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ECONOMICS DATA

PAPER III- IMPORTANT FACTS AND FIGURES

FOR UPSC MAINS 2020



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PURPOSE OF THE ECONOMICS DATA DOCUMENT

The given document pertains solely to important data, which can be used by the student for content enrichment in answers related to Paper-III in UPSC Mains Examination, 2020.

The data contained in the document is a collection and amalgamation of all the important facts and figures.

Further, each point must be treated as independent of the other.

The data for all the topics of economics have been covered therein.

HOW TO MAKE USE OF THE DATA

The data is divided topic-wise, and can be used in any question relating to the mentioned topic/ sub-topic. It can be used in the following ways-

- The data can be used in introductions
- Also, it can be used to support arguments in the body part of the answer
- Further, recommendations and committee names could be utilised to formulate and/ or enrich conclusions.

For maximum benefit, this material should be used as a source, in addition to the Economic Survey.

Much data has been represented and provided in the form of attractive tables and charts, which will aid the memorization of essential facts and facets and make the same easier. Further, these tables can be emulated as it is in answers in order to increase the visual appeal of the latter.

The student may keep this document as a ready-reference material for rather quick revisions before the exam.

Economics Data, Paper III- Important Facts and Figures for UPSC Mains 2020

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1. Fiscal Policy

14th Finance Commission had mandated prudent levels of both fiscal deficits (3% of state GDP) and debt to GDP ratio (25%) that must not be breached.

1.1. Gross Fiscal Deficit (GFD)

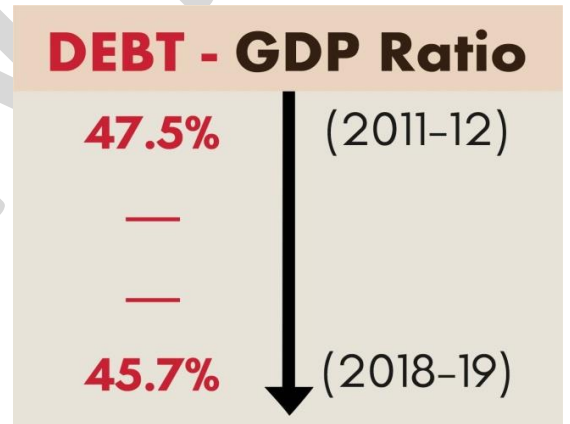
- GFD as a % of GDP has been on a **declining trend since 2012-13**.
- In 2019-20, the Centre's fiscal deficit was 3.3% of GDP down from 3.4% of GDP in 2018-19.
- The year 2019-20-decelerating growth rate experienced in the first half of the year.
- The Medium Term Fiscal Policy (MTFP) Statement presented with the Budget 2019-20, pegged the **fiscal deficit target for 2019-20 at 3.3% of GDP and 3% of GDP in 2020-21, continuing at the same level in 2021-22**.
- Considering the urgent priority of the Government to revive growth in the economy, the fiscal deficit target may have to be relaxed for the current year.

S.NO	SECTOR	GOAL	TARGET
1.	Overall economy	\$ 5 trillion	2024
2.	Manufacturing industry	\$ 1 trillion	2025
3.	Disinvestment	₹ 2.1 lakh crore	This financial year
4.	Infrastructure investment	\$ 4.5 billion	2040

S.No	YEAR	TARGET
1)	2019-20	3.3% OF GDP
2)	2020-21	3% OF GDP
3)	2021-22	3% OF GDP

1.2. Trends in the Debt to GDP Ratio

- According to the status paper, presently the Government's debt portfolio is characterized by favorable sustainability indicators: The share of short-term debt is within safe limits and has stabilized after some rise during 2005 to 2012.
- Increased reliance on Extra Budgetary Resources (EBRs): Over the years, the government's reliance on EBRs such as funds of state-owned enterprises like the LIC, SBI etc. to fund public programmes has increased. However, it does not appear in real time fiscal deficit numbers. CAG has raised concern about rising off budget (Extra-Budgetary) borrowings. Further, the 15th Finance Commission in its initial report recommended for both the Centre and States to eliminate EBRs.



Parameters	2017-18 (as % of GDP)	2018-19 (as % of GDP)	Remarks
Public Debt	41%	40.0%	Decreased.
Internal debt	37.4%	37.3%	Decreased.
External debt	2.8%	2.7%	Decreased
Central Govt. (GoI) Liabilities	45.8%	45.7%	Decreased.

- It was further projected that Central Government liabilities will come down to 48.0% of GDP in 2019-20, 46.2% of GDP in 2020-21 and 44.4% of GDP in 2021-22.

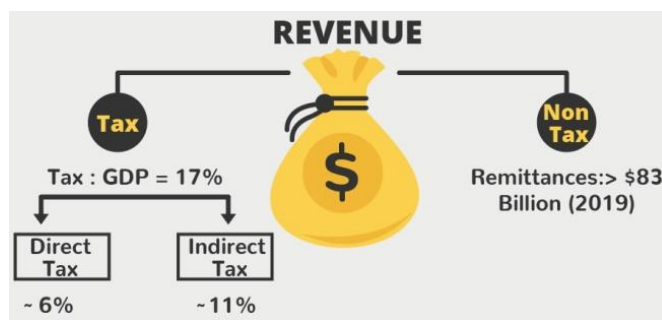
1.3. Expenditure

- Erosion of development expenditure suggests that the quality of expenditure is compromised by a combination of higher revenue expenditure (more than 80% of the total expenditure) and lower capital expenditure.
- Central Government budgetary expenditure is envisaged to increase by one percentage point of GDP in 2019-20. The entire increase is on revenue account with capital spending remaining unchanged as per cent of GDP.
- The Budget 2019-20 envisages an increase in expected grants and loan to States relative to 2018-19 RE, on account of higher requirements under compensation to States for revenue losses on roll out of GST, grants to rural and urban bodies and releases under Samagra Shiksha.

1.4. Revenue

Remittances are a major source of income for families of Diaspora in India.

- Indian diaspora contributed over \$83 billion (growth of 5.5%) in 2019 in terms of remittances.
- However, World Bank Group has made projection that remittances by Indian diaspora are set to decline by around 23% this year, due to the COVID-19-induced economic crisis.



1.5. Cooperative Federalism

- Both in absolute terms and as a % of GDP, total transfers to States have risen between 2014-15 and 2018-19 RE.
- The state governments are now responsible for a considerable share of total government spending (60%) and borrowings.
- The debt to GDP ratio for States has risen since 2014-15 owing to the issuance of UDAY bonds in 2015-16 and 2016-17, farm loan waivers, and the implementation of Pay Commission awards.
- The financing pattern of Gross Fiscal Deficit for States has changed over the years. Financing via market borrowings has increased from 61.6 per cent in 2015-16 to 73.7 per cent in 2018- 19 RE.
- Cesses And Surcharges- Largest among them was GST compensation cess (35% of total).
- The past two financial years also show a rise in the share of cesses and surcharges as per available Budget estimates
- Overall decrease in the divisible pool shared with states: Due to over-reliance of the Centre on cesses and surcharges, the share of states in the Centre's Gross Tax Revenue has declined from 36.6% in FY19 to 32.4% in FY20 (far from the 42% stipulated by 14th Finance Commission).
- The Union Government has imposed cess taxes for purposes such as hygiene, agriculture, state and rural roads, all of which are matters within the State List. This indirectly affects the Federal character of our polity.

1.6. States' Performance

- At least 20 states have breached the threshold of a debt-to-GDP ratio of 25 percent, according to the RBI report
- States' gross fiscal deficit (GFD) has remained within the FRBM threshold of 3% of gross domestic product (GDP) during 2017-18 and 2018-19. For 2019-20, states have budgeted for a consolidated GFD of 2.6% of GDP with a marginal revenue surplus (as against revenue deficits in the previous three years).
- Outstanding debt of states has risen over the last five years to 25% of GDP, posing medium-term challenges to its sustainability.
- Combined fiscal deficit of the central and the state governments could cross 10% of the GDP during this year which was about 7-7.5% last year.
- India's debt-to-GDP ratio is likely to increase to 84% in FY21 from an already high level of 72% as per rating agencies like Moody's and Fitch.

1.7. State Government Debt

- As estimated by Ninth Edition of the Status Paper on the Government Debt, the debt-GDP ratio of States has decreased to 24.8% in 2019 from 25.0% in 2018.
- The outstanding liabilities of the State Governments have been consistently registering double digit growth since 2012-13 with the exception of 2014-15 and 2018-19.
- Loans from the Centre have been decreasing over the years and accounted for 3.7% of total liabilities in 2019.
- Although the state governments have regularly met their fiscal deficit target of 3% of the GDP (except during 2016-17), it was mainly on account of reducing their expenditure (mostly towards social & infrastructural sectors) and increasingly borrowing from the market.
- Establishing an Independent Fiscal Council to monitor fiscal policies, help attain fiscal targets and keep a check on the fiscal consolidation of the Centre and states- suggested by the N K Singh Committee.

1.8. Gender Budgeting

- Women constitute 48% of India's population but they lag behind men on many social indicators like health, education, economic opportunities etc. India adopted gender budgeting in 2004-05, however this exercise has not been fruitful. The overall quantum of the gender budget is still less than 1% of the GDP (0.63% in 2019-20). Further, there is lack of utilization of existing funds also, such as 89% of the Nirbhaya Fund (a fund allocated for women's safety) have remained unutilized by the states. About 16 states in India currently undertake gender budgeting.



2. Taxation

- India's Tax-to-GDP ratio stands at around 17% in FY 20 (direct tax is ~6% and indirect tax is ~11%) which still remains below that of emerging economies (~21%) and much below OECD average (~34%).

Tax : GDP → A COMPARISON

INDIA	EMERGING ECONOMIES	OECD ECONOMIES
~17%	~21%	~34.1% (average)

- The direct taxes, comprising mainly of corporate and personal income tax, constitute around 54 per cent of GTR. Receipts from corporate and personal income tax have improved over the last few years.
- 57.8 million Individuals filed the income tax return (~5% of the population) of which only 15 million (~1.15% of the population) actually paid taxes.
- The ratio of central taxes to GDP slid to a 10-year low of 9.88% (direct tax fell to its lowest in 14 years, at 5.1%, while the indirect tax was at a 5-year low at 4.6% in FY20).
- The tax collections missed budgeted targets and caused severe fiscal distress to both the Union and States in FY19 and FY20.
- Among 20 large emerging economies, India was ranked as the fourth highest payer of corporate taxes.

3. Disinvestment and Privatisation

- The major component of Non-debt Capital receipts is disinvestment receipts that accrue to the government on sale of public sector enterprises owned by the government (including the sale of strategic assets).
- The government proposes to raise Rs. 2.1 lakh crore from disinvestment in the financial year 2020-21 (nearly double of Rs 65,000 crore it expects to raise in 2019-20).
- As many as 57 PSUs are now listed with total market capitalisation of over Rs 13 lakh crore.
- There are about 264 CPSEs under 38 different Ministries/Departments.
- Since the government of India adopted strategic sale as a policy measure in 1999-2000, 11 CPSEs had undergone strategic disinvestment from 1999-2000 to 2003-04. Examples include BALCO, Maruti, Hindustan Zinc etc.

3.1. Strategic Sale of PSUs

- Recently, the Cabinet Committee on Economic Affairs accorded 'in-principle' approval for strategic disinvestment of five state-run companies, including Bharat Petroleum Corporation Limited, Shipping Corporation of India Ltd etc.
- As per **Rangarajan Committee 1993 report**, mere change of ownership from public to private does not guarantee the efficiency.

4. Economic Growth and Development

- India's goal of becoming a 5 trillion dollar economy by 2024.**
- India's record of growth with macroeconomic stability over the last five years- an annual average growth rate of 7.5% and annual average inflation of 4.5%.

- The WEO of October 2019 has estimated India’s economy to become the fifth largest in the world, as measured using GDP at current US\$ prices, moving past United Kingdom and France.
- The size of the economy is estimated at US\$ 2.9 trillion in 2019.

4.1. Growth Estimates

- India’s GDP growth is expected to grow in the range of 6.0 to 6.5% in 2020-21.
- Some economists estimate that if India grows at 8% a year, and incomes of all rise by at least 6% a year, then the real incomes of all Indians would at least triple by 2035.

4.2. Investments

- **As per the Economic Survey 2018-19, private investment is the “key driver”** that drives demand, creates capacity, increases labour productivity, introduces new technology, allows creative destruction and generates jobs. It can help India to make use of favourable demographic phase. However, the Gross Fixed Capital Formation (GFCF) in the private sector has declined from around 27 percent in 2011 to around 21 percent in 2018.
- In case of India, the lag between the rate of fixed investment and its impact on GDP growth is seen to be of three to four years and the impact of GDP growth on consumption growth gets reflected in another one to two years.
- The stagnation in private corporate investment at approximately 11.5% of GDP between 2011-12 and 2017- 18 has a critical role to play in explaining the slowing cycle of growth.
- Reduction in the base corporate tax rate to 15% for new manufacturing companies may increase the rate of return on investment.
- **Consumer spending** fell for the first time in more than four decades in 2017-18, primarily driven by slackening rural demand (fell by about 9% compared with 2011-12 levels).

Investments → Private Investment

Time period	Investment Level	Remark
2003-08	~36%	India grew fastest
Now	~29%	Needs to be increased

4.3. Liberalisation

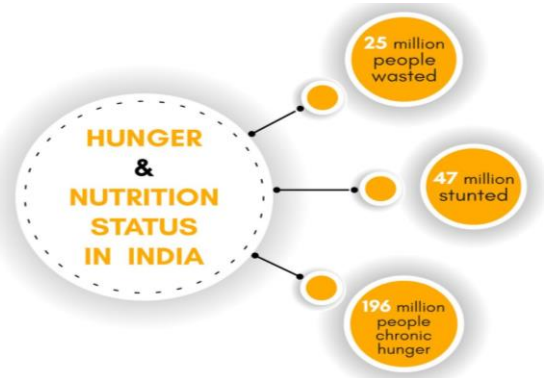
- Exponential rise in India’s GDP and GDP per capita post economic liberalisation in 1991 and corresponding wealth generation in the stock market.
- Since 1991, sectors that were liberalized grew significantly faster than those that remain closed.
- **The Economic Survey 2016-17**, mentioned that India has distinctly anti-market beliefs as compared to other countries with similar low initial GDP per capita levels. This ambivalence can be seen in the difficulty in privatizing even those public enterprises which have become financially unviable, such as the Air India.
- The global output growth has been estimated to decline to 2.9 per cent in 2019 (from 3.6 per cent in 2018 and 3.8 per cent in 2017). (The World Economic Outlook (WEO) Update of January 2020, IMF). This is the slowest global output growth since the global financial crisis of 2009, arising from a **geographically broad-based decline in manufacturing activity, trade and demand.**

Government Intervention in The Market

INDEX	INDIA’S RANK AMONG COUNTRIES
Index of Economic Freedom (by Heritage Foundation)	129/186 (most unfree)
Index of Global Economic Freedom (by framer Institute)	79/162

4.4. Developmental Issues

- In India, poor women and girls put in ₹19 trillion of unpaid care work every year.
- Only 48.6% of the rural households have exclusive access to the principal source of drinking water, which results in water and food borne diseases.
- Despite achieving 100% village electrification in rural areas, around 31 million households are yet to get power supply.
- According to ‘Indicators of Household Social Consumption on Education in India’ report, approximately 15% of rural households have internet connection compared to around 42% urban households.



4.5. Corruption

- Scrutiny of the Outcome Budgets for the years 2013-14 to 2016-17 by the CAG revealed inconsistency in depicting scheme-wise achievements (outcomes) against targets already set in previous years. Audit noted that the Outcome Budget 2013-14 indicated unquantifiable targets like improvement of roads, bridges, drains, construction of market complexes, flyovers etc. but achievements or outcomes were not included in the Outcome Budget of the following year i.e. 2014-15.
- A **study mentioned in the survey** on 88,000 roads **under PMGSY** has revealed following findings-
- Around 26% of the roads listed as completed in PMGSY monitoring data are missing from 2011 Census Data. Suggesting they were never actually built or completed.
- Preferential allocation of roads increases the allocation of such “missing” roads by as much as 86%.
- Public Sector Banks (PSBs) account for 92.9% of the cases of fraud, a large majority (90.2%) were related to advances, suggesting poor quality of screening and monitoring processes for corporate lending adopted by PSBs.
- Survey suggests- A plausible explanation for the NPA problems of PSBs is that in the Indian economy’s growth phase between 2004 and 2011, PSBs grew their loan portfolios but this credit growth was of suspect quality.

4.6. Data Quality Concerns

- In 2019, the Ministry (of Statistics and Programme Implementation) had decided not to release the consumer expenditure survey results of 2017-2018 due to the data quality issues.
- On similar lines, the NSO survey on employment (PLFS) estimated the population in 2017-18 to be 1,074 million, when almost all experts estimated it to be upwards of 1,300 million (actually 1,339 million). The underestimation in 2017-18 at 20 per cent is a record. These instances question the data quality of our governmental surveys and reports.

5. Demography

- India is expected to have the world’s largest working-age population of 1.03 billion by 2030.
- **Human Development Report (HDR) 2020-** India ranked 131 among 189 countries compared with 129 in the previous year.
- By 2030, it is estimated that around 42% of India’s population would be urbanised from the current 31%.
- It is expected that the working-age population of India will grow ~1.2x times during 2015-2030. India is expected to have the world’s largest working-age population of 1.03 billion (~68%) by 2030 compared with 0.97 billion in China and 0.22 billion in the US.
- According to the UN, India may have nearly 20 per cent population of 60 years and above by 2050. According to the Census 2011 figure, the old age population stood at 104 million.
- As per the 53rd round of the NSSO, nearly half of elderly population is completely dependent on others for their economic needs, while 20% is partially dependent on others for similar needs.
- **The Economic Survey 2018-19** also points out on how a proper retirement plan in a phased manner should be designed for the elderly owing to factors like rising life expectancy for male and female. It suggests it may be advisable to raise the retirement age a decade before the anticipated shift that will occur in 2041, so that arrangements for pensions and other retirement provisions can be put in place.
As per National Sample Survey (NSS) Report ,2017-18, Drop-out rate was 10 per cent at primary level, 17.5% at upper primary/middle and 19.8 percent at secondary level.
- According to **the Periodic Labour Force Survey (PLFS) 2017-18** only 13.53 per cent of the workforce in the productive age- group of 15-59 years has received training that includes 2.26 per cent formally trained and 11.27% informally trained.
- Formal training is highest in the states such as Tamil Nadu, Maharashtra and West Bengal and lowest in Bihar, Jharkhand and Assam. Informally trained is highest in Chhattisgarh, Uttar Pradesh and West Bengal and about 55.9 per cent received it either through self-learning or hereditary.

Country	Year	Expectation
India	2030	1.03 bn
China	2030	0.97 bn
US	2030	0.22 bn

6. Sustainable Development

6.1. Climate Change

- According to the **International Labour Organization**, the loss in productivity by 2030 because of heat stress could be the equivalent of India losing 34 million full-time jobs. According to the Union Government, Desertification, land degradation and drought cost India about 2.5% of gross domestic product in 2014-15.
- Agriculture production is estimated to decrease by 10-20% by 2050 because of climate change.
- **Desertification:** Nearly 30% of India's land area has been degraded through deforestation, over-cultivation, soil erosion and depletion of wetlands.
- As a party to the UNCCD, India has voluntarily committed to raise its ambition of the total area that would be restored from its land degradation status, from 21 million to 26 million hectares between now and 2030.
- **According to FAO**, India accounts for 2% of total global forest area in 2015. India is among a few countries in the world where, despite ongoing developmental efforts, forest and tree cover are increasing considerably.
- The forest and tree cover have reached 80.73 million hectare which is 24.56% of the geographical area of the country.
- The total to the GCF are a meagre US\$ 10.3 billion.

6.2. Water

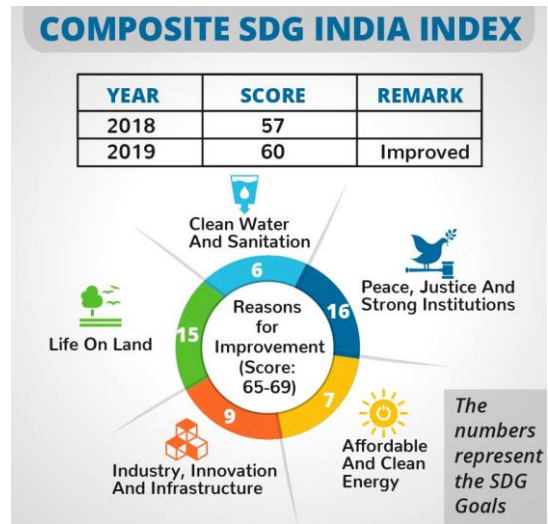
- India has only about 4% of the world's renewable water resources but is home to nearly 18% of the world's population. The per capita annual water availability has reduced from 1816 cubic metre in 2001 to 1544 cubic metre in 2011.
- India uses almost twice the amount of water to grow crops as compared to China and the United States.
- According to **the Composite Water Management Index (CWMI) of NITI Aayog**, 21 major cities will reach zero groundwater levels by 2020, affecting access for 100 million people.

7. Poverty

- **About 22% of India's population** is living below the poverty line (Census 2011).
- India is home to 28% of the world's poor, according to the Human Development Index (HDI), 2019.
- According to the **Multidimensional Poverty Index (MPI) 2018**, India has lifted more than 271 million people out of poverty between 2005-06 to 2015-16. Despite this, 373 million Indians continue to experience acute deprivations/ India still remains home to 28 per cent of the world's poor, as per the Human Development Report. About 84.3% of multidimensionally poor people live in Sub-Saharan Africa and South Asia.
- Currently, out-of-pocket expenditure constitutes 62% of the healthcare spending of families in the country - sometimes forcing families to incur catastrophic expenditure and pushing them below the poverty line.

7.1. The Impact of COVID-19

- India has an estimated 812 million poor people, which could increase to 915 million, due to the impact of COVID pandemic, as per the 'Estimates of the impact of COVID-19 on Poverty' report of United Nations University. This is based on the World Bank's poverty line for lower-middle-income countries which is \$3.2 a day.
- Human Development Report (HDR) 2020 released by UN Development Programme- Covid-19 pandemic may have pushed some 100 million people into extreme poverty, the worst setback in a generation.
- As per the International Labour Organization (ILO), around 400 million workers from India's informal sector are likely to be pushed deeper into poverty



The IMF and Economic Survey 2016-17 recommend quasi-basic income schemes that leave out the well-off top quartile of the population as an effective means of alleviating poverty and hunger.

7.2. Estimating Poverty

- In India, the first official rural and urban poverty lines at the national level were introduced in 1979 by Y. K. Alagh Committee and official poverty counts began for the first time. It constructed a poverty line for rural and urban areas on the basis of nutritional requirements –2400 calories for rural and 2100 for urban areas.
- Later, in 1993, Lakdawala Committee recommended state specific poverty lines while continuing with the methodology of calorie consumption for poverty estimation.
- In 2009, the Planning Commission appointed the Tendulkar Committee which further refined the poverty estimation methodology and recommended following major changes: Shift away from calorie consumption-based poverty estimation;
- Incorporation of private expenditure on health and education while estimating poverty.
- Continued criticism regarding low poverty lines led to the appointment of Rangarajan Committee in 2012. The committee recommended that the consumption basket should contain a food component that satisfied certain minimum nutrition requirements, as well as consumption expenditure on essential non-food item groups (education, clothing, conveyance and house rent) besides a residual set of behaviorally determined non-food expenditure.

7.3. Poverty Alleviation

- MGNREGA has provided nearly 235 crore person days in the last three years, each year.
- The national average wage of an MGNREGA worker is ₹178.44 per day, less than half of the ₹375 per day national minimum wage recently recommended by a Labour Ministry panel under the chairmanship of Anoop Satpathy.
- Nearly 1,11,000 AWCs are being constructed in convergence with Ministry of Women and Child Development.
- Indian-American economist Abhijit Banerjee has won the 2019 Nobel Prize in Economics, along with Esther Duflo of the Massachusetts Institute of Technology and Michael Kremer "for their experimental approach to alleviating global poverty".
- Recently, the Prime Minister outlined Rs.20 lakh crore stimulus package which was accompanied with large scale structural reforms.

7.4. Affordable Housing

- As per recent NSO survey in 2018, about 76.7% of the households in the rural and about 96.0 % in the urban areas had the house of pucca structure.
- Land often constitutes more than 50% of the project cost for developers making affordable housing projects unviable.

8. Unemployment

- Currently, the unemployment rate in India is approximately 6.1% according to the Periodic Labour Force Survey of NSSO.
- The unemployment rate has peaked at its 45 years high (NSSO data). According to monthly data from the Centre for Monitoring Indian Economy, unemployment rate in India shot up significantly from 7.87% in June 2019 to 23.48% in May 2020.
- Male unemployment rate at 6.0% and female at 5.2%. The IMF estimates that equal participation of women in the workforce will increase India's GDP by 27 percent. Further, according to World's Resources Institute, women's inclusion in the labor force can also advance low-carbon, sustainable development.
- At present, India has approximately about 27% women in the workforce. According to 2011-12 NSSO data, 94% of women are employed in the unorganised sector and involved in work, which lacks social security, decent and timely wages etc.

Further, the employment generated as of now is of poor quality and is mainly created in informal sector. At present, **more than 90% jobs are there in unorganized sector.**

The Labour Force Participation Rate (LFPR) in India has declined to 37.5% in 2018-19 from 39.5% in 2011- 12 (NSSO). For males, the LFPR is 55.6% whereas for females it is 18.6%.

The Worker Population Ratio (WPR) in India has declined to 35.3% in 2018-19 from 38.6% in 2011-12 (NSSO). For males, the WPR is 52.3% whereas for females it is 17.6%.

8.1. Employment Status of Workers

- Rural areas have higher percentage of self-employed people.
- Urban areas have higher percentage of regular wage employees.
- **According to PLFS report**, the average monthly earnings for all self-employed workers stood at ₹8,000 per month, much lower than the average monthly earnings of regular workers.
- Casual workers in rural areas are more than double of casual workers in urban areas.
- Since 2000, India's GDP growth was second only to China, but the labour force participation rate shrank from 55% in 2012 to 49.7% in 2018. India also needs considerable improvement in several social indicators as it was still ranked 129 among 189 countries in the 2019 Human Development Index.
- **Status of Employment in India**
- As per PLFS estimates, between 2011-12 and 2017-18
- The proportion of total self-employed workers remained unchanged at 52%
- Total formal employment in the economy increased from 8% in 2011-12 to 9.98% in 2017-18.

8.2. Informal Economy

- **Employs more than 90% of workforce and** contributes about 50% of the gross national product.
- Share of informal sector in rural areas is significantly large (~75%) mainly in areas like agriculture and non-farm economy including low end services.
- Witnessed substantial growth in terms of output, share of employment and earnings. For instance, in 2017-18 the share of informal sector employment increased by 3.6% while on the other hand the share of formal employment increased by only 0.9%.
- **How COVID-19 Has Aggravated the Issue-** more than 80% workers in the informal sector lost employment in India.

8.3. Self Employment

- As per latest Periodic Labour Force Survey (PLFS) report, self-employment between 2009-10 to 2017-18 increased in rural workforce and decreased in urban workforce.
- ILO's latest report titled 'Small Matters' highlighted that 85% of workers in India are self-employed or do casual work.
- Only 4% of India's self-employed actually hire workers from outside.
- Gender pay gap is highest in the category of those who are self-employed: On an average, male workers earn about 3 times more than the female workers.
- Every job created in manufacturing has a multiplier effect of 2-3 additional jobs in related activities.
- **The Economic Survey highlights that** in just the five year period 2001-2006, labour-intensive exports enabled China to create 70 million jobs for workers with just primary education.
- Survey suggests that by integrating "Assemble in India for the world" into Make in India, India can raise its export market share to about 3.5 per cent by 2025 and 6 per cent by 2030. In the process, India would create about 4 crore well-paid jobs by 2025 and about 8 crore by 2030. India's export under-performance vis-à-vis China India's world market share of 1.7% by 2018 is paltry compared to 12.8 per cent for China.
- The survey suggested that a 10% increase in foreign value added share of gross exports leads to 17.9 per cent increase in the dollar value of gross exports, which in turn, causes domestic value added (from exports) to increase by 7.7 per cent. Finally, 7.7 per cent increase in domestic value-added increases employment by 13.2 per cent.
- With this calculation, in a country like India, it is possible to create 10 million additional export related jobs during the next five years and over 20 million jobs during the next ten years.
- **Global Employment Scenario: World Employment and Social Outlook: Trends 2020 (WESO) report by ILO.**
- More than 470 million people worldwide lack adequate access to paid work.
- In 2019, the female labour force participation rate was just 47 per cent, 27 percentage points below the male rate (at 74 per cent).

8.4. Effect of COVID-19 on the World of Work: Findings of ILO Monitor Report

- Global working hours declined in the first quarter of 2020 by an estimated 4.5 per cent (approximately 130 million full-time jobs).
- Hardest-hit sectors identified were accommodation and food services, manufacturing, wholesale and retail trade, and real estate and business activities.
- The number of small businesses in advanced economies is expected to decline
- More than 2 billion people worldwide work in the informal economy. Almost 1.6 billion informal economy workers (76 per cent of informal employment worldwide) are significantly impacted by lockdown measures and/or working in the hardest-hit sectors.
- Women are overrepresented in high-risk sectors: 42 per cent of women workers are working in those sectors, compared to 32 per cent of men.
- The earnings of informal workers are estimated to decline by 60% globally due to the crisis.

9. Labour Law Reforms

- Labour is subject in the Concurrent List of the seventh schedule
- The share of contract workers in factories among total workers increased from 26% in 2004-05 to 36% in 2017-18.
- As of 2015, there were 12,420 registered trade unions in India with an average membership of 1,883 persons per union.
- Labour laws only covered the organized sector that accounts for just 7% of the workforce, and the remaining 93% of the total workforce is informal that is left uncovered.
- According to the **Oxford Internet Institute's 'Online Labor Index'**, India leads the global gig economy with a 24% share of the online labour market, with demand for software developers, creative and marketing professionals.
- **Periodic Labour Force Survey Report (2018-19)** indicates that 70% of regular wage/salaried employees in the non-agricultural sector did not have a written contract, and 52% did not have any social security benefit.

10. Inflation

- In India, inflation has been witnessing moderation since 2014. Headline inflation based on Consumer Price Index-Combined (CPI-C) has been sliding on a downward path since 2014. This has been led by a drastic fall in food inflation, which has fallen from 6.4% in 2014-15 to 0.1% in 2018-19.
- CPI has stayed between central bank's 2-6% range providing space to accommodate probable inflationary pressures created by fiscal stimulus.
- However, recently inflation has shown an uptick with Headline Consumer Price Index-Combined (CPI-C) inflation increasing to 4.1% in 2019-20 (April to December, 2019) as compared to 3.7% in 2018-19.
- During 2019-20, food and beverages emerged as the main contributor to CPI-C inflation.
- The fixation of ceiling prices/Maximum Retail Price (MRP) has resulted in a large saving of 12,447 crores to the public after implementation of DPCO, 2013. It has been observed that there is 26 per cent increase in the sales of the cardiac stents in the Indian market in the post price capping period (2017). It has also been observed that indigenous manufacturers have benefited from the price capping as their share in the production has increased by 10 per cent in post price capping period.
- Prices of rice and wheat remained stable since 2014
- Retail inflation in India touched 7.35% in December last year, the highest in five-and-a-half-years with food inflation surging to 14.12%. Simultaneously, the Index of Industrial Production (IIP) data highlighted that 18 of the 23 industry groups in the manufacturing sector showed negative growth.

11. Food Security

- India's food-grain output in 2019-2020 is estimated to be over 290 million tonnes, and as per World Economic Forum, **India needs approximately 230 million tonnes of food per year** to feed its population. Still, 194 million people go hungry every day in India, comprising about 23% of the world's undernourished population, as per **UN-FAO report**. Ranked 94 among 107 countries in **Global Hunger Index**

PARADOX OF PLENTY (India) (FOOD SITUATION)		
Food per year required	Current food production (2019-2020)	People going hungry per day
230 MT	>290 MT	194 million

(GHI) 2020, 38% of Indian children, under five years of age, are stunted, and 51.4% of Indian women in reproductive age suffer from anaemia. In addition, vitamin and mineral deficiencies, often called “hidden hunger” leads to undernourishment.

- Almost 62,000 tonnes of foodgrains were damaged in the FCI godowns between 2011-12 and 2016-17.
- Only 10% out of the total monthly allocation of 1.95 lakh metric ton (LMT) pulses under the **Pradhan Mantri Garib Kalyan Ann Yojana (PMGKAY)**, had been issued by the states till April 22.
- About 30% of the grains are stored in open space covered with tarpaulins under covered and plinth storage (CAPS) system which is exposed to rain, floods etc. deteriorating the grain quality. India’s cold storage capacity is approx. 30 million tonnes while 66 million tonnes is required.
- Government is obligated under National Food Security Act (NFSA), 2013 to provide foodgrains to 75% of rural population and 50% of the urban population. Thus, Food subsidy incurred by the Government has risen substantially from about 0.6 lakh crore in 2009-10 to about 1.7 lakh crore in 2018-19.
- Government procures around 40-50% of the total market surplus of rice and wheat, making the government virtually a **monopsonist** in domestic grain market. This has led to Government becoming the single largest hoarder of rice and wheat. (Central pool stocks were 74.3 million tonnes on July 1 2019 as against the norm of 41.1 million tonnes.)
- There is an evident decline in the demand for cereals. (Reflected in decrease in share of cereals in Monthly Per Capita Expenditure (MPCE) by 33% and 28% for rural and urban areas respectively).
- Contrary to the demand, the production of foodgrain has increased consistently since 2005.

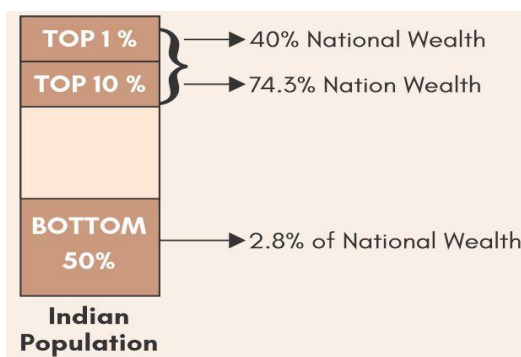
11.1. Thalonomics: The Economics of a Plate of Food in India

- The absolute prices of a vegetarian Thali have decreased since 2015-16 though it increased during 2019. This is true both across the country and regions i.e. North, South, East and West.
- Affordability of vegetarian Thalis has improved over the time period from 2006-07 to 2019-20 by 29% and that for non-vegetarian Thalis by 18%.
- At the all-India level, prices of almost all the components used have been mostly lower compared to the projected prices since 2015-16.
- Thali inflation (year-on-year growth in Thali prices) has cyclical nature but has shown secular decrease from 2006-07 to 2015-06.
- Affordability of Thalis vis-à-vis a day’s pay of a worker has improved over time indicating improved welfare of the common person.



12. Inequality

- India’s top 10% of the population holds 74.3% of the total national wealth
- According to the **latest survey by Oxfam**, India’s top 1% now holds almost 40 percent of the nation’s wealth, while the top 10 percent holds almost 70-80 percent. This has brought India among the top three most unequal countries in the world.
- The bottom 50%, the majority of the population, owns a mere 2.8%
- The Oxfam report highlights that since 2000, the poorest half of the world population has received just 1% of the total increase in global wealth, while the 50% increase has gone to the top 1% only.
- Large numbers of workforce work in sectors with low productivity. For e.g. Agriculture provides employment to 53% jobs, while contributing only 17 % to the GDP.
- Wealth inequality in India is rising with the **Gini wealth coefficient** having risen to 83.2% in 2019 from 81.2% in 2008.
- As per **Global Social Mobility Index**, released by the World Economic Forum (WEF), India ranks 76th out of 82 economies.



13. Financial Inclusion

13.1. Current Status of Financial Inclusion in India

- According to World Bank data, in 2017, 80% of adults had a bank account.
- More than 50% of the household savings still comprise of physical assets.
- In 2016, the percentage of the population using mobile money services in India was only 1%, compared to Bangladesh (40%), Pakistan (9%) and Kenya (81%).
- Also, bank credit to GDP ratio in India was 51%; 98% in China in 2016.
- According to a survey, more than 75% of Indian adults do not adequately understand basic financial concepts. It's even worse when it comes to women. More than 80% of women are financially illiterate.
- According to the government's own figures, more than 75 million **Pradhan Mantri Jan Dhan Yojna** accounts are receiving DBT.
- **McKinsey** estimates that Indians lose more than US\$ 2 billion a year in forgone income simply because of the time it takes travelling to and from a bank.

13.2. Bank Accounts

- **PM Jan Dhan Yojna (PMJDY)**: It led to creation of 35 crores additional accounts with total balance exceeding 1 lakh crore. Out of this, 29.54 crore accounts are operative accounts. There has been a steady rise in Jan Dhan average balance, making it a profitable venture for the banks. There has been a rise in terms of transactions (both withdrawal and deposits) in rural areas from 24% in 2014 to 39% in 2017.
- Almost 6 crore dormant accounts operative.
- The allocations of banking resources to rural areas, agriculture, and priority sectors increased. For example in the period from 1969-1980-
- Number of rural Bank branches increased ten-fold.
- Credit to rural areas increased twenty-fold.
- Credit to agriculture expanded forty-fold, reaching 13% of GDP from a starting point of 2% of GDP

13.3. India's Digital Finance Infrastructure

- Digital payments in the country have witnessed a Compound annual growth rate of 61% and 19% in terms of volume and value respectively over past five years.
- 72% of India's consumer transactions take place in cash, double the rate as in China.
- India had low levels of formal identification (in 2008, only 1 in 25 people) and inclusion (1 in 4 Indian adults had a bank account). By December 2019, almost 380 million bank accounts had been opened under PMJDY.
- As per an estimate, without Aadhar it would have taken 47 years to achieve 80% of adults with a bank account had India solely relied on traditional growth processes.

13.4. SHGs

- Distribution remained skewed towards the Southern region, which accounts for almost half of the SHGs in the country i.e. 48%, followed by the Eastern region with 20% share of the total SHGs in 2014-15 (NABARD 2015).
- **Non-Banking Financial Sector (NBFC)**: The growth of loans from NBFCs declined but the balance sheet of the NBFC sector grew significantly. The sector also witnessed liquidity stress.
- As of 2016, 97% of the MFI borrowers were women with SC/ST and minorities accounting for around 30% and 29% of the borrowers. Thus making an impact to the bottom of the pyramid.
- following the unexpected default by a major shadow lender IL&FS in 2018, it became tough for other NBFCs to refinance their debt as investors like Mutual funds and other banks turned risk averse.
- The mutual fund is among the biggest fund provider to NBFCs via commercial papers and debentures. These investors are getting reluctant to lend post the IL&FS crisis.
- In a recent report, Moody credit rating agency said the inability of borrowers to repay loans amid the Covid-19 crisis, coupled with a six-month moratorium on repayment allowed by RBI, will lead to a disruption of inflow for NBFCs and HFCs, even as outflow will have to continue.

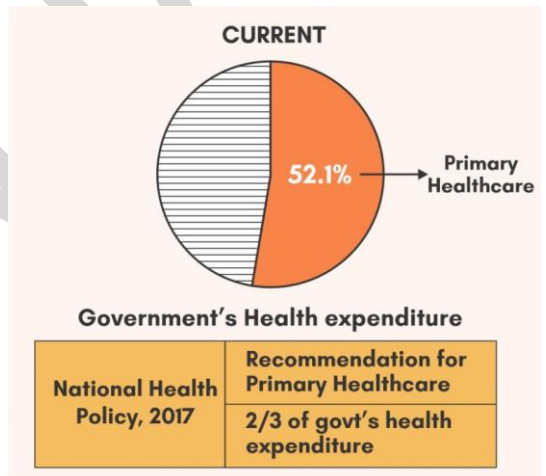
- NBFCs have grown their portfolio of small and micro loans in a big way where there are risks of lack of credit history, scale and historically high NPAs. Thus, to address risk of high NPAs and to inject liquidity in NBFCs, Government launched "Partial credit guarantee scheme".

14. Financial Markets

- The growth rate of corporate bonds has generally been slowing since 2017 and marked its lowest rate in over a decade in May 2019 at 9.7%
- Most of the lending in India is dominated by banks, leaving India's corporate bond occupying just 16% of the GDP, compared with 46% in Malaysia and 73% in South Korea.

15. Infrastructure

- As per the Economic Survey 2018, India requires around \$4.5 trillion worth of investments till 2040 to develop infrastructure. However, the current trend shows India can only meet around \$3.9 trillion infrastructure investment.
- The government has announced that infrastructure projects, The **National Infrastructure Pipeline (NIP)**, worth Rs 102 lakh crores will be implemented by 2025. This rank falls to above 100 in areas like water and electricity utility infrastructure.
- World Economic Forum's **Global Competitiveness Index**- India is currently ranked 70 out of 140 countries for its infrastructure quality.
- According to the NITI Aayog, a 10% decrease in indirect logistics cost has the potential to increase exports by 5-8%.
- According to World Bank's **Logistics Performance Index**, India ranks 44th in 2018 globally, up from 54th rank in 2014.
- According to estimates, Indian logistics sector is expected to grow at 8-10% over the medium term and touch US\$ 215 billion by 2020.
- Investments into the warehousing sector account for around 26% of the total private equity investments into real estate during January 2014 - January 2018.
- About 42% of identified projects are already under implementation, 19% are under development.
- Vijay Kelkar Committee (2015) on PPP Policy and to eliminate the deterrent factors hampering PPP in India.



15.1. Social Infrastructure

- The expenditure on social services (education, health and others) by Centre and States as a proportion of Gross Domestic Product (GDP) increased by 1.5 percentage points from 6.2% in 2014-15 to 7.7% in 2019-20.
- An increase was witnessed across all social sectors during this period viz Education (2.8% to 3.1%) and Health (1.2% to 1.6%).
- India's rank in the Human Development Index (HDI) improved to 129 in 2018 from 130 in 2017. With 1.34% average annual HDI growth, India is among the fastest improving countries, and ahead of China (0.95), South Africa (0.78), Russian Federation (0.69) and Brazil (0.59).
- Drinking water and Sanitation**- Since the launch of the SBM-G in 2014, over 10 crore toilets have been built in rural areas; over 5.9 lakh villages, 699 districts, and 35 States/UTs have declared themselves Open Defecation Free (ODF).

OUT OF POCKET EXPENDITURE

YEAR	As a % age of total health expenditure
2013-14	64.2%
2016-17	58.7%

Data: National Health Accounts, 2016-17

HEALTH RELATED STATISTICS

Healthcare infrastructure in rural areas	25%	
Medicines as a proportion of out of pocket expenditure	70%	
	Currently	Ideal
Doctor: Population	1:1456	1:1000 (WHO)
Budget expenditure on healthcare	1.2% of GDP	3% of GDP
	2001	2018
Insurance density in India	\$ 11.5	\$ 74

16. Monetary Policy

- Growth rate of monetary aggregates witnessed reversion to their long-term trend during 2018-19 after experiencing unusual behaviour in 2016-17 due to demonetisation and again in 2017-18 due to the process of remonetisation.
- The money multiplier (M3/M0) has been declining since 2017-18 and it continued to decline in 2019-20 as well.
- Repo rate has been brought down to 5.4% to spur credit growth
- There can be a time lag of up to 18 months before higher interest rates have the effect of reducing demand.

17. Banking and Payments

- The Survey observes that India's banks are disproportionately small when compared to: size of the economy (GDP), development of the economy (GDP per capita) and population.
- Using international examples, the survey estimates that in relation to the size of the Indian economy, we should have at least six banks in the global top 100. That will increase to eight, if India aspires to become a \$ 5 trillion economy.

17.1. Consolidation of Public Sector Banks

- **Narasimham Committee (1998)** on banking reforms had also recommended the merger of strong public sector banks and selective closure of weak ones.
- Government has approved the amalgamation of 10 Public Sector Banks (PSBs). At present, India has 18 state-owned banks compared with 27 in 2017. After the merger, the number will further come down to 12.

18. Stressed Assets and their Restructuring

18.1. Trends

- Non-Performing Assets reached 11.5% of total loans in March 2018. Due to this, the growth in the bank credit to industry has witnessed a sharp fall from around 24% of the GDP in 2010 to around 7% in 2019.
- The Survey observes that credit growth among PSBs has declined significantly since 2013 even as New Private Banks (NPBs) had considerable credit growth. (Between 15% and 29%)
- Many PSBs have continued to record negative profitability ratios since March 2016, mainly on account of provisioning requirements.
- Recently, RBI appointed **K V Kamath committee** submitted its report on resolution framework for bank loans which were stressed on account of the COVID-19 pandemic- ~70% of banking sector loans were impacted by the pandemic; ~45% were stressed even before the pandemic, and only 30% is impacted due to COVID-19 and the consequent lockdown.

ASSET CLASSIFICATION AS PER RBI	
SMA-O	Principal or interest payment showing signs of incipient stress but not overdue for more than 30 days
SMA - 1	Principal or interest payment overdue for 31-60 days
SMA - 2	Principal or interest payment overdue for 61-90 days
NPA	Principal or interest payment overdue > 90 days (or 2 crop seasons for short duration crops; 1 crop season for long duration crops)
Substandard Assets	NPAs for ≤ 12 months
Doubtful Assets	Substandard assets for 12 months
Loss assets	Loss is identified but not written off wholly

18.2. The Weakening of Public Sector Banks

- In 2019, PSBs reported gross and net NPAs of Rs. 7.4 lakh crore and Rs. 4.4 lakh crore respectively, amounting to about 80% of the NPAs of India's banking system. (The gross NPAs of PSBs amount to 11.59% of their gross advances)

18.3. Insolvency and Bankruptcy Code (IBC)

- Of the total 221 resolved cases under IBC, just 44% amount of debt has been recovered since the inception of the law in 2016.

19. Urban Cooperative Banks

- With many of these banks failing, and the RBI encouraged weak ones to merge, the number of UCBs operating in India has shrunk from 1,926 in 2005 to 1,551 by 2018.
- As of March 2019, as many as 277 Urban cooperative banks were reporting losses; 105 UCBs were unable to meet minimum regulatory capital requirements; 47 were having negative net worth and 328 UCB were having more than 15% Gross NPA ratio.
- As suggested by **Malegam Committee (2011)** and **R. Gandhi Committee (2015)**, a Board of Management should also be created in addition to existing Board of Directors to assist them in formulation of policies. Also, audits of UCBs should be done by independent external auditors, as recommended by the **Madhava Rao Committee (1999)**.
- **Y H Malegam Committee** also introduced the concept of board of management (BOM) in UCBs, batted for doing away with dual regulation
- Reforms suggested by the **R Gandhi Committee** as well.

20. Agriculture

- India is the **2nd largest agriculture producer** in the world and has the largest arable land of 156 million hectares.
- India ranks within the world's 5 largest producers of over 80% of agricultural produce items, including many cash crops such as coffee and cotton.
- Government has set a target of doubling of farmers' income by the year 2022.
- India accommodates more than 17% of the world population and only 4% of fresh water resources, out of which around 80% is used in agriculture alone.
- Almost 70% of India's rural households still depend primarily on agriculture for their livelihood. 60% of India's total workforce employed in its agriculture sector
- Share of agriculture and allied sectors in GVA has declined from 18.2% in 2014-15 to 16.5% in 2019-20. Further, growth rate of agriculture has always been lower than the India's GVA growth rate.

- **Agricultural Trade:** India occupies a leading position in global trade of agricultural products. However, its total agricultural export basket accounts for a little over 2.15 percent of the world agricultural trade. Major export destinations: USA, Saudi Arabia, Iran, Nepal and Bangladesh. Major Products: Rice (both Basmati and non-basmati), spices and cotton.

INVESTMENT IN AGRICULTURE			
INVESTMENT	2012-13	2017-18	REMARK
GCF as a % age of GVA	16.5%	15.2%	Fluctuating trend
Agriculture Credit	Highest	Low	————
	Southern states	North Eastern, Hilly & Eastern states	————

- 716 Kisan Vikas Kendras (KVKs) of the country have been linked with 3.37 lakh common service centers to enhance their reach amongst the farmers and provide the demand driven services and information. KVKs conducted 42361 on-farm trials and 2.71 lakh Frontline Demonstrations

SMALL AND MARGINAL FARMERS	
Individual Land Ownership	< 2 ha
Proportion of farmers	86.2 %
Ownership as a proportion of total cropped area	47.3 %

- The agriculture sector of China is characterized by smallholders' economy where the arable land in terms of hectares per person is 0.086 as against 0.118 in India, yet the agricultural productivity in China is very high compared to India.

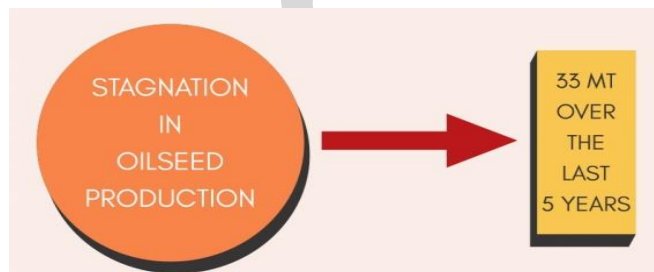
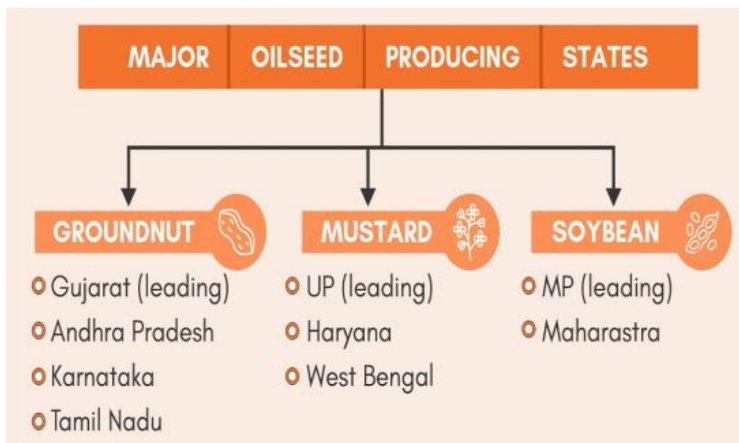
- **According to Economic Survey 2019-20**, the share of marginal farmers increased from 62.9% in 2000-01 to 68.5% in 2015-16, while decline in share of small and large farmers.

- **As per Economic Survey-2016-17**, there is an inverse relationship between indebtedness and the size of land holding.

- **Agricultural Marketing and Farmer Friendly Reforms Index** to assess competitiveness, efficiency and transparency in agro markets by the NITI Aayog.

STATUS OF EDIBLE OIL IN INDIA	
CONSUMPTION	3 RD LARGEST
Production of oilseeds	4 th largest (after USA, China and Brazil)
Current Production (from primary sources)	34 mt
Total Edible oil production	7.31 mt
Estimated Demand	24.5 mt
Oil Import	65-70% of domestic requirements (1990s: < 5%)

- **AWARENESS-** only about 5.1% of the farm households were able to access any information on animal husbandry against 40.4% for crop farming.
- A survey highlighted that, 81% of the cultivators were aware of MSP fixed by the Government for different crops and out of them only 10% knew about MSP before the sowing season.
- **Oilseeds-** Majority of oilseed growers (more than 85%) are small and marginal farmers having poor resource base coupled with non-availability of quality seeds of varieties and hybrids.
- **Ministry of Agriculture has set the following targets to be achieved by 2022-23-**
- To take annual production of edible oils from current 7.31 mt to 13.69 mt.
- Increasing oilseed production from primary sources from the current 34 mt to 45.64 mt.

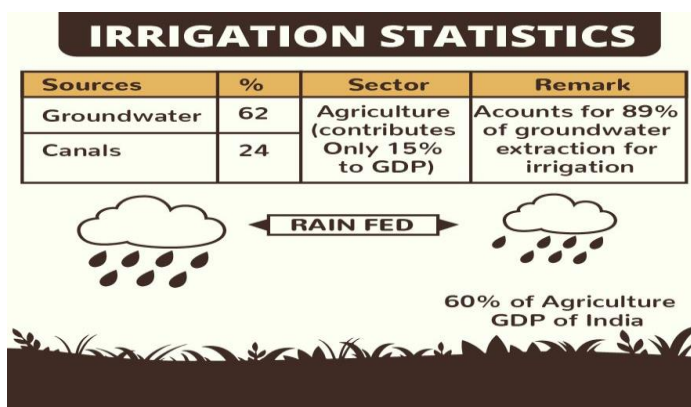


20.1. Cold Storage

- Public investments in agriculture as a percentage of agricultural GDP has declined from 3.9 per cent in 1980-81 to 2.2 per cent in 2014-15, while input subsidies as a percentage of agricultural GDP have increased from 2.8 per cent to around 8 per cent over the same period.
- Only about 15% of the APMCs have cold storage facilities and less than 50% of mandis in the country have weighing machines.
- According to Indian Council for Research on International Economic Relations (ICRIER), every rupee spent on agricultural research and development yields better returns (11.2), compared to returns on every rupee spent on fertiliser subsidy (0.88), power subsidy (0.79).
- As against subsidies, public money spent on capital investment is expected to be almost 5 to 10 times more successful in terms of the number of people brought out of income poverty.

20.2. Agricultural Inputs

- India spent nearly Rs 80,000 crore on fertilizer subsidy in 2018. The government budgeted almost Rs. 730 billion for fertilizer subsidies in 2015, making it the largest subsidy in absolute terms after food. Urea, the most commonly used fertilizer, makes up almost 70% of the fertilizer subsidy allocation.
- In India, the current consumption of Nitrogen, Phosphorus, and Potassium (NPK) ratio is 6.7:2.4:1, which is highly skewed towards nitrogen (urea) as against ideal ratio of 4:2:1. According to the estimates, fertilizers subsidy amounts to around Rs.5000/hectare of net cropped area, resulting in excessive use of fertilizers, especially NPK at the cost of micro-nutrients and manure. Data from the Department of Agriculture shows that since 2010, the ratio of consumption has worsened to 8:3:1 leading to diminishing crop yields and increased soil toxicity.
- **Irrigation** consumes about 84% of total available water in India. India has already realized over 80% of its irrigation potential.
- Economic Survey 2018-19 suggests a transition from land productivity to irrigation water productivity.



FERTILIZER INDUSTRY IN INDIA

- India is second largest consumer of urea fertilizers after China.

- India also ranks second in the production of nitrogenous fertilizers and third in phosphatic fertilizers whereas the requirement of potash is met through imports since there are limited reserves of potash in the country.
- Almost 36% of the fertiliser subsidy is lost through leakage to industry or smuggled across borders. Black market prices are, on average, about 61 per cent higher than stipulated prices

SEED INDUSTRY IN INDIA

- India is the fifth largest seed market across the globe.
- The seed market is majorly contributed by non-vegetable seeds such as corn, cotton, paddy, wheat, sorghum, sunflower and millets.
- Direct contribution of quality seed to the total production can be raised up to 45% with efficient management of other inputs.
- The research investment by private companies remained at a meagre 3-4% of revenue against the international norm of 10-12%
- Seed replacement rate continues to remain below the desired level of 20% for most crops.
- **Zero Budget Natural Farming-** requires only 10% water and 10% electricity than what is required under chemical and organic farming. **The Economic Survey 2018-19** reported that about 1.6 lakh Indian farmers follow ZBNF.

20.3. Marketing And Exports

- **AGRICULTURE INFRASTRUCTURE-** India has limited infrastructure connecting farmers to markets and hence, 15-20% of yield is wasted which is relatively higher vs. other countries where it ranges between 5-15%. The total post-harvest losses estimated by Indian Council of Agricultural Research were at about Rs 92,651 crores at average prices value of 2014. Around 40% of all fruits and vegetables are wasted in India annually
- **Traditional Marketing Methods:** generally start with sale by farmer and involve a number of intermediaries at different levels from rural markets to terminal markets. Close to 50% of the agricultural produce in India is sold via these channels.
- **(e-NAM):** Till date, more than 1 lakh traders and over 66,000 commission agents have been registered on the portal. As of 2018, trade recorded on the e-NAM portal stood at a value of Rs 50,575 crore, and in terms of volume it was more than two crore tonnes.
- **Model APMC Act, 2003:** So far, only 16 States have amended their Act and only 6 states have notified the amended Rules. There are some States which do not have APMC Act and some have partially amended their Act.
- Currently, there are over 5,000 Farmer Produce Organizations (FPOs) in the country. 20% of these are struggling to be viable and 50% are in mobilization stage only.

AGRICULTURAL EXPORTS

- In 2019, India exported USD 38.7 billion of agricultural goods, which is **only 7%** of Indian agriculture production.
- India ranks 13th in the world in agriculture exports despite being leading producer of milk, bananas, mangoes etc.
- One key cause of the discrepancy between rank in production and exports is the large domestic demand of a population of 1.34 bn people.
- From 2013 to 2018, growth has slowed down relative to the impressive growth of 2009 to 2011.
- Exports dropped by 10% CAGR due to a drop in global process and back to back drought in 2014, 2015 and 2016.
- India exports 70% of its commodities and agricultural product exports to nearby geographies, including the Middle East, Africa and Asia Pacific, only exporting 30% to Europe and the Americas showing low agri market diversification.
- India's agricultural export has the potential to grow from USD 40 billion to USD 70 billion in a few years. Additional exports are likely to create an estimated 7-10 million jobs.
- **Limited value addition:** India is a more prolific exporter of primary commodities than of value-added agriculture products – the country ranks 10th globally in processed meat, 18th in the export of processed fruits and vegetables and 35th in dairy.
- India's total agricultural export basket accounts for a little over 2.15% of the world agricultural trade. India has remained at the lower end of the global agri export value chain given that the majority of its exports are low value, raw or semi-processed and marketed in bulk. The share of India's high value and value added agri produce in its agri export basket is less than 15% compared to 25% in US and 49% in China.

- Indian agro-products bearing high export potential have been facing high import duties in some premier importing countries. For example, Sri Lanka and Philippines imposed as high as 35% and 40% tariff respectively on Indian wheat.

20.4. Agricultural Finance

- According to National All India Rural Financial Inclusion Survey (NAFIS 2015), share of non-institutional credit still persists at around 28%.
- Dependency on scheduled commercial banks in agricultural & allied credit is still large (~78-80% of the credit). ~60% of Small & Marginal Farmers (SMFs) have not been covered by SCBs.
- Though co-operative institutions (~15%) and Regional Rural Banks (~5%) play a significant role in extending agricultural credit, their share is highly skewed geographically. States falling under central, eastern and north eastern regions are getting very low agri-credit as % of their agri-GDP.
- Overall PSL target of 40%, so far they have failed to achieve the agriculture target of 18% at system-wide level.
- As per Agricultural Census 2015-16, only 45% of the farmers possess operative KCCs. Existing 10% limit in KCC scheme for consumption requirements is inadequate.
- In many states like Tamil Nadu, Andhra Pradesh, Kerala etc., agri-credit is far higher than their agri-GDP, indicating the possibility of diversion of credit for non-agricultural purposes.
- Currently, only about 35% of farmers are covered under crop insurance schemes.

21. Allied Sectors

- Almost 50-60% of final value of dairy output in India flows back to farmers. Thus, growth in this sector would directly impact farmer's income.
- India is one of the world's five largest producers of livestock and poultry meat, registering one of the fastest growth rates.
- About 20.5 million people depend upon livestock for their livelihood. Livestock contributed 16% to the income of small farm households as against an average of 14% for all rural households. Livestock provides livelihood to two-third of rural community. Livestock sector contributes 31.25% of total Agriculture GDP during 2016-17.
- According to **NSSO 68th Round Survey**, about 16.44 million workers are engaged in the activities related to rearing animals, mixed farming, fishing and aquaculture etc.
- Livestock sector has grown at a compound annual growth rate of 7.9 per cent during last five years.
- Animal Husbandry Sector- The sector received only about 12 per cent of the total public expenditure on agriculture and allied sectors, which is disproportionately lesser than its contribution to agricultural GDP.
- Currently, only 6% of the animal heads (excluding poultry) are provided insurance cover. Livestock extension has remained grossly neglected in the past.

21.1. Dairy Sector

- India has the largest bovine population in the world and ranks first in milk production since 1998 accounting for 20% of world production. Milk production in the country was 188 million tonnes in 2018-19 with a yearly growth rate of 6.5%
- The average annual milk yield of Indian cattle is only about 50% of the global average.
- Budget 2020 aims to double the country's milk processing capacity by 2025. (from 53.5 million tonne to 108 million tonne).

21.2. Minor Forest Produce (MFP) in India

- Around 100 million forest dwellers depend on Minor Forest Produces for food, shelter, medicines and cash income. (Report of the National Committee on Forest Rights Act, 2011)
- Tribals derive 20-40% of their annual income from Minor Forest Produce on which they spend major portion of their time.

21.3. Fisheries Sector

- India is **2nd largest producer** in fishery sector. In the recent years, the fish production in India has registered an average annual growth rate of more than 7%.

- The sector provides livelihood to about 16 million fishers and fish farmers at the primary level and almost twice the number along the value chain.
- The sector accounts for 6.58% of GDP from agriculture, forestry and fishing.
- Also, the sector is one of the major contributors of foreign exchange earnings with India being one of the leading seafood exporting nations in the world.

22. Agriculture Related Industries

22.1. The Food Processing Industry

- Accounts for around 32% of the country's total food market and is ranked 5th in terms of production, consumption, export and expected growth. It contributes ~14% to the manufacturing GDP and 13% of India's total food exports.
- It employs around 25% of the workforce. Nearly 7 million persons are engaged in this sector.
- It contributes to around 32% food share in India's food market & 10.7% of India's exports. Further, it is a sunrise industry with more than 10% growth rate in India.
- During the last 6 years ending 2017-18, FPI sector has been growing at an average annual growth rate of ~ 5.06%
- **Micro and small enterprises constitute an important component of the food processing sector.** They constitute almost 98% of the sector and 66% amongst them are based in rural areas. These units account for 74% of employment in the food processing sector. Moreover, the micro food processing sector has the potential to generate an additional 9 lakh skilled and semi- skilled jobs.

23. Industry and Infrastructure

- In India, at present, there are about 55.8 million enterprises in various industries, employing close to 124 million people. Of these, nearly 14% are women-led enterprises, and close to 59.5% are based in rural areas.
- **Aim-** Indian manufacturing sector to become a \$1 trillion industry by 2025
- Industrial sector- Directly contributes close to **30% of total gross value added (GVA)**
- Around 350 startups registered in Logistics.

23.1. Textiles Sector

- Indian textile industry is the **2nd largest manufacturer** and exporter in the world.
- Contributed 18.0% of manufacturing and 2.0% of GDP in 2017-18.
- The share of textiles and clothing in India's exports was 12% in 2018-19. However, the sector has just 5% share in the global textiles exports.
- **The sector is the biggest employer after agriculture** and it employs 4.5 crore people directly and 6 crore people in allied sectors.
- **Technical Textiles-** Indian technical textiles segment constitutes around 6% of the \$250 billion global technical textiles market.
- TT constitute 12-15% of the total textile value chain in India (in European countries it is 50)%. Recently, Cabinet Committee on Economic Affairs (CCEA) has approved the setting up of a National Technical Textiles Mission at an total outlay of ₹1,480 Crore.
- The annual average growth of the segment in India is 12% as compared with world average growth of 4%.
- **Construction Sector:** The construction sector accounts for **8.2% of GDP** which includes housing and employs about 12% of the workforce.

INDEX OF INDUSTRIAL PRODUCTION (IIP):

- The Survey observes that IIP moves in tandem with some occasional deviation.
- IIP growth moderated: Overall, IIP growth moved to 3.8% in 2018-19 compared to 4.4% in 2017-18.

23.2. SEZs

- Exports from SEZs are growing at a faster rate than overall exports from the country. E.g. In April-June 2019, even as overall export growth from India slowed down to 2%, exports from SEZs posted a robust 15% growth.
- In SEZs, growth in manufacturing segment was around 4%, while in services segment (constituting majorly of IT & ITes) export growth was 23.69%.

- Since the SEZ Act came into force in 2005, over 2 million jobs have been created, with an incremental annual growth rate of 25.2%. The share of SEZ exports in India's total exports value has grown to around 30% in 2018-19.
- About half of the land notified for SEZs was unutilized (as of August 2017)
- Recommendations were given by the **Baba Kalyani Committee**

23.3. Network Products

- Accounted for nearly 30% of world exports in 2018. Total trade in NPs can be classified into its two main sub-categories - parts & components (P&C) and assembled end products (AEP). AEP is highly labour intensive, which can provide jobs for the masses, while domestic production of parts & components (P&C) can create high skill jobs.
- The survey highlighted that in 2018, NP exports accounts for 10% in India's export basket, while these products account for about 50% of the total national exports of China, Japan and Korea. Also, among the major Asian countries, India is the only one with trade deficit in NP.
- The main category of NP exported by India is Road vehicles with a share of 4.9% in its total exports in 2018.

23.4. MSME Sector

- With about 63.38 million enterprises, MSME sector contributes about **45% to manufacturing** output, more than 40% of exports and **over 28% of GDP**.
- MSMEs create employment for about 111 million people.
- Small and medium-sized enterprises (SMEs) constitute 80% of the textile industry.
- The MSME sector accounts for 29% of India's GDP and 45% of exports.
- Only about 8% of MSMEs are served by formal credit channels.
- Between December 2017 and December 2019, the non-performing asset (NPA) rate on MSME loans of public sector banks varied between 16.6% and 18.7%

23.5. Skill Development

- As per a **World Bank report**, countries that sustained high growth for long periods put substantial effort into educating its citizens and deepening its human capital.
- According to NSSO Report 2011-12, **India's formally trained workforce stand at merely 2.3% in comparison to economies like South Korea which are at a mammoth share of 96%**.
- According to **PLFS 2017-18**, only 1.8% of the population reported receiving formal vocational/technical training, 5.6% reported receiving informal vocational training (such as hereditary, self-learning, and on the job training). The bulk of the trainees were in the fields of electronics, IT/ ITeS sector, apparels, and mechanical engineering.
- ~ 33% of the formally trained youth was unemployed in 2017-18.
- **KEY FINDINGS OF INDIA SKILLS REPORT 2020**
- Female employability witnessed an upward trend at 47% while that of male workforce declined from 47.39% in 2019 to 46% this year. However, Hiring Intent Survey for 2020 reflects a likely hiring ratio of 71:29 for Male to Female candidates.
- Only 60% of students were aware of the National Apprenticeship Promotion Scheme (NAPS).
- The rising share of gig workers in the economy at 13% share in the overall hiring intent by employment type.

24. Mines and Minerals Sector

- The mining industry serves as the base for the power sector, with around 72% of India's current power being generated through coal.
- India produces 95 minerals which include 4 hydrocarbon energy minerals, 5 atomic minerals (ilmenite, rutile, zircon, uranium, and monazite).
- Mining and quarrying sector contribution to GVA accounted for about 2.38% during 2018-19.
- The production of major minerals during the year 2018-19 has recorded a growth of 25% when compared to last year in terms of value. The Index of Mineral Production (base 2011-12 = 100) for the year 2018-19 is estimated to be 107.9 as compared to 104.9 of previous year.
- Despite having the world's fourth largest coal reserves, India imported 235 million tonnes (mt) of coal last year.

24.1. District Mineral Foundation (DMF)

- Total cumulative accrual in DMFs across the country is close to Rs 36,000 crore as in January 2020.
- Non-coal major mineral mining, such as iron ore, bauxite, manganese, limestone, precious metals, etc. account for the highest share of DMF accruals, about 48 per cent.
- Out of the top five states in terms of DMF accrual, three are coal mining states—Jharkhand, Chhattisgarh, and Telangana.
- Districts like Keonjhar which has poor malnutrition indicators are using some of its DMF funds by setting up crèches to address the nutritional needs of children under three years of age.

24.2. Electronics Manufacturing

- The sector accounts for about **2.3% of India's GDP**
- The domestic value addition for mobile phones is expected to witness 35- 40% jump by 2025 from 20-25% now. CAGR is of about 25%.
- India's share in global electronics manufacturing grew from 1.3% (2012) to 3.0% (2018).

24.3. Steel Sector

- India stood at **2nd position** in the production of crude steel. (with 6% share in global production)
- It is also the third largest consumer of the finished steel after China and USA.
- Crude steel production- growth of 1.5%
- **Steel scrap** is unique in that it is 100% recyclable. It can be used, reused and recycled infinitely.
- The current supply of scrap is 25 MT from the domestic unorganized scrap industry and 7 MT from import of scrap.
- Most of the major steel producing countries like Japan, USA, and China are continuously increasing scrap-based steel production with proportionate reduction from primary route.
- There is also higher scrap availability due to increasing per capita steel consumption (doubled from 2004- around 33kg to around 60 kg).
- Recycling steel requires 56% less energy than producing steel from iron ore, and reduces CO2 emissions by up to 58%.
- The National Steel Policy 2017 policy projects crude steel capacity of 300 million tonnes (MT), production of 255 MT and a robust finished steel per capita consumption of 158 Kgs by 2030-31

25. Services Sector

- Accounts for **around 55%** of total size of the economy and GVA growth, two-thirds of total FDI inflows into India and about 38% of total exports.
- It is estimated that the share of services in total employment in India will grow to 48% in 2030.
- Services sector growth (Year on Year) continued to moderate during 2019-20, reaching 6.9 percent from 7.5 percent in 2018-19.
- Growth in bank credit to the services sector has continued to decelerate from 28.1 percent as on November 2018 to 4.8% on November 2019.
- Gross FDI equity inflows jumped by 33 per cent Year on Year during April- September 2019 to reach US\$ 17.58 billion, accounting for about two-thirds of the total gross FDI equity inflows into India during this period.
- While merchandise exports were growing faster than commercial services exports during 2005-11, commercial services exports have outperformed goods exports during 2012-18. Consequently, India's share in world's commercial services exports has risen steadily over the past decade to reach 3.5 percent in 2018, twice the share in world's merchandise exports at 1.7 per cent.
- India now ranks 8th among the world's largest commercial services exporters
- Services exports maintained their growth at 6.4%. India's services exports remain concentrated in software services accounting for almost 40% of total exports.
- Services import growth was 7.9 per cent (7.3% last year (2018-19)).
- India persistently runs a trade deficit in education services with education imports, reaching about US\$ 3 billion in 2018-19.

25.1. Tourism Industry

- Contributed nearly 10% to India's GDP in 2018- expected growth up to Rs 35 trillion by 2029. This is set to rise further with offers of niche products like eco-tourism.
- **As per WEF's world travel and tourism competitiveness index 2019, India ranks 34th out of 140 countries. However, India still needs to enhance its enabling environment (98th), tourist service infrastructure (109th) and environmental sustainability (128th), the report said.**
- The sector witnessed a strong performance from 2015 to 2017, with high growth in foreign tourist arrivals. However, foreign tourist arrivals growth has decelerated since then.
- Majority of them (62.4%) visited India for leisure, holiday and recreation.
- Top five states attracting foreign tourists are Tamil Nadu, Maharashtra, Uttar Pradesh, Delhi and Rajasthan, accounting for about 67% of the total foreign tourist visits.
- Foreign tourist arrivals to India on e-visas have increased from 4.45 lakh in 2015 to 23.69 lakh in 2018.

26. Space

- India spent about US\$ 1.5 billion on space programmes in 2018. But it still lags behind that of the major players such as USA and China, which spent about 13 times and 7 times more than India respectively.
- High success rate: India has launched around 5-7 satellites per year in the recent years with no failures, barring one in 2017.

27. E-commerce Sector

- **Fastest growing market in the world:** Revenue from the India's e-commerce sector is expected to increase from USD 39 billion in 2017 to USD 120 billion in 2020, growing at an annual rate of 51%, the highest in the world.
- India has ranked 73rd out of 152 countries in UNCTAD's business-to-consumer E-commerce index 2019.
- As per a Working Paper of United Nations Industrial Development Organization (UNIDO), nearly 43% of the MSMEs participate in online sales in India. A cooperative of tribal women Mahila Udyami Bahuddeshiy Sahakari Samiti in Chhattisgarh collaborated with Amazon to sell their line of authentic eco-friendly products online.
- Future consumers are set to emerge from India's tier-2 and tier-3 cities.
- **Challenges faced by the sector**
- **Low customer base:** India's total internet user base is set to grow from 665 million in 2019 to 829 million by 2021, yet e-commerce remains highly underpenetrated with only 50 million online shoppers.
- **Low share in retail sales:** As per **World Bank report**, online sales as a percentage of total retail sales were only 1.6% in India, versus over 15% for China and around 14% globally.

28. TELECOM SECTOR

- Total telephone connections in India grew by 18.8% from 9,961 lakh in 2014-2015 to 11,834 lakh in 2018-19.
- The wireless telephony now constitutes 98.27% of all subscriptions whereas share of landline telephones now stands at only 1.73%.
- The overall tele-density in India stands at 90.45%, the rural tele-density being 57.35% and urban tele-density being 160.71%.
- The number of internet subscribers stood at 6,653 lakh as compared to 2,516 lakh in 2014. Among them, the number of mobile internet subscribers was 6,436 lakh.
- India's monthly data consumption is the highest, with average consumption per subscriber per month increasing 157 times from 2014 to 2019.
- A committee headed by Rajiv Gauba has been setup to help the struggling telecom sector.
- Limited Spectrum Availability- government auction spectrum at an exorbitant cost and hence the available spectrum is less than 40% as compared to European nations and 50% as compared to China.
- Import dependence- India imports around 40 billion dollars of telecom equipment including infrastructure to setup 5G technology.
- High taxes- taxes and levies in the Indian telecom sector, ranging from 29% to 32%, are one of the highest globally.

- Large debts- telecom sector is under a debt of around Rs. 4 lakh crores because of various investment related and other activities.

28.1. Tariff War

- Since 2016, the sector has witnessed substantial competition and price cutting by the Telecom Service Providers (TSPs) creating financial stress in the sector.
- The price of data is at an average of Rs 8 per GB, which is one of the lowest in the world and calling service has also been made virtually free. So, monthly average revenue per user (ARPU) has plunged to Rs 113 in FY19 from Rs 174 in FY15.
- Low level of capital expenditure- because of cut-throat competition in the sector, the sector is short of around 7 lakh crore investment that is needed to provide qualities as promised by 4G technology.

29. Transport Sector

- The share of transport sector in the GVA for 2017-18 was 4.77%, of which the share of road transport is the largest at 3.06%, followed by the Railways (0.75%), air transport (0.15%) and water transport (0.06%).
- India imports oil to cover over 80% of its transport fuel.

29.1. ROADS

- As per the National Transport Development Policy Committee Report, road transport is estimated to handle 69% and 90% of the countrywide freight and passenger traffic, respectively.
- Pace of construction: Grew significantly from 17 kms per day in 2015-16 to 29.7 kms per day in 2018-19.
- Total investment in the Roads and Highway sector has gone up more than three times in five year period of 2014-15 to 2018-19.
- The road network transports 64.5% of all goods in the country and 90% of total passenger traffic ambitions
- Transport sector is the second largest contributor to CO2 emissions in India. India plans to completely shift to electric vehicles by 2030. As per a report by NITI Aayog, electric vehicles can cut India's energy demand by 64% and carbon emissions by 37% by 2030.
- Pace of construction: Grew significantly from 17 kms per day in 2015-16 to 29.7 kms per day in 2018-19.



29.2. Aviation Sector

- A total of 43 airports have been operationalized since Udaan scheme was taken-up.
- Capacity Expansion: To ease the strain on existing airport capacities, 100 more airports are to be made operational by FY 2023-24. Airlines in India have scaled up their aircraft seat capacity from an estimated 0.07 annual seats per capita in 2013 to 0.12 in 2018.
- Shipping: Around 95% of India's trade by volume and 68% in terms of value is transported by sea.
- Low Shipping Tonnage: India's share in total world dead weight tonnage (DWT) is only 0.9% (Despite having a large fleet strength of 1,419 ships.)
- High costs owing to GST in the range of 5-28% on aircraft engines and spare parts
- International cargo, comprising 60% of the total air cargo handled in the country, logged a growth of 15.6%, while domestic cargo grew by only 8%.
- Indian rupee's depreciation adversely affects airline carriers. About 25-30% of their costs such as aircraft lease rents, maintenance costs to ground handling, parking charges abroad etc. are dollar denominated.
- civil aviation sector- about 0.25 million persons will have to be skilled over the next 10 years.



29.3. Railways

- Govt has set a vision of making railways a 100% safe, fast and reliable mode of transport for passengers and freight. The plan is to modernise the entire network by investing around Rs 50 lakh crore by 2030.
- Indian Railways (IR) with over 68,000 route kms is the third largest network in the world under single management.
- Indian Railways carried 120 crore tonnes of freight and 840 crore passengers making it the world's largest passenger carrier and 4th largest freight carrier. (Revenue Earning Freight and Passenger Traffic grew at 5.34% and 1.85% respectively.)
- It has a high operating ratio of 98.4% i.e. railways spends INR 98.4 to earn INR 100 (2017-18).
- Over-stretched infrastructure with 60% plus routes being more than 100% utilized, leading to reduction in average speed of passenger and freight trains.
- Poor terminal facilities lengthen loading and unloading times. 80% of railway loads come from terminals.
- Decrease in accidents: During 2018-19, consequential train accidents decreased from 73 to 59 in comparison to the corresponding period of the previous year.
- Swachh Rail, Swachh Bharat: Number of bio-toilets has increased from about 20,000 in 2015 to 2.25 lakh in 2019.
- Modernization of stations: 1,253 stations have been identified for development under Adarsh Station Scheme and a dedicated SPV, Indian Railway Station Development Corporation (IRSDC) Limited has been set up for the purpose.

CHALLENGES

- Union Budget 2019-2020 stated that Rs 50-trillion investment is required in the railways by 2030. However, the capital expenditure outlays for railways in Union government budgets are around Rs 1.5-1.6 trillion, and it would take decades to complete all sanctioned projects.
- As per Railway Board, 5 crore intending passengers could not be accommodated during 2019-20 for want of capacity, and there was 13.3% travel demand in excess of supply during summer and festival seasons.

COMMITTEES

- **Rakesh Mohan Committee** observed that Indian Railways over the past decade (1991-2002) has fallen into a vicious cycle of under investment, misallocation of scarce resources, increasing indebtedness, poor customer service and rapidly deteriorating economics. The committee also pointed out that the international experience on privatizing railways showed that it was "exceedingly difficult and controversial".
- For example: When Britain privatized its railways, it offloaded assets including tracks and routes that led to an under-investment in infrastructure.
- Various committees like Bibek Debroy, Anil Kakodkar and also Rakesh Mohan have given recommendations to tackle these challenges and make Indian Railways efficient and commercially viable. **Bibek Debroy Committee** in 2015 recommended that private entry into running both freight and passenger trains should be allowed to bring in competition with Indian railways via "liberalisation and not privatisation".
- Restructuring of the Railways has been on the agenda for decades, as unification of services has been recommended by various committees.

DEDICATED FREIGHT CORRIDOR (DFC)

- DFC can allow train speed to a maximum of 100 kmph from the current average speed of around 25 kmph.
- The golden quadrilateral which is just 16% of rail network carries 58% of total freight traffic and 52% of passenger traffic.
- As per a 30 year greenhouse gas (GHS) emission forecast, if there were no dedicated freight corridors, the GHG emissions would be 582 million ton CO₂, while the emissions with the two DFCs in service would be less than one-fourth at 124.5 million ton CO₂.
- Also, the goods moved by road had 3 times the emission rate in comparison to the corresponding movement by rail.

29.4. Shipping

- India is strategically located on the world's shipping routes with a coastline of approximately 7,517 km and 14,500 km of potentially navigable waterways.

- India's strategic location on key international maritime trade routes offers credible potential for port led development.
- Around 95% of India's trade by volume and 68% in terms of value is transported by sea, but contributes **around 1 % to the share of GDP** as compared to 9% by the railways and 6 % by the road sector offering huge potential for growth.
- Inland Water Transport (IWT) carries less than 2% of India's organized freight traffic and negligible passenger traffic.
- India's share in total world dead weight tonnage (DWT) is only 0.9% (Despite having a large fleet strength of 1,419 ships.)
- India has 204 ports, out of which 12 are major ones and handle 55% of the cargo traffic.
- Existing ports in India are primarily owned and controlled by the government. Currently, 11 of the 12 ports owned by the government are run as trusts.
- Non Major ports are largely given to private parties on concession for periods ranging up to 30 years while ownership remains with the concerned Provincial Government.
- IWT is widely regarded as the most environmentally friendly and cost effective mode of freight transport. As per RITES Report of 2014, one litre of fuel moves 24 tonne - km on road, 95 tonne-km on rail and 215 tonne-km.

30. Power Sector

- Fossil fuels supply around three-quarters of India's primary energy demand and around 80% of it is imported.
- India became the **3rd largest electricity generator** in the world with installed capacity of power generation reaching 344 GW in 2018. Further, power generation recorded a compounded annual growth rate (CAGR) of 8.9%, an increase from 124 GW to 344 GW between 2006 and 2018.
- India is the **3rd largest energy consumer** in the world after USA and China. (With a share of 5.8% of the world's primary energy consumption). Also, India is at 106th position in terms of per capita consumption in 2017, according to world energy statistics published by the IEA
- Thermal power accounts for about 63% (with renewable energy- 23% and Hydro- 12.4%) of total installed capacity and roughly half of the generation capacity is in the private sector.
- India has improved its ranking to 76th position in the **Energy Transition Index** published by the **World Economic Forum (WEF)** suggesting paradigm shift in the sector. This can be attributed to Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) as 18 States have reported supply of more than 20 hours of electricity supply while remaining states have reported about 15 or more hours.
- India's average aggregate technical and commercial loss is at 21.4% leading to overdue bills; pushing up the dues of discoms to power generating companies to Rs. 72,938 crore at the end of November 2019. The AT&C losses in Delhi after the privatization in 2002 has been brought down from a high of 53% to around 8%.
- According to the **Ministry of Power**, distribution companies in the country suffered losses worth Rs 27,000 crore in 2018-19.
- Power- The average tariff increase is a paltry 3% per annum against the target of implementing regular tariff hikes of 5-6% per annum.
- Transmission has taken rapid strides in India, with a CAGR of 7.2% between fiscals 2012 and 2018, raising India's transmission line capacity to 3.9 lakh ckm (circuit kilometre).

GLOBAL ENERGY SCENARIO: HIGHLIGHTED BY THE GLOBAL ENERGY REVIEW 2020

- Global energy demand declined by 3.8% in the 1st quarter of 2020. India's energy demand reduced by almost 30%.
- There would be reduction in emission which would be the largest ever, six times larger than the previous record reduction of 0.4 Gt in 2009 due to the financial crisis
- IEA expects global electricity demand to fall by 5% in 2020. This would be the largest decline since the Great Depression in 1930s.

30.1. Coal, Oil and Gas

- India has the world's **4th largest coal reserve** and is **2nd largest producer** after China, still India stands as 2nd largest coal importer. Overall production of raw coal in India is growing at 8.1%.

- Domestic production of natural gas has been increasing since 2017-18 and is estimated to be 31.8 billion cubic metres (BCM) in 2019-20.
- Domestic oil reserves are limited compared with our needs, India's import dependency (above 80% in 2018) is going to increase significantly in the coming decades.
- Energy efficiency can reduce the energy demand by 17% in 2040 (India Energy Security Scenario (IESS) 2047).
- **Petroleum and Natural Gas:** India is the 3rd largest energy consumer in the world after USA and China. (With a share of 5.8% of the world's primary energy consumption.)
- India's oil production is one of the lowest among the major economies of the world and has been declining over a period of time.
- Large Refining Capacity: India with a refining capacity of 249.4 MTPA is the fourth largest in the world after the United States, China and Russia.
- Proposed auction of 41 coal blocks for commercial mining will create more than 2.8 lakh jobs and attract capital investment worth 33,000 crore. The 41 mines proposed for auction are expected to hit peak production of 225 million tonne (mt) and expected to account for around 15% of India's total coal production in 2025-26. It is expected that commercial coal mining will add ₹20,000 crore annually to the state governments' revenue.
- India has set a policy target of increasing the share of natural gas in India's energy basket from current 6.5% to 15% by 2030.

31. Business and Innovation

- In the **World Bank's Doing Business 2020 Report**, India has improved its rank in 7 out of 10 indicators and is, for the third year in a row, among the 10 economies that improved the most on the ease of doing business after implementing regulatory reforms.
- India has set the target to achieve the top-50 rank.
- India is currently ranked 163 out of 190 countries when it comes to enforcement of contracts.
- **Dealing with Construction Permits (Rank-27):** India streamlined the process, reduced the time and cost of obtaining construction
- **Resolving Insolvency (Rank-52):** India made resolving insolvency easier by promoting reorganization proceedings in practice. India also made resolving insolvency more difficult by not allowing dissenting creditors to receive as much under reorganization as they would receive in liquidation.
- **Trading across Borders (Rank-68):** India made trading across borders easier
- According to an **NSSO report**, 63 million enterprises in India have no registration, out of which 96% are run by individuals and most of them pay no GST as their volume of business is below Rs 20 lakh.

31.1. Entrepreneurship

- With a 10% increase in registration of new firms per district-year, GDP increases by 1.8%.
- India has the **3rd largest entrepreneurship ecosystem** in the world ahead of the countries such as Brazil and South Korea.
- Start-up India: New firm creation has gone up dramatically in India since 2014. As a result, 1, 24, 000 new firms were created in 2018 up from 70,000 in 2014. This growth is particularly pronounced for the services sector reflecting India's new economic structure.
- Entrepreneurial intensity (i.e. number of new firms registered per year per 1000 workers) in formal economy, is low in India compared to other developed economies as large number of India's enterprises operate in the informal economy.
- Higher education levels in a district enable the development of better human capital due to increased supply of ideas and the largest increases appear when literacy rises above 72%.



31.2. Business Statistics

- **Manufacturing:** There are 51 applicable acts and 6,796 Sections / Rules of such acts that are required to be complied with by manufacturing units in India.

- **Services:** The survey showed that the number of licenses required to open a restaurant in India is 12-16 in comparison to only 4 licences that are required in countries such as China and Singapore.
- Compared to Bangladesh, China, and Vietnam, which have more than 80% of market value of exports by large enterprises, India has 80% by small enterprises.
- **Firm Replacement**
- Estimates suggest that a firm that entered the market in 1986 could have expected to stay for the next 60 years (assuming liberalization did not occur). The corresponding figure changed to 12 years due to liberalization.
- In 1991, the size of the largest firm was nearly 100 times the smallest firm which got reduced to 12 in 2018.

31.3. Automobiles Experience

- The country has emerged as a major assembly centre for compact cars.
- India's exports of completely built units (CBUs) increased from about US\$225 million in 2001 to US\$8.8 billion in 2017, while exports of parts and accessories increased from US\$408 million to US\$5.5 billion between these two years. On the other hand, imports of parts and accessories grew significantly faster than imports of assembled vehicles during the same period.

31.4. Mobile Handsets

- India toppled Vietnam to become the **2nd largest manufacturer of mobile** phones globally following China in 2018 with a world share of 11%.
- Between 2013 and 2017, while India's import of telecom handsets declined from US\$4.47 billion to US\$3.31 billion and that of telecom parts increased steadily from US\$1.34 billion to US\$9.41 billion. At the same time exports of telecom handset increased significantly during the last three years. This pattern is consistent with the emergence of India as an assembly centre for telecom handsets.

31.5. Start-up and Innovation

- India has the **3rd largest start-up ecosystem** in the world. Around 28,000 start-ups are recognized by DPIIT.
- India is home to **32 unicorns** (start-ups with valuation greater than \$1 billion) with a combined valuation of more than \$100 billion. It is estimated that the number of unicorns in India will increase by three times, to 95 in 2025 with a cumulative valuation of approximately \$390 billion.
- The entire start-up ecosystem raised \$50 billion funding between 2014 and 2019.
- On an average 12 jobs created per startup totaling up to more than 3.5 Lakh jobs.
- Boom in Women Entrepreneurship: More than 43% of the total start-ups in India have one or more women directors.

INNOVATION

- Recently, India's rank improved in the **Global Innovation Index (GII)** by four places to 48th place in 2020 from 52nd position last year.
- Even though India is within touching distance of breaking into the top-50 innovator countries in the world, it is still quite far from a China, which filed, for instance, 53,345 patent applications with the WIPO in 2018 versus India's 2,013.
- The gross enrollment ratio at the tertiary education level in India is a low 26% meaning, a vast reserve of potential research talent is lost.

32. External Sector

- As per the October 2019 report of World Bank, India remained the **top remittance recipient** country in 2018 followed by China.
- India's external liabilities to GDP ratio has witnessed significant decline during 2014-19 as against 2009-14.
- **External debt remains low at 20% of GDP** as compared to the average external debt to GDP ratio of all developing countries (25.6%) according to World Bank's International Debt Statistics, 2020.
- India's external debt to GDP ratio slightly increased by 0.3% at the end of first half of 2020 over its level at end-March 2019, primarily on account of an increase in commercial borrowings, non-resident deposits and short-

term trade credit. This makes the BoP position more vulnerable because of relatively higher rates of interest on such borrowings.

- ECBs turned negative during 2014-19, from a healthy positive level in 2009-14.
- The share of short term debt (with original maturity of up to one year) has been falling in total external debt since 2012-13.

32.1. International Trade

- India's share in global trade is less than 2% (**1.7% in 2018**). Trade as a share of GDP has grown from 24% in 1960 to 60% in 2015.
- India has improved its ranking from 143 in 2016 to 68 in 2019 under the indicator, "Trading across Borders", in **World Bank's Ease of Doing Business Report**.
- India has signed 14 FTAs with various countries between 1993 and 2018.
- India has witnessed 700% growth in defence exports from 2016-17 to 2018-19 and it ranked 19th in the list of defence exporters in 2019. India's toy industry makes less than 1% of the world market.
- WEO has projected the declining growth of global output to rebound in 2020 with a modest uptick to 3.3% which may positively impact India's exports.
- CAD to GDP ratio has been significantly improving from 2009-14 to 2014-19
- CAD/forex ratio increased from 10.6% in 2013-14 to 13.9% in 2018-19 and caused the rupee to depreciate.
- With two top trading countries i.e. USA and United Arab Emirates, India has consistently run trade surplus since 2014-15.
- India has trade deficit continuously since 2014-15 with respect to other major trading partners i.e. China PRP, Saudi Arabia, Iraq, Germany, Korea RP, Indonesia and Switzerland.
- India had trade surplus with Hong Kong and Singapore till 2017-18, before it changed to trade deficit in 2018-19.

32.2. Merchandise Trade Deficit

- It is the **largest component** of India's current account deficit.
- On average, India's merchandise trade balance has improved from 2009-14 to 2014-19 on account of more than 50% decline in crude prices in 2016-17.
- Over the years the merchandise imports to GDP ratio has been declining for India and may be a reflection of a deceleration in GDP growth.
- India's top 10 trading partners during 2019-20 (April-November) jointly account for more than 50% of India's total merchandise trade.
- **The global value chains** today account for nearly 50% of trade worldwide. According to the World Development Report 2020, a 1% increase in GVC participation is estimated to boost per capita income levels by more than 1% - about twice as much as the conventional trade.
- China's "Button Town," where hundreds of factories produce more than 60% of all buttons on Earth.

32.3. Services

- India's net services surplus has been steadily declining in relation to GDP since it reached its peak to about two-thirds of merchandise deficit in 2016-17.
- India's service exports have consistently hovered between 7.4 to 7.7% of GDP. Software services constitute around 40-45%
- Over the years, service imports in relation to GDP has been steadily rising given arising level of FDI and a gradual upscaling of the Make in India program.
- The component of travel services has been steadily increasing reflecting the growing attractiveness of global destinations to the domestic tourists in the country.

32.4. Exports

- **Report of the High-Level Advisory Group-** Over a period of 2003-2017, in all the sectors-Agriculture, Manufacturing goods, Goods(Merchandise), Services and All trade-India's ranking in global exports is lower now (between 2012 and 2017) than before. **According to WTO data**, India's share in global merchandise exports was 1.7% in 2017, and the services share 3.4%. Aggregate export share in world exports has been on a marginal

upward trend and has plateaued in the 2 to 2.1% range since 2010. In this backdrop, **the government's target of doubling of India's exports by 2025** seems unrealistic.

- However, Indian share in world trade is increasing (albeit slowly) because our growth is faster than the world average.
- Growth in Non-POL exports dropped significantly from 2009-14 to 2014-19.
- Between 2011-12 and 2019-20, imports of Electronics grew the fastest from a negligible share to 3.6%.
- While India takes 60-68 and 88-82 hours in border and documentary compliance for exports and imports respectively, Italy takes only one hour for each. Moreover, the cost of compliance is zero in Italy which is US\$ 260-281 and US\$ 360-373 for exports and imports respectively in India.
- Recommendation: Enhance capital base of the EXIM Bank by another INR 20,000 crores by 2022 and that of the Export Credit Guarantee Corporation (ECGC) by INR 350 crores.



33. International Investment

- Foreign investment has remained at **2% of GDP**.
- According to **World Investment Report of UNCTAD**, India jumped from 12th position in 2018 to 9th in 2019 on the list of the World's top FDI recipients.
- Net FDI inflows have continued to be buoyant in 2019-20 attracting in the first half itself an amount more than 50% of the previous year level due to continuous liberalization of FDI guidelines.
- In relation to net FDI, dependence on net FPI to finance the CAD was less in 2014-19 at 17.1% as compared to 45.6% in 2009-14.
- India is biggest FDI host in the sub-region, with more than 70% of inward stock. Nearly 80% of all the FDI inflows have come from Singapore, Mauritius, Netherlands, USA and Japan.
- US has the largest inflow of FDI followed by China and Singapore
- Most of the investments were in the information and communication technology (ICT) and the construction industry
- 2014 marks the entry of the Chinese private sector at a large scale in India and subsequent influx of Chinese capital and investments in infrastructure, automobiles, energy, real estate and consumer goods sectors. Since then, Chinese investors have invested around \$4 billion into 90 start-ups in India and 18 of the country's 30 unicorn start-ups are funded by Chinese investors.
- In the last five years, Chinese investment in India has drastically increased from US \$1.6 billion in 2014 to at least US \$26 billion in 2019 (both current and planned), in particular in technology start-up segment.

33.1. BITs

- **India started signing BITs in early 1990s** and signed the first BIT with the United Kingdom (UK) in 1994, since then India has signed BITs with 84 countries.
- BITs have been one the major drivers of FDI inflows into India. Total FDI to India has increased from \$4,029 million in 2000-2001 to \$43,478 in 2016-17.
- India has unilaterally terminated 66-odd BITs between 2016 and 2019. Since then, India has signed just three treaties, none of which is in force yet.

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