Insights Mains 2018 Exclusive

Economy
Table of Contents

INDIAN ECONOMY – GROWTH AND DEVELOPMENT ................................................................. 4
1. Economic Survey 2017-18: Highlights .................................................................................. 4
2. Banking Reforms ..................................................................................................................... 4
3. Public Sector Asset Rehabilitation Agency (PARA) .................................................................. 5
4. The Government Needs to Handle Public Sector Banks with Care ........................................ 6
5. Development Banks .............................................................................................................. 6
6. Boosting India’s Exports ......................................................................................................... 6
7. Ease of Doing Business: India jumps 30 Spots ..................................................................... 7
8. Moody's Upgrades India’s Rating ......................................................................................... 8
9. Behavioural Economics ......................................................................................................... 8
10. For a knowledge Economy ................................................................................................... 9
11. Manufacturing sector in India ............................................................................................... 10
12. Creating Jobs for Indians ..................................................................................................... 10
13. PSBs Consolidation ............................................................................................................. 11
14. The State of State Government Finances ............................................................................ 12
15. India’s Double-digit GDP Growth is doable ....................................................................... 13
16. Focus on Simplifying the GST Structure ............................................................................ 13
17. National Financial Reporting Authority (NFRA) ................................................................. 14
18. Fiscal Responsibility and Budget Management (FRBM) ..................................................... 14

ISSUES RELATED TO DIRECT AND INDIRECT FARM SUBSIDIES AND MINIMUM SUPPORT PRICE .......... 16
1. Minimum Support Prices .................................................................................................... 16
2. The MSP and Procurement Conundrum ............................................................................. 17
3. Third Generation Food Security Law .................................................................................. 18
4. PDS Reforms ..................................................................................................................... 19
5. Digitization of PDS .......................................................................................................... 19

INDIAN AGRICULTURE – ISSUES ......................................................................................... 21
1. Agriculture Sector: Economic Survey 2017-18 ................................................................. 21
2. Budget Proposals for Enhancing Farmers Income .............................................................. 21
3. Creating a National Agriculture Market (NAM) ................................................................. 22
4. Contract Farming .............................................................................................................. 23
5. Milk Crisis in India ............................................................................................................ 24
6. Zero Budget Natural Farming (ZBNF) .............................................................................. 24
7. Farm Policies for India ....................................................................................................... 25
8. Draft Report of Ashok Dalwai Committee ......................................................................... 25
9. Indian Agrarian Crisis ....................................................................................................... 26
10. Reforming Indian Agriculture by Sprinkles and Drips ....................................................... 27
11. Agriculture investment: Time to cultivate a visible hand ................................................ 28

ISSUES RELATING TO PLANNING, MOBILIZATION OF RESOURCES, GROWTH, DEVELOPMENT AND
EMPLOYMENT ......................................................................................................................... 29
1. Formalization of conomy ..................................................................................................... 29
2. Skilling India ........................................................................................................................ 29
3. Rebooting the system for a skills upgrade ........................................................................ 30

www.insightsonindia.com                      Page 2                      www.insightsias.com

FINANCIAL SECTOR .......................................................................................................................... 33
1. Externa Commercial Borrowings ............................................................................................... 33
2. RupeeDepreciation ....................................................................................................................... 33
3. Tax Compliance in India ............................................................................................................. 34

INFRASTRUCTURE: ENERGY, PORTS, ROADS, AIRPORTS, RAILWAYS ETC ......................... 35
1. Infrastructure Sector: Economic Survey 2017-18 ................................................................. 35
2. Offshore Wind Energy ............................................................................................................... 36
3. India's Energy Sector Reforms .................................................................................................. 36
4. In a State of Energy Poverty: On the Goal of 100% Electrification ......................................... 37
5. Rising Fuel Prices ..................................................................................................................... 38
6. A Long-term Strategy to Reduce Crude Imports ....................................................................... 38
7. Logistics Sector in India ............................................................................................................ 39
8. Infrastructure Sector in India ..................................................................................................... 39
9. India's Digital Economy ............................................................................................................ 40
10. How Digitisation can Drive Growth in India ......................................................................... 41
11. Ujjwala Revolution .................................................................................................................. 42
12. The problem of land hoarding ............................................................................................... 42

INDUSTRIAL POLICY AND INDUSTRIAL GROWTH .................................................................. 43
1. Sugar Industry Crisis .................................................................................................................. 43
2. Role of Union and State Governments in the Growth of IT Sector .................................... 43
3. Global Value Chains (GVC) ..................................................................................................... 44
4. Food Processing Sector ............................................................................................................. 45
5. Rampant Ever-greening in Indian Pharma Industry ............................................................... 45

ISSUES RELATING TO INTELLECTUAL PROPERTY RIGHTS ............................................... 47
1. Role of Gi Tag for India's Growth ............................................................................................. 47

LAND RELATED ISSUES ............................................................................................................... 48
1. The Need for Digitizing Land Records in India ....................................................................... 48

MISCELLANEOUS ............................................................................................................................ 49
1. Shell Companies in India ........................................................................................................... 49
2. Railways’ focus misplaced: CAG ............................................................................................. 49
Indian Economy – Growth and Development

1. Economic Survey 2017-18: Highlights
   - GDP to grow 7-7.5% in FY19; India to regain fastest growing major economy tag.
   - GDP growth to be 6.75% in FY2017-18.
   - Policy agenda for next year -- support agriculture, privatise Air India, finish bank recapitalisation.
   - GST data shows 50% rise in number of indirect taxpayers.
   - Demonetisation has encouraged financial savings.
   - Insolvency Code being actively used to resolve NPA woes.
   - Retail inflation averaged 3.3% in 2017-18, lowest in last 6 fiscals.
   - Rs 20,339 cr approved for interest subvention for farmers in current fiscal.
   - FDI in services sector rises 15% in 2017-18 on reforms.
   - Technology should be used for better enforcement of labour laws.
   - Priority to social infrastructure like education, health to promote inclusive growth.
   - Centre, states should enhance cooperation to deal with severe air pollution.
   - Survey 2017-18 in pink colour to highlight gender issues.

2. Banking Reforms
   - To sustain the high growth rate India has achieved, the country should carry out banking sector reforms.
   - IMF also said India must address the ongoing crisis in its banking sector to support investment and inclusive growth agenda.
   - Inclusive growth has been India’s policy focus throughout and the 12th Five Year Plan was even titled as – “Faster, sustainable and more inclusive growth”.
   - Historically, India’s banking sector reforms — especially in the 1990 — focused on enhancing competition, strengthening governance and regulation.
• Future reforms should build upon these areas and draw lessons from past experiences.
• India’s banking system is characterised by a high share of Public Sector Banks (PSBs), accounting for over 70% of total assets.
• Since the RBI launched the Asset Quality Review (AQR) in 2015, Indian banks have had to progressively reveal the true extent of their NPAs.
• The gross non-performing asset (GNPA) of the Scheduled Commercial Banks (SCBs) has deteriorated from 10.4% in September 2017 to 11.6% in March 2018.
• The deterioration with regards to public sector banks is even sharper: from 13.7% to 15.6%.
• Rising NPAs have also put a strain on the health of the PSBs, reflected in their declining Return on Assets (ROA) and Return on Equity (ROE) ratios.
• The decline in bank’s profits is largely due to higher growth in risk provisions; loan write offs and decline in net interest income.
• The stresses on the banking sector have translated into a slowdown in industrial credit.
• India’s banks lag behind global counterparts in terms of financial depth or the size of banks.
• India also has low levels of private credit to GDP and credit to deposit ratio, relative to other emerging economies.

3. Public Sector Asset Rehabilitation Agency (PARA)
• The Central government has revived the idea of setting up an asset reconstruction or asset management company, a sort of ‘bad bank’.
• In the Economic Survey Report 2017, Chief Economic Adviser Arvind Subramanian had suggested the creation of Public Sector Asset Rehabilitation Agency (PARA) which will work as a “Bad bank” to absorb the losses from the PSBs.
• A bad bank is an entity that buys NPAs or stressed loans from banks and financial institutions (FIs), mostly at a discounted market price.
• It then works to recover and turnaround the assets through professional management, sale or restructuring.
• Private Asset Reconstruction Companies (ARCs), Joint Lenders Forum (JLF), Strategic Debt Restructuring (SDR) and Scheme for Sustainable Structuring of Stressed Assets (S4A) haven’t proved successful in resolving bad debts.
• Bad bank has been experimented in several countries especially after the financial crisis of 2008-09.
• It has witnessed some success in Malaysia, Sweden, Spain and few other countries.
• In 1999, China set up four state-controlled AMCs to mop up bad loans from the country’s ailing banks.
• Former RBI governor Raghuram Rajan said that it would simply mean the transfer of NPAs from one entity to other.
• Reference: http://www.insightsonindia.com/wp-
4. The Government Needs to Handle Public Sector Banks with Care

- In the March quarter, PSU banks booked losses in excess of Rs 62,000 crore and the total gross non-performing assets (NPAs) stood at about Rs 9 trillion.
- India has been ranked fifth on the list of countries with the highest Non-Performing Assets (NPAs), by CARE Ratings.
- Of the 21PSBs, 11are under the Prompt Corrective Action (PCA) plan of RBI.
- Poor pay, more scrutiny in PSBs: Ananthasubramanian earned about Rs30 lakh at PNB in the year ended March 2017, about 5% of the Rs6 crore earned by Chanda Kochhar, the CEO of ICICI Bank Ltd.
- About 30 top level vacancies exist at state banks, including executive directors, the Press Trust of India reported.
- It is likely that the current Rs 2.11 trillion PSU bank recapitalization plan will not be sufficient to put the PSU banks back on track.
- Economic Survey Suggestions:
  - Need to be mindful of the 4 Rs —
    - ‘Recognition’ of assets close to their true value
    - ‘Recapitalisation’ or infusion of equity for banks to protect their capital
    - ‘Resolution’ in the form of selling underlying stressed assets
    - ‘Reform’, through the right future incentives for the private sector and corporates to ensure there is no repeat of the twin balance sheet syndrome.

5. Development Banks

- Development banks are specialized financial institutions. They provide medium and long-term finance to the industrial and agricultural sector.
- The role of development banks was diluted during the early 2000s, not only in India but also in other developing countries.
- The China Development Bank was established as late as 1994, and it performed a critical role in the industrialization surge that began in the mid-1990s.
- Between 2000 and 2010, the outstanding loans of development banks as a percentage of GDP dropped from 7.4% to 0.8% in India, but rose from 6.4% to 9.7% in Brazil and 6.2% to 11.2% in China.
- The time has come to establish a National Development Bank (NDB) in India.

6. Boosting India’s Exports

- India is not a big exporter in the world and its share in the world trade is less than two percent.
- The Central government’s Merchandise Export from India Scheme (MEIS) aims at increasing that share to 3.5 per cent by 2020.
• The government has taken several measures to boost exports in its midterm review of foreign trade policy 2015-20.
• Exports have played an important role in transforming countries such as South Korea and China in recent decades.
• Indian exports especially in garments and ‘ready mades’ are competing against Bangladeshi and Vietnamese exports.
• Vietnam and Bangladesh are becoming more competitive and are capturing the low-end manufacturing space being vacated by China.
• India has potential in increasing agricultural exports and marine products, but the markets in developed countries like US have strict standards for admitting agricultural imports.
• Focus on new emerging sectors such as genomic and giving thrust to export of goods that are not currently among the top 10 items.
• Banking on India's political relationships with countries such as Cuba and many in Africa to push exports to new markets.

7. Ease of Doing Business: India jumps 30 Spots
• India jumped 30 spots to number 100 in the latest Ease of Doing Business report for 2018 released by the World Bank.
• Positives
  o Major improvements in indicators such as resolving insolvency, paying taxes, protecting minority investors, getting electricity connection and getting credit.
  o India improved ranking in six of the ten indicators, while its performance in absolute terms improved in nine.
  o India’s corporate law and securities regulations were recognised as highly advanced.
  o The time taken to obtain an electricity connection in Delhi reduced from 138 days four years back to 45 days now, against a 78-day average in OECD high-income economies.
  o India witnessed the biggest jump in the criterion of paying taxes.
  o The World Bank report also appreciated India’s new insolvency law.
  o The World Bank also complimented India for easing tax compliance.
• Where India slipped up
  o The need for local entrepreneurs to go through 12 procedures to start a business, as opposed to five in high-income countries.
  o Major slip in ranking in the category of registering property due to increase in time taken, cost and number of procedures for registration.
  o Bhutan, in 75th place, is South Asia’s highest-ranked economy, followed by India (at 100) and Nepal (at 105).
  o India still lags in starting a business, enforcing contracts and dealing with construction permits.
• Improvement in India’s rank will boost SMEs, job creation: World Bank.
• There are examples across the world where an improved Doing Business ranking has resulted in increased employment and inclusive growth.
• The report takes into account only Delhi and Mumbai. To get a true picture of...
doing business, manufacturing hubs such as Tamil Nadu and Gujarat should be looked at.


### 8. Moody's Upgrades India's Rating

- Moody's Investors Service upgraded India's sovereign credit rating to **Baa2** from Baa3, changing outlook to 'stable' from 'positive'.
- This is higher than Brazil, Russia and South Africa but lower than China.
- Moody's upgraded India's ranking for the first time in 14 years.
- This happened at a time when India's ranking in the ease of doing business index moved up 30 places.
- What led to Moody’s upgrading India’s ratings
  - **Wide ranging reforms**
    - Government efforts to reduce corruption, formalize economic activity and improve tax collection and administration through demonetization and GST.
    - The **Aadhaar-based direct benefit transfers** will remove 40-50% leakages associated with India’s subsidy programme.
  - **Steps taken to strengthen banks**
    - Government addressing **twin balance-sheet problem** through the insolvency code and bank recapitalisation.
    - Adoption of new **FRBM Act** is expected to enhance India's fiscal policy framework.
    - Adoption of a flexible inflation targeting regime and the formation of a Monetary Policy Committee (MPC).


### 9. Behavioural Economics

- Behavioural economics is the effects of **psychological and emotional factors** on the economic decisions of individuals and institutions.
- The study of behavioural economics includes how market decisions are made and the mechanisms that drive public choice.
- Example: Often perfectly rational people tend to behave irrationally, by simply reducing the price from ₹1,000 to ₹999.99 which increases sales.
- In another case, people get attracted to higher discount rates rather than the markup price in different shops.
- Behavioural economist **Richard Thaler**, is the winner of the 2017 Nobel Prize in Economics.
- Lessons from behavioural economics can be used to create environments that **nudge people toward wiser decisions** and healthier lives.
- This could be savings or pension schemes that have penalties for early withdrawal; or making it harder to reach the shelves with unhealthy food in school canteens or grocery stores; or membership schemes in the gym where customers agree to pay more if they miss their scheduled workouts.
- An experimental study showed that by providing three options: no savings account, a normal savings account, and a commitment savings account that
locked up the money until a certain date - the farmers picked the third option.

- UK, US, Singapore and Australia have setup behavioural economics unit which serve as policy toolbox.
- Behavioural economics can be used in policy-making to influence behaviours.
- Swachh Bharat will succeed truly if behaviours change. For which mindsets must change.
- Experiments conducted in some states show that application of behavioural economics successfully changed the sanitation mindset.
- Behavioural economics will have an impact even on macroeconomics, thereby influencing on issues like monetary and fiscal policies.
- Criticism
  o Discoveries about the past from behavioural experiments do not easily generalise to the future - the social context for one generation is often different from another.
  o The diversity of the country means that what works in one state may not work in another.

10. For a knowledge Economy

- The knowledge based economies use ICT, innovation and research, higher education and specialised skills to create, disseminate, and apply knowledge for growth.
- U.S. accounts for 33% of global output of knowledge-intensive services, China 10%, but India only 2%.
- India has the potential to become a leading knowledge-based economy with its youth population and growing information technology.
- India has strong services sector which contribute around 60 per cent to India's GDP.
- ISRO, considered a leading space organisation globally, is one of the best and most competitive in the multi-billion-dollar space launch market.
- India is becoming a hub for 'Medical Tourists'.
- Large numbers of Indian students go for tertiary education abroad and many stay abroad leading to India's brain drain.
- High percentage of illiteracy and informal economy in India makes large population to be left out in reaping the benefits of Knowledge based Economy.
- Lack of Innovation and Research and Development in India. The number of Nobel prizes won by India despite its huge population is evidence to this.
- India will need supportive laws, improved infrastructure, removal of barriers to trade and investment, up-skilling of labour force, higher spending in R&D and innovative financing.
- If we wish to become a knowledge economy we should revamp our profoundly inadequate, inefficient and inequitable early health and education systems.
11. Manufacturing sector in India

- India's manufacturing sector has evolved through several phases - from the initial industrialisation and the license raj to liberalisation and the current phase of global competitiveness.
- The **Indian Manufacturing sector** currently contributes **16-17% to GDP**.
- By 2020, the country is expected to become the fifth largest manufacturing destination.
- India offers the **3 'Ds'** for business to thrive — **democracy, demography and demand**.
- Various studies have estimated that every job created in manufacturing has a multiplier effect in creating 2–3 jobs in the services sector.
- 65% of India's population is below the age of 35 - giving us the edge of demographic dividend.
- Robust domestic demand, a growing middle class, a young population and a high return on investment, makes India an attractive opportunity to manufacturers.
- According to our latest salary index, manufacturing is the lowest paid sector with Rs. 211.7 median hourly gross salary in 2016.
- According to a FICCI report, India has 5.5 million people enrolled in vocational courses, while China has 90 million of them.
- If India has to raise its share of manufacturing in GDP to around 25%, industry will have to significantly step up its R&D expenditure. This must be addressed by the new industrial policy.

**Government Initiatives**

- Make in India initiative with the primary goal of making India a global manufacturing hub.
- ‘Zero defect zero effect’ for MSMEs to deliver top quality products using clean technology.
- ‘SKILL INDIA’ - a multi-skill development programme with a mission for job creation and entrepreneurship.
- Labour reforms through a dedicated Shram Suvidha Portal, Random Inspection Scheme, Universal Account Number and Apprentice Protsahan Yojana.
- Defence Procurement Policy (DPP) under which the priority will be given to the indigenously made defence products.
- Technology Acquisition and Development Fund (TADF) under the National Manufacturing Policy (NMP) to facilitate acquisition of Clean, Green and Energy Efficient Technologies by MSMEs.
- Pradhan Mantri MUDRA Yojana (PMMY) for providing loans to small-scale businesses.


12. Creating Jobs for Indians

- 65% Indians are younger than 35 years, and they dream of a better life built on well-paid and secure employment.
- Unemployment is a major hurdle in India’s growth path. Therefore, Jobs are
the pivot for the social and economic growth of the country.

- According to labour ministry’s report on the **Fifth Annual Employment-Unemployment Survey** (2015-16), the unemployment rate in 2015-16 was 5% of the labour force, up from 4.9% in 2013-14.
- Employment in the formal sector has fallen since 1997.
- People are pushed into either self-employment; or the unprotected and casualised wage employment.
- Labour is a concurrent subject, thus there is multiplicity of laws at centre and state levels.
- The socio-economic and caste census (SECC) survey revealed that 56% rural households own no land, and depend primarily on manual labour to survive.
- Out of 1.5 million engineering graduates, only 500,000 are absorbed into the market. This raises concerns about the quality of engineers produced.
- Make in India, Digital India, Startup India and the Smart Cities project did not create the number of jobs it aimed at.
- **Indian Companies in US**
  - Indian companies in US are generating employment for the Americans.
  - Between 2011 and 2015, the Indian companies have made an investment of $2 billion and paid taxes worth $20 billion in US.
  - Indian talent is essential for the US to maintain its leadership in the field of innovation and research, a top American senator had said.
- To ensure large-scale job creation, the freedom to create jobs must be on a par with other freedoms guaranteed by the Constitution.
- If there is a fundamental right of job, then quality of basic education, health and social service between urban and rural residents will be narrowed.
- The need of the hour is reversing the agrarian crisis, strengthening the education system, greater labour protections and promoting labour-intensive small manufacturing.
- Prioritise investments in labour-intensive sectors. NITI Aayog has suggested tax holidays for big job creators.
- India’s private sector needs to come forward to create well-paid and highly productive jobs, said former Niti Aayog Vice-Chairman Arvind Panagariya.
- Sustainably increasing farm income needs **4Is** — incentives, investments, institutions, and innovation.

### 13. PSBs Consolidation

- The government is working on a consolidation agenda with a view to creating 3-4 global-sized banks and reduce the number of state-owned lenders to about 12.
- **Indian banking sector** is highly **fragmented**, especially in comparison with other key economies.
- In 1991 it was suggested that India should have fewer but stronger PSBs.
- From regulatory perspective, monitoring and control of less number of banks will be easier after mergers.
- For meeting the norms under **BASEL III**, for ensuring **capital adequacy ratio**,
the larger banks will be at ease.
- Improve the capacity of the banking system to absorb shocks that the markets may cause to it.
- Bigger banks can attract more Current Account, Savings Account (CASA) deposits.
- **Risks and Challenges**
  - One of the most challenging problems would be human resource integration and management.
  - Employees would fear job loss, reduced promotional avenues, new culture, etc.
  - Failure of a very large bank may have macro implications on the economy and may have to be bailed out during stress periods.
  - RBS from United Kingdom is an example of how a big global bank collapsed post the global financial crises and had to sell its assets globally.
  - Many big private banks globally, including in the US, have failed.
  - In the US and the UK, political campaigns have been run advocating break-up of big banks.
  - Following the merger of 5 SBI associate banks, SBI’s gross NPAs jumped from Rs1.08 trillion to Rs1.79 trillion.
- The **Narasimham committee** had spoken about a large number of regional and local banks at the lowest tier of banking structure.
- RBI should continue to give banking licences for more small finance banks as well as universal banks along with bank mergers.

### 14. The State of State Government Finances
- The **annual study of state government finances** by the Reserve Bank of India (RBI) shows that states missed the fiscal deficit target of 3% of GDP for the third year in a row.
- **The fiscal deficit of states is estimated to be at 3.1% of GDP in 2017-18.**
- One reason for higher expenditure in the last fiscal, was a sharp rise in salaries.
- Further, as per the revised estimates for 2017-18, **debt waivers dented state governments’ budget to the extent of 0.32% of GDP.**
- The share of market borrowing in the financing of fiscal deficit is expected to top 90% in the current year, compared with about 61% in 2015-16.
- It’s time to align the monetary and fiscal economies.
- India needs better fiscal management at both the state and Central levels to avoid crowding out the private sector.
- **Revenue mobilisation** remains one key ingredient to attaining fiscal targets. In 2018-19, states’ revenue capacity may be augmented with the stabilisation of GST and the consequent expansion of tax base and efficacy.
15. India’s Double-digit GDP Growth is doable

- India’s GDP, clocked in at $2.6 trillion for 2017, according to International Monetary Fund’s World Economic Outlook (WEO) for April 2018.
- India is now the world’s sixth largest economy, displacing France. The five economies ahead are the United States, China, Japan, Germany and United Kingdom.
- Getting GDP to grow by 10 per cent in real terms, though not impossible, is quite challenging.
- During 2005-08 India had recorded an average growth of around 9.5 per cent.
- What needs to be done?
  - Past experience shows that high GDP growth has been associated with years when agriculture grew by 4-5 per cent.
  - For this to materialise farm output has to be resilient and grow in an unhindered way.
  - The second is industry, where the two building blocks would be manufacturing and construction.
  - This segment has to register 10 per cent growth continuously for the overall growth number to clock 10 per cent.
  - The service sector has to necessarily grow by over 10 per cent.
- The global institutions report said that India’s millennial population of 400 million is the largest in the world and is armed with around $180 billion in spending power and with high smartphone adoption and widespread availability of mobile broadband infrastructure; it will become a disruptive force faster than most businesses expect.

16. Focus on Simplifying the GST Structure

- Analysis by Economic Survey:
  - The implementation of the GST, which is bringing more businesses into the tax net, will further push formalization of the economy.
  - The GST is leading to better tax compliance. The number of unique registrations has now crossed the 10 million mark, which is higher than entities registered in the pre-GST period.
NOTES

The GST system is creating a vast repository of data that could be useful in policymaking. For example, it is now possible to know the state-wise distribution of international exports.

The way the GST Council has evolved is a notable achievement. It shows the way complex issues can be addressed through cooperation between the Union and state governments.

- The latest “India Development Update” of the World Bank, for example, noted that the 28% rate, applicable on a set of goods, is the second highest among the 115 countries sampled: 49 countries have a single rate and 28 have two rates.
- Only four countries other than India—Italy, Luxembourg, Pakistan and Ghana—have four rates.
- Arvind Subramanian has noted that the 28% rate should go.
- Removing the highest 28 per cent slab and a uniform rate of cess should be the first step for further simplification of the Goods and Services Tax (GST).
- On the basis of collections in nine months—showed that revenue went up by 11.9%, with implied tax buoyancy of 1.2. This was higher than the historical standard for indirect taxes.
- As per the latest World Bank report, ‘The Indian Goods and Services Tax (GST) system is among the most complex in the world with one of the highest tax rates.’

17. National Financial Reporting Authority (NFRA)

- Union Cabinet had approved establishment of National Financial Reporting Authority (NFRA).
- It is a big step forward in regulating the financial audit of large companies.
- The decision comes against the backdrop of various auditing lapses in the banking sector, including the Rs. 12,700 crore fraud at Punjab National Bank.
- The NFRA is to be an independent regulator overseeing the auditing profession. Its creation was first recommended by the Standing Committee on Finance in its 21st report.
- As per the Companies Act, 2013 the NFRA is tasked with multiple jobs like recommending accounting and auditing standards, ensuring compliance with them and overseeing the quality of service of the accounting and audit professions.
- Most of the major economies of the world have independent audit regulators.

18. Fiscal Responsibility and Budget Management (FRBM)

- The Fiscal Responsibility and Budget Management (FRBM) Act was enacted in 2003 which set targets for the government to reduce fiscal deficits. The targets were breached time and again.
- The Fiscal Responsibility and Budget Management Act, 2003 (FRBMA) was passed with an aim to institutionalize financial discipline, reduce India’s fiscal deficit and improve macroeconomic management by moving towards a
balanced budget.

- In Budget 2016-17, a panel under the chairmanship of N.K Singh was constituted to review the Fiscal Responsibility and Budget Management Act.

**Recommendations of NK Singh committee**

- **Combined debt-to-GDP ratio** of Centre and States should be brought down to 60% by 2023 (40% Centre and 20% States) as against existing 49.4% of centre and 21% of states.
- **For fiscal consolidation**, the centre should reduce its **fiscal deficit** from the current 3.5% (2017) to 2.5% by 2023.
- The central government should reduce its **revenue deficit** steadily by 0.25 percentage (of GDP) points each year, to reach 0.8% by 2023.
- The Committee proposed to create an autonomous **Fiscal Council** with a role of preparing multi-year fiscal forecasts, recommending changes to the fiscal strategy, improving quality of fiscal data, advising the government if conditions exist to deviate from the fiscal target, and advising the government to take corrective action for non-compliance with the Bill.

**Proposed changes to FRBM Act in the Budget 2018-19**

- Budget 2018-19 had proposed amending the FRBM Act again, which will shift the target of 3% fiscal deficit-GDP ratio to end-March 2021.
- The current Budget has retained the fiscal deficit at 3.5% of GDP, missing the budgeted target of 3.2% which was itself a deviation from the stipulated target of 3% for 2017-18 in the amended FRBM Act.

- Government has to abide by this 3% mandate beyond 2020-21 to bring down debt to GDP ratio to 40% by 2024-25.
- **Higher reliance on extra budgetary resources may lead to Fiscal risks.**
- The Central government did not accept the recommendation of setting up a fiscal council.
- There is a need for a regular and constant review of the fiscal policy and targets contained in FRBM, as circumstances can change in the economy.
Issues related to Direct and Indirect Farm Subsidies and Minimum Support Prices

1. Minimum Support Prices
   - A key reason for the current agrarian distress is that farmers have failed to get even minimum support prices for their produce.
   - In the budget 2018-19 the government announced that farmers will be paid 1.5 times the cost of production as part of the MSP for all kharif season crops.
   - Minimum Support Price is the price at which government purchases crops from the farmers, whatever may be the price for the crops.
   - MSPs have failed to keep pace with input costs, according to data from CACP.
   - The cost of cultivation varies across states, while MSPs are based on a weighted all-India average, so farmers don’t get guaranteed profits.
   - Between 2010 and 2014, MSPs grew 12% on average, while between 2015 and 2018, they grew only 5%, according to data from credit rating firm Crisil.
   - Only a selected few states such as Punjab, Haryana, MP and west UP have well-developed procurement infrastructure.
   - More than three-fourths of farming households don’t produce any marketable surplus and hence can’t really benefit from price support.
   - India’s price support programme is also promoting cultivation of water intensive crops like paddy and sugarcane even in water deficit regions such as Punjab, Haryana and Maharashtra.
   - Rice and sugarcane occupy 25% of India’s agricultural land but consume more than 60% of its irrigation water.

Factors for determining MSP:
   - Cost of production, Changes in input prices, Input-output price parity, Trends in market prices, Demand and supply.
   - Inter-crop price parity, Effect on industrial cost structure, Effect on cost of living, Effect on general price level.
   - International price situation, Parity between prices paid and prices received by the farmers.
   - Effect on issue prices and implications for subsidy.

Recommendations by NITI Ayog
   - The awareness to farmers and timely dissemination of information till the lowest level so that it would increase the bargaining power of the farmers.
   - Timely payment should be ensured.
   - MSP should be announced well in advance of the sowing season so as to enable the farmers to plan their cropping.
   - Improved facilities at procurement centres, such as drying yards, weighing bridges, toilets, etc.
   - More godowns should be set up and maintained properly for better storage and reduction of wastage.
   - The criteria for fixing MSP should be current year’s data and based on more meaningful criteria rather than the historical costs.
   - The Procurement Centres should be in the village itself to avoid transportation costs.
2. The MSP and Procurement Conundrum

- The government has increased MSPs of 14 kharif crops to at least 50% above paid out costs of farmers including imputed cost of family labour.

- **Over Emphasis on MSP:**
  - The overall approach to agriculture is marked by reactive, rather than clear-sighted, proactive thinking.
  - Increasing the MSP more to suit the interests of farmers rather than linking it with market dynamics has distorted the pricing system.
  - While MSP is effective for rice and wheat, it is only indicative for other crops.
  - **Overemphasis on support prices distorts markets and creates storage issues.**
    - The farmers’ distress coexists with surplus production.
    - Higher MSPs are likely to make our rice exports globally uncompetitive, leading to further accumulation of stocks at home, and greater economic inefficiency.
    - States like Uttar Pradesh announce a much higher state advised price for sugarcane, and we see mounting cane arrears, in turn making the sugar industry vulnerable.

- **Other Countries:**
  - Setting procurement prices higher than global prices is not new in world history.
    - European Economic Community (EEC) did it earlier, leading to mountains of butter and lakes of milk.
    - China also raised MSPs of wheat, rice and corn substantially above world prices, leading to piling up of grain stocks touching 300 MMT in 2016-17.
    - But China is learning from its mistakes and since 2014, it has been reducing its MSPs for rice and wheat and has removed corn from price support.
    - On input subsidies, it has moved towards direct income support on a per hectare basis.

- **OECD-ICRIER (Indian Council for Research on International Economic Relations) Report:**
  - OECD-ICRIER report suggested to the government to launch **new policy initiatives** and **accelerate existing reforms** to achieve higher agriculture growth and ensure better income to farmers.
  - The report *Agriculture Policies in India* pointed out that the gross farm revenue declined 6% annually between 2014 and 2016 period because of low market prices even as farmers got large subsidies for
inputs like fertilisers, power and irrigation.

- The challenges confronting the sector include prevalence of large numbers of smallholders, low productivity, climate change, pressure on natural resources, persistent food insecurity and an under-developed food processing and retail sector.
- The input subsidies provided through the budget should be freezeed and then gradually withdrawn.
- This fund should be used for providing infrastructure and innovation in the sector.

- Coordination is needed amongst union ministries dealing with agriculture, food, food processing, fertilisers, water, rural development, and trade to evolve a holistic approach to agriculture and farmers’ incomes.
- The need for this coordination was also echoed in the OECD-ICRIER report.
- It is time for India to devise an income policy (DBT) for farmers.
- Telangana’s Rythu Bandhu scheme with direct investment support is interesting. It can be refined and made WTO compatible.
- The state government gives a payment of Rs 10,000 per hectare of cultivable land to all farmers irrespective of the crops they raise.

3. **Third Generation Food Security Law**

- The right to food is a principle of international human rights law.
- Food security includes the four dimensions of access, availability, utilisation and stability.
- As a state party to the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights, India has the obligation to ensure the right to be free from hunger and the right to adequate food.

- Assessing the Food Security Act
  - The National Food Security Act does not guarantee a universal right to food.
  - It restricts the right to 75% of the Indian population.
  - The claim under the Act would not be available in times of “war, flood, drought, fire, cyclone or earthquake”
  - NFSA predominantly mentions just rice and wheat, and that too for only some citizen.
  - NSFA does not address the issue of malnutrition and nutritional deficiency adequately.
  - NFSA addresses issues of access, availability and utilisation, and is largely silent on the issue of stability of food supplies.
  - The Act does not address the impact of climate change on Indian agriculture and measures to overcome it.
  - Thus there is a need for ‘third generation’ approach towards food security due to increased vulnerability to climate change and natural disasters.

4. PDS Reforms

- India’s **public distribution system (PDS)** is the largest food security programme in the world, which covers nearly 60% of the population.
- Many States have initiated ‘reforms’ in the PDS from compulsory biometric authentication to direct benefit transfer (DBT) and Computerized Fair Price Shops.
- Odisha, Tamil Nadu, Rajasthan, Chhattisgarh, Madhya Pradesh, Telangana and Gujarat have intensified reforms in PDS using technology and ensuring community participation.
- It includes computerisation of off take of grains, recording of procurement, storage and distribution and installation of PoS machines in fair price shops.
- The Jharkhand government made Aadhaar-based biometric authentication compulsory for PDS users. It cancelled ration cards not linked with Aadhaar.
- Due to compulsory biometric authentication, vulnerable groups such as widows and the elderly, found themselves excluded from the PDS.
- The main problem with DBT is that it consumes more time for travelling to banks, pragya Kendras (common service centres) and ration shops to get their money and then use it to buy rice at the ration shop.

5. Digitization of PDS

- The public distribution system (PDS) in India is the largest food security system of its kind in the world.
- The digitization of PDS will ensure that, at every step from field to fork, the government would track the movement of food grains so that they reached the right beneficiaries.
- A key component of this initiative is the **digitisation of the beneficiary database** and linking ration cards to Aadhaar numbers.
- At least 11 States have not taken the elementary step of digitising fair price shops.
- Nine other States, including Uttar Pradesh, have hardly made any progress.
- Out of 5.26 lakh ration shops, only 51% have been digitised in three years.
- North Eastern states have cited connectivity issues for their inability to commence the process of digitisation.
- In Bihar, less than 1% of ration shops are digitised; the figure is 1% for Tripura, Delhi and Uttarakhand.
- Children aged 5 die every day because of their poor diets. Hence it is necessary to ensure that food reaches to the beneficiary.
- The success stories of Madhya Pradesh and Chhattisgarh about implementing IT measures to streamline the TPDS set an example for digitisation of PDS.
- Digitization is the path towards **Minimum government and maximum governance**.
- Wide inter-state variations exist in both seeding and use of electronic Point of Sale (e-PoS) devices at Fair Price Shop (FPS).
• Critics argue that the use of e-PoS devices may not be viable due to network and connectivity issues.
• Risk of exclusion error due to either incorrect mapping of ration card to Aadhaar details or deactivation of Aadhaar numbers for a multitude of reasons.
• Lack of awareness among beneficiaries about their rights under National Food Security Act.
• As of 2016, as many as 21.6 million ‘bogus’ ration cards were detected in the PDS.
Indian Agriculture – Issues

1. Agriculture Sector: Economic Survey 2017-18
   - Agriculture accounts for 16% of GDP and 49% of employment in India, making it crucial in the overall economy.
   - Agriculture income may fall by 25 per cent in unirrigated areas due to climate change.
   - It is estimated that in a year when temperatures are 1 degree higher, farmer incomes would fall by 6.2% during the kharif season and 6% during Rabi in unirrigated areas.
   - In a year when rainfall is 100 mm less than average, incomes would fall by 15% during kharif and by 7% during the Rabi season.
   - It is estimated that agricultural workers in total work force would drop to 25.7% by 2050 from 58.2% in 2001.
   - The Economic Survey has proposed an agricultural policy aimed at integrating women as active agents in rural transformation.
   - There are an increasing number of women in multiple roles in agriculture sector, as cultivators, entrepreneurs and labourers.
   - The government has earmarked 30% of the budget allocation for women beneficiaries in all ongoing schemes and programmes.
   - The government has committed to double farmer incomes by 2022, but the sector’s projected growth of 2.1% doesn’t seem coherent with this.

2. Budget Proposals for Enhancing Farmers Income
   - The budget introduced several measure focused on improving the income and demand in rural India.
   - Growth of gross value added (GVA) in agriculture declined from 6.3% in 2016-17 to 2.1% in 2017-18.
   - The average growth rate of agricultural GDP in the last four years was only 2.2% per annum.
   - The Economic Survey also indicates that the level of agricultural GDP and real agricultural revenue has remained constant in the last four years.
   - Budget Proposals:
     - A minimum support price of 1.5 times the input cost for Kharif crop to farmers
     - Developing and upgrading the existing 22,000 rural haats into Gramin agricultural markets (GrAMs).
     - These GrAMs, electronically linked to e-NAM will provide farmers to make direct sale to consumers and bulk purchasers.
     - Agri-Market Infrastructure Fund will be setup for developing and upgrading agricultural marketing infrastructure in the GrAMs and APMCs.
     - Setting up of a fisheries and aquaculture infrastructure development fund (FAIDF) and animal husbandry infrastructure development fund (AHIDF) with a corpus of Rs 10,000 crore.
- Doubling the allocation for the food processing sector.
- 100% tax deduction for Farmer producer companies.
- “Operation Greens” with an outlay of Rs 500 Crore to address the challenge of price volatility of perishable commodities like tomato, onion and potato.
- Organized cultivation of highly specialized medicinal and aromatic plants.
- Organic farming by Farmer Producer Organizations (FPOs) and Village Producers’ Organizations (VPOs) in large clusters will be encouraged.
- Re-structured National Bamboo Mission to promote bamboo sector in a holistic manner.
- Extending Kisan Credit Cards to fisheries and animal husbandry farmers to help them meet their working capital needs.
- Liberalizing farm export policies and setting up state-of-the-art testing facilities in mega food parks.

- The budget proposals for the agriculture sector are in the right direction but may not be enough to revive the sector and double farmer incomes.

- Concerns / Challenges:
  - India processes only 10% of its fruits and vegetables, as compared to 40-70% in many other countries.
  - The growth rate of farmer incomes between 2003 and 2013 was only 3.1% per annum. If we want to double farmer incomes, growth should be more than 10%.
  - The budget has not talked about reducing subsidies and increasing investments. Climate change might reduce farm incomes by up to 20-25% in the medium term.
  - We need climate-resilient agriculture and the budget is silent on climate change and natural resource management.


3. Creating a National Agriculture Market (NAM)
- National Agriculture Market (NAM) is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.
- Almost 40 per cent of all fruits and vegetables are lost annually in India between the grower and the consumer mainly due to lack of storage facilities, a weak transportation system and bad roads.
- A model Agricultural Produce Marketing (Regulation) Committees (APMC) Act 2003 was suggested to states.
- As many as 22 states have adopted it in some form, yet it failed to transform the agri-marketing structure in India.
- The country’s food production has increased tremendously from just 51 million tonnes in 1950-51 to about 252 million tonnes in 2014-15. However, farm income did not grow much. This was also highlighted by the National Commission on Farmers (NCF) headed by MS Swaminathan.
- The Government came out with the APLM 2017, or the Agricultural Produce
and Livestock Marketing (Promotion and Facilitation) Act.

- It shifted the focus from regulation (under APMC), to promotion and facilitation (under APLM), setting the right tone for agri-marketing reforms.
- The Dalwai Committee on Doubling Farmers’ Income has pointed out that the share of farmers in consumer’s price is very low; it generally varies from 15 to 40 per cent. Studies conducted by the International Food Policy Research Institute and World Bank have confirmed this.
- According to Ashok Gulati, former chairman of the Commission for Agricultural Costs and Prices, commission agents in Delhi charge exorbitant fees ranging from 6 per cent to 15 per cent.
- The aim of creating a truly unified NAM with an efficient price discovery mechanism is still a far-fetched dream.
- States need to support some of the reforms and be a part of the e-NAM initiative.

4. Contract Farming

- Agriculture growth is under stress at 3.4 per cent in 2017-18 compared with 6.3 per cent in 2016-17.
- The government recently came out with a Model Contract Farming Act, 2018 with an intent to increase farmers’ income by creating an alternative market mechanism that links them to national and international markets.
- Contract farming refers to a system in which bulk purchasers, including agro-processing, exporting and trading units, enter into contracts with farmer(s) to purchase a specified quantity of any agricultural commodity at a pre-agreed price.
- Model Contract Farming Act, 2018
  - The Model Contract Farming Act, 2018 allows farmers and farmer producer organisations (FPOs) to directly link with companies, thus enhancing market linkage and removing dependence on middlemen.
  - The Act will have an indirect effect on small and marginal farmers for a better say in determining the prices of their produce.
  - The Act insulates land ownership rights of the farmers from any potential infringement from the sponsors or the buyers.
  - The fear of losing their land has always inhibited farmers from embracing any new policy.
  - Shortcomings
    - The Act mandates the sponsor to buy the entire contracted amount of produce from the farmers, even if the quality parameters are not met.
    - This bears heavy on the sponsor, who wanted to procure a specific grade of produce.
    - The sponsor is burdened with the additional cost of insurance support to the farmer. The government can instead consider covering this cost.
5. **Milk Crisis in India**

- For centuries, livestock has been a critical component of the lives and livelihoods of India’s small farmers, pastoralist and indigenous people.
- **India is the largest producer of milk** (165.4 MMT in 2016-17).
- 70 per cent of those earning their livelihood from milk are women.
- Procurement prices have fallen over a period of last few months and the input costs have risen at the same time.
- Milk prices have fallen by 20 per cent to 30 per cent in several milk-surplus states.
- The increase in milk production since 2014-2015 has been unprecedented (6.3% per annum during FY 15 to FY17).
- The milk output, instead of falling during the lean (summer) season, registered high growth in 2017-18.
- In such a situation of glut, India should have been exporting large quantities of skimmed milk powder (SMP).
- Unfortunately, the global SMP prices have fallen making SMP exports unviable.
- Only 21% of India’s milk production gets processed through the organised sector and the rest passes through unorganised small players.
- Create a buffer stock of two lakh tonnes of SMP through National Dairy Development Board (NDDB).
- Introduce skimmed milk powder (SMP) to the futures market platform.
- As global SMP prices improve, NDDB can sell these stocks at a profit.
- Bring SMP under the Merchandise Exports Incentive Scheme (MEIS). Today, butter and ghee are in that category, but not SMP.
- Expand domestic demand for higher milk consumption through concerted campaigns, especially in the 115 aspirational districts where malnutrition is high.

6. **Zero Budget Natural Farming (ZBNF)**

- To feed the global population of 9.6 billion by 2050, as projected by a United Nations report, scaling up food production is important.
- The phrase 'Zero Budget' means without using any credit and without spending any money on purchased inputs.
- 'Natural farming' means farming with Nature and without chemicals. Everything required for the crop comes from nature itself.
- The **four wheels of ZBNF are Bijamrita, Jiwanmrita, Mulching and Waaphasa**.
  - Bijamrita is a natural way of seed treatment using local cow urine and cow dung.
  - Jiwanmrita is made using water, local cow dung, local cow urine, jaggery, dal flour and soil.
  - Waaphasa is the aeration in the soil.
- Zero budget natural farming requires only 10 per cent water and 10 per cent electricity than what is required under chemical and organic farming.
- The Parliamentary Standing Committee on Agriculture in its 2016 report
recommended “revision of the existing fertiliser subsidy policy and promotion of organic fertilizers”.

- The Food and Agriculture Organization (FAO) of the UN advocates environmentally-friendly farming methods that can take us to a more sustainable future.
- ZBNF constitutes an effective strategy for achieving SDGs targets.
- ZBNF has attained wide success in southern India, especially the state of Karnataka where it first evolved.
- Farmers in Andhra Pradesh have practised ZBNF and have witnessed good results.
- Himachal Pradesh Government has launched ZBNF project which aims to increase agriculture produce and the income of farmers by the year 2022.

7. Farm Policies for India

- The farmers protested across India demanding implementation of Swaminathan Committee’s recommendations, lower input costs, farm loan waiver and fair price for farm produce among other things.
- The “one-size-fits-all” policy created for the farm sector and programmes meant to double farmer incomes may not show better results.
- No region specific norms in Pradhan Mantri Fasal Bima Yojana force it to distribute benefits in uneven manner.
- To meet their priority-sector lending targets, banks have indiscriminately given loans of over Rs one lakh crore to farmers based on their asset value rather than economic viability.
- States interest in E-NAM is lacking.
- Rather than force E-NAM on states, incentivising each state to have their own electronic platform which meets the basic criteria of interoperability with other states.
- To prepare Indian farmers for global assimilation, funding for programmes like Rashtriya Krishi Vikas Yojna and the sub-­mission on agriculture mechanisation should be doubled.
- Women farmers need policy attention
  - National agricultural policies are not geared to cater to women farmers.
  - Often, women are not given due recognition as farmers which hampers their ability to access productive input.
  - Thus, the onus is on policy makers to create a favourable ecosystem for women engaged in farming by ensuring greater access to physical and financial resources.

8. Draft Report of Ashok Dalwai Committee

- The Union Government had constituted an inter-ministerial committee headed by Ashok Dalwai to prepare a blueprint for doubling farmers’ income by 2022.
• It noted that policy should focus on creating a **favourable investment climate** for increasing investment 'in agriculture'.
• An additional investment of Rs 6,399 billion is required from both public and private sectors to enable doubling of farmers' real income by 2022.
• **Key Recommendations**
  o Placing agricultural marketing in the Concurrent list.
  o Greater private sector participation in agri-marketing and logistics.
  o **Farmer producer and village producer organisations (FPO/VPO)** could play a critical role in integrating small and marginal farmers into the agricultural market system.
  o The report set a minimum target of 7,000 FPOs/VPOs, each of which could cover 1,000 farmers and/or 1,000 hectares.
  o Amend the Companies Act to facilitate **private sector shareholding in FPOs** up to 26 per cent and incentivising them by treating them at par with cooperative societies.
  o **Market reforms and investment in infrastructure** for cold-chain integration to reduce wastages.
  o The committee estimated that the country need about 10,000 wholesale and 20,000 rural retail markets.
  o The current agricultural marketing system in the country comprised of 2,339 principal markets with sub-market numbering 4,276.
  o The committee strongly recommends stepping up of institutional credit on a large scale.
  o Key aspect of doubling farmers’ income is to focus on export. The aim should be to raise agricultural export by a minimum of three times by 2022-23.
  o It suggests a **permanent inter-ministerial committee**, including commerce, consumer affairs and agriculture. This would monitor domestic and global prices, recommending on needed changes.
  o The Ministry has to develop comprehensive guidelines to promote warehouse-based post-harvest loans and **eNWR (Negotiable Warehouse Receipts)** based trading.

9. **Indian Agrarian Crisis**
• Agriculture accounts for less than 15% of gross domestic product (GDP), and is the main source of livelihood for nearly half our population.
• The rising frequency of **farmers’ agitations** and the high incidence of **farmer’s suicides** are symptoms of a deep malaise in the sector.
• **Roots of this crisis**
  o **Weather** - A weak monsoon or even a delayed monsoon means a significant loss of output.
  o **Fragmentation of land** - Demographic pressure has pushed to 0.2 hectares of cultivable land per head of rural population.
  o **Price variations** - The highly distorted and exploitative product market is responsible for the misery of the small farmer.
  o **Shortage of money** - Landless or marginal farmers lacks the resources
to buy or lease land or invest in farm infrastructure.

- **APMCs** - According to a study, the farmers may typically get as little as 25% of the price that consumers finally pay.
- **MSP** - Small farmers usually do not benefit from the government assured MSPs. Small farmers typically do not have enough marketable surpluses.
- **Increasing debt burden** - According to NSS survey, loans taken by cultivators from non-institutional sources is rising faster than from institutional sources.
- **Crop insurance programmes** - They have not been able to recover farmers’ investments in most cases.
- **High-input cost of farm labour.**

- **Cooperative farming**
  - This is already popular in France, Germany, Kyrgyzstan, Kenya, and Bangladesh among others.
  - It involves land pooling; labour pooling; joint investment, joint water management and joint production.
  - It gives more efficient farming practices and greater bargaining power.


### 10. Reforming Indian Agriculture by Sprinkles and Drips

- India is the **world’s largest producer** of pulses, rice, wheat, spices and spice products.
- India has emerged as the **second largest producer of fruits and vegetables** in the world.
- **73 million hectares out of a net sown area of 141 million hectares are unirrigated and rainfall dependent.**
- This year, for instance, rains have been plentiful in central and south India, normal in western India and deficient in the east and the North-East.

- **Data from Economic Survey:**
  - Climate change is likely to add long-run volatility to agricultural yield.
  - The Economic Survey 2017-18 suggests that farmer income losses could range from 15% to 18% and could rise to between 20% and 25% in unirrigated areas.
  - Absence of adaptation by farmers and changes in policy, there is likely to be an average loss of 12%.
  - **Real Indian agricultural output growth** has grown from about 2% average in the first decades to over 3% now and the annual volatility has been reduced from 6% to about 3%, the growth is below China’s and the volatility of output is higher than China’s for the same period.

- **How Agricultural Reforms evolved in China:**
  - China’s serious agricultural reform began in 1978.
  - In the first 20 years of reform, **food grain output increased** from 300 million to 500 million tonnes.
  - At the same time, cereal centricity was replaced by a focus on meat, eggs, aquatic product and fruit.
This shift in assortment was very successful with cereal production per capita increasing by 27% but aquatic and fruit production increasing 700% in the first two decades.

China’s challenges are tougher than India’s, with only 15% of total land being arable in China (against about 40% in India) and vast areas being inhospitable to agriculture in the north, north-west and south-west of the country.

China has also a shorter agricultural season than India (five months versus 10 months).

Chinese agriculture faces challenges from water shortage and climate change.

The focus of Chinese agriculture policy has shifted from quantity to quality and better water and fertilizer use.

- India’s agricultural policy for the next decade should shift away from cereal (and quantity) centricity and be primarily focused on water effectiveness.
- Federal policy itself is trapped by the seventh schedule of the Constitution, which makes agriculture, dairy, meat and fisheries a state subject.
- Government Initiatives:
  - PMKSY Per Drop More Crop is an important micro-irrigation scheme.
  - Rs. 6,000-crore World Bank-aided Atal Bhujal Yojana with community participation to ensure sustained groundwater management.

A comprehensive reform process in agriculture would start with a constitutional amendment that makes agriculture and water (use) a concurrent subject in the Constitution.

As emphasised in this year’s theme on World Water Day by the UN, we need to connect with nature to help rebalance the water cycle in a sustainable and cost-effective way by planting new forests, reconnecting rivers to floodplains and restoring wetlands.


### 11. Agriculture investment: Time to cultivate a visible hand

- One of the challenges faced by Indian agriculture today is the lack of investment.
- The ministry of agriculture estimates that to double farmer incomes by 2022-23, private investment in agriculture must jump two times to almost Rs 1,40,000 crore.
- Smallholder Farmer: Key player in Agriculture Investments.
- Smallholders (with up to 2 hectares of land) run 85% of the total farms in India and own more than 50% of the livestock.
- In Odisha, where 92% are smallholders, each farming family spent on average Rs 1,142 a month on crop production, according to National Sample Survey Office (NSSO) 2012-13.
- So, smallholders have, on an average, less than 10% share of the total private investment in farming.
1. **Formalization of Economy**
   - The Economic Survey 2017-18 provides evidence of how the Indian economy is becoming more formalized.
   - The introduction of the goods and services tax (GST) has brought more firms into the tax net and will further push formalization of the economy.
   - The number of enterprises paying indirect taxes has gone up by 3.4 million, an increase of 50%.
   - The GST system is creating a vast repository of data that could be useful in policymaking.
   - For example, it is now possible to know the state-wise distribution of international exports.
   - Employees’ Provident Fund Organisation (EPFO) and the National Pension System (NPS) data show 2.2 million formal jobs added in 6 months.

   **Concerns / Challenges:**
   - At present, only 10% of India’s over 470 million workforces are in the formal sector.
   - India’s informality is one reason why its tax-to-GDP ratio has been stuck at 15% or so for decades, impacting education and health care.
   - On average, firms spent 243 hours a year filing and paying taxes and the total tax payment is 61.7% of profit. GST has not reduced these compliance costs.
   - GST imposes a new system of compliance that requires frequent filing and a dysfunctional receipt matching mechanism under the GST network.
   - Policymakers should build on its success and address the drawbacks to ensure GST achieves its full potential.
   - Complying with law must become easier and in parallel law enforcement should become more effective.
   - For example in Chile and Peru inspectorates provide training for micro and small enterprises (MSEs) to comply with the law.


2. **Skilling India**
   - Today, India is one of the youngest nations in the world, with more than 62%
of the population in the working age group.

- Around 250 million young people will be joining the workforce over the next decade.
- The level of competition in the future will be so high that people will have to skill multiple times to survive in their field.
- The government’s analysis says that by 2022, 24 sectors will need an additional 109 million skilled workers.
- **Organisation for Economic Co-operation and Development** (OECD) data depicts skills shortage in India.
- The government launched the Skill India mission which aims to train over 400 million people in India in different skills by 2022. Various schemes have been launched to further the aim of skill development.
- Data shows that of the 30.67 lakh trained candidates in June 2017, only 2.9 lakh had received placement offers.
- According to a 2017 **World Bank report ‘Skilling India’**, more than 12 million youth in the age group 15 and 29 are expected to enter India’s workforce every year in the next two decades.

**Government Initiatives:**

- National Policy for Skill Development and Entrepreneurship (NPSDE) 2015:
  - Target of skilling 300 million people by 2022.
  - Special focus on skill development and entrepreneurship programmes for women.
- National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC) and the Directorate General of Training (DGT) under the Skill India mission.
- National Skill Qualification Framework.
- Pradhan Mantri Kaushal Vikas Yojana (PMKVY).
- NITI Aayog’s programme **Sustainable Action for Transforming Human capital** (SATH) is the much need intervention to harvest the demographic dividend.

**World Bank Assistance**

- India signed a loan agreement with World Bank under ‘Skills Acquisition and Knowledge Awareness for Livelihood Promotion’ (Sankalp) project.
- World Bank will provide USD 250 million loan to India for skill development programme to support livelihood.
- The objective is to enhance institutional mechanisms for skills development and increase access to quality and market-relevant training for the work force.
- Another scheme assisted by World Bank - STRIVE (Skill Strengthening for Industrial Value Enhancement).


3. **Rebooting the system for a skills upgrade**

- The report of the **Standing Committee on Labour (2017-18)** headed by an MP, Kirit Somaiya, on the “Industrial Training Institutes (ITIs) and Skill
Development Initiative Scheme” of the Ministry of Skill Development and Entrepreneurship (MSDE) was submitted to Parliament recently.

- The ITIs were initiated in the 1950s. In a span of 60 years, until 2007, around 1,896 public and 2,000 private ITIs were set up.
- However, in a 10-year period from 2007, more than 9,000 additional private ITIs were accredited.

Concerns and Findings of Somiya Committee report:
- The National Skill Development Corporation (NSDC) today has more than 6,000 private training centres.
- Number of ITIs increasing rapidly but they disregard norms and standards.
- Placement in NSDC training has been less than 15%.
- The QCI did not follow accreditation norms created by the National Council for Vocational Training (NCVT).
- The future of 13.8 lakh students in these substandard ITIs is at risk.

Sharda Prasad Committee recommendations
- We need better oversight, with a national board for all skill development programmes.
- The core work (accreditation, assessment, certification and course standards) cannot be outsourced.
- We should also have a mandatory rating system for the ITIs that are published periodically.
- A ranking of the ITIs on several parameters such as the one done by the National Assessment and Accreditation Council in tertiary education can be replicated.
- There should be one system, with one law and one national vocational education and training system.
- We need a national vocational act that replaces all scattered regulations — recommended in the 12th Five Year Plan.

Micro-institutional reforms: Need of the hour:
- Critical need to reskill ITI teachers and maintain the student-teacher ratio.
- Financial support envisaged through the NSDC should be extended to the ITIs.
- Institutional reforms such as moving the office of the Directorate General of Employment (the arm that has all data on employment) from the Ministry of Labour to the MSDE would help.

- The best possible available solution is through a reimbursable industry contribution (RIC) — a 1-2% payroll tax that will be reimbursed when employers train using public/private infrastructure and provide data.
- RIC, which is implemented in 62 other countries, was recommended in the 12th Plan and is an idea whose time has come.


- The Department of Telecommunications (DoT) has released draft of new Telecom policy – National Digital Communications Policy, 2018.
The National Communications Policy aims to accomplish the following strategic objectives by 2022:
1. Provisioning of Broadband for All.
2. Creating 4 million additional jobs in the Digital Communications sector.
3. Enhancing the contribution of the Digital Communications sector to 8% of India’s GDP from ~6% in 2017.
5. Enhancing India’s contribution to Global Value Chains.

- Over 200 million Indians regularly use social media and in the last year alone, over 200 million Indians took to mobile banking and digital payments.
- At the current pace of digitisation, it is estimated that India’s digital economy has the potential to reach one trillion USD by 2025.
- It has been broadly estimated that a 10% increase in broadband penetration in a country could potentially lead to an over 1% increase in GDP.

Financial Sector

1. External Commercial Borrowings
   - External commercial borrowing (ECB) is basically a loan availed by an Indian entity from a non-resident lender.
   - They are used widely in India to facilitate access to foreign money by Indian corporations and PSUs (public sector undertakings).
   - In the post reform period, ECBs have emerged a major form of foreign capital like FDI and FII.
   - Unlike China, most of the Indian foreign debt is mainly owned by the private corporate sector.
   - ECBs have emerged as one of the chief conduits for strengthening the Indian corporate debt market.
   - According to data on ECBs from RBI, it is found that its quantum has grown during the last decade (financial years 2007–17).
   - The government follows a well-designed ECB policy - government puts ceiling for the total amount of ECBs that can be obtained by all Indian firms through the ECB route during a year.
   - RBI recently liberalised the norms for ECB by including more sectors in the window.

   - The Sahoo Committee report on ECB
     - The Sahoo Committee was set up in 2013, to develop a framework for access to domestic and overseas capital markets.
     - The Committee noted that the possibility of market failure can be ameliorated, by requiring firms that borrow in foreign currency to hedge their exchange risk exposure.
     - The present complex array of controls on foreign currency borrowing should be done away with.
     - The Indian domestic rupee debt market is a viable alternative to foreign borrowing for financing Indian firms and does not entail any market failure.
     - The policy should aim at removal of all impediments to the development of the domestic rupee debt market.


2. Rupee Depreciation
   - Recently the rupee hit its all time low against the dollar breaching the 69 a dollar mark that prompted the central bank to intervene in the currency market by selling dollars.
   - Even as rupee hit its all-time low, Moody’s continues to believe that India is least vulnerable to currency pressures.
   - Global volatility is much higher than in August 2013 when the rupee had touched its previous low of 68.83.
   - RBI estimated in its monetary policy report in April that for every 5% fall in rupee, retail inflation will increase by 20 basis points.
   - India is among the 5 countries which are least vulnerable to currency pressures.
pressures amid strengthening of the US dollar.

- **India’s low dependence on foreign currency borrowing to fund its debt burden** limits the risks of depreciation says rating agency Moody’s.
- Although India’s debt affordability is relatively weak, the average maturity of debt is close to 10 years and over 96 percent of it is in local currency.

### 3. Tax Compliance in India

- It is often said that India is “a tax non-compliant society and too many people evade taxes”.
- The fact that less than 3% of Indians pay income tax implies that a **large majority avoid paying income tax**.
- It is also said that most Indians **under-report their incomes**.
- Tax compliance will increase the per-capita tax revenues.

**Present Status**

- With rising per capita incomes, the tax-to-GDP levels are rising quite well due to increasing formalisation of the economy.
- Between 2000-01 and 2017-18, the tax-to-GDP rose from 8.7% to 11.6%.
- During this period, personal income taxes, as a ratio to GDP, are up from 1.5% to 2.6%.
- Corporate taxation levels have been falling for several years, with the slowing of corporate profitability, and had this not happened, tax revenues would have grown even faster.
- In the personal income tax (category), the salaried ones are paying more compared to business people. It is important to ‘remove this unevenness’.
- Demonetisation, sustained campaign against tax evasion and the implementation of GST have resulted in greater tax compliance.
- GST implementation has increased the indirect taxpayer base by more than 50%.
- There has been a concerted effort to make India a tax compliance society.
- In Union Budget 2018-19, corporate tax rate of 25 per cent for businesses with turnover of up to Rs 250 crore was proposed.

- With agriculture not taxed, over 60% of the population is out of the ambit of the tax system or other exemptions given for senior citizens, etc.
- The Economic Survey highlighted some local bodies are not collecting **property taxes** adequately.

**International Practice:**

- In the US, tax compliance is high and ascribed to strong deterrent effect of selective, intensive audits.
- In advanced countries, high tax collection and excellent public services reinforce each other.
- Globally the revenue from personal income tax is much higher compared to corporate income tax.
- While in India the personal income tax collection has to go up.
NOTES

China’s taxpayers are more than those of India, even when its income levels were similar to those of India.

- "The government will need to stabilise GST implementation to remove uncertainty for exporters, facilitate easier compliance, and expand the tax base," the Economic Survey 2017-18 said.

Infrastructure: Energy, Ports, Roads, Airports, Railways etc

1. Infrastructure Sector: Economic Survey 2017-18
   - India lags behind many emerging economies in terms of providing qualitative transportation related infrastructure.
   - Around US$4.5 trillion worth of investments is required till 2040 to develop infrastructure to improve economic growth and community well-being.
   - The current trend shows India can meet around US$3.9 trillion infrastructure investment.
   - So India will face a $526 billion infrastructure investment gap by 2040, according to Economic Survey.
   - Total investment for Bharatmala is estimated at Rs10 trillion—the largest ever outlay for a government road construction scheme.
   - Rs8 trillion of investments will be needed for Sagarmala until 2035.
   - The Global Infrastructure Outlook reflects that rising income levels and economic prosperity are likely to further drive demand for infrastructure investment in India over the next 25 years.

2. Logistics Sector:
   - India has high logistics costs of 16-18% (of the cost of a product), which make exports uncompetitive when compared with those of China, where these costs make up 8-10%.
   - Improving logistics sector has huge implication on exports and it is estimated that a 10% decrease in indirect logistics cost can increase 5-8% of exports.
   - India also plans to set up 35 multi-modal logistics parks and develop 50 economic corridors.
   - The Global Ranking of the World Bank’s 2016 Logistics Performance Index shows that India jumped to 35th rank in 2016 from 54th rank in 2014.

3. Recommendations:
   - The Economic Survey says the infrastructure investment gap needs to be filled by private investments and the National Infrastructure Investment Bank (NIIB).
   - Support from global institutions such as the Asian Infrastructure Investment Bank (AIIB) and the New Development Bank is required.
   - Encourage ship-building and manufacturing, given India’s strategic location along international trade routes.
   - “Railway station redevelopment” could be a big source of revenue generation by providing “worldclass amenities and services”.

www.insightsonindia.com  Page 35  www.insightsias.com
2. Offshore Wind Energy

- Offshore wind energy is the use of wind farms constructed in bodies of water, usually in the ocean on the continental shelf, to harvest wind energy to generate electricity.
- The government has set a target for offshore wind energy generation of 5 GW by 2025 and 30 GW by 2030.
- The National Off-Shore Wind Policy was notified in October 2015 to realise the offshore wind power potential in the country.
- The Ministry of New & Renewable Energy (MNRE) has been authorized as the Nodal Ministry for use of offshore areas within the Exclusive Economic Zone of the country.
- Government has paved way for development of the offshore wind farms up to the seaward distance of 200 Nautical Miles (within its Exclusive Economic Zone) from the base line.
- The MNRE recently invited Expressions of Interest (EoI) for the first 1 Gw offshore wind project in India.
- Given India's coastline of 7,600 km, the country has enormous potential for offshore wind energy.
- India has an estimated 127 gigawatts of offshore wind power potential.
- The government has identified Gujarat and Tamil Nadu as potential destinations for offshore wind projects in the country.
- Global Practice:
  - Globally there has been an installation of about 17 to 18 Gw of offshore wind power.
  - Globally, UK tops the list of offshore wind markets, followed by Germany, Taiwan, China and the USA.

3. India's Energy Sector Reforms

- The status of the energy sector in India is highly uneven and the scope for reform in many areas still exists.
- As per estimates by the Central Electricity Authority, electrical energy requirement is expected to grow by 37 per cent by the financial year 2021-22
- Need for Reforms
  - To achieve government's vision of energy access, efficiency, sustainability and security.
  - To secure universal, affordable, accessible, 24x7 quality power for all.
  - To explore ways to raise domestic output and cut imports.
- Initiatives in Past 3 Years
  - Deregulation of diesel prices, which reignited private sector interest in fuel retailing.
  - Gas pricing and marketing freedom.
  - New policy for exploration and production.
Russia’s Rosneft acquired Essar Oil’s refinery in Gujarat and a countrywide fuel retail network for $12.9 billion.

The government has allowed the oil marketing companies to follow dynamic pricing of auto fuels across the country from 16 June 2017.

- Private investments have stagnated for the last few years while fuel demand has been rising by 5-6 percent annually.
- Need to develop energy infrastructure and access to energy in eastern India.
- Need for a unified energy policy, seismic data sets and a gas tariff regulatory board.
- We need to think strategically and plan for next 10, 15 and 20 years. UK has announced that by 2040 no car registration would be allowed other than for electric vehicles.
- As India moves towards a cleaner and more fuel-efficient economy, its benefits must expand horizontally to all sections of the society, and in particular to the poorest.
- Both conventional and non-conventional sources have their own advantages and disadvantages and the right balance of both is very important


4. In a State of Energy Poverty: On the Goal of 100% Electrification

- There is now 100% village electrification in India, an important milestone in the country’s development trajectory.
- India continues to harbour energy poverty; 31 million rural households and about five million urban households are still to be connected to the grid — the highest in any single country.
- The Central government has set itself an ambitious target of connecting all remaining households by the end of March 2019.
- As part of a Centre-State joint initiative on 24x7 ‘Power for All’, State governments have already committed to ensuring round-the-clock supply to all households from April 2019.
- The regional imbalances in electricity access have persisted. Seven States (Uttar Pradesh, Bihar, Odisha, Jharkhand, Assam, Rajasthan and Madhya Pradesh) account for 90% of un-electrified households.
- Electricity distribution companies (DISCOMS) in these seven States are already highly indebted, accounting for 42% of accumulated debts of all DISCOMS as on March 2016.

**Government Initiatives:**

- Preparation of state specific action plans for ‘24X7 Power for All’.
- The revised Tariff Policy with a focus on ‘4 Es’ i.e. Electricity for all, Efficiency to ensure affordable tariffs, Environment for a sustainable future, Ease of doing business to attract investments and ensure financial viability.
- Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) for rural areas.
- Integrated Power Development Scheme (IPDS) for urban areas.
- Operationalization of Power System Development Fund (PSDF).
- Ujwal Discom Assurance Yojana (UDAY).
- Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya).
5. **Rising Fuel Prices**

- Crude oil hit their strongest since late-2014 amid ongoing production cuts led by the Organization of the Petroleum Exporting Countries (OPEC).
- Other reasons include robust demand, Political instability in Venezuela and the prospect of US sanctions against Iran for the rise in fuel prices.
- A one-dollar increase in the international price of crude oil increases the cost of petrol and diesel in India by Rs 0.50/litre.
- A fall in the exchange rate of the rupee against the US dollar increases the cost of petrol and diesel in India by Rs 0.65/litre.
- **India** is particularly at risk from stronger global prices for crude oil as it is the third biggest importer of the commodity, buying about 80 per cent of its oil needs.
- The concern over crude oil prices stems from India’s energy import bill of around $150 billion, expected to reach $300 billion by 2030.
- Convert a portion — maybe 50 per cent — of the excise on fuel into a cess, which could be used solely to fund railways, metro, highways, irrigation, port and other infrastructure projects.
- Consumers may not mind paying more in taxes, when they know where that money is going.
- Government must bring petroleum products under the ambit of goods and services tax (GST) in the interest of consumers.

6. **A Long-term Strategy to Reduce Crude Imports**

- **India’s energy consumption** will grow 4.5 percent every year for the next 25 years.
- **India imports 80 percent of its oil needs** and is the third largest oil consumer in the entire world.
- Country’s refineries are on track to meet the ambitious target to produce clean and affordable fuel by April 2020.
- The primary benchmark for international oil prices, the Brent crude, reached a level ($80.49 per barrel) in May that was not seen since 2014.
- **US sanctions on Iran** have also affected sentiments considerably.
- The government had collected around ₹2 trillion from excise duties in 2017-18, which played a crucial role in fiscal management.
- What India needs now is a carefully devised strategy that is not driven by short-termism, but aims to gradually insulate the country from global oil price volatility.
- Since the transport sector accounts for around 70% of the total diesel sales in the country, it is an appropriate sphere for a transition from traditional fuels to electric motors.
- Within the transport sector, trucks alone account for around 28% of the diesel consumption. Thus, creating dedicated electric corridors for trucks
on the highways could go a long way in curbing oil imports.

- **Expanding the biofuel blending in petrol.** If these fuels together reduce oil imports by 20%, the country could save up to $18 billion a year in terms of foreign exchange.

7. **Logistics Sector in India**
   - The Indian logistics sector is a sunshine industry and is going through a phase of transformation on account of various reform initiatives and policy changes.
   - The major reforms include the **GST, roll out of E-Way bill and the sector being granted infrastructure status.**
   - The Indian logistics industry provides employment to more than 22 million people.
   - It has grown at a compound annual growth rate (CAGR) of 7.8 per cent during the last five years.
   - In the World Bank's 2016 Logistics Performance Index, India jumped to 35th rank in 2016 from 54th rank in 2014 in terms of overall logistics performance.
   - India has improved its rank in all the six components of logistics performance index.
   - A new **Logistics Division in the Department of Commerce** has been established to coordinate integrated development of the sector.
   - Government plans to bring down the logistics cost from current 13-14% of GDP to around 10% of GDP.
   - Growth in E-Commerce is another key driver.
   - Economic survey 2017-18 said, the logistics industry which is worth around USD 160 billion is likely to touch USD 215 billion in the next two years with the implementation of GST.
   - Over 70 per cent of the logistics sector is in small, unorganised hands.
   - India’s logistics costs are 40 per cent higher than in most developed countries.
   - High cost of logistics impacting competitiveness in domestic and global market.
   - **Improving logistics sector has huge implication on exports** and it is estimated that a 10 per cent decrease in indirect logistics cost can increase 5-8 per cent of exports.
   - The need of the hour is to formulate an **integrated logistics policy.**
   - Better performance in logistics will augment programmes like Make in India, and also enable India to become an important part of the global supply chain.

8. **Infrastructure Sector in India**
   - Infrastructure sector is a **key driver for the Indian economy.**
   - Infrastructure sector includes power, bridges, dams, roads and urban infrastructure development.
   - Over the next decade, an estimated $1.5 trillion is needed to create infrastructure, and overhaul and refurbish existing infrastructure.
   - Infrastructure development will **benefit Government’s Ease of Doing Business.**
• Government Efforts
  o With initiatives such as ‘Housing for All’ and ‘Smart Cities,’ the government is working on reducing the bottlenecks that impede growth in the infrastructure sector.
  o Under UDAY scheme the government has taken steps to improve operational and financial parameters of discoms.
  o The National Highways Authority of India (NHAI) launched Masala Bonds in May 2017, for raising capital for funding the infrastructure projects in India.
  o National Infrastructure Investment Fund (NIIF) with an initial corpus of Rs 40,000 crore.
  o The modernization of Indian Railways has been one of the top priorities of the central government.

• Green Infrastructure
  o The real estate sector is held accountable for 22 percent of India’s annual CO2 emissions.
  o India will benefit if investments are steered towards green-infrastructure projects.
  o Green bonds can provide a long-term source of debt capital for renewable infrastructure projects.
  o Germany is one country that has been a nest for the innovation and application of green technologies. This can provide a useful lesson for India.

• Strengthening of PPP route, as it has been able to deliver world class infrastructure in sectors such as airports.
• In 2015, the Kelkar Committee suggested overhauling of the PPP framework in India through measures such as funding through hybrid models and adoption of international best practices.
• Ensure a robust regulatory environment for domestic and international funding of infrastructure by introducing an independent PPP regulator in India.
• As India move towards completing 100 years of independence in 2047, the country must strive to emerge as a developed country complete with all modern and updated infrastructure and an example for the world to see.

9. India's Digital Economy
• Digital Economy refers to the full range of economic, social and cultural activities supported by the Internet and related information and communications technologies.
• Some experts regard it as the third industrial revolution.
• Digital payments, Make In India, Start-Up India, Skill India are among the key drivers of the digital economy.
• In the next three years, India will add more than 300 million new mobile subscribers.
• By 2025, it is highly likely that India will be the largest mobile market in the world.
• India is developing a “mobile-first” digital culture, with smartphones fuelling a boom in e-commerce and other forms of business.
• According to industry experts, India has the potential to grow to USD 2 to 3 to 4 trillion digital economy by 2022.
• **International Examples**
  o Estonia is now Europe’s digital leader.
  o The country has succeeded in building high-tech infrastructure, and a regulatory culture that encouraged new digital competition.
  o However there are some countries in Europe that have protected markets from digitization because of fear of new competition.
  o But that misconception has blocked the economic renewal in many European countries.
  o India should adopt policies that serve the interest of the entire economy and avoid repeating the mistakes of some European countries.
• Key challenge is **unequal access to the internet**. Mumbai and Delhi still rank behind Jakarta and Manila in the most networked cities in the world.
• **Uninterrupted access to power** is essential. However, around 22% of rural households across the country still do not have access to electricity.
• A study shows that 19% of the Indian population remains unbanked or financially excluded.

### 10. How Digitisation can Drive Growth in India
• The central theme of the recent report on ‘Economic Outlook for Southeast Asia, China and India’, released by OECD development centre, is fostering growth through digitisation.
• The report indicates that ICT (information and communication technology) services account for a considerable share of the value of exports from China, India and other Asian nations.
• India pioneered **offshore IT services** to contribute to exports worth $150 billion.
• Global brokerage company **Morgan Stanley** said that India is expected to be a $6 trillion economy – the third largest in the world – in the next decade.
• In the report, Morgan Stanley said India’s digitisation drive would provide a **boost of 50-75 basis points to GDP growth** in the coming decade.
• In one of the first studies, **McKinsey Global Institute (MGI)** pointed out in its report on ‘Global flows in a digital age’, how apart from goods and services, digital flows across countries do contribute to economic development.
• It points out that cross-border goods, services and financial flows contribute to **about $30 trillion** and **about 40 per cent of world GDP**.
• Data from 2000-2015 across all countries of the world, found that a **10 per cent increase in digital flows increases country GDP by 0.2 per cent**.
• Since the digital economy is heavily based on intellectual property, we should enforce **strict protection to patents and copyrighted work**.
• For example, the **Indian Patent Act** does not allow **patenting “software per**
Indian inventors consider filing their patents in the **US Patent and Trademark office**.

So we need to augment the **infrastructure and capability** at the patent offices in the country and **encourage and incentivise patent filing** in India.


### Ujjwala Revolution

- According to **WHO** estimates **about 5 lakh deaths in India occur** alone due to unclean cooking fuels.

- According to experts, having an open fire in the kitchen is like **burning 400 cigarettes an hour**.

- One of the reasons India has such bad outdoor air pollution is that **nearly 200 million households** are still burning biomass every day for cooking.

- **Pradhan Mantri Ujjwala Yojana** – Scheme for Providing **Free LPG connections to Women** from BPL Households. This is the first time in the history of the country that the **Ministry of Petroleum and Natural Gas** implementing welfare scheme benefitting crores of women belonging to the poorest households.

- **What makes LPG adoption necessary?**
  - About 75 crore Indians, especially **women and girls**, are exposed to **severe household air pollution (HAP)** from the use of solid fuels such as biomass, dung cakes and coal for cooking.
  - A report from the **Ministry of Health & Family Welfare** places HAP as the **second leading risk factor** contributing to India’s disease burden.


### The problem of land hoarding

- As per the details from to the **Government Land Information System (GLIS)**, the government owns at least 13,505 square km.

- In 2012, a committee headed by former finance secretary **Vijay Kelkar** had recommended **monetising the government’s unutilised and under-utilised land** to finance infrastructure projects in urban areas.

- The railways are the biggest landowner among Union ministries.

- The CAG reports that none of the government agencies maintains adequate ownership records.

- The 13 major ports have failed to produce title deeds for as much as 45% of their land holdings.

- We could take a cue from Britain. There, the government has pledged to provide details of ownership, location, and intended use for all properties. Citizens are invited to contest official land use and suggest alternatives under a ‘right to contest’.

- The Indian government should also agree to disclose its land use and release of excess land.

Industrial policy and Industrial Growth

1. Sugar Industry Crisis

- India is the world’s second largest sugarcane producing country. (First - Brazil)
- The Union cabinet announced Rs 70 billion bailout package to ‘deal with the current crisis in the sugar sector’.
- Of the Rs 70 billion package, only Rs 11.75 billion has been allocated to pay the pending dues of sugarcane farmers.
- The rest, Rs 57.32 billion, is aimed towards providing financial assistance to sugar mills for investing in infrastructure.
- The cabinet decision also included the setting of a minimum selling price of Rs 29 per kilogram for sugar.
- Minimum price of Rs 29 per kilogram fails to address the problem as the cost of producing sugar is around Rs 36 per kilogram.
- The crisis that the sugar industry is facing is the result of excess production of sugar.
- Mills have delayed payments for cane of more than 200 billion rupees.
- India’s estimated annual consumption of sugar is 25 million tonnes; production in 2017-18 touched 31.6 million tonnes.
- Brazil and Australia initiated a legal investigation into whether India’s support for its sugar sector has violated WTO restrictions.
- The global prices have fallen 17 percent in 2018.
- Implementation of the C Rangarajan committee suggestion of rationalisation of sugarcane prices with sugar prices.

2. Role of Union and State Governments in the Growth of IT Sector

- IT industry has earned a distinction of being one of the few “achieving” sectors in India during the post-reforms period.
- This sector has emerged as a globally competitive industry, especially in information technology enabled services (ITES).
- With the economic reforms in early 1990s, India’s position as the preferred destination for IT in the world had been established.
- The establishment of a series of software technology parks (STPs) across several cities in India during the 1990s (and beyond) was an exemplary initiative of the state.
- FDI policies adopted in the early 1990s and special economic zones (SEZs) incentivised the IT industry.
- The deregulation of the telecom sector gave a big boost to the IT revolution in India.
- The global financial crisis in 2007–08 had an adverse impact on the Indian IT industry.
- The Indian IT sector is still viewed as a preferred destination by major MNCs.
- National-level IT Policy Initiatives
  - The IT industry also cashed in on several government-initiated projects such as networking of government offices, modernisation of telecom
infrastructure, Aadhaar, and e-governance.

- The IT/ITES industry will play a vital role in the programmes such as Make-in-India, Stand-up India, Digital India, and Smart City Mission.
- State policies on data security, prevention of piracy, content regulation, and cybercrimes have also been framed from time to time.
- New Industrial Policy of 1991, tax-free and fiscally-incentivised SEZs and National Manufacturing Investment Zones have been recognised as important measures.

- **Subnational Policy Initiatives**
  - Several Indian states have recognised the IT sector as a catalyst for economic growth; improve governance and public service delivery.
  - The subnational governments recently have increased their budgets for IT-related activities.
  - The recent rise in demand for IT services has been from local governments for digitalisation of records, online cash transfer of subsidies, scholarships, and so on.
  - Shifting IT activities to tier II and tier III cities has the potential of boosting the local economy through employment and income generation.


3. **Global Value Chains (GVC)**
   - The GVC model breaks the product life-cycle into many tasks. Participating countries complete each task sequentially.
   - Inputs and products manufactured in GVCs account for two-thirds of world trade.
   - The iPhone is a good example to understand how GVCs work.
   - The US prepares the iPhone design and prototypes, while Taiwan and South Korea produce critical inputs such as integrated circuits and processors.
   - Final assembly takes place in China from where the iPhones are marketed all over the world.

- **Why is India out of GVCs?**
  - **Small basket**
    - 70 per cent of India’s export earnings come from the small basket products.
    - The small basket contains products that account for 30 per cent of world trade. The large basket holds the remaining 70 per cent.
    - The small basket items include small diamonds, jewellery, rice, buffalo meat, shrimps, petroleum, cotton, yarn etc.
    - The small size of the global basket limits the potential for future growth.
    - Also, most products face intense competition from low-cost countries such as Bangladesh and Vietnam.
  - **Weak global share**
    - Electronics, telecom, and high-end engineering products are
important large basket items.

- India has a weak global export share in these commodities.
- China, Japan, South Korea, Thailand and Malaysia have become part of GVCs through the quality trade infrastructure route.

- According to UN, there appears to be a **positive correlation between participation in GVC and GDP per capita growth rates**.
- India needs to **improve connectivity infrastructure and industrial laws** to raise its ranking in world trade.
- Policy initiative must target all parts of the GVC life-cycle from conceptualisation, development of a prototype, to manufacturing, to after-sales service.

4. **Food Processing Sector**

- Food Processing Sector has emerged as an important segment of the Indian economy contributing to GDP, employment and investment.

- The food sector has emerged as a **high-growth and high-profit sector** due to its potential for value addition.

- The Indian food processing industry accounts for 32 per cent of the country’s total food market which is one of the largest industries in India.

- India’s organic food market is expected to increase by three times by 2020.

- **Measures to give a boost to Food Processing Sector**
  - 100% FDI in trading including through e-commerce, for food products manufactured in India.
  - Special Fund of Rs. 2000 crore in NABARD to provide credit at concessional rate of interest to designated food parks and agro processing units.
  - Food and agro-based processing units and cold chain infrastructure have been brought under the ambit of Priority Sector Lending (PSL).
  - Mapping all agro-clusters in the country.
  - The Ministry of Food Processing Industries announced **Human Resource Development (HRD)** in the food processing sector.
  - Setting up testing laboratories, laying down of food standards and their harmonization with international standards.
  - **National Institute of Food Technology Entrepreneurship and Management (NIFTEM)** in Haryana acts as a “one Stop Solution Provider” to all the problems of the sector.
  - An integrated Food Law i.e. **Food Safety and Standards Act, 2006** will provide single window to food processing sector.


5. **Rampant Ever-greening in Indian Pharma Industry**

- India is the **largest provider of generic drugs** globally with the Indian generics accounting for **20 per cent of global exports** in terms of volume.
India’s cost of production is nearly **33 per cent lower** than that of the US.

Labour costs are **50–55 per cent cheaper** than in Western countries.

The Indian pharmaceutical market size is expected to grow to **US$ 100 billion by 2025**.

Presently **over 80 per cent of the antiretroviral drugs** used globally to combat AIDS are supplied by Indian pharmaceutical firms.

Pharmaceutical companies **through ever-greening** continue to seek extra patents on variations of the original drug.

The U.S. recognises and encourages secondary patents. India, however, does not.

In India, couple of years ago, Swiss company Novartis filed a new patent on its drug Glivec, a drug used to fight leukaemia. But Supreme Court refused to grant Novartis a patent for a new version of its cancer drug as the drug was not substantially different from original one.

India’s patent law also does not accept Ever-greening of drugs.

A **key highlight in the Indian law is Section 3(d) of The Patents Act, 1970**, which was introduced in 2005 as a **yardstick to distinguish real innovation** from trivial tweaks.

Despite such measures, **ever-greening practices may be rampant in India**, based on a study of about 2,300 patents for drugs granted between 2009 and 2016.

The **High Level Expert Group Report on Universal Health Coverage for India (2011)** clearly articulated the need for strengthening **public sector units (PSUs) drug manufacturing**.

The UN report also urges member states of WTO to **adopt a permanent revision of Paragraph 6 of the TRIPS agreement** to enable swift and expeditious export of pharmaceutical products produced under compulsory license. **India should take the lead in ensuring universal access** to affordable drugs through such measures.

**National Biopharma mission needs effective implementation.**

Issues Relating to Intellectual Property Rights

1. Role of GI Tag for India’s Growth
   - A geographical indication (GI) is a name or sign used on products which corresponds to a specific geographical location or origin.
   - It act as a certification that the product possesses certain qualities, is made according to traditional methods, or enjoys a certain reputation.
   - Under Paris Convention for the Protection of Industrial Property, GIs are covered as an element of IPRs.
   - GI is governed by WTO’s Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).
   - In India, GI tag is governed by Geographical Indications of Goods (Registration and Protection Act), 1999.
   - This Act is administered by Controller General of Patents, Designs and Trade Marks, who is also Registrar of Geographical Indications.
   - The special treatment to wines and spirits in TRIPS Agreement appears to be developed country centric.
   - Developing countries, including India, seek the same higher level of protection for all GIs as was given under TRIPS for wines and spirits.
   - The battle for GI tag between states. We saw between West Bengal and Odisha over the ownership of Rasogolla.
   - Cheap Power loom saris are sold as reputed Banarsi handloom saris, harming both the producers and consumers.
   - Intellectual Property is a power tool for economic development and wealth creation particularly in the developing world.
   - GIs have the potential to be our growth engine. Policy-makers must pay a heed to this and give Indian GI products their true reward.
1. **The Need for Digitizing Land Records in India**
   - The Peruvian economist Hernando de Soto has often pointed out that a *modern market economy requires a strong system of property rights*.
   - Nearly two-thirds of all pending cases in Indian courts are related to *property disputes* costing a whopping *Rs.58,000 crore in litigation*, both civil and criminal.
   - *Land Records digitization* can help accelerate *India’s GDP by as much as 1.3%*.
   - NITI Aayog has said that such property cases take an *average of 20 years to settle*.
   - The result is that millions of Indians *cannot use their principal asset as collateral* to borrow from the formal financial system.
   - *Government steps to digitise Land records:*
     - Digital India initiative aims to modernize land records management.
     - Some states, such as Madhya Pradesh, Andhra Pradesh, Telangana, Chhattisgarh, Tamil Nadu and Maharashtra, doing better than the others.
     - The government has now pushed the year of completion of digitization of land records to 2021.
   - *State Government Initiatives:*
     - The Bhoomi Project in Karnataka led the way even before the Union government got into the act. The state government began to *digitize land records* at the turn of the century.
     - The Rajasthan legislature passed the Rajasthan Urban Land (Certification of Titles) Act in April 2016. This law ensures that the state government is a *guarantor for land titles in Rajasthan*, and will provide compensation in case of issues of defective title.
     - Andhra Pradesh government has tied up with a Swedish firm to use new blockchain technology to prevent property fraud.
1. **Shell Companies in India**
   - Shell Company is a corporate entity **without active business operations** or significant assets.
   - There is no clear definition of shell companies under the Companies Act, 2013 in India.
   - The Centre has been cracking down on shell companies in recent months.
   - SEBI had directed to stock exchanges to initiate action against suspect shell companies and ban them from trading.
   - A ‘**Task Force on Shell Companies**’ was constituted in February, 2017 for effectively tackling the malpractices by shell companies.
   - Most of the shell companies are registered in tax havens, where there is nil or low tax.
   - Shell companies had been set up in the recent past to launder black money and hold benami property or companies.
   - The leaked **Panama Papers (2016)** exposed a global network of shell companies operating from tax havens used for moving assets and cash from one country to another illegally.

2. **Railways’ focus misplaced: CAG**
   - The **Indian Railways (IR)** is the fourth-largest railway network in the world – in terms of size, its total track length being 1,21,407 kilometers.
   - It operates **more than 13,000 passenger** trains on a daily basis.
   - It is currently the 8th-largest employer in the world, with **more than 1.3 million employees** but trains running late have been a common scenario across the country.
   - **CAG observation on modernization of railways** had brought the focus back on this key priority area of government as highlighted in the Budget.
   - **Infrastructure** such as platforms, washing pit lines and stabling lines at the stations were **not augmented to match the increase in number of trains**.
   - **Expansion of the stations** by adding more platforms needs to be considered.
   - **There should be platform of adequate length and adequate facilities of stabling and washing pit lines.**
   - **Provision of CCTV cameras** has been made over 394 railway stations. Installation of CCTV cameras is also under progress over 983 stations with allocation of budget under **Nirbhaya Fund**.
   - **To improve the standard of food** being provided to passengers, **new Catering Policy** has been issued on 27th February, 2017.
   - **Solution by CAG Report**
     - **Modernisation/redevelopment of stations** should address infrastructural constraints.
     - **All Zonal Railways need to prepare comprehensive Master Plans** for stations with heavy passenger traffic.
     - **Increase the length of all the platforms** at major stations so as to
accommodate trains of 24 or more coaches.