sea
- India is endowed with a rich coastline of ~7500 km and has a strategic location on key international maritime trade routes.
- The Sagarmala program has identified 500+ projects under four pillars— 211 port modernization projects, 200 port connectivity projects, 32 port-led industrialization projects, and 62 coastal community development projects which can unlock the opportunities for portled development.
- GoI has also been striving to improve operational efficiencies of major ports through mechanization, digitization, and process simplification.
- The average turnaround time in FY20 improved to 61.75 hours as against 126.96 hours in FY11 and 96 hours in FY15.

Railways:

- Indian Railways (IR) with over 67,580 route kms, is the third-largest network in the world under single management.
- IR endeavours to provide safe, efficient, and competitive means of transport by adopting technological changes including through development of specific indigenous systems.
- The IR accorded the highest priority to safety and took various measures on a continuous basis to prevent accidents and to enhance safety.
- The GoI has allowed the private players to operate in the Railways sector through the PPP mode under the "New India New Railway" initiative.
- The initiative is expected to garner an investment of about Rs30,000 crores from the private sector.
- Ministry of Railways has identified over 150 pairs of train services for the introduction of 151 modern train sets or rakes through private participation.
- To develop capacity- both infrastructure and rolling stock- ahead of demand, the Ministry of Railways has developed a National Rail Plan (NRP).

Figure 25: Share of Road Transport in total Transport GVA



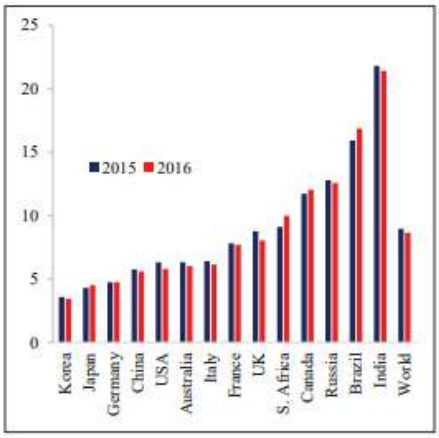
Source: Survey calculations based on MoRTH data.

- It aims at developing adequate rail infrastructure by 2030 to cater to the projected traffic requirements up to 2050.
- NRP has attempted to map the entire transport infrastructure of the country on a common platform.

Telecom Sector

- The sector has been recognized all over the world as a powerful tool for development and poverty reduction.
- The GoI has laid considerable emphasis on broadband for all as a part of its Digital India Campaign.
- The overall teledensity in India stands at 86.6 per cent at the end of November-2020,
- whereas teledensity in rural and urban areas are 59.1 per cent and 139.0 per cent respectively.
- Under the Bharat Net project, network infrastructure is being established for Broadband Highways, accessible on a non-discriminatory basis to provide affordable broadband services to citizens and institutions in rural areas, in partnership with States and the private sector.

Figure 43: T&D Loss of India vis-à-vis other countries



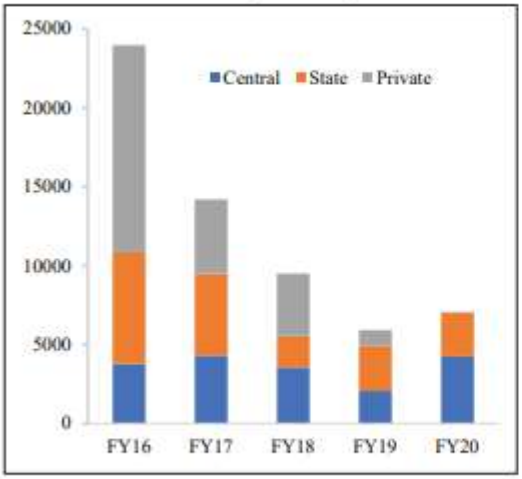
Petroleum and Natural Gas:

- India is the third-largest energy consumer in the world after USA and China.
- With a share of 5.8 per cent of the world's primary energy consumption, the Indian energy consumption basket is primarily dominated by Coal and Crude Oil.
- During FY21 (Apr-Dec), oil production registered a decline of 5.7 per cent as compared to the corresponding period in FY20.

Power

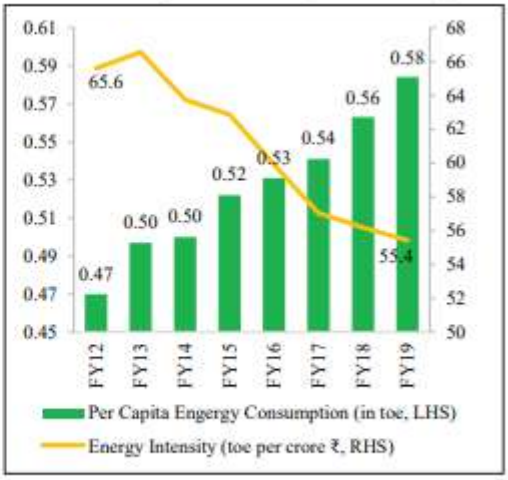
- The power sector has witnessed substantial transformation from both the demand (universal electrification) and supply-side (the advent of green energy).
- The decline in energy deficit may be partially attributed to enhanced energy efficiency and improved energy intensity in India.
- Energy intensity is defined as the quantity of energy required to produce a unit of output.

Figure 41: Capacity Addition in Power (in MW)



Source: Survey calculations based on Ministry of Power data.

Figure 42: Energy intensity and Per capita Consumption trend (2011-2019)



Source: Survey calculations based on Ministry o Power data.

Mining Sector

- India produces as many as 95 minerals which include 4 hydrocarbon energy minerals (coal, lignite, petroleum & natural gas), 5 atomic minerals (ilmenite, rutile, zircon, uranium, and monazite), 10 metallic, 21 non-metallic, and 55 minor minerals.
- Under Atmanirbhar Bharat Abhiyan, the GoI announced major initiative on 16.05.2020, which inter alia include:
  - (1) introduction of a seamless composite exploration-cum-mining-cum-production regime;
  - (2) 500 mining blocks to be offered through an open and transparent auction process;
  - (3) joint auction of bauxite and coal mineral blocks;
  - (4) removal of distinction between captive and non-captive mines;
  - (5) Mineral index for different mineral;
  - (6) rationalization of stamp duty.

Housing and Urban Infrastructure:

- The GoI has been implementing the DeendayalAntyodayaYojana - National Urban Livelihoods Mission in all the statutory townsto addressthe social & occupational vulnerabilities of the urban poor.
- Under the mission, urban poor are imparted skill training for self and wage employment and assisted in setting up self-employment ventures by providing credit atsubsidized rates of interest.
- Pradhan MantriAwasYojan-Urban (PMAY-U) has so far approved more than 109 lakh houses of which over 70 lakh houses have been grounded for construction. More than 41 lakh houses have been completed and delivered.

PM Street Vendor's AtmanirbharNidhi (PM SVANidhi):

- This scheme targets to benefit over 50 lakhs street vendors who had been vending on or before March 24, 2020, in urban areas.
- Under the Scheme, the vendors can avail a working capital loan of up to Rs10,000, which is repayable in monthly instalments in the tenure of one year.
- On timely/ early repayment of the loan, an interest subsidy @ 7 per cent per annum will be credited.

WAY FORWARD

- The crisis management strategy had to encompass all the stakeholders, especially the weaker and the vulnerable sections.
- The FY21 can be summarized in the lines of Saint Francis of Assisi "Start by doing what's necessary, then do what's possible, and suddenly you are doing the impossible" because as Albert Einstein said, "In the midst of every crisis, lies great opportunity."

Chapter 09- Services

SERVICES SECTOR PERFORMANCE IN INDIA: AN OVERVIEW

Impact of COVID-19 on Services Sector

- The contact intensive services sector was severely impacted, particularly sub-sectors such as tourism, aviation, and hospitality.
- Indian airlines were grounded for about two months.
- Bank credit growth YoY to services sector had moderated significantly between September 2018 and December 2019.

Service sector share at the State and UT level:

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

FDI Inflows into Services Sector

- India improved its position from 12th in 2018 to 9th in 2019 in the list of the world's largest FDI recipients according to the latest World Investment Report 2020 by United Nations Conference on Trade and Development (UNCTAD).

Trade in Services Sector:

- India has a significant presence in the services sector exports. It remained among the top ten trading countries in commercial services in 2019 accounting for 3.5 per cent of world services exports.

MAJOR SERVICES: SUB-SECTOR WISE PERFORMANCE AND RECENT POLICIES

- Aviation and tourism declined sharply in 2020.
- Only 2.46 million foreign tourist arrived in India during January-June 2020 as compared to 5.29 million during January-June last year.

Tourism Sector

- Tourism sector is a major engine of economic growth that contributes significantly in terms of GDP, foreign exchange earnings and employment.
- In order to evacuate Indians stranded abroad after the breakout of the Covid-19 pandemic and the resultant lockdowns across the world, Vande Bharat Mission was launched in early May.
- India ranked 23rd in the world in terms of international tourist arrivals in 2019, falling slightly from the 22nd position in 2018.
- The top five states attracting foreign tourists are Tamil Nadu, Maharashtra, Uttar Pradesh, Delhi and West Bengal.
- India ranked 34th in Travel and Tourism Competitiveness Index, improving significantly from its rank of 65 in 2013.
- Tourism contributed 5 per cent share to India's total GDP in 2018-19.
- It also supports almost 13 per cent of total employment in India.

IT BPM Services

- Over the last six years, IT services has constituted the majority share (over 50 per cent) of the IT-BPM sector.
- Out of the total US$ 146.55 billion in exports of the IT-BPM sector in 2019-20, IT services contributed US$ 79.1 billion, accounting for 54 per cent of the exports.
- Looking at country-wise distribution of export revenues, USA remained the biggest recipient of exports, amounting to US$ 91 billion.

Ports, Shipping and Waterways Services

- Ports handle around 90 per cent of export-import cargo by volume and 70 per cent by value in India.
- A consistent growth of around 6 per cent was maintained in overall port traffic between 2015-16 and 2018-19.
- The turnaround time of ships, which is a key indicator of efficiency of the ports sector, has declined from 4 days in 2014-15 to 2.62 days in 2020-21.
- As per the latest UNCTAD data, the median ship turnaround time globally is 0.97 days, suggesting that India has room to further improve upon the efficiency at ports.
- The vision of the Sagarmala Programme is to reduce logistics cost of Exports-Imports and domestic trade with minimal infrastructure investment.
- This includes
    - reducing the cost of transporting domestic cargo;
    - lowering logistical cost of bulk commodities by locating future industrial capacities near the coast;
    - improving export competitiveness by developing port proximate discrete manufacturing clusters, etc.

Space Sector

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

Prospects for commercialization and attracting private investment in the space sector

- New Space India Limited (NSIL), a Central Public Sector Enterprise under Department of Space, has been mandated to transfer the technologies emanating out of Indian space programme and enable Indian industry to scale up high-technology manufacturing base.
- Government of India has also established Indian National Space Promotion and Authorisation Centre (IN-SPACe) for promoting industries and attracting investment in space sector.
- Further, ISRO would be sharing its infrastructure, transfer technology know-how for production and spin-off.
- As per industry estimates, there are more than 40 start-ups working in India with funding, teams and structure on space and satellite projects complimenting the efforts of government.
- The commercial satellite industry is accounting for nearly 75 per cent of global space business.

As percentage to GDP							
Expenditure on Social Services	6.2	6.6	6.8	6.7	6.7	7.5	8.8
of which:							
i) Education	2.8	2.8	2.8	2.8	2.8	3.0	3.5
ii) Health	1.2	1.3	1.4	1.4	1.4	1.5	1.8
iii) Others	2.1	2.5	2.6	2.4	2.6	3.0	3.5

Chapter 10 : Social Infrastructure, Employment and Human Development

INTRODUCTION

- The lockdown had an inevitable impact on the vulnerable and informal sector, the education system, and on the economy as a whole.

TRENDS IN SOCIAL SECTOR EXPENDITURE

- The expenditure on social services (education, health and other social sectors) by Centre and States combined as a proportion of GDP increased from 6.2 to 8.8 per cent during the period.
- In subsequent announcements, additional support cumulating to Rs 29.88 lakh crore up to November 2020 was announced. Of these, provision for Rs 4.31 lakh crore made for social sector includes PMGKY and PMGKY Anna Yojana, housing and health.

HUMAN DEVELOPMENT

- India's rank in Human Development Index (HDI)1 was 131 in 2019, compared to 129 in 2018, out of a total 189 countries according to UNDP Human Development Report, 2020.
- The value of HDI for India has increased from 0.579 in 2010 to 0.645 in 2019.

QUALITY EDUCATION FOR ALL

- While India has attained a literacy level of almost 96 per cent at the elementary school level, it is still behind in achieving 100 per cent literacy.
- Female literacy remained below national average among social groups of SC, ST, OBC, including religious groups of Hinduism and Islam.
- The age specific attendance ratio (ASAR) indicates the proportion of children of a particular age group actually attending schools/colleges irrespective of the level or class in which they are studying.

Programmes and Schemes for School Education during 2020-21

SamagraShiksha: It is an overarching programme for the school education sector extending from preschool to class 12. The main outcomes of the Scheme are envisaged as Universal Access, Equity and Quality including Vocational Education, Inclusive Education, increased use of Technology and strengthening of Teacher Education Institutions (TEIs)

Holistic approach to education: Treat school education holistically as a continuum from Pre-school to Class 12 with inclusion of support for senior secondary levels and pre-school levels for the first time.

Table 2: Trends in India's HDI Value and its Sub-components

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

Focus on Quality of Education:

- Enhanced focus on improving quality of education and learning outcomes by focus on the two T's – Teachers and Technology.
- Enhanced Capacity Building of Teachers and School Heads, BRC, CRCs.
- Focus on strengthening Teacher Education Institutions like SCERTs and DIETs to improve the quality of prospective teachers in the system.
- Annual Grant per school for strengthening of Libraries: Library grant of Rs 5,000 to Rs 20,000/-

Focus on Digital Education:

- Enhanced use of digital technology in education through smart classrooms, digital boards and DTH channels and ICT infrastructure in schools from upper primary to higher secondary level.

Strengthening of Schools:

- Improve the Quality of Infrastructure in Government Schools at all levels.
- Enhanced Transport facility to children from classes I to VIII for universal access to schools

Focus on Girl Education:

- Upgradation of Kasturba Gandhi BalikaVidyalayas (KGBVs) from Class 6-8 to Class 6-12.
- Self-defence training for girls from upper primary to senior secondary stage

National Education Policy (NEP) 2020

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

- A new and comprehensive National Curriculum Framework for school education, Early Childhood Care & Education, Teacher Education and Adult Education.
- By 2030, the minimum degree qualification for teaching will be a 4-year integrated B.Ed. degree

Initiatives for school going students during COVID-19 pandemic

- PM eVIDYA : The four PM e-Vidya components of school education are:
  - One nation, one digital education infrastructure
  - One class, one TV channels through SwayamPrabha TV Channels
  - Extensive use of Radio, Community radio and Podcasts:
  - For the differently-abled: One DTH channel is being operated specifically for hearing impaired students in sign language.
- Swayam MOOCs for open schools and pre-service education:
- Funding support for digital initiative:
- National Repository of Open Educational Resources (NROER)
- PRAGYATA guidelines on digital education

SKILL DEVELOPMENT

- There is an improvement in the proportion of skilled people over the annual cycle of Periodic Labour Force Survey (PLFS) across rural, urban and gender classification.

Policy Reforms:

- Operationalizing Unified Skill Regulator: A significant step to make the skill ecosystem more dynamic and credible has been undertaken through the operationalization of the unified skills regulator- National Council for Vocational Education and Training (NCVET).
- Pradhan MantriKaushalVikasYojana 3.0 (PMKVY 3.0): First phase of PMKVY 3.0 was rolled out in 2020-21 with a tentative target to skill 8 lakh candidates including migrants
- The grading of ITIs has been undertaken to improve their quality and transparency.
- Integration of Vocational and Formal education both at school and higher education under national education policy.

STATUS OF EMPLOYMENT

- The size of labour force in 2018-19 was estimated at about 51.8 crore persons: about 48.8 crore employed and 3.0 crore unemployed.
- The females labour force participation rate increased from 17.5 per cent in 2017-18 to 18.6 per cent in 2018-19.
- Industry-wise estimates on workforce shows that the largest, about 21.5 crore persons are employed in 'Agriculture', which is still the largest employer with 42.5 per cent of workforce.
- Next important industry is ‘other services’ where about 6.4 crore persons (13.8 per cent) were engaged.
- The proportion of regular wage/salaried employees saw an increase in both rural & urban areas and for both males & females.

Formal Employment

- The net payroll data of Employees' Provident Fund Organisation (EPFO) as on 20th December, 2020 shows a net increase of new subscribers in EPFO of 78.58 lakhs in 2019-20.

Unemployment

- Unemployment rates at all India level, for all ages, as per usual status, declined marginally to 5.8 per cent in 2018-19 from 6.1 per cent in 2017-18.
- The highest decline in unemployment rates is seen among those who have received formal vocational/ technical training.

- The level of unemployment is recorded the highest, 20.2 per cent, among urban youth (age 15-29 years) and the lowest for the subgroup 'not literates' at 1.1 per cent among the persons of age 15 years and above with different educational attainments.

Labour Reforms

- Nearly 29 Central Labour laws are being amalgamated, rationalized and simplified into four labour codes viz.:
  - (i) the Code on Wages, 2019,
  - (ii) the Industrial Relations Code, 2020,
  - (iii) the Occupational Safety, Health and Working Conditions Code, 2020
  - (iv) the Code on Social Security, 2020

Changing Nature of Work: Gig and Platform Workers

- Digital platforms have emerged as enablers for employment creation with the power to easily discover job seekers and job providers in the absence of middlemen.
- Flipkart, Ola, Uber, Urban Clap, Zomato, Swiggy etc. India has emerged as one of the largest country for flexistaffing in the world.
- The nature of job contract for a gig worker is different from the contract between an employer and employee/worker.
  - Their labour contract is usually shorter and more specific to the task or job assigned.
  - Their employment type might be either temporary or contractual and certainly not regular.
  - The nature of payment against the work is more of piece rate, negotiable, may be as wage or partly as profit/reward than a fixed salary.
  - The control over their work by employer varies in degree but in any case, is not full.
  - The workers most of the time are flexible to decide on when to work, where to work etc.
- These class of workers have been brought under the ambit of the newly introduced Code on Social Security 2020 to provide social security benefits.

Impact of COVID-19 on the Labour Market:

- COVID-19 has exposed the vulnerability of urban casual workers, who account for 11.2 per cent of urban workforce (All-India) as per PLFS.

Programmes and schemes to improve employment opportunities:

- Payment of Entire employees' and employers' contribution (12 per cent of employees' EPF and 12 per cent of employers' EPF contribution or statutory rate applicable to establishment).
- Pradhan MantriRojgarProtsahanYojana (PMRPY): Under the scheme,
  - Government of India was paying 8.33 per cent of the employer EPS contribution for all sectors in respect of these new employees.
  - Under the scheme, benefits have been provided to 1.21 crore beneficiaries through 1.52 lakh establishments.
- Allowed premature withdrawal from the EPFO
- Under Prime Minister's GaribKalyan Package (PMGKP) financial assistance was given to building & other construction workers (BOCW).

GENDER DIMENSION OF EMPLOYMENT

- LFPR of females in the productive age (15-59 years) was 26.5 per cent in 2018-19, as compared to 80.3 per cent for males (rural+urban).
- It is observed that time spent by a female on unpaid domestic services and unpaid caregiving services to household members is prominent and higher than male counterparts.
- Similarly, among unpaid domestic services for household members, females spent most of the time in food, meal management and preparation.

- The unpaid domestic and caregiving services provided by women are not influenced by their level of education.
- In order to incentivise more women to join into the labour force, investment in institutional support to affordable and quality child care facilities, paid paternal leave, family-friendly work environment, and support for elderly care needs to be made.

HEALTH

- India has made significant progress in improving its health outcomes over the last two decades by eliminating Polio, Guinea worm disease, Yaws and maternal & neonatal Tetanus.
- Health indicators shows, Total Fertility Rate (TFR) has reduced sharply from 3.6 in 1991 to 2.2 in 2018.
- Maternal Mortality Ratio (MMR) was 113 per 1,00,000 live births for the period 2016- 2018 and Under Five Mortality Rate (U5MR) was 36 per 1000 live births in 2018.
- Accredited Social Health Activists (ASHAs): ASHAs played a key role in the country's response for prevention and management of the COVID-19.

Child health outcomes:

- The cash incentives for institutional delivery of pregnant women and ASHAs under Janani Suraksha Yojana (JSY) and conditional cash transfer under Pradhan MantriMatruVandanaYojana (PMMVY) aims to reduce maternal and infant mortality rates.
- NFHS-5 shows significant improvement in the institutional birth in selected States.
- Infant mortality rate and under five mortality rate have declined in most of the selected States in NFHS-5 compared to NFHS-4.
- To address the problem of malnutrition in the country, Anganwadi Services, Pradhan MantriMatruVandanaYojana and Scheme for Adolescent Girls under the Umbrella Integrated Child Development Services Scheme (ICDS) are some targeted interventions of the Government.

AYUSH:

- About 12,500 HWCs to be set up through National AYUSH Mission.
- The AYUSH HWCs would be created by upgrading existing AYUSH dispensaries (10000) and Sub Health Centres (2500) to provide comprehensive primary health care

WATER AND SANITATION

Swachh Bharat Mission-Grameen (SBM-G)

- UNICEF study on 'Access to Toilets and Safety, Convenience and Self-respect of Women in Rural India' (February, 2020), states that 91 per cent of the women reported that they have been able to save upto an hour and do not have to travel up to a kilometre for defecation after the construction of toilets.
- Phase-II of SBM(G) from 2020-21 to 2024-25 is being implemented with a total outlay of Rs 1,40,881 crores focusing on Open Defecation Free (ODF) sustainability and Solid & Liquid Waste Management (SLWM) through convergence between different verticals.

Jal Jeevan Mission (JJM)

- Keeping with 'no one is left out' principle, 18 districts in the country spread across Gujarat (5), Telangana (5), Himachal Pradesh (1), Jammu & Kashmir (2), Goa (2) and Punjab (3) have become 'HarGhar Jal districts'.

RURAL DEVELOPMENT

COvid Measures:

- The first of measures announced under the PMGKP in March, 2020 included cash transfers of uptoRs 1000 in two instalments of Rs 500 each to the existing old aged, widowed and disabled beneficiaries under the National Social Assistance Programme (NSAP).

- Free distribution of gas cylinders to about 8 crore families for three months was also undertaken.
- Limit of collateral free lending for 63 lakh women SHGs increased from Rs 10 lakhs to Rs 20 lakhs which would support 6.85 crore households.

DeenDayalAntyodayaYojana-National Rural Livelihoods Mission (DAY-NRLM):

- DAY-NRLM seeks to alleviate rural poverty through building sustainable community institutions of the poor.
- The mission aims at mobilizing about 9-10 crore households into SHGs and link them to 'sustainable livelihoods opportunities by building their skills and enabling them to access formal sources of finance.
- Cumulative progress (upto December 2020) shows that about 7.26 crore households have been mobilized into 66.03 lakh SHGs under the mission.

Pradhan Mantri Gram SadakYojana (PMGSY):

- The PMGSY has completed two phases and third phase has been launched with the target allocation of 1.25 lakh km all-weather road connectivity.
- More than 6.44 lakh km road length has been constructed so far under the Scheme.

GaribKalyanRojgarAbhiyan (GKRA):

- The major objectives of the initiative include the provision of livelihood opportunities to returning migrants and similarly affected rural citizens, saturate villages with public infrastructure viz. roads, housing, anganwadis, panchayat bhavans, various livelihood assets and community complexes, among others and a basket of a wide variety of works.
- The Abhiyan started with a resource envelope of Rs50,000 crore with estimated employment generation of 40.34 crore person-days from 20th June, 2020 to 22nd October, 2020.

CONCLUSION:

- The government is committed to invest in social sector viz education, healthcare, skill development, providing employment opportunity, housing, sanitation etc in order to bring overall improvement in socio-economic indicators and achieving SDGs.

Box 8: Jal Jeevan Mission (JJM)

- Goal of JJM is to enable every rural household get assured supply of potable piped water at a service level of 55 litres per capita per day (lpcd) regularly on long-term basis by ensuring functionality of the tap water connections
- To provide FTWC to every rural household by 2024 with a total outlay of ₹ 3.60 lakh crore in partnership with States.
- JJM is a decentralized, demand-driven and community-managed programme with the Gram Panchayat and/ or its sub-committee, i.e. Village Water and Sanitation Committee (VWSC)/ Paani Samiti/ User Group, etc. playing a key role in planning, implementation, management, operation and maintenance of water supply systems.
- JJM envisions empowering water supply department and local communities to function as water utilities for long-term water security in the country.