VISION IAS
INSPIRING INNOVATION

Economy

Classroom Study Material 2021

(September 2020 to September 2021)

www.visionias.in
+91 8468022022
DELHI | JAIPUR | PUNE | HYDERABAD | AHMEDABAD | LUCKNOW | CHANDIGARH | GUWAHATI

ECONOMY

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Previous Year Questions

A reference sheet of syllabus-wise segregated previous year questions from 2013-2020 (for the Economy Section) has been provided. In conjunction with the document, it will help in understanding the demand of the exam and developing a thought process for writing good answers.

A NOTE FOR THE STUDENTS

Knowing is not enough; we must apply. Willing is not enough; we must do.

-Johann Wolfgang von Goethe

Dear Students,

Every year with Mains 365 documents, we aim to provide consolidated content keeping in mind the demand of the exam and the corresponding needs of the students. This necessitates keeping pace with changing pattern of the examination.

Over the course of last 3-4 years, the nature of questions in the Mains examination has changed significantly, especially in the Economics section. Questions are becoming more conceptual, and more holistic in nature (i.e., having an amalgamation of both static and current parts), for e.g. the question on intra-generational equity and inclusive growth in Mains 2020 examination.

In this context we have made following additions in the document:

- **Topic at glance:** More than 40 Topic at glance have been added to the Mains 365 Economy document. These topic at glance seek to:
  - Act as a bridge **connecting the static information** and the analysis of the current events.
  - Give a **360-degree view of the comprehensive topics** like Employment, skill development.
  - Provide essential data/ initiatives related to the topic for **quick revision and replication in the examination.**
- **Infographics:** Infographics have been added in the document in a manner that they can readily be replicated in the examination through flowcharts, pie charts, maps etc., thereby improving the presentation of the content in the answers.
- **Previous year questions:** A QR Code to the syllabus-wise segregated Previous Year Questions has been provided for student's reference. These will act as a guiding light for developing a thought process required for writing good answers.

The document seeks to not only provide a one stop solution for Economics Current Affairs but it also seeks to develop a coherent thought process required for effective and well presented answer. Therefore, the articles in the document are not only to be read for content but also for understanding and adopting good practices of answer writing.

We hope that the coverage of the content in an organized manner will assist you in performing well in the examination.

All the best!
Team VisionIAS

1. EMPLOYMENT, SKILL DEVELOPMENT AND LABOUR REFORMS

1.1. EMPLOYMENT

EMPLOYMENT AT-A-GLANCE

Key targets

- Increase **female labour force participation** to at least 30%.
- Disseminate **publicly available data** and use the same for administrative purposes.
- Encourage **increased formalization of the labour force.**
- Ensuring fair wages, good working conditions, increased productivity, and socio-economic security for workers.

Current Situation

40.1%	Was the Labour force Participation Rate (LFPR). (PLFS 2019-20)
4.8%	Of the workforce was unemployed despite seeking active employment.
52 crore	Workers make up India's total workforce.
45.6%	Of the workers are employed in agriculture.
5.5%	Growth was seen in the Female Labour Force Participation.

Schemes/Policies/Initiatives

- Minimum Wages Act, 1948.
- Employees Pension Scheme, 1948.
- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).
- Sampoorna Rojgar Yojana.
- Aajeevika- National Rural Livelihood Programme.
- Pradhan Mantri Shram Yogi Maan-dhan Yojana.
- Prime Minister's Employment Generation Programme.
- Atmanirbhar Bharat Rozgar Yojana.

Way Forward

- **Enhance skills and apprenticeships** through initiatives like Labour Market Information System (LMIS).
- **Simplification and Modification of Labour Laws** for the current context.
- Enhance **female labour force participation.**
- **Improve data collection on employment** through tools like Periodic Labour Force Survey.
- **Ease industrial relations** to encourage formalization.
- Better enforcement of **wage regulations and ceilings**.
- Enhance Occupational Safety and Health (OSH) in every sector of the economy.

Constraints

- Large share of India's workforce is employed in **Low Productivity activities.**
- A large number of workers are **not covered by social security or labour regulations.**
- Less than half of the graduates **have requisite skills** and are employable.
- **Lack of timely and periodic estimates of the data** on workforce and its engagements.

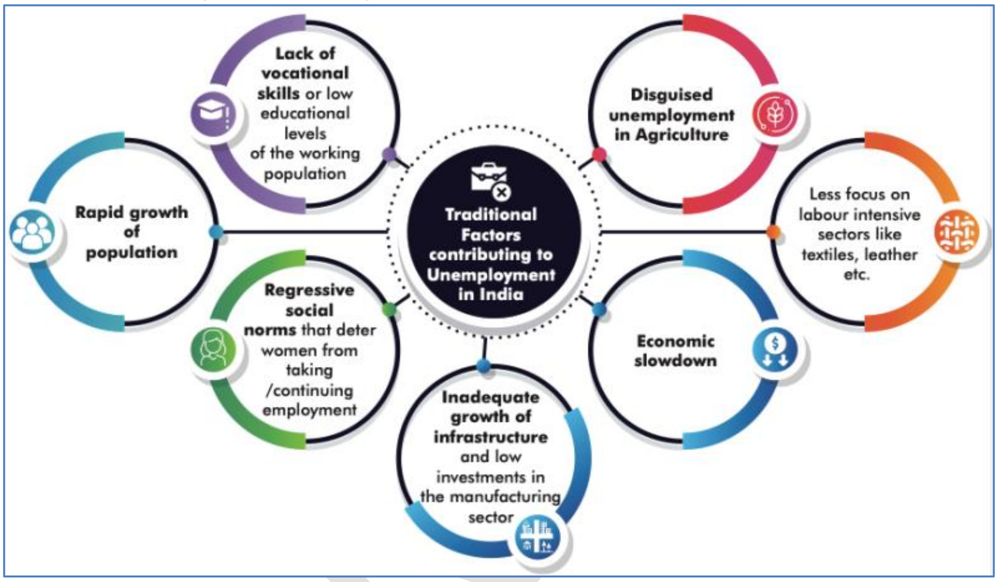
1.1.1. UNEMPLOYMENT IN INDIA

Why in News?

The third annual report on Periodic Labour Force Survey (PLFS) data indicated that despite slip in the real growth rate of the economy the **Unemployment Rate (UR)** fell to **4.8%** in 2019-20.

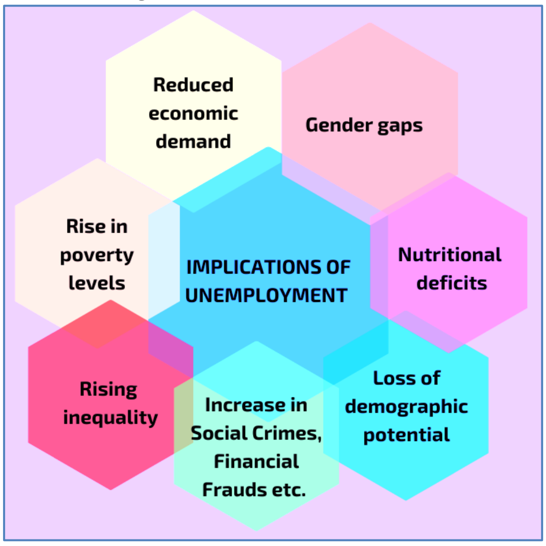
Concerns despite falling UR

- **High UR in the 15-29 age group (15%)** with **higher joblessness in urban youth** as compared to in rural areas.
- **Almost entire rise in workforce due to increase in agriculture** workforce.
- **Increase in share of rural women in agriculture**, largely as unpaid family workers.
- **Only 12.9% rural household** were engaged in regular wage/salary earning (43.1% in Urban area) with **53.2% rural household engaged in self-employment** (30.7% in urban area).



Major reasons for Unemployment in India

- **Traditional Factors** contributing to unemployment in India (as given in Figure).
- Slowing economic growth rate and the Covid-19 pandemic further worsened the condition as:
    - **Almost 90% workforce is engaged in hard hit informal sector** with no/little social security,
    - **Closure of digitally disconnected businesses** or businesses facing supply chain disruptions due to lockdowns,
    - **Restricted hiring activities with layoffs in MSMEs,** further increasing the d**isguised unemployment in agriculture, and**
    - **Job losses among Indian Diaspora** in Middle East countries like Kuwait, Saudi Arabia, Oman, Qatar and Bahrain as a result of the crumbling oil dependent economies amid pandemic.



Recent steps that have been taken

- **Digi Saksham:** It is a **digital skills programme** to enhance the employability of youth by imparting digital skills that are required in an increasingly technology driven era.
- **Atmanirbhar Bharat Rozgar Yojana (ABRY):** ABRY was launched to **incentivize employers for creation of new employment along with social security benefits** and restoration of loss of employment during COVID-19 pandemic.
- **E-Shram Portal:** It has been created for **Registration of Unorganized workers.**
    - **All registered workers shall be issued an e-Shram card with Universal Account Number (UAN)** to avail benefits of various social security schemes of the government (like PM-Shram Yogi Maan-Dhan Yojana).

Measures to overcome Traditional Unemployment Factors

- **Address declining demand and speed up the recovery** through comprehensive employment policy including a National Employment Policy,
- **Tapping into the digital economy's potential** of mass employment,

- **Building Back Better-Informal Economy** for higher productivity and networking ability,
- **Reskilling and upskilling of worker** in light of changing demands across sectors,
- **Facilitating the transition of economy** from informal to formal sector,
- **Introducing a centralised unemployment insurance** scheme for all unemployed individuals/removing bottlenecks of existing unemployment benefit schemes.

1.1.2. FIXED TERM EMPLOYMENT

Why in news?

Draft **Model Standing Orders, 2020** by the Ministry of Labour and Employment for all manufacturing, mining, and services sector explicitly mentioned **Fixed Term Employment as one of the classifications of a worker.**

What is Fixed Term Employment?

- Broadly, fixed-term employment is a contract in which a company or an enterprise hires an employee for a specific period, usually a year with option to renew on term expiry depending on the requirement.

Key provisions of the Model Standing Order

- **Definition:** "Fixed-term employment" means the **engagement of the worker based on a written contract of employment with an employer** for a fixed period.
- **Termination:** The termination of the service of a worker because of **completion of tenure will not be considered as retrenchment.**
- **Compensation:** The salary payment will be more transparent, and **all remuneration will be paid within a maximum of seven days after completion of the wage period of a worker.**
- **Transparency:** Display of **wage rates on an electronic device or notice board and website or human resources portal of the industrial establishment** in Hindi, English or the local language in which majority of the workers are conversant.
- **Renewal: No cap** on the number of times **private firms can renew fixed-term contracts in India.**

Need of Model Standing Order on Fixed-Term Employment

- **Changing work culture and new forms of employment** like gig-economy and rise in entrepreneurial culture, demanding statutory flexibility and expansion of definition of employment.
- **Requirement of seasonal and demand-based industries** like leather-based industries, textile market, meals industries etc. to tap the talented workforce for a short period of time.
- **Directly hire contract workers** through the fixed-term contract without a middleman.
- **Overcome issues on delay in payment to workers**.
- **Provide alternative to contractual employment**, helping employees to get advantages similar to permanent workers for a similar work.

Concerns over Fixed-term Employment

- **Going against the concept of job security**: Though Government assured on no conversion, but it can lead to conversion of existing permanent employees to fixed term employment**.**
- **Difficulty in enforcement of agreements:** Due to limited financial capability and ability to understand contracts of most employees, it will be difficult for employees to enforce written contract.
- **Misuse of contractual employment arrangements** against illiterate workforce for their economic exploitation through deceptive contractual arrangements.

Way forward

The Notification is a step which signals the intent of the Central Government to retain India on the manufacturing world map, without significantly compromising on labour interests. But its effectiveness will be subject to **effective implementation of the order** and **implementation of complementary labour reforms in the form of Labour Codes**.

1.1.3. GIG ECONOMY

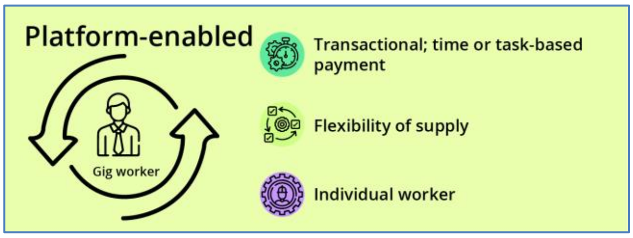
Why in news?

Recently, a report titled 'Unlocking the Potential of the Gig Economy in India' highlighted that there will be a rise in Gig jobs in India.

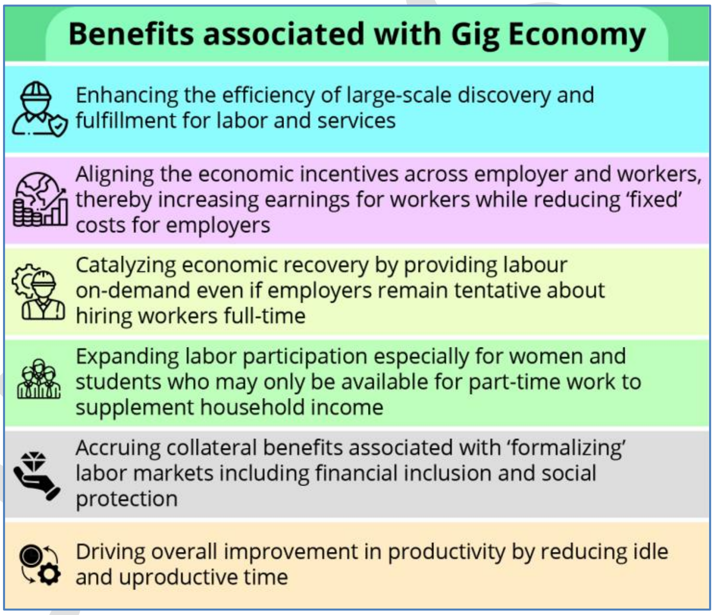
More on the news

- The report estimates that **gig economy has the potential to serve up to 90 million jobs** by 2028 in the non-farm sectors of India with the potential to **add up to 1.25% to India's GDP** through efficiency and productivity gains alone.

What constitutes Gig work?



- **Gig work** is the work in which organizations contract with independent workers for short-term engagements on a per-time or per-task basis (with no commitment of future work).
    - Thus, the gig worker has **flexibility to choose hour of work with no negative impact on earning potential**.
- **Emerging Business Models in gig economy:**
    - **Digital Marketplaces** sign up demand-driven service providers skilled in niche areas such as beauty, fitness, plumbing, electrical repairs, etc. and offers these services to consumers on a contractual basis as per requirements. **For example– UrbanCompany.**
    - **Service Listing Platform** offers a platform to list the demand for various professional services which can then be matched with the services being offered. **For instance– Truelancer.**
    - **Asset/ Service Sharing** is an asset sharing business model that engages gig workers to offer specific services such as transportation, accommodation, and delivery. **For example-Uber.**



Prominent issues related to Gig economy

- **Low Job security and Inconsistent income**: The income earned by the gig workers is unpredictable and they are at a particularly high risk of **having unclear employment status**.
- **Lack of social security benefits**: Jobs in the gig economy have no such safeguards such as Health Insurance, EPF etc.
- **Limited opportunities for skill upgradation** and career progression that are attached to traditional jobs.
- **Potential exploitation of workers**: Due to individualistic nature of gig work, unlike traditional employees, gig workers cannot form unions and bargain collectively.
- **Application of labour laws**: The dispersed nature of the work on digital labour platforms across international jurisdictions makes it **difficult to monitor compliance with applicable labour laws**.
- **Urban-rural disparity**: Currently in India, very few people in the rural areas are comfortable in using digital platforms to identify employment opportunities and hence cannot actively participate in gig economy.
- **Skill shortage**: Indian workforce may lack appropriate skills to fully utilize the potential of demand-based Gig economy, especially in white collar jobs.
    - **Curriculums in Indian schools and higher education institutions have failed to keep up** with changing skill demands of the labour market.

Way Forward

- **Basic workplace training**: Basic training requirements for gig workers can be provided to equalize the standard of care associated with both traditional and gig work arrangements.
- **Social protection for all:** There is a need to update existing eligibility and coverage of social protection to reflect the needs of Gig workers more accurately.
    - For example, **a Universal Labour Guarantee can be established that provides a labour protection floor** for all workers, which includes fundamental workers' rights, an adequate living wage, limits on hours of work etc.

- **Addressing skill shortages:** This can be achieved by three-pronged strategy of **Skilling** for demand-oriented skills, **Re-skilling** workers facing potential job losses and **upskilling** as part of life-long learning.
- **Work assurance:** Companies need to make an effort for transparency in employer-employee relationship, especially regarding **income and quantity of work.**

1.2. SKILL DEVELOPMENT

Key targets

- Increase the **formally skilled** labour from the **current 5.4%** of India's workforce to at least **15%.**
- Ensure **inclusivity** and reduce divisions based on gender, location, organised/unorganized, etc.
- India's **skill development infrastructure** should be brought at par with **global standards.**
- Skill development should be made an integral part of the **secondary school curriculum.**

Current Situation

- **54%** Of India's population is below 25 years of age.
- **25 years** The **demographic dividend** is expected to last up till this time.
- **5.4%** Of India's workforce has undergone **formal skill training.**
- **47%** Of those coming out of **higher educational institutions** are **employable**.
- **About 70 lakh** Candidates have been **skilled under PMKVY**.

Schemes/Policies/Initiatives

- **Ministry of Skill Development and Entrepreneurship** was set up in 2014 to implement the **National Skill Development Mission.**
- **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**
- **Deendayal Upadhyay Grameen Kaushal Yojana**
- **Pradhan Mantri YUVA Yojana**
- **Skills Acquisition and Knowledge Awareness for Livelihood (SANKALP)** and **Skills Strengthening for Industrial Value Enhancement (STRIVE)**
- **Skill India Mission** for Vocational training and certification
- **Aajeevika Skill Development Programme**
- **Skill Management and Accreditation of Training Centres (SMART)**

SKILL DEVELOPMENT AT-A-GLANCE

Way Forward

- **Mapping** skill requirements for a demand-driven skill development ecosystem, sector-wise and geographically.
- Improving **training delivery and quality** through regular evaluation of training institutes.
- Regular **skill surveys** to be able to assess the demand and supply of the market skills.
- Planning appropriate **apprenticeship programmes.**
- **Mainstreaming skill development** with education through a system for academic equivalence to ITI's qualifications.
- **Alternative financial sources** such as CSR, CAMPA, MPLAD funds, MGNREGA etc can be utilised for skill development.

Constraints

- **Underdeveloped and poor quality infrastructure** of skill training centres.
- **Low student mobilization** vis-à-vis vocational training.
- **Lack of industry participation** in both the process and pedagogy of skilling.
- **Participation of women in skill development schemes** still remains low.
- **Lack of proper career guidance to the students** due to the inadequate placement statistics and weak industry linkages of the training institutes.
- Demographic advantage might turn into a **demographic disaster** if the skills sets do not match industry requirements.

1.3. LABOUR LAWS REFORMS

LABOUR LAW REFORMS AT A GLANCE

Labour Laws and their role

- They are a body of laws, administrative rulings, and precedents which address the legal rights of, and restrictions on, working people and their organizations.
- Labour legislations fulfill three major roles:
  - **Redistribution of legal powers** between workers and employees.
  - Facilitation of individual and collective **employment relationships.**
  - It serves as a reminder and **guarantee of fundamental principles and rights** at work.

Evolution of Labour Laws in India

- The labour laws of independent India can be associated with **views expressed by important nationalist leaders, Constituent Assembly debates, provisions of the Constitution** and **ILO's Conventions and Recommendations.**
- Post-independence, labour laws were majorly driven by economic policy of **government directed "nation-building".**
- With the advent of liberalization in 1990s, the New Industrial Policy started shifting towards a less regulated labour market.

REFORM AND CODIFICATION OF INDIA'S LABOUR LAWS

Need for reform and codification of India's Labour Laws

- Labour laws are **highly complex** and overlapping in nature and also **very high in number.**
- **Poor enforcement** of laws due to delays in referral, disposal and implementation of awards in cases.
- **Constrained growth of firms** with high administrative burden and lack of an easy exit option.
- It is indirectly **promoting more capital-intensive industries.**
- A **large number of unions** within an establishment negatively impact **collective bargaining rights of workers.**
- **Inadequate coverage** of workers **aggravates social issues like poverty.**

Potential effect of Labour Code on these issues

- This will lead to **consolidation and simplification of labour laws.**
- It has **extended the coverage** to **more categories of workers and establishments**.
- It **guarantees timely minimum pay to all** with provisions like National Minimum Wage.
- It **facilitates growth of firms along with job creation** by increasing the permission threshold before closure, lay-off, or retrenchment to 300 workers.
- **Improves labour administration** through web-based inspections and compounding of offences in certain cases.
- It increases **protection of contract labourers rights** by increasing responsibilities of the contractor.
- It **provides recognition to negotiation unions** with 51% membership.
- Easing the process for entrepreneurs with **'one labour return, one licence and one registration'** policy.

Issues and concerns against the new consolidated codes

- **Universal minimum wage is very low** and can lead to the process of **labour cheapening.**
- Unnecessarily **wide jurisdiction of the government** in certain cases.
- **Over-delegation of legislation** leading to bypassing of legislative scrutiny in some laws.
- The central and the state government have **wide discretion in providing exemptions** from these codes.
- **Overlap between the definitions** of gig workers, platform workers and unorganized workers.
- Certain code like social security and occupational safety do not apply to all the workers.
- **Other emerging challenges** like dealing with new kind of workforce like "crowd-work" or "on-demand" work.

Other steps that could have been taken

- National Commission on Labour (NCL) (2002) had **recommended a separate law for small scale units.**
- Standing Committee on Labour (2020) recommended that the Code on security should provide a framework for achieving **universal social security.**
- NCL recommended a system of **labour courts, lok adalats and Labour Relations Commissions (LRCs) as the integrated adjudicatory system** in all labour matters.
- ILO (2016) highlighted that r**estricted use of fixed term and ad-hoc contract workers** in the total workforce could prevent their over-exploitation.
- NCL recommended that a **specific provision may be made to enable workers in the unorganized sector to form trade unions.**

Parliament has passed the three Labour Code **bills** – the Occupational Safety, Health and Working Conditions Code, 2020; the Industrial Relations Code, 2020; and the Code on Social Security, 2020 in a major boost to Labour reforms.

1.3.1. CODE ON INDUSTRIAL RELATIONS, 2020

- It combines the features of three erstwhile laws:
  - Trade Unions Act 1926,
  - Industrial Employment (Standing Orders) Act, 1946
  - Industrial Disputes Act, 1947

Major provisions under the code:

- **Definition of worker:** It defines a 'worker' as any person who work for hire or reward. It excludes persons employed in a managerial or administrative capacity, or in a supervisory capacity with wages exceeding Rs 18,000.
- **Prior permission of the government for closure, lay-off and retrenchment:** It is required for an establishment having at least 300 workers to seek prior permission of the government before closure, lay-off, or retrenchment. Central government is **empowered only to allow an increase in the threshold** through notification.
- **Negotiating Union and Council:** It states that only one Negotiating Union will be recognized and the same will have the powers akin to a trade union.
- **Tribunals for settlement of disputes:** For the settlement of industrial disputes, each Industrial Tribunal will consist of a Judicial member and an Administrative member.
- **Fixed term employment:** Fixed term employment refers to workers employed for a fixed duration based on a contract signed between the worker and the employer.
- **Re-skilling fund:** To re skill those workers who are fired from their jobs. Contributions for the fund will be made from the employer of an industrial establishment amounting to fifteen days wages last drawn by the worker immediately before the retrenchment along with the contribution from such other sources.

Key issues with the code

- **May impact ability of workers to strike & employers to lock out workers:**
  - **The code has expanded to cover all industrial establishments** for the required **notice period and other conditions for a legal strike.** A prior notice of 14 days is required before a strike or lock-out and prohibits strikes and lock-outs under certain conditions.
  - **Earlier these provisions were applicable only for public utility services** (railways, airlines, and establishments that provide water, electricity, and telephone service) under the Industrial Disputes Act, 1947. The **rationale for extending the provisions on notice to all establishments is unclear.**
  - The National Commission on Labour (2002) had justified the rationale of treating such industries differently, considering their impact on the lives of a vast majority of people.
- **Violation of the principle of separation of executive and judiciary:**
  - The code gives extensive **power to government to modify or reject tribunal awards through executive action and raises a question of conflict of interest.**
  - It states that the awards passed by a Tribunal will be enforceable on the expiry of 30 days. However, the government can defer the enforcement of the award in certain circumstances on public grounds affecting national economy or social justice.
    - The Industrial Disputes Act, 1947 had similar provisions. In 2011, the Madras High Court struck down these provisions on constitutional grounds.
- **Impact on formation of trade unions:** It is unclear as to what will happen in case there are multiple registered trade unions.
- **Certain terms not defined in the Code:** it does not define the terms 'manager', 'supervisor', 'contractor' and 'establishment' leaving them open to wider interpretation.

1.3.2. CODE ON SOCIAL SECURITY, 2020

- The Code replaces nine laws related to social security. These include
  - The Employees' Provident Fund Act, 1952
  - The Maternity Benefit Act, 1961
  - The Unorganised Workers' Social Security Act, 2008

Major provisions of the code

- **Applicability:** The code is **applicable to any establishment** (subject to size-threshold as may be notified by the central government).
- **Social security fund**: The code states that the central government will set up such a fund **for unorganised workers, gig workers and platform workers**. Further, state governments will also set up and administer separate social security funds for unorganised workers.
- **Provisions for registration** of all three categories of workers - unorganised workers, gig workers and platform workers.
- **National Social Security Board**: for the purposes of welfare of above three categories of workers and recommend and monitor schemes for them.
- **Contribution for Schemes:** schemes for gig workers and platform workers may be funded through a combination of contributions from the central government, state governments, and aggregators.
- **Changes in definitions**: These include expanding the definitions of (i) 'employees' to include workers employed through contractors, (ii) "inter-state migrant workers" to include self-employed workers from another state, (iii) "platform worker" to additional categories of services or activities as may be notified by the government, (iv) audio-visual productions to include films, web-based serials, talk shows, reality shows and sports shows
- **Offences and penalties**: The code changes the penalties for certain offences. For example, the maximum imprisonment for obstructing an inspector from performing his duty has been reduced from one year to six months.
- **Additional powers during an epidemic**: The code adds new clauses which may become applicable in the cases of an epidemic. For example, the central government may defer or reduce the employer's or employee's contributions (under PF and ESI) for a period of up to three months in the case of a pandemic, endemic, or national disaster.

Key issues with the code

- **No Universal social security:**
  - Benefits, such as **pension and medical insurance, continue to be mandatory only for establishments with a minimum number of employees** (such as 10 or 20 employees). All other categories of workers (i.e., unorganised workers), such as those working in establishments with less than 10 employees and self-employed workers may be covered by discretionary schemes notified by the government. A large number of workers may continue to be excluded.
  - The code **continues to treat employees within the same establishment differently** based on the amount of wages earned. For instance, provident fund, pension and medical insurance benefits are only mandatory to employees earning above a certain threshold (as may be notified by the government) in eligible establishments.
  - The code **continues to retain the existing fragmented set up for the delivery of social security benefits**. These include: (i) a Central Board of Trustees to administer the EPF, EPS and EDLI Schemes and (ii) an Employees State Insurance Corporation to administer the ESI Scheme.
- **Provisions on gig workers and platforms workers are unclear:** The code introduces definitions for different categories of workers, however, **there may be some overlap between their definitions.** For example, a driver working for an app-based taxi aggregator is a gig worker, a platform worker, and an unorganized worker at the same time due to his nature of job.
- **Mandatory linking with Aadhaar may violate Supreme Court judgement:** The code mandates an employee or a worker (including an unorganised worker) to provide his Aadhaar number to receive social security benefits or to even avail services from a career centre. This may violate the Supreme Court's Puttaswamy judgement.

1.3.3. CODE ON OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS, 2020

- It consolidates 13 existing acts regulating health, safety and working conditions. These include-
  - The Factories Act, 1948
  - The Mines Act, 1952
  - The Contract Labour (Regulation and Abolition) Act,1970

Major provisions under the code

- **Threshold for coverage of establishments**
  - **Factory:** It defines a factory as any premises where manufacturing process is carried out and it employs more than: (i) 20 workers, if the process is carried out using power, or (ii) 40 workers, if it is carried out without using power.
  - **Establishments engaged in hazardous activity:** It **includes all establishments** where any hazardous activity is carried out **regardless of the number of workers**.
  - **Contract workers:** Code will apply to establishments or contractors (including the offices of the central and state governments) employing 50 or more workers (on any day in the last one year) and prohibits contract labour in core activities (to be determined by the appropriate government).
- **Work hours and employment conditions**
  - **Daily work hour limit** fixes the maximum limit at eight hours per day.
  - **Employment of women:** Women will be **entitled to be employed in all establishments for all types of work**.
- **Exemption**: The code **empowers the state government to exempt any new factory** from the provisions of the Code in order to create more economic activity and employment.
- **Inter-state migrant workers**
  - **Definition of inter-state migrant worker:** Any person who moves on his own to another state and obtains employment there and is earning a maximum of Rs 18,000 per month, or such higher amount which the central government may notify.
  - **Benefits for inter-state migrant workers:** They include: (i) option to avail the benefits of the public distribution system either in the native state or the state of employment, (ii) availability of benefits under the building and other construction cess fund in the state of employment, and (iii) insurance and provident fund benefits available to other workers in the same establishment.
  - **The code removed the provision for Displacement allowance which was there in the 2019 bill** to pay a displacement allowance to inter-state migrant workers at the time of their recruitment, which was equivalent to 50% of the monthly wages.
  - **Database for inter-state migrant workers:** the central and state governments to maintain or record the details of inter-state migrant workers in a portal and the migrant worker can register himself on the portal on the basis of self-declaration and Aadhaar.
  - **Social Security Fund for the welfare of unorganized workers:** The amount collected from certain penalties under the Code will be credited to the Fund. The government may prescribe other sources as well for transferring money to the Fund.

Key Issues with the code

- **Rationale for some special provisions unclear**
  - It contains general provisions which apply to all establishments. These include provisions on registration, filing of returns, and duties of employers. However, it also includes additional provisions that apply to specific type of workers such as those in factories and mines, or as audio-visual workers, journalists, sales promotion employees, contract labour and construction workers.
  - While special provisions for hazard-prone establishments such as factories and mines and categories of vulnerable workers such as contract labour seems justified, the **rationale for mandating special provisions for other workers is not clear.**
- **Civil Court barred from hearing matters under the Code**
  - Under the existing 13 health and safety laws, claims which affect the rights of workers such as wages, work hours, and leave, are heard by labour courts and industrial tribunals.
  - However, the code bars the jurisdiction of civil courts. The only recourse available would be to directly file a writ petition before the relevant High Court. It can be argued that the bar on civil courts may deny aggrieved persons an opportunity to challenge certain issues before a lower court.

2. ECONOMIC REFORMS AND INCLUSIVE GROWTH

2.1. ECONOMIC REFORMS

2.1.1. 30 YEARS OF 1991 ECONOMIC REFORMS

30 YEARS OF 1991 REFORMS AT A GLANCE

Background of the 1991 reforms

Underlying causes for the crisis

- **License raj:** The "License Raj" or "Permit Raj" was the elaborate system of licenses, regulations and accompanying red tape that were required to set up and run businesses.
  - This was largely executed through the MRTP Act, 1969.
- **Policy of import substitution:** This policy advocated replacing imports with domestic production.This led to the monopoly of Indian industries and lack of incentive for them to improve.
- **A closed economy:** The rupee was inconvertible and high tariffs and import licensing prevented foreign goods reaching the market. The overinvolvement of bureaucracy often led to absurd restrictions.

Immediate unfolding of the crisis

The immediate causes of the crisis included complacency caused by Bombay High Oil discoveries, collapse of Rupee-Rouble trade following the dismantling of the Soviet Union and crude oil price hike due to the Gulf War. This resulted in a BoP crisis-

- **1985:** BoP problems started due to persistent deficit between income and expenditure.
- **1990:** The Central Government was close to defaulting on its foreign payments.
- **1991:** The foreign exchange reserves dropped to a dangerous level alongside rise in prices of essential goods.

This led to a situation where India was seeking help from external bodies i.e., IMF and World Bank.

Response of the Indian Government to the crisis

- **Liberalization:** Liberalization was done in various sectors in like **deregulation of industrial sectors, financial sector reforms** like establishment of private banks and increased foreign investment and **reforms related to taxation.**
- **Privatization:** This included **expansion of the 'dereserved list'** thus inviting private participation and disinvestment which helped in transition towards a market driven economy.
- **Globalization:** The idea of globalization manifested in **Trade and Investment Policy Reforms** like dismantling of quantitative restrictions, removal of import procedures and lowering of export duties. It was also accompanied with **Foreign Exchange Reforms** such as devaluation of rupee.

Impact of these reforms

- **Size of the Indian Economy** has grown from about Rs. 6 lakh crore to about Rs. 140 lakh crore.
- With continuous liberalization in the **FDI and FII, the collective investment of the two have crossed $ 100 bn.**
- Forex reserves in 2021 reached a **record high crossing the $ 642 bn mark.**
- India has become a **successful exporter of auto parts, pharmaceutical goods, engineering goods, IT software and textiles.** As a corollary, **the services sector has showed significant growth** post-1991.
- Encouragement to private sector led to **development of a vibrant capital and financial market.**
- Opening of the economy has shifted the demand-supply equilibrium upwards thus resulting in **increased consumption and rising middle class.**

The reforms have also impacted areas like Health and Education, Nature of Politics, Culture and Technological Development.

Challenges that remain unaddressed

- **Limited inclusivity and jobless growth** as GDP growth remains uneven and does not create proportionate level of employment.
- **Taxation framework is complicated and regressive** with half of the tax revenue coming from indirect taxation.
- **Several areas** like agriculture, urban informal sector and forest communities **remain untouched by reform.**
- **Surprise changes, lack of consistency at policy level** makes the Indian market volatile and less attractive.
- **Chronic inadequacy in infrastructure** has a negative multiplier effect on almost all areas of the economy.
- **Small size of the financial sector** including banks and development of bond, forex markets etc.
- **Lack of emphasis on human resource development.**

Way forward for the future of economic policy

- **Diversified privatization** to complement privatization with policies which prevent concentration of wealth.
- **Moving from shareholder capitalism to stakeholder capitalism** to make growth more inclusive.
- Focusing on creating an **integrated and progressive taxation system.**
- **Clarity in the role public sector envisages to play** in the economy.
- **Holistic reforms** in areas ranging from industry to labour to streamline the **economic climate of the country.**
- **Integrated approach to financial sector** including banks, FinTech sector, financial markets among others.
- With the evolution of India's political economy, the **states need to be an integral part of the reformation process.**
- **Economic policy** reform should **take into account** the ideas and targets propagated by **the SDGs.**

2.1.2. POST-PANDEMIC ECONOMY

POST-PANDEMIC ECONOMY AT A GLANCE

COVID-19 exposed following fault lines of the Indian Economy-

- **Persisting Economic Slowdown** was compounded by the pandemic and issues like NPA Crisis and transition effect of GST were further aggravated.
- **Economic Fragility** due to large dependence on the Services Sector.
- Inability to provide adequate fiscal stimulus highlighted Indian Economy's **limited fiscal capacity.**
- **Trust deficit between Government and Private Sector** can be seen as hindering quick recovery and creating a lower demand-supply equilibrium.
- Large scale disruptions in supply of essential commodities have indicated towards **lack of resilience in supply chains.**
- **High degree of informalization** in the economy resulted in creation of migrant crisis and large-scale loss of employment.
- The immediate threat of increasing poverty posed by the pandemic showcased the **deep-rooted nature of poverty in Economy.**
- The disproportionate impact faced by the poorer sections exposed the **entangled nature of inequality and the prevalent model of economic development.**
- The immediate impact of the pandemic in the form of increased wildlife presence and natural repair of ecosystems has glaringly showcased the currently **unsustainable nature of the economic growth.**

Changes that happened in the nature of the economy

- Measures like social distancing and lockdowns have **normalized the idea of 'Work from Home (WFH)'.**
  - WFH has further encouraged technological developments in this direction and provided a fillip to remote working and gig economy ecosystems.
- **Increased focus on self-reliance** due to disruption of global supply chains.
- **Increasing digitization** of most of the businesses and institutions.
- **Accelerating trend of deglobalization** due to growth of nationalist sentiments like 'Vaccine Nationalism'.
- Uncertainty associated with labour has given a **push towards technology-intensive and capital-intensive growth.**
- **Development of health capacity** in the form of testing infrastructure, enhancing production capacity for key products like ventilators.
- **Change in equilibrium of the economy** in the form of **altered sectoral equilibrium, simultaneous formalization and informalization in the economy and change in regional distribution of work.**

Changes that happened in other spheres

- **Digitization of economy translates to digitization of society** with growth of digital platforms.
  - Also, increased digitization may increase already prevalent digital divide.
- **WFH** may lead to **reimagining of Urbanization** with less pressure on metro cities & limited office space requirements.
- **Rapid technology penetration in education** with E-learning becoming popular.
- The precautions and habits followed during the pandemic have resulted in **internalization of sanitation standards.**
- **Ramifications for gender parity** in the form of disproportionately high burden of domestic & care responsibilities, increase in instances of domestic violence etc.
- Increased unemployment has led to **intensification of social issues** like child labour, exploitation of workers etc.

Measures to ensure smooth and speedy recovery

- **Ensuring food security** by further expanding Public Distribution System (PDS).
- **Direct cash transfer to affected populations** to increase social security for workers affected by the pandemic.
- **Participating in rekindled supply chains** as countries will be moving away from China centric supply chains.
- **Public investment in physical and social infrastructure** to augment health, urban, rural and especially digital infrastructure.
- **Providing fiscal room to the economy** by relaxing FRBM Act in the immediate term.

Philosophy to build a better Post Pandemic Economy

Moving towards a new broader destination of economic development encompassing **environmental sustainability, rising** well-being, **reduction of inequality** and **systemic resilience** alongside economic growth.

- **Moving from Shareholder Capitalism to Stakeholder Capitalism** to make economic decision making more inclusive.
- **Focus on building resilience going forward** by investing in strengthening health and social protection systems, close the digital divide; and ensure a green recovery.
- **Focusing on the Triple bottom line- People, Profit, and Planet** which includes economic growth, movement of social parameters like inequality levels and status of the environment.
- **Making continuous innovation part of the process** with experimentation with ideas like '4-day week', '24X7 economies' among others.

2.2. POVERTY ALLEVIATION

Key targets

- **Eradicate extreme poverty** for all people.
- Basing Poverty line estimation in India **on the** consumption expenditure **and not on the income levels.**
- Identification of **all forms of poverty beyond economic realm.**
- Addressing **Multi-dimensional poverty in a holistic manner.**

Current Situation

364 million people are below poverty line in India.
271 million people came out of poverty between 2005-15.
$ 1.90 is defined as the global line for extreme poverty.
40% of the World's poor live in conflict-affected countries.

Schemes/Initiatives

- Deendayal Antyodaya Yojana National Rural Livelihoods Mission (DAY-NRLM).
- Deendayal Antyodaya Yojana- National Urban Livelihoods Mission (DAY-NULM)
- Mahatma Gandhi National Rural Employment Guarantee Act, 2005
- PM Kisan Nidhi Scheme
- PM Awas Yojana
- Integrated Child Development Services
- National Food Security Mission
- Pradhan Mantri Garib Kalyan Yojana

POVERTY ALLEVIATION AT- A- GLANCE

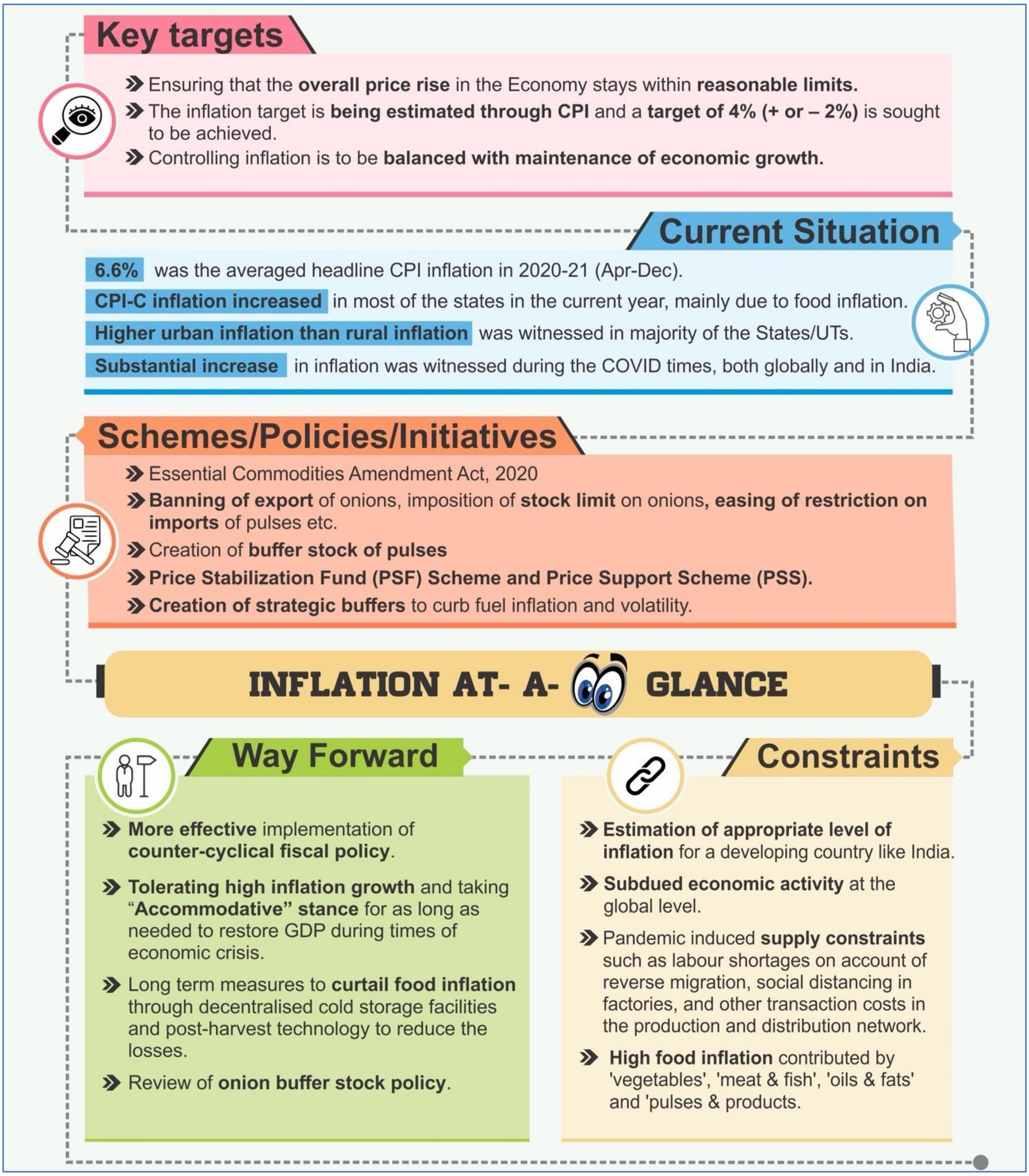
Way Forward

- **Providing adequate training and incentives** to government and bank officials.
- Ensuring participation of **local government and institutions.**
- **Effective distribution of wealth** and benefits of economic growth.
- Policy responses need to **reflect the changing profile of the poor.**
- Poverty action needs to address **hot spots of conflict, climate change and COVID-19.**
- **Expanding cooperation and coordination** at state, national as well as global level among all the stakeholders.

Constraints

- **Unequal distribution of land and other assets-** due to which the issue of free rider.
- **Amount of resources** allocated is **not sufficient.**
- **Implementing officials are inadequately trained,** corruption prone and vulnerable to pressure from a variety of local elites.
- **Less participation of local level institutions** in programme implementation.

2.3. INFLATION AND MONEY SUPPLY



2.3.1. WHOLESALE PRICE INDEX

Why in News?

The annual rate of Wholesale Price Index (WPI) stood at 7.39% for the month of March, 2021 over March, 2020 which is **the highest wholesale inflation rate since October 2012.**

About WPI

- The Wholesale Price Index (WPI) reflects **changes in the average prices of goods at the wholesale level** — that is, commodities sold in bulk and traded between business or entities rather than goods bought by consumers.

- **It does not consider the price of services** and does not reflect the consumer price situation in the country.
- **Released by:** Economic Advisor in the Ministry of Commerce and Industry
- **Base year:** Its base year is 2011-12 (revised in 2017 from 2004-05)
- **Components of WPI:** The index is based on the wholesale prices of a basket of 697 commodities categorised under three groups — Primary articles, Fuel and power and Manufactured products.

Significance of WPI

- Used as a **deflator of various nominal macroeconomic variables** including Gross Domestic Product (GDP).
- Used for the purpose of **escalation clauses** in the supply of raw materials, machinery and construction work.
- Global investors track WPI as one of the **key macro indicators** for their investment decisions.
- WPI based **inflation estimates** serve as an important determinant, in formulation of trade, fiscal and other economic policies by the Government.
- WPI also has sub-index called **WPI Food Index** (aggregate of WPI for Food Products under Manufactured Products and Food Articles under Primary Article) which along with Consumer Price Index (CPI) Food Price Index published by Central Statistics Office (CSO) helps to **monitor the food inflation effectively**.

Reasons for surge in WPI

- **Supply disruptions:** Pandemic induced local lockdowns and supply disruptions have resulted into supply disruptions causing rise in prices.
- **Depreciation of Rupees:** The rupee has been depreciating because of the Reserve Bank of India (RBI)'s measures to keep the interest rate on government bonds low. Also, the outflows by foreign portfolio investors have placed an additional pressure on the rupee.
    - A decline in the external value of rupee makes India's imports, particularly crude oil, metals and edible oils more expensive.
- **Rise in price of commodities:** The prices of crude oil, petroleum products and basic metal substantially increased in March 2021 as compared to the corresponding month of last year.
- **Seasonalilty of products:** As summer sets in, perishable products (especially vegetables) usually sees higher inflation.
- **Unreliability of data:** The sharp rise in annual rate in March can be attributed to the low base as data for March 2020 was computed with a low response rate that could have given lop-sided results.
    - Month-on-month (March 2021 over February 2021) rate of inflation stood at 1.57 %.

Implications

- **Increase in retail inflation:** There areconcerns that the higher inflation on the wholesale side could eventually spill over to the retail level in the following months, especially if the new lockdowns and restrictions hit supply chain.
    - Retail inflation has already climbed to 5.52% in March as fuel and transportation costs increased alongside some categories within the food basket.
- **Policy rate cuts:** Although WPI numbers are not the Reserve Bank of India's main metric for the purpose of setting monetary policy; the sharp spike may result in Monetary Policy Committee looking at precautionary rate cuts.
- **Higher inflationary expectations:** The apprehensiveness about future inflation may result in people making purchases earlier than planned and cause a rise in actual current inflation.
- **Dual pressure on economy:** Higher inflation and restrictions due to COVID-19 may weaken Indian economy further resulting into various disruptions such as higher unemployment.

Conclusion

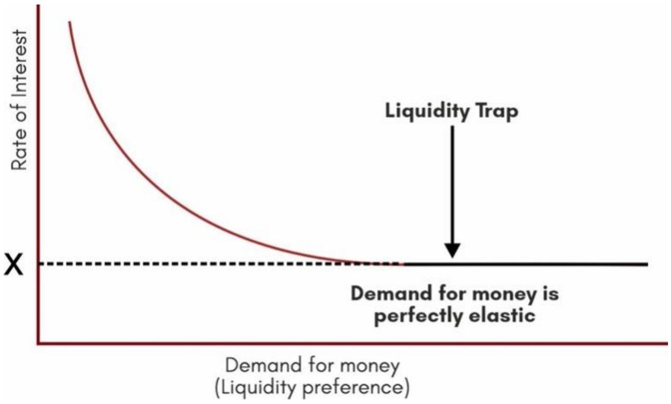
Though CPI gives much clearer picture of Inflation than WPI, it is important not to overlook the surge in WPI. The rise in WPI may be indicative of the real inflation rise in future which may have disruptive effects on the economy.

2.3.2. LIQUIDITY TRAP

Why in news?

Recently, the IMF economist Gita Gopinath stated that the global economy may be heading towards a liquidity trap.

What is a liquidity trap?



A liquidity trap is a contradictory economic situation in which interest rates are very low and savings rates are high, rendering monetary policy ineffective. It leads to a scenario where any additional money supply that is generated in the economy get channeled towards savings rather than investment thus rendering the economy to remain at same liquidity level.

Is the global economy stuck in a liquidity trap?

The economic situation created by the pandemic has led to following developments which indicate towards a liquidity trap:

- **Very low interest rates:** 60 per cent of the global economy - including 97 per cent of advanced economies -- central banks has pushed policy interest rates below 1 percent. In one-fifth of the world, they are negative. As a result, **central banks have little room to further cut interest rates** if another shock strikes.
- **Global demand still sluggish:** Despite the extremely low interest rates, the global demand is still sluggish due to the impact of the COVID-19 pandemic.
- **Threat of a potential currency war:** Due to decrease in interest rates, money supply around the world would increase which can potentially trigger a currency war due sliding exchange rates in the trading arena.
- **Effects reaching the developing world:** Generally, the developing countries are unlikely to develop this problem due to high average interest rates. But recently, developing countries like Peru and Chile have almost brought the borrowing costs to zero due to their crashing economies, thus signaling a liquidity trap.

Should India worry?
The second-order effects of lockdown in India could later see demand slump again to drag India's economy down. In this context, we **risk slipping into a liquidity trap if inflation fails to fall below 6%** within a quarter or so, as projected by the RBI. (As the policy rates have been brought close to 4%) This calls for a circumspect approach on part of India with regard to its fiscal as well as monetary policy.

What could be done as remedial measures?

- **Global synchronized fiscal push:** Fiscal authorities can actively support demand through cash transfers to support consumption and large-scale investment in medical facilities, digital infrastructure and environment protection.
- **Coordination and collective easing of the monetary policy:** Increased global coordination can potentially deter a global deflationary path which may lead to prolonged recession. This would be akin to the Quantitative Easing (QE) measures which were initiated by US.
- **Revisiting global economic arrangements:** Reevaluating the global arrangements like trade agreements and global supply changes could help better invest the calibrate the available liquidity.

2.4. HOUSING

Key targets

- Every family with a **pucca house, with a water connection, toilet facilities, and 24x7 electricity and access.**
- Address the **housing requirement of Urban Poor including Slum Dwellers**.
- **Promotion of affordable housing** along with Public-Private Partnership.

Current Situation

- **3 crore and 1.2 crore** Houses are needed in rural and urban areas respectively.
- **52 lakh** Houses completed under PMAY (U).
- **7.5 lakh crore** Investment has already been done in the sector.

Schemes/Policies/Initiatives

- 'Housing for All' by 2022
- **Pradhan Mantri Awas Yojana (Gramin – PMAY-G)** converged with **Swachh Bharat Mission (Gramin)** and Mahatma Gandhi National Rural Employment Guarantee Scheme **(MGNREGS)**.

HOUSING AT-A-GLANCE

Way Forward

- Focus on affordable housing could bring rich **dividends for other distressed sectors** such as steel and cement.
- Ensuring greater access to **institutional finance** and alternate methods of financing.
- Usage of **new technology** for construction and construction material.
- **Encouraging private sector participation** through innovative models like Swiss Challenge.
- **Linking the skill development and employment ecosystem** with housing sector.

Constraints

- Lack of access to **finance** from **formal** financial institutions.
- Long-drawn out, multi-level **approval system** in urban areas in a large majority of municipal jurisdictions.
- Limited private sector participation in affordable housing schemes in urban areas.
- Predominance of **conventional construction practices that result in delayed progress** in urban areas and the **limited use of prefabricated and pre-engineered materials.**
- Limited access to suitable **land banks** for affordable housing projects.
- Insufficient number of **trained masons** despite the operation of the Construction Sector Skills Development Council since 2013.
- **Capacity constraints** in urban local bodies (ULBs) to formulate and design mass housing projects.

2.4.1. MODEL TENANCY ACT, 2021

Why in News?

Ministry of Housing and Urban Affairs has passed the **Model Tenancy Act, 2021.**

Need of the Model Tenancy Law

- **Lack of a sound rental policy** as despite acute housing shortage, there are over 1.10 Crore homes lying vacant in the country's urban areas.
- **Land is a state subject:** Since land comes under state list, States have their own laws with long drawn legal provisions which result in lengthy litigation to resolve disputes.
- **Owner side concerns:**
  - **Low rental yield** is accrued from residential properties – averaging not more than 3% in major cities.
  - Existing rent control laws that put a **ceiling on rent** are restrictive in nature.
- **Tenant side concerns**:
  - The affordability to own a house is a challenge especially for low-income households.
    - ✓ **Non-availability of affordable accommodation** was the key reason behind migrant leaving towns amidst COVID-19 pandemic.
  - Exorbitant increase in year-on-year rent and interference by landlord too has caused disputes.
- This has made **rental housing financially unattractive resulting into informal sub-standard rental market** lacking basic amenities.

About Model Tenancy Act, 2021

- It envisages to **balance the interest and rights of both the owner and tenant** and to create an accountable and transparent ecosystem for renting the premises in disciplined and efficient manner.
- The Model Act provides for its applicability for the whole of the State i.e., **urban as well as rural areas** in the State.
- **Features**
  - **Establish Rent courts and Tribunals**
    - ✓ **Rent Authority may direct for compensation** on the person responsible for cutting off or withholding the essential supply.
    - ✓ Act provides for **fast-track quasi-judicial mechanism** for adjudication of disputes. Officer of the rank of **deputy collector or higher** will act as **rent authority** to adjudicate any issue arising out of a rental disagreement
  - **Rent:** All premises (residential or commercial) shall be rented only after a **written agreement on mutually agreed terms.**
  - **Security Deposits:** It proposes to **cap the security deposit to maximum of two month's rent** in case of residential properties and Security deposit to be refunded by the landlord at the time of taking over vacant possession of the premises.
  - **Repair and Maintenance:** If the landowner refuses to carry out the required repairs, the tenant can get the work done and deduct the same from periodic rent.

How will the Model Tenancy Law be Beneficial?

- It will encourage **private participation in rental housing** for addressing the huge housing shortage across the country. Also, leading to **Formalization of the rental housing market.**
- It provides **relief for both tenants and landlords** and helps take some load off India's **overburdened litigation process**.
- It will enable creation of adequate **rental housing stock** for various income segments of society including migrants, formal and informal sector workers, professionals, students etc.

Issues that may arise:

- The Act formalizes the existing arrangements; thereby the **rents might also increase.**
- The **Act is not binding on the states**, as it is a model act. Thus, like in the case with RERA, the fear is that states may choose not to follow guidelines, diluting the essence of the Model Act.

2.5. FINANCIAL INCLUSION

Key targets

- To make **financial services available and affordable** to all the citizens in a safe and transparent manner.
- **Universal Access to Financial Services-** Banking for the unbanked (Bank Accounts, Digital payment services), Securing the unsecured (Insurance and social security)
- Better **access to credit** at a reasonable cost for those presently excluded.
- Access to **Livelihood and Skill Development**
- **Financial Literacy and Education**
- **Customer Protection** and Grievance Redressal
- Effective Co-ordination

Current Situation

- **42.2 Crore PMJDY** accounts (till March 2021)
- **1.45 Lakh Crore rs** deposit under PMJDY accounts (till Mach 2021)
- **10.65 crore** enrolment under PM Jeeven Jyoti Bima Yojana (till July 2021).
- **24.03 crore** enrolment under PM Suraksha Bima Yojana (till July 2021

Schemes/Policies/Initiatives

- PM Jan Dhan Yojana
- NPCI- UPI & RuPay card
- Banking Correspondents
- Atal Pension Yojana
- PM Jeevan Jyoti Bima Yojana
- PM Suraksha Bima Yojana
- PM Mudra Yojana
- Stand Up India Scheme

FINANCIAL INCLUSION AT-A-GLANCE

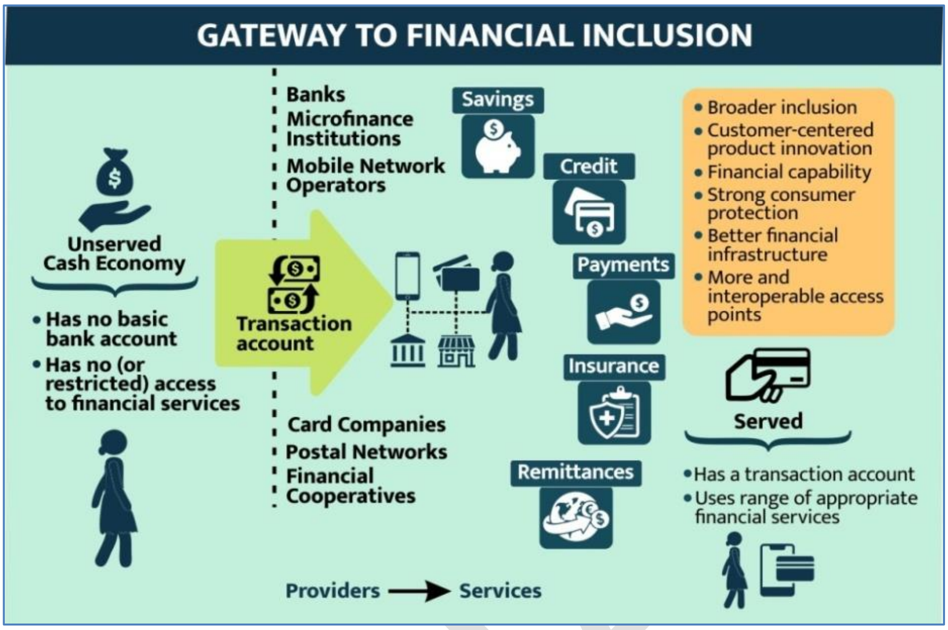
Way Forward

- **Financial empowerment**: Going forward, there is need to move from financial inclusion to financial empowerment by providing credit.
- Launching a new scheme for comprehensive financial literacy by **integrating in the regular school curriculum, mass media campaign**.
- Facilitating growth of **online and paperless banking.**
- Using technology to **improve the assessment of credit-worthiness** for households and informal businesses.
- **Leverage payment banks** and other platforms **to scale up payments systems** in underserved areas.
- Assess the performance of **banking correspondents** and give better incentives.
- **Overhaul the regulatory framework** governing formal financial products to attract households.

Constraints

- **Lack of financial literacy** amongst low income households and small informal businesses.
- The **high cost of operations** of the traditional banking model.
- **Excessive regulatory requirements** on products, and market entry, and conservative regulatory approach to new technologies.

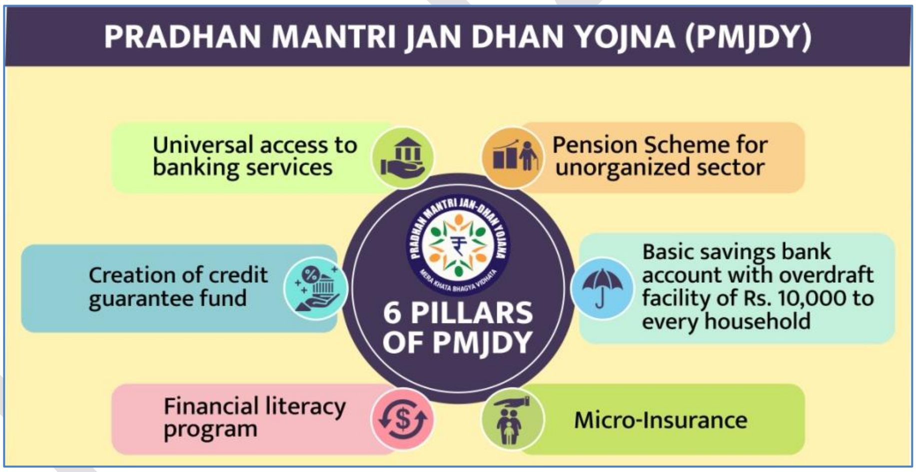
2.5.1. SEVEN YEARS OF PRADHAN MANTRI JAN DHAN YOJANA



Why in news?

Recently, the **Pradhan Mantri Jan-Dhan Yojana (PMJDY),** announced in 2014 **has completed seven years of its implementation.**

About Pradhan Mantri Jan-Dhan Yojana (PMJDY)



- It is **National Mission for Financial Inclusion** to ensure access to financial services, namely, Banking/ Savings & Deposit Accounts, Remittance, Credit, Insurance, Pension in an affordable manner.
- **Financial inclusion** is the process of ensuring access to financial products and services needed by vulnerable groups at an affordable cost in a transparent manner by institutional players. It is a major **step towards inclusive growth.**
- The concept of financial inclusion was **first introduced in India in 2005 by the Reserve Bank of India.**

Objectives of the scheme:

- To **ensure access to various financial services** like access to **need based credit, insurance and pension to the excluded sections** i.e. weaker sections and low income groups.
- **Use of technology** to lower cost and widen the reach of financial sector.

Impact of PMJDY on the Financial System

- **Prevent Leakage**: DBTs have **empowered and provided financial security to the vulnerable sections** of society via PMJDY accounts as well as ensured every rupee reaches its intended beneficiary and **preventing systemic leakage.**
- **Financial inclusion:** PMJDY has been the foundation stone for **people-centric economic initiatives**. Whether it is DBTs, COVID-19 financial assistance, PM-KISAN, increased wages under MGNREGA, life and health insurance cover, the first step of all these initiatives is to **provide every adult with a bank account**, which PMJDY has nearly completed.
- **Formalization of the financial system**: Jan dhan provides an **avenue to the poor for bringing their savings into the formal financial system,** an avenue to remit money to their families in villages besides taking them out of the clutches of the usurious money lenders.

Challenges faced in PMJDY

- **Infrastructural Issues:**
    - **Connectivity:** Lack of **physical and digital connectivity in hinterlands and hilly areas** such as the Northeast, Jammu and Kashmir, Uttarakhand, and Bihar etc. pose a major hurdle in achieving Financial Inclusion.
    - **Technological issues:** Issues ranging from **poor connectivity, network outage, power shortage and bandwidth problems** to **managing costs of maintaining the infrastructure affect the banks.**
- **Keeping the accounts 'LIVE':** Villagers are **reluctant to deposit a small amount of money** in far located branches that costs time and loss of a full day's earnings. On the other side, Banks have to spend Rs. 100-150 per account on the necessary paperwork, cost of holding camps and the commission paid to Business Correspondents (BC) who are authorized to open accounts.
    - Unless transactions per account increase via technology or BC, it is **financially unsustainable** for the Government to run this scheme.
- **Financial and Technology illiteracy**: There is **a lack of financial illiteracy, awareness, knowledge and skills among rural people** to make informed decisions about savings, borrowings, investments and expenditure.
    - A survey conducted by Visa reveals that **65 percent of Indians lack financial literacy**.
- **Duplication of Accounts**: The lure of getting a large insurance cover, accidental death benefit cover and overdraft facility, may prompt people to open **multiple accounts in different banks using different identification documents,** as there is **no single centralized information sharing system** to detect duplication of account.
- **Managing the ecosystem of Business Correspondents (BC)**: It is a **complex and unwieldy task** for the banks due to the following reasons-
    - **Delay in payout of subsidies and remuneration** granted under MNERGA, DBT, pension, etc. to villagers by BC.
    - Bank's **lack of commitment to monitor** the operations of BC.
    - **Lack of effective grievance redressal** systems.
    - **Absence of proper training** to a BC agent regarding financial products and ability to handle customer complaints.

Way Forward

- **Financial empowerment**: Going forward, there is need to move from financial inclusion to financial empowerment by providing credit. The PMJDY should become **PM Jan Dhan Vridhi with universal access to bank credit** to the most underprivileged sections of the society.
- **Infrastructure:**
    - **Model of credit history**: This will require **reduction in cash transactions and moving to digital transactions** and building credit models using artificial intelligence techniques to promote digital payments including RuPay debit card usage amongst PMJDY account holders.
    - Cost effective, techno-savvy and economically viable business model needs to be implemented.
- **Access of account holders**: Improving access of PMJDY account holders to **Micro-credit and micro investment** such as flexi-recurring deposit etc.
- **Create Database:** There is a need to build up a data base **to capture the income, transaction history of the Jan Dhan account holders** on the basis of which credit delivery models can be worked out.
    - As of now, we have only aggregate data. Banks and Fintechs can do further data analysis to create a new data base.

Conclusion

PMJDY holds greater promise than its predecessors because it is more geographically widespread, provides greater benefits, embraces technology and garners greater support from critical stakeholders i.e., the Government, banks and regulators. PMJDY can be a **solid foundation for holistic growth and inclusive development.**

2.6. LAND REFORMS IN INDIA

Key targets

- **Legalize** and ease **land leasing.**
- Consolidate fragmented plots of farmers to enhance efficiency and equity.
- **Create a digitized and integrated land records system** that is easily accessible in all states.
- Increase efficiency in the **management of forest land.**
- **Convert waste and fallow land** to productive uses.
- **Strengthen property rights**, especially community rights over forest land.

Current Situation

- **1.15 ha** was the average farm size in 2010-11.
- **<10%** of the land is under non-agricultural uses.
- **23.3%** of the total geographical areas are forest.

Schemes/Policies/Initiatives

- Digital India Land Records Modernization Programme
- SVAMITVA (Survey of Villages and Mapping with Improvised Technology in Village Areas) Scheme

LAND REFORMS AT- A- GLANCE

Way Forward

- States may consider the **Model Land Leasing Act, 2016.**
- Consolidate smaller plots of land through **land pooling to enhance productivity.**
- **Increase efficiency around the management of forest land** by implementation of Forest Rights Act (FRA) etc.
- Updating and **modernization of land record systems**
- **Initiating Public Private Partnerships (PPPs)** for wasteland development.
- **Using land as resource** to finance urban development.

Constraints

- **Restrictive agricultural tenancy laws** which create issues like conditions on leasing and high informal tenancy.
- **Small sized land parcels** disincentivizes economies of scale.
- **Poor productivity and shrinking area** of Forestland.
- **Absence of conclusive titling and records.**

2.6.1. LAND RECORD DIGITISATION

Why in news?

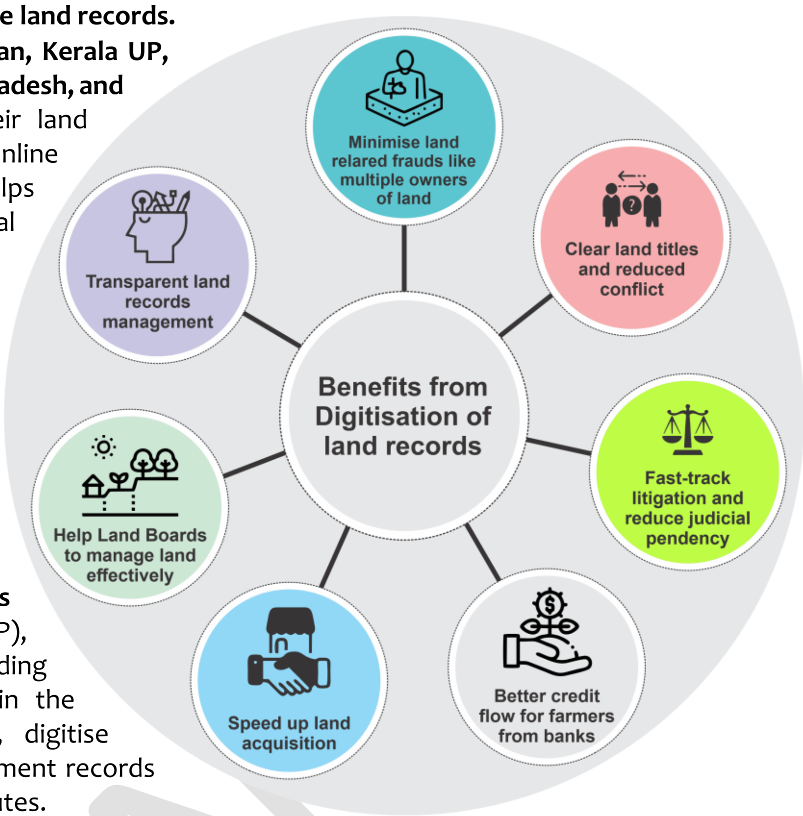
Recently, the government has sought from banks the status regarding digitisation of land records and online creation of equitable mortgage that would help in faster disbursement of agricultural loans.

What are Land Records and why is there a need for their digitization?

- Land records consist of **various types of information (property maps, sale deeds)** that **are maintained across different departments** at the district or village level. These departments work in silos, and the data across departments is not updated properly. Hence, discrepancies are often noted in land records.

- For instance, land-related disputes in India account for **60-70% of all civil litigation**.
- The pendency of several million cases relating to land disputes in courts is partly because of the **lack of comprehensive and up-to-date land records.**

- States including **Karnataka, Rajasthan, Kerala UP, Gujarat, Madhya Pradesh, Andhra Pradesh, and Telangana** have fully digitised their land record, enabling banks to create online bank charge on land records that helps in **better credit delivery**. But several states, and districts in some states such as Maharashtra, are yet to fully implement this.



Efforts made by the government to realize the potential of land records digitization

- **Digital India Land Records Modernisation Programme (DILRMP):** It was launched in 2016, to **replace the National Land Records Modernisation Programme** (NLRMP), to computerise all land records, including mutations, improve transparency in the land record maintenance system, digitise maps and surveys, update all settlement records and minimise the scope of land disputes.
- **NCAER Land Records and Services Index (N-LRSI):** N-LRSI was formulated to assess the states and union territories performance on two broad dimensions — **digitisation and quality of land records** of the country, and enable evidence-based solutions for securing land, housing, and property rights in India.
- **Unique Land Parcel Identification Number (ULPIN) scheme:** ULPIN is a **14-digit Alpha–Numeric Unique ID for each land parcel**.
- **Survey of Villages and Mapping with Improved Technology in Village Areas (SVAMITVA) Scheme**: It is a **Central Sector Scheme of Ministry of Panchayati Raj** which aims at surveying the unmapped land parcels in rural inhabited areas using drone technology and creates accurate land records for rural planning and reduces property related disputes.
- **State level initiatives:**
  - **Karnataka was the first state in India** to computerize land records under the **"Bhoomi Project"**- online database and viewing system for management and access of land records- followed by Andhra Pradesh and Tamil Nadu in the year 2001.
  - Rajasthan legislature passed the **Rajasthan Urban Land (Certification of Titles) Act in 2016** to ensure that the state government is a guarantor for land titles in Rajasthan.
  - **Andhra Pradesh government has tied up with a Swedish firm** to use new **blockchain technology** to prevent property fraud.

Challenges faced in Digitization of Land Records

- **Lack of unified Legal framework**: The system of land records was inherited from the zamindari system, the **legal framework in India does not provide for guaranteed ownership**, and the manner in which information pertaining to land records is collected and maintained further exacerbates the gaps in these records.
- **Land unavailability in development of infrastructure**: These **delays occur because of non-availability of encumbrance free land,** non-updation of land records, resistance to joint measurement survey of land records, demands for higher compensation by landowners, and filing of large number of arbitration cases by landowners.
- **Lack of manpower**: One of the major roadblocks in ensuring continuous updation of land records is the lack of skilled manpower in land record departments in states.

- **Poor synergy across land record departments**: Revenue department as the custodian of textual records, the survey and settlement department managing the spatial records and the registration department, which is responsible for registering land transactions lack synergy in functioning.
    - In the **absence of data privacy laws**, chances of misuse of land records are high.
- **Digital divide:** Lack of awareness, digital illiteracy, high digital and gender divide are prevalent in rural areas.

Way Forward

- **Technology adoption:** The technologies such as **geographical information system**, **data warehouse, and webs** are very much helpful in making land records management efficient and easier for decision making, strategy planning and productive modelling.
- **Digital record department**: An **online or digital record department could be established** for the betterment of online land records maintenance. This could also be outsourced to third parties who can assist in the maintenance.
- **Periodic surveys**: At regular intervals, a **fresh survey of every parcel of land to update records** will help everyone in purchasing, transferring and selling land, giving deeds, and easing all kinds of land transactions with the press of a button.
- **Conclusive land titles**: **The Committee on Financial Sector Reforms (FSRC) in 2009** had recommended moving from a presumptive to a conclusive titling system (land records designate actual ownership) which **drastically lower litigation related to land**. Also, NITI Aayog also came up with **Model Bill on Conclusive Land Titling**.

2.6.1.1. SVAMITVA SCHEME

Why in News?

Recently, Prime Minister of India Distributed the e-property cards under the SVAMITVA (Survey of Villages and Mapping with Improvised Technology in Village Areas) scheme on the occasion of National Panchayati Raj.

About SVAMITVA Scheme

- It is a **Central Sector Scheme** that aims to provide an **integrated property validation solution for rural India**, engaging the latest Drone Surveying technology, for demarcating the inhabitant (Aabadi) land in rural areas.

Issues in implementation of the scheme

- **Reluctance in community:** Land and boundaries are sensitive topics among rural people, which can discourage them to participate in such policy reforms.
- **Exclusion of vulnerable people:** Dalits, women, tenant farmers and tribal communities are often excluded from accessing land, even though they may legitimately have a claim.
- **Lack of functional market in rural areas** for the using land as a marketable collateral.
- **Lack of regular updation of the created records:** Different authorities for creation (Survey of India) and maintenance (States' Revenue Department) of records may create impediments in regular updating of created records.

- **Center- State Coordination:** With center being the nodal agency and states being the implementation agency there have been certain issues related to smooth implementation of the scheme especially related to monitoring and ownership of the scheme.
- **Legal loopholes:** The Scheme places the responsibility of carrying out appropriate amendments to the revenue laws for its implementation on the respective state revenue departments. However, careless review of these laws can create legal loopholes.

Way Forward

- **Engaging the community from the beginning**: Involving the community and ensuring high level of transparency can create an environment of greater acceptance of the process and reduce potential for disputes.
- **Protecting the most vulnerable people:** It would be important to build safeguards in the implementation process to ensure legitimate claims of the most vulnerable people are not crowded out.
- **Establish a grievance redressal system:** A grievance redressal system will effectively addresses people's concerns in a transparent and fair manner and will aid in smooth implementation of the program.
- **Enable markets to work:** States should simplify the legislative and regulatory procedures to build consumer confidence and encourage transactions in these areas.
- **Fostering healthy competition among states:** It can expedite progress under the scheme. For this a credible system or an index to verify achievement and rank states should be implemented.
- **Devising the appropriate monitoring system**: Given that there is considerable autonomy in the way states will choose to implement this scheme, it is important to evaluate the scheme's performance on desired outcomes.
- **Empower Gram panchayats**: They should also be authorised to revise property tax records at the time of land record updates to ensure robust and consistent revenue collection.
  - A GIS-based-based software may be provided to panchayats to manage property and taxation records.
- **Ownership rights to women**: States can consider recognizing possession based ownership rights to single women.

2.6.2. LAND BANKS

Why in News?

The Department of Investment and Public Asset Management has finalised the **structure of the Land Bank Company** that will be tasked with **selling land parcels** owned by government departments and public sector companies.

What is a Land Bank?

- Land bank is a governmental entity or non-profit corporation that helps **manage and dispose of vacant properties, vacant land, or tax-delinquent properties** so that vacant property can be redeveloped for a more productive use.
- **NITI Aayog's strategy for New India @ 75** suggested to adopt the system of using Geographic Information System (GIS) based maps at all levels to create **pre-approved land banks** for manufacturing facilities.

Benefits of a land Bank

- **Land use efficiency:** Land banks would allow for **better utilisation of unused government land**, including that in notified SEZs, which has about 52% of vacant land.
- **Addressing inordinate delay in disposing Government land** and lack of coordination between various ministries.
- **Boosts Investment:** According to CPR (Centre for Policy Research) study, an estimated 7.7 million people in India are affected by **conflict over 2.5 million hectares** of land **threatening investments worth $200 billion**.
  - Land bank can serve as a **one-stop solution to the free and easy accessibility of all related industrial information** which will help in informed decision making by investors, boosting investments.
- **Ease of Doing Business:** Often large projects like **Vedanta's Bauxite mining project** proposal in Odisha's Niyamgiri and **Tata Motors' project in Singur (West Bengal)** got cancelled due to land issues. Availability of all **associated permits and the near absence of land litigation** would help **reduce cost overruns**, decreasing the corporate bankruptcy.

- **Other Benefits include** infusion of **transparency** in Land market transactions, availability of consolidated land, reduced burden on judiciary and **informed decision making** by various stakeholders.

Concerns associated with Land Banks

- **Land banks raise questions of ownership and rights:** Land Banks strategically avoid legal bottlenecks of acquiring land that demands following **legitimate procedures.** State governments are rushing to build land banks **using both private and common land** at the cost of people's rights.
- **Legal loopholes:** According to the **Forest Conservation Act of 1980**, the government is required to **get forest 'clearance' or approval from the central environment ministry** to use forest land for a non-forest purpose. However, there is **no provision to obtain forest clearance for a 'land bank'** under the Act.
- **Potential of future conflicts**: Reports have cautioned that there is a **potential risk of future investments on banked lands facing conflicts** similar to those that prevented the previously planned projects. Further, **De jure records** regarding land use and ownership on the bank and **de facto use** on the ground may not match.
- **One-time solution:** Such land banks offer a one-time solution as **continually finding new vacant lands is difficult.** Moreover, some projects **require lands in particular areas** which, if unavailable, will **circle back to the problem of land acquisition.**

Way ahead

- The required reforms include creation of a **land record repository**, **digitisation and integration** of all records relating to titles, defining a structured timeline for **timely resolution** of property disputes and making **public land disputes data** etc.
- **Land Pooling can be explored further:** For the development of Amravati in Andhra Pradesh, the government **procured 13,000 hectares of land from 25,000 farmers in exchange for a smaller portion of developed land**, which would be worth at least as much as it was before.
    - This idea can be replicated at larger scale. Landowners could be **promised a share in the ownership, i.e., equity, in exchange for land**. Consequently, landowners would not be selling their lands but rather investing them, thus making them **partners in the venture.**

2.7. URBAN GROWTH AND DEVELOPMENT

Urban Planning at Glance

Urban Planning

Urban Planning as an approach takes into account all aspects of a city — economic development, population diversity and social interaction — in order to develop a central and coherent view of the urban space.

Level	Components
City Level (City Master plans, Local area level planning and building level interventions etc.)	Land use planning, Mobility planning, Environmental infrastructure planning, Implementation of various government schemes and programmes, Public outreach.
Regional level (District/metropolitan development plans, industrial area plans etc.)	Land use planning and planning of Regional infrastructure like highways etc.
National/State level (Long term plans developed by Union and State Governments)	Policy framework, Designing of programmes/missions and Strategic/Project planning.

Evolution of Urban Planning in India

Bronze Age: Harappan Civilization

- **Features:** Efficient water supply systems, rainwater harvesting and sewerage systems, and grid -iron patterns of the streets.
- **Notable cities:** Harappa, Mohenjo-Daro, Dholavira and Lothal.

Ancient India: Mansara's Shilpashastra and Kautilya's Arthshastra mention principles on town planning.

- **Features:** Planning of settlements was influenced by religion, region, and security.
- **Notable cities:** Pataliputra, Ayodhya, Varanasi, Madurai and Kanchipuram.

Mughal era

- **Features:** Town planning placed significant importance on the 'place of worship' and the location of bazaars.
- **Notable cities:** Fatehpur Sikri, Shahjahanabad.

Colonial period

- **Features:** Settlements included Port towns, Residency areas in the princely States, 'Hill station' for holidays etc.
  - The Bombay Town Planning Act of 1915 was the first town-planning legislations were enacted in India.
- **Notable cities:** Calcutta, Madras and Bombay.
- **Eminent planners:** Sir Patrick Geddes planned cities like Tanjore, Madurai etc. and British architect Sir Edwin Landseer Lutyens planned New Delhi.

Post-Independence

- First city planned- **Chandigarh**
- **Rise of planned Industrial. townships in 1960s-** Rourkela, Durgapur, Bhilai, Jamshedpur, Bokaro, etc.
- **Urban Planning based on Five-Year Plans** prepared by the erstwhile Planning Commission.
- **1996- the first Urban Development Plan Formulation and Implementation (UDPFI) Guidelines** were prepared.

Present framework of Urban Planning

- **Role of Governments:** 7th Schedule bestows power of Urban Planning upon the States while Central Government plays an 'advisory' role and provides financial and technical support.
- **Legislative framework:**
  - **At State level:** State Town and Country Planning Acts, Municipal Corporation Acts etc.
  - **At regional/local levels:** e.g. Delhi Development Act 1957.
  - **Acts related to land housing, infrastructure, environment, etc.:** e.g., the Registration Act 1908, Environment (Protection) Act 1986, etc.
- **Institutional framework:**
  - **Institutions created via the Constitution (Seventy-Fourth) Amendment Act, 1992:** Urban Local Bodies (ULBs) and Metropolitan/District Planning Committees.
  - **Other Institutions:** State Town and Country Planning Departments, Parastatal agencies/bodies, Improvement trusts.

Role of urban planning in development of urban spaces of the future

- **Accommodating accelerated growth in Urban population** and Dealing with issues emanating from unplanned growth like slums, traffic congestion, etc.
- **Overcoming Interstate disparities** in terms of distribution of urban centres and the pace of urbanisation.
- **Building disaster resilient cities.**
- Efficient Urban Planning is significant for **achieving India's Economic growth,** Infrastructure and Employment targets.
- **Transitioning to low carbon economy** by controlling emissions in cities.
- **Fulfilling India's global commitments-** SDG 11; United Nation Habitat's New Urban Agenda; and the Paris Climate Agreement.

Issues in India's urban-planning capacity

- **Institutional issues:** Multiplicity of authorities; Absence of effective decentralisation; Governance issues in municipal bodies.
- **Issues in the planning process:** Absence of participative decision making; Lack of Master Plans of Cities and Regions; Low participation of private sector; Disconnect between Urban Planning and Urban Land Records.
- **Issues related to Urban land use:** Non-Recognition of 'Urban' Areas; Sub-Optimal Utilisation of Urban Land; Unintended impacts of Development regulations.
- **Issues related to Disaster Resilience:** Development location decisions are not directed by hazard exposure; Lackadaisical approach towards natural drainage systems and waterbodies; Building bye-laws are still limited to a few hazard risks etc.
- **Issues in Human resource engaged in urban planning:** Shortage of adequate and technically qualified planners; Lack of Specialised Professionals; Limited Awareness about Urban Planning among administrators or elected officials; Substandard capacity building ecosystem.

Way Forward: Building cities of the future

- **Interventions in existing master plan preparation:** Engaging in long term planning; Preparing interoperable base map of the city; Mapping of all the relevant sub-sectors of a city; Development and inclusion of specific proposals with clear responsibilities.
- **Human resource management:** Undertake regular capacity building; Overcoming shortage of Urban planners by expediting the filling up of vacant positions of town planners, standardisation of the job descriptions of town planners etc.
- **Executive and Legislative Reforms:** Clear division of the roles and responsibilities of various authorities; Standardisation of the job descriptions of town planners and other experts; Adapting the planning regulations and building bye laws as per economic growth drivers of cities; etc.
- **Conducting Hazard Risk and Vulnerability Assessments (HRVA)** of cities to build resilience.
- **Expanding Participation:** Conducting 'Citizen Outreach Campaign'; Enhancing the Role of Private Sector; Strengthening Urban Planning Education System.

2.7.1. URBAN TRANSFORMATION INITIATIVES

Why in news?

Recently, the **Ministry of Housing and Urban Affairs (MoHUA)** organised an event to commemorate 6 years of the **three transformative Urban Missions** vis. **Smart Cities Mission (SCM), Atal Mission for Urban Rejuvenation and Urban Transformation (AMRUT)** and **Pradhan Mantri Awas Yojana-Urban (PMAY-U).**

What is Urban transformation and why is it important?

Urbanization is a form of **social transformation from traditional rural societies to modern urban communities**. Urban transformation expresses entire **strategies and actions used to improve the economic, social, physical, and environmental conditions of damaged and collapsed urban areas** by comprehensive and integrated approaches.

For example, in Pune, **India's first worker-owned waste-pickers' cooperative** is helping to create an efficient waste-collection system that reaches more residents and showing cities how to incorporate informal workers into a modern economy.

The approach of urban transformation becomes important due to following reasons:

- **Population growth:** By 2050 the proportion living in urban areas is expected to reach 66%.
- **Employment opportunities:** Due to **industrialization**, majority of people migrate into urban areas to seek a better livelihood as **ample job opportunities in cities** are available in all **developmental sectors such as public health, education, transport, sports and recreation etc.**
- **Economic growth:** India is one of the **fastest growing economies** in the world, and its high economic growth is due to expansion of towns and cities. Indian cities are likely to contribute to **70% of India's GDP by 2030**.
- **Sustainable development:** The urban transformation puts the cities on a central stage for **accelerating change towards local and global sustainability and resilience** which are enshrined in the **2030 United Nations Sustainable Development Goals (SDGs).**

What are the challenges in effecting urban transformation?

Institutional:

- **74th amendment act has been implemented half-heartedly** by the states which has not fully empowered the Urban local bodies (ULBs) functionally and financially.
- **Public monopoly**, organizational inefficiency, **technical flaws in the form of high leakages**, **lack of preventive maintenance,** poor accounting as well as over staffing and **lack of autonomy** have led to failure of the public sector to provide adequate service delivery.
  - State and national planning institutions **lack qualified planning professional**.
- **Lack a modern planning framework (decentralised planning)** which limits effective land utilisation and cities' abilities to grow in accordance with changing needs.
  - Growing trend of **declining ratio of revenue generation** with the ULBs.

Infrastructural:

- The rapid **growth of urban population by natural and migration** ways has put **heavy pressure on public utilities** like housing, sanitation, transport, water, electricity, health, education and so on.
- **Lack of investment** in urban infrastructure and capacity building.
- Despite high economic growth, India cities are the centres of **high income inequality and poor quality of life**. In 2019, **New Delhi and Mumbai ranked 118th and 119th** respectively, on the Global Liveability Index that covered 140 cities.

Environmental:

- Urban areas are at **higher risk to floods, earthquakes** owing to low density and overcrowding. Urban areas are becoming **heat islands, rising air and groundwater pollution and persistent water crisis.**
  - **Example,** pollution in Delhi, floods in Mumbai and Chennai indicate poor urban planning and management.

Social:

- Issues of lack of resources, overcrowding, unemployment, poverty, and lack of social services and education habitually lead to many social problems and crimes including **violence, drug abuse, human trafficking, sexual assault, child labour etc.**

Steps taken by government to overcome these challenges and their progress

Mission	Description	Progress
PMAY-U	• It **addresses urban housing** shortage among the Economically Weaker Sections (EWS) and Middle-Income Group (MIG) categories including the slum dwellers **by ensuring a pucca house to all by 2022.**	• **1.12 crore houses sanctioned** and more than 50 lakh houses completed. • **Affordable Rental Housing Complexes (ARHCs) for urban migrants/ poor launched** as response to reverse migration induced by COVID-19.
AMRUT	• It is **first focused national water Mission** which aims to **provide basic services like water supply, sewerage, etc. to households and build amenities in cities.** ○ 500 cities selected under AMRUT. • All cities having **population above 1 lakh are covered** under Mission.	• **105 lakh household water tap** and **78 lakh sewer connections** have been provided. • **88 lakh streetlights have been replaced with energy efficient LED** lights against target of 101 lakh leading to energy savings and reduction in CO_2 emission.
SCM	• It aims to **promote cities that provide core infrastructure, clean and sustainable environment to their citizens through the application of 'smart solutions'** like smart grid, smart water using Internet of Things (IoT) etc.	• **70 Smart cities have developed and operationalized their Integrated Command and Control Centres (ICCCs)** which were used as war-rooms for COVID management. • Smart solar, Smart Water and Vibrant Public Spaces projects are heading towards progressive paths in the Mission.

Other recently taken steps to further strengthen above missions

- **Climate Smart Cities Assessment Framework (CSCAF) 2.0**: It aims to provide an overarching roadmap to **formulate, implement and monitor urban climate actions** in India.
- **Data Maturity Assessment Framework 2.0**: Every year, the Smart Cities are being ranked so that Urban Local Bodies (ULBs) continue to **invest in developing and strengthening their data ecosystems**.
- **ICCC Maturity Assessment framework (IMAF):** It is a **self-assessment tool kit** developed to assess the maturity of Integrated Command and Control Centres (ICCC) across **key aspects of functionality, technology, governance and citizen/stakeholders' engagement**. It helps cities identify areas of improvement in their ICCCs to deliver better services to the citizens.
- **TULIP (The Urban Learning Internship Program) Report:** Itis a platform to **connect graduates to ULBs and Smart Cities** to co-create new solutions for our cities.
- **NIUA (National Institute of Urban Affairs) Knowledge products** such as **CITIIS (City Investments to Innovate, Integrate and Sustain) Program, Handbook of Urban Statistics** with special focus on **Persons with Disabilities (PwDs**) and **Cities Insights Report.**

What can be the approach to accelerate urban transformation in future?

- **Urban governance**: With cities growing beyond municipal boundaries, having fully formed metropolitan authorities with clearly defined roles will be essential for the successful management of large cities in India.
- **Integrated planning and management**: It should include the needs of the marginalized sections including their residence, health, water, transportation, and other amenities at affordable prices.
- **Finance:** Devolution must be supported by more reforms in urban financing that will reduce cities' dependence on the Centre and the states and unleash internal revenue sources.
- **Trained human resource: Special knowledge and expertise** is needed in urban planning of urban areas, especially in hill states, coastal regions, riversides, and disaster vulnerable areas.

2.7.2. NATIONAL URBAN DIGITAL MISSION

Why in news?

The **Ministry of Housing & Urban Affairs (MoHUA)** along with the **Ministry of Electronics and Information Technology (MeitY)** has launched **National Urban Digital Mission (NUDM)** to improve urban connectivity that will connect nearly 2,535 cities.

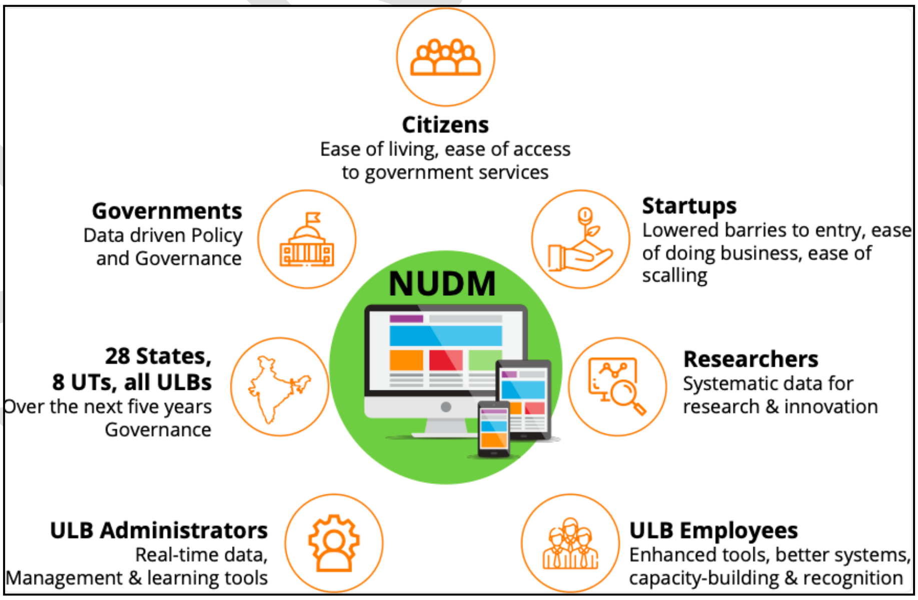
More on news

Other initiatives such as **India Urban Data Exchange (IUDX), SmartCode platform**, Smart Cities 2.0 website, and **Geospatial Management Information System (GMIS)** were also launched by MoHUA.

- **India Urban Data Exchange (IUDX):** Developed in partnership between the **Smart Cities Mission** and the Indian Institute of Science (IISc), Bengaluru to **address the problem of data silos**, both within and across cities.
    - Serves as a **seamless interface for data providers and data users,** including Urban Local Bodies (ULBs), to share, request, and access datasets related to cities, urban governance, and urban service delivery.
- **Smart Code Platform**: Enables all ecosystem stakeholders to contribute to a repository of open-source code for various solutions and applications for urban governance.
    - **It addresses the challenges that ULBs face in the development and deployment of digital applications** to address urban challenges, by enabling cities to take advantage of existing codes and customizing them to suit local needs, rather than having to develop new solutions from scratch.
- **Smart Cities Mission 2.0 website** has been redesigned to serve as a **single stop for all Smart Cities initiatives.**
    - **GMIS** is integrated with this website. The website creates a **single window hub for Smart Cities Mission.**
    - The website has been developed to be used as a highly effective communication and outreach tool.

About National Urban Digital Mission

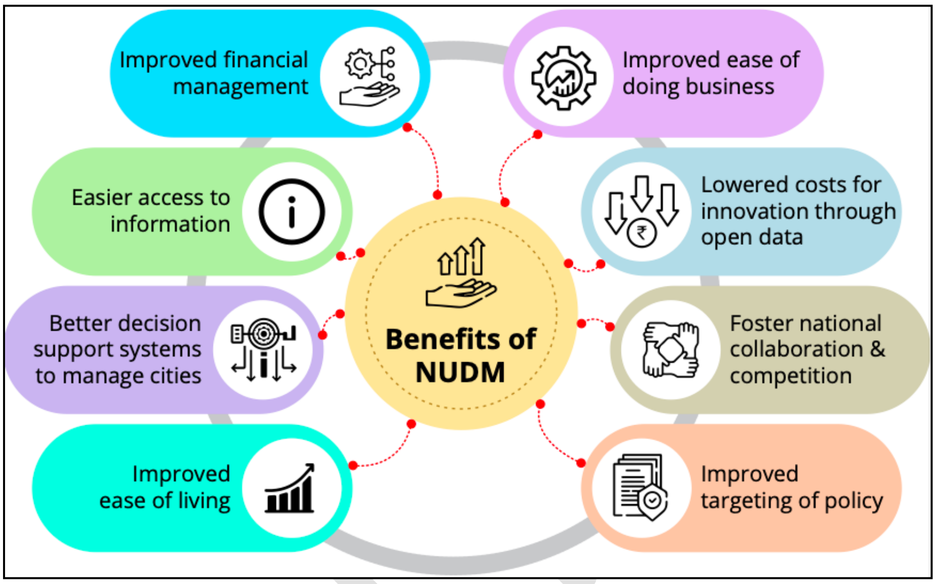
- NUDM aims to **build the shared digital infrastructure for urban India,** working across the **three pillars of people, process, and platform** to provide holistic support to cities and towns.
    - **People:** Mobilise, enable and empower stakeholders across the urban ecosystem.
    - **Processes:** Improve governance through standards and frameworks for collaboration and impact.
    - **Platforms:** Leverage technology in service of an improved quality of life for every citizen.



- It will institutionalize a **citizen-centric and ecosystem-driven approach** to urban governance and service delivery in cities by 2022 and across all cities and towns in India by 2024.
- **Objectives of NUDM:**
    - To **catalyse an urban national open digital ecosystem (u-NODE)** that leverages NUDM build new platforms, solutions, and innovations.
    - To **create open standards and enforce the adoption of open standards** by all national digital urban stakeholders.
    - To **establish registries at appropriate levels** to create single source of truth in respect of urban assets, service delivery, urban data, and actors.

- To **promote the development of nationally scalable application systems** with a special focus on achieving the Sustainable Development Goals (SDGs) for urban.
- To **adopt the best principles of cooperative federalism** while working with the States, Union Territories and ULBs for the realization of the vision.
- To provide for **enhancing the efficiency and effectiveness of governance** at all levels.

Challenges in urban digital transformation



- **Lack of expertise**: There is poor resource management planning, lack of information technology resources, expertise, and skilled manpower in digital technology.
- **Data security:** Successful integration of digital technologies requires a transformation of security, which is a top-most challenge faced by many organizations.
- **Inadequate Investment:** There are insufficient funds to implement policy and bridge the infrastructure gaps in urban areas.
- **Poor connectivity:** Digital technology is not accessible to every citizen which creates **digital divide due to lack of connectivity in urban areas** such as **absence of internet** and **unavailability of digital services in local languages**.
- **Lack of coordination** among various departments which lacks vision to transform India to a digitally empowered society and knowledge economy.

Way forward

- **Policy Transformation:** Increased focus and mainstreaming of **people-centered sustainable and inclusive digital transition** is critical policy topic in high level political forums and global dialogues on smart cities.
- **Financing Digital Urban Innovation**: Increased **investment and financing for people-focused smart cities** to accelerate the achievement of the SDGs with a specific focus on developing countries, small and medium size cities and grassroots urban communities.
- **Digital Empowerment and Capacity Building**: Enhanced capacity of governments at all levels to **adopt a people-focused, privacy-enhancing, and rights preserving approach** to digital technologies for inclusion and sustainable urban development in the achievement of the SDGs.
- **Proper Infrastructure**: Public Private Partnership (PPP) models must be explored for sustainable development of urban digital infrastructure, as has been the case for civic infrastructure projects like roads and metro.
- **Inclusive growth:** There is need to ensure data security, clear regulatory guidelines, and greater autonomy for academia for inclusive growth.

3. FISCAL POLICY AND RELATED NEWS

3.1. STATUS OF GOVERNMENT FINANCES

GOVERNMENT FINANCE AT- A- GLANCE

Key targets

- To ensure **transparent fiscal management systems** in the country.
- To create a **more equitable and manageable distribution of the country's debts** over the years.
- Aim for **fiscal stability for India** in the long run.

Current Situation

- **9.3% of the GDP** is the fiscal deficit for the year 2020-21.
- **61.7%** is the expected debt-to-GDP ratio for India for the year 2021-22.
- **2.5% of GDP** as fiscal deficit is recommended by the NK Singh committee, to be achieved by 2022-23.
- **<60% as tax-to-GDP ratio** is recommended by the NK Singh committee, to be achieved by 2022-23.

Schemes/Policies/Initiatives

- Fiscal Responsibility and Budget Management (FRBM) Act, 2003.
- Fiscal Responsibility Legislation (FRL) adopted by the states.
- Creation of Financial Stability and Development Council (FSDC).

Way Forward

- **Financing from private investment**, institutions dedicated for infrastructure financing.
- Compliance with the **fiscal deficit and debt levels** as per Fiscal Responsibility and Budget Management (FRBM) Acts.
- **Low reliance on Cess & Surcharges**.
- More **planned and efficient utilization** of financial resources.

Constraints

- **Vertical imbalance** (between the Centre and the States) and **horizontal imbalance** (among the states with varying fiscal capacities) in the distribution of financial resources.
- Issue of **high inflation** in the economy.
- **Non- compliance of FRBM** mandate.
- **Low Tax-to-GDP ratio**.
- Issue of **leakages and free riders for various schemes**.
- **Shortfall in state's GST collection**.

3.1.1. FIFTEENTH FINANCE COMMISSION

Why in News?

The Fifteenth Finance released its report which was recently tabled in the Parliament.

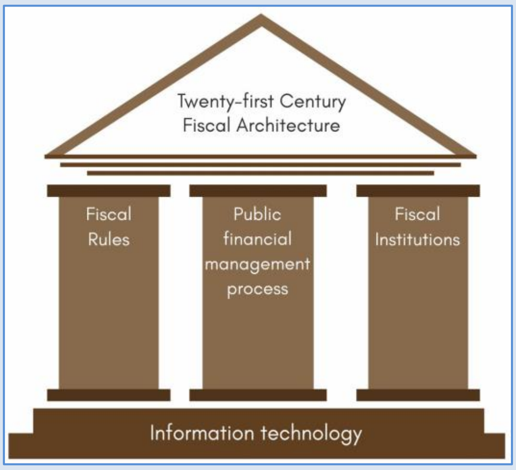
How the Terms of Reference (ToR) of Fifteenth FC were different from previous commissions?

- **Fiscal Consolidation Roadmap:** To review the current finances of both state and central government and recommend a fiscal consolidation roadmap for sound fiscal management.

- This task became all the more difficult with the **outbreak of the Pandemic,** as the need for fiscal room became dire.

- **Indirect Taxation System:** To evaluate the impact of the GST, including the need for payment of compensation for possible loss of revenues for 5 years, and abolition of a number of cesses.
- **Measurable Performance Incentives:** To consider proposing of measurable performance-based incentives for States, at the appropriate level of government in areas like deepening of tax nets, population control, power sector reforms etc.
- **Using 2011 population against 1971 population data:** The Commission had to use the population data of 2011 while making its recommendations. This was tricky as there was an active opposition from Southern States on usage 2011 population data, as they have done better vis-à-vis population control and stabilization.
- Other unique demands:
  - Analyzing the possibility of **creation of a non-lapsable defense fund.**
  - Reviewing the present arrangements on **financing Disaster Management initiatives.**

What are the recommendations given by the Fifteenth FC Report for 2021-26 period?

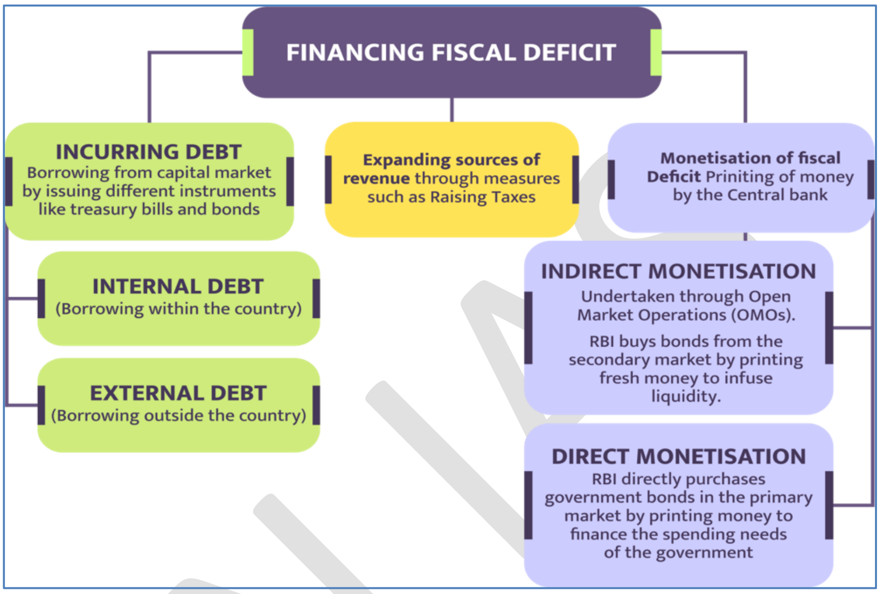
Vertical Devolution	• The commission has recommended **maintaining the vertical devolution at 41%.**
Horizontal Devolution	• The horizontal devolution is primarily based on **three principles namely need of states, equity among states and performance of states.**
Grants to States	• **Revenue deficit grants**: 17 states will receive grants worth Rs 2.9 lakh crore to eliminate revenue deficit. • **Sector-specific grants**: Sector-specific grants will be given to states for sectors like health, education, implementation of agricultural reforms etc. **A portion of these grants will be performance-linked.** • **State-specific grants**: These will be given in the areas of social needs, administrative governance and infrastructure etc. • **Grants to local bodies**: The total grants to local bodies will be Rs 4.36 lakh crore (**a portion of grants to be performance-linked).** • **Disaster risk management**: The Commission recommended retaining the existing cost-sharing patterns between the centre and states for disaster management funds. • **Incubation of new cities**: Finance Commission has recommended Rs 8,000 crore to states for incubation of new cities, granting Rs 1,000 crore each for eight new cities.
Total transfers	• Including total grants and tax devolution**, aggregate transfers to States is estimated to remain at around 50.9 per cent of the divisible pool during 2021-26 period.**
Fiscal Management and Consolidation Roadmap	The Commission suggested that the centre bring down fiscal deficit to 4% of GDP by 2025-26. For states, it recommended the fiscal deficit limit (as % of GSDP) of: (i) 4% in 2021-22, (ii) 3.5% in 2022-23, and (iii) 3% during 2023-26.  • **Extra annual borrowing worth 0.5% of GSDP** will be allowed to states during first four years (2021-25) upon undertaking power sector reforms. • It recommended forming a **high-powered inter-governmental group** to: (i) **review the Fiscal Responsibility and Budget Management Act (FRBM),** (ii) recommend a new FRBM framework for centre as well as states and oversee its implementation. • The **inverted duty structure** between intermediate inputs and final outputs present in GST **needs to be resolved. Revenue neutrality of GST rate should be restored.** • **A comprehensive framework for public financial management** should be developed. **An independent Fiscal Council** should be established with powers to assess records from the Centre as well as states.
Other recommendations	• **Disaster Management Fund:** Setting up the **state and national level Disaster Risk Mitigation Fund (SDRMF**), in line with the provisions of the Disaster Management Act. • **Defense Modernization Fund:** Creation of a separate **non-lapsable fund for modernization of defense and internal security**. The objective is to bridge the gap between defense budget allocations and the projected budgetary requirements.

	• **Health:** States should **increase spending on health to more than 8% of their budget by 2022.** Primary healthcare expenditure should be two-thirds of the total health expenditure by 2022. • **Centrally sponsored schemes (CSS):** A threshold should be fixed for annual allocation to CSS below which the funding for a CSS should be stopped (to phase out CSS which outlived its utility or has insignificant outlay)

3.1.2. DIRECT MONETISATION OF THE FISCAL DEFICIT

Why in news?

There is a debate whether India should undertake direct monetization of the deficit by Reserve Bank of India (RBI), given the hurt to its economy caused by second wave of Covid-19 infections.



What is Fiscal deficit and how is it financed?

- Fiscal Deficit is the difference between the total income of the government (total taxes and non-debt capital receipts) and its total expenditure. It occurs when the government's expenditure exceeds its income.

Fiscal Deficit = Total expenditure of the government (capital and revenue expenditure) – Total income of the government (Revenue receipts + recovery of loans + other receipts)

- Typically, governments have two basic choices for financing their fiscal deficits: they can borrow (issue debt) or raise taxes.
- Alternatively, the central bank can print currency for the government to bridge its fiscal deficit, which is known as **monetisation of deficit**.

About Direct Monetisation of deficit

- It refers to a scenario where a **central bank prints currency to the tune of accommodating massive deficit** spending by the government. It happens when the government privately places its bonds with the Central bank i.e., the central bank purchases government bonds in the primary market.
  - Direct monetisation may **not necessarily involve actual printing of currency as the central bank could simply credit the Government's account** with itself through an electronic accounting entry.
- The exercise leads to an **increase in total money supply in the system**.

Reasons behind demand of Direct monetization

- **Financing recovery programmes**: It can provide easy liquidity to the government to directly cover some of the costs of extraordinary recovery programs.
- **Mitigating deflation and stimulating moderate inflation**: Printing money can ensure that the money reaches the masses which can then lead to higher spending. This provides an opportunity for the government to **boost overall demand** at the time when private demand has fallen.
- **Maintaining financial stability**: Since savings in an economy are limited, financing large deficits through issuance of G-Secs can substantially increase interest rates and cost of borrowing for the Government. This could increase the probability of default, threatening financial stability of the national economy.
- **Keeping interest rates low:** Printing money ensures that there is enough money going around in the financial system and in the process, interest rates continue to remain low.
- **Other Benefits:**
  - Unlike debt-financed fiscal programs, a money-financed program does not increase future tax burdens.

  - It can reduce the value of a government's outstanding obligations to some extent by increasing inflation.

Concerns regarding use of Direct monetisation in India

- **High inflation**: Monetisation of the government's fiscal deficit may give rise to unproductive spending and may lead to higher inflation.
- **Erodes the credibility of RBI**: Adopting monetization as a regular part of a central bank's toolkit, or even setting a precedent that it is available, could gradually erode the barriers between monetary and fiscal policy, damaging the central bank's credibility and limiting its ability to fulfill its mandate.
- **May hurt fiscal prudence**: Direct monetisation can disincentivize fiscal consolidation activities of the Government. India has already repeatedly pushed back its target of achieving 3% fiscal deficit.
- **Fiscal dominance**: The lack of fiscal discipline in the long run affects the independence of the central bank as it will be forced to monetize an unsustainable, out-of control deficit to avoid negative economic outcomes leading to fiscal dominance.
- **Ineffective to increase liquidity**: Money extended by a fiscal program inevitably ends up in the banking system. This can increase the amount of bank reserves at the central bank as in times of stress banks are usually reluctant to lend, so they are likely to keep these excess reserves at the central bank and earn interest on them.
- **Depreciation of currency**: The supply-demand imbalance in the currency market can cause the Indian rupee to depreciate.
  - RBI could step in and intervene using its forex reserves. However, running down on forex reserves can ultimately result in a balance of payments crisis.

Way Forward

- **Productive use of fiscal deficit prior to direct monetization:** If there exists enough underutilized resources and opportunities in the economy (as is the case in point for a labour abundant India), then printing money does not stoke excessive inflation.
  - So, before India adopts direct monetization, the government should develop 'credibility' of its fiscal spends and ensure productive spending decisions for higher growth multiplier effects.
- **Exploring alternatives**: The government could raise a part of its borrowing requirements by issuing **Covid bonds** to the public.
  - Appropriately priced and structured, they can provide relief to savers who are short-changed by the low-interest rates on bank fixed deposits.
- **Using Direct monetization as a last resort**: RBI is currently printing money and buying bonds from the secondary market through Government Securities Acquisition Programme (GSAP).
  - Hence, presently there is no need for a direct purchase on bonds as GSAP has been successful in providing necessary liquidity, fulfilling economy stimulus, and keeping the bond yields comfortably low.

3.1.3. STATE FINANCES

Why in news?

Recently, Government has issued fresh guidelines on the **'Scheme of Financial Assistance to States for Capital Expenditure'** for the financial year 2021–22.

Importance of State Finance

- **Employment:** States now spend one-and-a-half times more than the Union government and **employ five times more people** than the Centre.
- **Macroeconomic Stability:** Amid the pandemic, states have heavily borrowed from market and **high borrowings by states** has serious implications on the interest rates charged in the economy, the availability of funds for businesses to invest in new factories, and the ability of the private sector to employ new labor.
- **Debt Sustainability**: In wake of **high debt-to-GDP ratio** amidst Pandemic, inability of states to raise revenue could start a vicious cycle wherein states end up paying more and more towards interest payments instead of spending their revenues on creating new assets.

Issues with State Finance

- **Shortfall in tax collections**: Data suggest that there is fall in **gross tax collections** of Union Government by 1.5% of gross domestic product. Within this, states are hit harder with the **shortfall in tax revenues for states.**
- **Goods and Services Tax (GST),** the main source of tax revenue for the states, have **witnessed a 15-25 per cent lower tax revenue collection in 2020-21.**
- **Lowering Share of States in divisible pool**: Due to over-reliance of Centre on **Cess and Surcharges**, the share of states in the **Centre's gross tax revenue (GTR)** fell sharply from 36.6% in FY19 to 32.4% in FY20.
- **Increased reliance on borrowing**: During the 2015-21 period, **20% of the total expenditure** of states has been met through **borrowings.**
    - Recently, **Reserve Bank of India** has warned about rising public debt at state-level. **Public debt as a share of states' own revenue has increased since 2014.**
- **Populism**: Political class has the tendency towards expansionary fiscal policy, which increases burden on future Governments and thus, has detrimental long-run impacts e.g., loan waivers to farmers.
- **Deteriorating financial situation of discoms**: More than 60% of the total outstanding guarantees given by state governments is for **power sector companies**. The risk for invocation of these guarantees could **further rise** in near future, owing to continuing losses and an increase in the outstanding debt of discoms poses a **systemic risk to the States' finances.**
- **Shortfall in GST compensation**: Shortfall in a state's GST collection is compensated by the Centre and funded through a Cess. **Low Cess collection and high compensation requirement** have resulted in shortfall of GST compensation to states.

Steps taken to improve State Finance in the wake of COVID-19

- **Raised Borrowing Limits**: The Centre has raised borrowing limits for states for the current fiscal to **5%of gross state domestic product (GSDP) from 3% at present**, allowing them fiscal headroom of around Rs. 4 trillion, subject to their carrying out specific reforms.
- **RBI measures**: To enable the State Governments to better manage their fiscal situation in terms of their cash-flows and market borrowings, certain relaxations are being permitted with regard to availment of **Overdraft (OD) facilities.**
- **Health Sector**: The Central government has released around **Rs. 80,000 crore to the States under National Health Mission (NHM) as grants.**

Way forward to boost State's Financial Management in the long term

- **Recommendations of 15th Finance Commission**
    - It has recommended that both central and state governments should focus on **debt consolidation** and comply with the fiscal deficit and debt levels as per their respective **Fiscal Responsibility and Budget Management (FRBM) Acts.**
    - It recommended that both the central and state governments should make **full disclosure of extra-budgetary borrowings** and these liabilities should be clearly identified and eliminated in a time-bound manner.
    - The Commission recommended **broadeningthe tax base**, **streamlining tax rates**, and **increasing capacity and expertise of tax administration** in all tiers of the government.
- **Post-pandemic fiscal response by states:** Re-prioritizing expenditures towards more productive high multiplier capital projects has to be made center stage.
    - **Investing in health care systems and social safety nets** in line with the states' demographic and co-morbid profiles and **strengthening urban infrastructure**have to be an integral part of the fiscal strategy.
- **Debt Management**: Like the Centre, states may also consider **revising their fiscal legislations** by bringing in the desired counter-cyclicality and by incorporating debt as a medium-term anchor.
- **Low reliance on Cess & Surcharges**: According to **Vidhi Centre for Legal Policy**, all cesses in force for a long duration or where there is evidence of non-utilization and diversion of funds should be abolished.
    - In future, **cesses should be imposed for a narrowly defined purpose and with a clear estimationof the amount** of money that the Union government aims to raise through the cesses.
- **GST Compensation**: The long-term solution to the compensation issue lies in **fostering greatereconomic growth.** The GST Council must routinely relook some of the tax changes it proposes and put them to test, with focus on economic growth rather than effect on revenues in mind.

3.2. INDIRECT TAXATION

Key targets

- The Budget 2021-22 has set a tax revenue target of **Rs 22.17 trillion for FY22.**
- The **GST revenue,** including the Central GST and compensation cess, is pegged at **Rs 6.30 trillion.**
- The **GST Compensation requirement** for FY22 has been pegged at **Rs 2.7 trillion,** of which Rs 1.1 trillion is expected to be met through **cess collection.**

Current Situation

12% increase in indirect tax collection was witnessed to Rs 10.71 trillion in FY21, even as **goods and services tax (GST) mop-up** declined by 8%.

21% increase was witnessed in **Customs duty** collection because of import of CCTV cameras, optical fibres and automobiles and their parts.

Excise duty on petroleum and diesel increased to 65% and 79% respectively.

Schemes/Policies/Initiatives

- GST (101st Amendment Act), 2016
- GST (Compensation to States) Act, 2017
- Composition Scheme under GST
- GST Network.

INDIRECT TAXATION AT- A- GLANCE

Way Forward

- **Further simplification of tax structure.** E.g., lesser tax slabs
- **Optimising digital resources** to accelerate the process of claiming input tax credit. It can also increase the capacity of the portal to handle higher numbers of data processing.
- **Robust compliance regime and technology driven intelligent system** to catch the tax evaders and unethical practices.
- **Consensus based decisions** and focus towards Cooperative federalism.

Constraints

- Persistent Economic Slowdown
- Tussle between Centre and State for GST Compensation cess and the **annual revenue growth target of 14%.**
- **Overestimation of GST collection**
- Goods out of purview of GST e.g., Petroleum products,
- Issues associate with GST council, **Complex tax slabs, Cumbersome filing structure, Ambiguous and conflicting AAR judgments, Transitional Issues, etc.**
- **Tax evasion and tax fraud**
- **Indirect Tax can be regressive** as they raise price of commodities for everybody irrespective of their purchasing power

3.2.1. FOUR YEARS OF GST

Why in news?

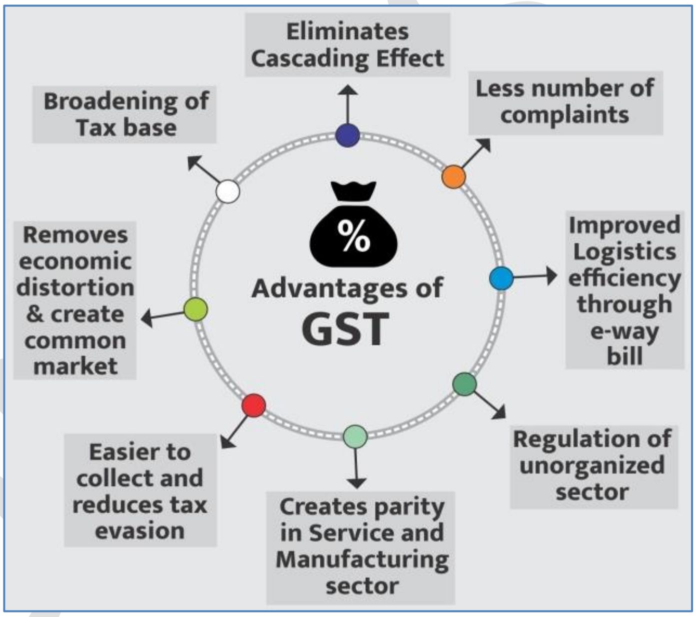
Coming into effect from 01 July 2017, the Goods and Services Tax (GST) marked its fourth anniversary in India.

Reverse Charge Mechanism

- The GST has to be typically paid by the supplier of goods and services. But in some cases, the liability to pay the tax falls on the buyer. This is called reverse charge.
- This is only applicable in certain instances e.g. when a business buys goods or services from a supplier who is not registered to pay GST or in cases of import.

Achievements of GST

- **Widening of India's tax base:** Almost doubled from 66.25 lakhs to 1.28 crores in the last four years (2017-2021).
- **Increase in GST revenue collection:** Over Rs 100,000 crore revenue collection for eight consecutive months in a row. The overall revenue collection in FY 2019-20 soared by 42% in comparison to FY 2016-17.
- **Ease of compliance**: Brought efficiencies in indirect tax compliances and reduced number of indirect tax authorities that business needed to interact with.
- **E-Invoicing:** To identify each trade invoice by a unique identification number, generated by automated government-backed online portals.
- **Increased Logistics efficiency**: As per estimate, it has saved over 50% of logistics effort and transit time of goods movement by eliminating the entry tax, check-posts (inter-state barriers) and introducing nationwide e-way bill.
- **Reduced transaction costs:** By eliminating 2% of additional cost (Central Sales Tax) on all interstate transactions, GST has significantly reduced overall transaction cost.
- **Reinforced Cooperative Federalism**: GST council has emerged as a successful example of cooperative federalism and its functioning has been free from political biases.
- **Increase in Transparency:** It allows taxpayers to track their compliances online on the GST Portal, get the basic information about any business by entering the respective PAN or GSTIN etc., increasing transparency in the system.



Challenges

- **Overestimation of GST collection:** With actual collection lower than initial estimation, some call GST a failed taxation regime.
- **Complex tax slabs:** Its complex slab structure with frequent switching of items between them leads to confusion in the compliance system and unethical profiteering due to fluctuating tax rates.
- **Complex and cumbersome filing structure:** The current GST return filing structure put too much onus on the taxpayer with requirements of- possessing a valid tax invoice/debit note, actual receipt of goods/service by the recipient, tax submission at each level by different seller etc., making it complex and cumbersome tax regime.
- **Ambiguous and conflicting AAR judgments:** Conflicting rulings from various benches of the Appellate Authority for Advance Ruling across different States has led to confusion among taxpayers. Additionally, more than 80% of rulings, since the establishment of the AARs, have been revenue biased, leading to disgruntled taxpayers.
- **Tax evasion and tax fraud:** GST tax evasion and tax fraud, including use of fraudulent invoices, fake e-way bills, etc has led to massive losses in revenue collection (over ₹70,000 crore, according to news report in March 2020).
- **Expanding the GST purview:** With nearly 30% of the states' revenue coming from excise duties on petrol and diesel, the GST council is reluctant to increase commodities under GST, especially fuel and alcohol.

- **Concerns over GST shortfall and compensation to states:** The Covid-19 pandemic and lockdowns lead to severe revenue shortfall for States and the Centre, leading to the Centre's inability to pay the dues to states on time.
  - Recently, a tussle ensued between Centre and State because of an estimated Rs. 30,000 crores shortfall in the **GST Compensation Cess**. It was finally resolved with Centre operationalizing a special borrowing window of 1.1 lakh crore of which 30,000 crore has been already borrowed by Centre on behalf of the States.
- **Delay in reforms:** Falling revenue amid disruptions caused by the pandemic is said to have continuously delayed reforms related to revision of tax slabs, robust compliance regime, etc., has made GST regime lackluster.
- **Transitional Issues**: Even after four years, many assesses are still experiencing technical/legal issues as a result of the transition from the old to the new GST system.

Way Forward

- **Simpler tax structure**, like using the three tax slab structure that will help rationalize this indirect tax system.
- **Robust compliance regime**, curbing unethical and illegal tax evasion practices and better tax compliance through a robust, technology driven intelligent GST system**.**
- **Structural reforms** to widen the ambit of GST for revenue augmentation like reviewing GST on continuous basis or widening of tax base by including electricity, petrol, diesel, real estate, or even agriculture in the long run.
- **Optimizing digital resources** to accelerate the process of claiming input tax credit and increase the capacity of the portal to handle higher numbers of data processing.
- **Rebuilding institutional capital to move towards Cooperative federalism,** resolving revenue sharing battle between Centre and States through **Inter-State Council** or **through institutions like Chief Minister's Conference.**
- **Increasing transparency in Fiscal management:** Increasing transparency in areas like working of GST Council, adhering to the procedure established by the GST Compensation Act, and decreasing over-reliance on cesses and surcharges could repose the lost faith of States in Centre's Fiscal Management.

3.3. DIRECT TAXATION

Key targets

- The Budget 2021-22 had set a **tax revenue target of Rs 22.17 trillion** for FY22.
- The Centre projected **corporation tax** to stand at Rs 5.47 trillion and **personal income tax** at Rs 5.61 trillion in estimates for the current fiscal year.

Current Situation

55% of Gross Tax Revenue comes from direct taxes, comprising mainly of corporate and personal income tax (FY21).

Rs 9.45 lakh crore was India's direct tax collections for FY21 which was 10% lower than the previous year.

Moderation in growth and Corporate Tax rate cut could be the reason for lower tax collections.

About 5.8 crore individuals filed an income-tax return.

Only 1% of the India's population paid taxes.

Schemes/Initiatives

- Transparent taxation- Honoring the Honest
- The Faceless Assessment Scheme, 2020
- Faceless Appeals Scheme 2020
- The taxpayer's charter
- The Taxation and Other Laws (Relaxation and Amendment of Certain Provisions) Act, 2020
- Taxation Laws (Amendment) Act, 2021

DIRECT TAXATION AT- A- GLANCE

Way Forward

- **Direct Tax Code** on line of GST.
- **Base widening** by increasing the number of taxpayers.
- Exploring **taxation on agricultural income.**
- **Rationalisation** of incentive provisions.
- Curbing non-compliance by developing an **efficient information centre, digitisation, etc.**

Constraints

- Stagnant **tax-GDP ratio** at around 10%
- **Tax evasion** and corruption
- **High exemption** limit and deductions
- **Double taxation** of dividend
- MNCs setting up offices in **low-tax jurisdiction countries/tax havens**
- **Lack of global consensus** over tax rates
- Issues surrounding **Digital taxation**

3.3.1. CAPITAL GAINS TAX

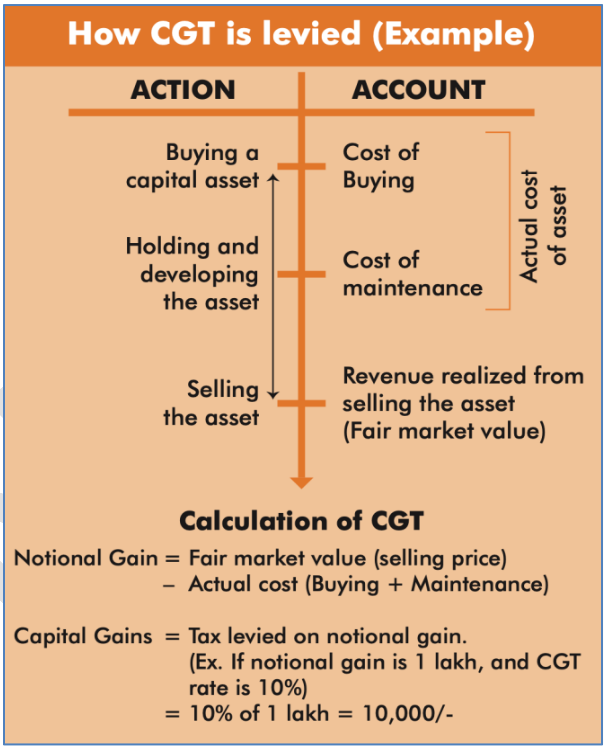
Why in News?

Recently, the Finance Bill, 2021 proposed an amendment to the regulations relating to Capital Gains Tax (CGT).

What is Capital Gains Tax (CGT)?

Capital Gains Tax is a tax on growth of value of investments incurred when individuals and corporations sell those investments. Following can be cited as the key characteristics of the CGT levied in India-

- The tax **doesn't apply to unsold investments**, so stock shares that appreciate every year will not incur capital gains taxes until they are sold, no matter how long they are held.
- **Capital gains treatment only applies to "capital assets"** such as stocks, bonds, jewelry, coin collections, and real estate property among others. In other words, it **applies only to transactions** which are capital in nature i.e., **result in change of assets or liabilities.**
- Capital gains are **not applicable to an inherited property as there is no sale**, only a transfer of ownership. However, if the person who inherited the asset decides to sell it, capital gains tax will be applicable.
- The CGT framework divides the tax in two types based on the time for which they are held-
    - **Short-term Capital Gains Tax (STCG) on Short-term capital asset:** When an asset is held for a period of 36 months or less, it is termed as a short-term capital asset.
        - ✓ The criteria of 36 months have been reduced to 24 months for immovable properties such as land, building and house property. For instance, if you sell house property after holding it for a period of less than 24 months, any income arising will be treated as short-term capital gain.
    - **Long-term Capital Gains Tax (LTCG) on Long-term capital asset:** An asset that is held for more than 36 months is a long-term capital asset.



3.3.2. GLOBAL MINIMUM CORPORATE TAX RATE

Why in News?

Recently, Finance Ministers from the Group of Seven (G7) nations reached a landmark accord on backing a global minimum corporate tax rate of at least 15%.

How a global minimum corporate tax works?

- Suppose, a company headquartered in Country A is reporting income **in Country B, where the rate is 11%.**
- With a global minimum rate of 15% in effect, **Country A would "top up" the tax and collect another** 4% of the company's profit from Country B representing the **difference between Country B's rate and the global minimum rate.**

About Global Minimum Corporate Tax

- Global Minimum Corporate Tax is an **additional tax imposed on large multinational companies** (MNCs), potentially forcing them to pay taxes to countries based on where their goods or services are sold, **regardless of whether they have a physical presence in that nation.**
- It will **undercut any advantage of shifting to lower-tax places** and pressures countries to conform to the global norm.

Need for a Global Minimum Corporate Tax Rate

- **Bringing uniformity:** It is aimed at ending a decades-long "race to the bottom" in which countries have competed to attract corporate giants with ultra-low tax rates and exemptions.
- **Check on tax havens:** It neutralizes the low tax incentive and will discourage multinationals from shifting profits - and tax revenues - to low-tax countries regardless of where their sales are made.

- **Additional tax revenue to fight pandemic:** According to estimates, governments lose $245 billion annually to tax havens.
- **Boost to global economy:** by leveling the playing field for businesses and encouraging countries to compete on positive bases, such as educating and training their work forces and investing in research and development and infrastructure.
- **Allow taxing global digital MNCs:** It will be giving a right to tax a slice of profits of large digital MNCs and will put an end to various digital taxes that have proliferated around the world, similar to equalization levy in India.

Challenges

- **Global consensus:** There are challenges of getting all major nations on the same page.
- **Consensus on tax rate:** a minimum tax of 15% may not raise substantial revenues and there is a possibility that other countries may want a higher minimum global tax rate**.**
- **Impact on socio-economic development in developing/ least developed countries:** MNCs are a source of foreign direct investment (by lowering tax rates). These corporations help to generate demand with efficient utilisation of resources and create employment in low-income countries.
- **Right to sovereignty:** Any global minimum tax operates to limit a national government's ability to exercise tax policy how it sees fit.
    - Ireland, which has a tax rate of 12.5 percent, has come out against the global minimum tax, arguing that it would be disruptive to its economic model.
- **Issue of Digital taxation:** Global minimum tax's lack of clarification on the issue of digital taxation may be further dissuasion to countries like India, who are not in the stage of development so as to not differentiate between distinct sectors and industries.

Possible Impact on India

- India is likely to benefit as the **effective domestic tax rate is above the threshold,** and the country would continue to attract investment.
    - In 2019, India **announced a sharp cut in corporate taxes for domestic companies** to 22% and for new domestic manufacturing companies to 15%.
    - The cuts effectively brought India's headline corporate tax rate broadly **at par with the average 23% rate in Asian countries**.
- In respect of outbound investments, it **will prevent base erosion of tax in the country** as the government will be able to claw back any shortfall in tax paid below 15% by an overseas business owned by an Indian resident

OECD and Global Minimum Tax

- **Under the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS)**, 139 countries and jurisdictions are **collaborating to put an end to tax avoidance strategies** that exploit gaps and mismatches in tax rules to avoid paying tax.
    - BEPS refers to **tax planning strategies used by multinational enterprises (MNEs) that exploit gaps and mismatches in tax rules** to artificially shift profits to low or no-tax locations where there is little or no economic activity, resulting in little or no overall corporate tax being paid.
- Recently, **130 countries, including Switzerland, China, and India, have joined a new two-pillar plan to reform international taxation rules** and ensure that multinational enterprises pay a fair share of tax wherever they operate.
    - **Pillar One** ensures that large MNEs, including digital companies, **pay tax where they operate and earn profits.**
    - **Pillar Two seeks** to ensure that **large MNEs pay at least a Global Minimum corporate tax rate,** currently proposed at 15%, regardless of the jurisdiction where profits may be recorded.

3.3.3. RETROSPECTIVE TAXATION

Why in News?

Recently, parliament enacted the **Taxation Laws (Amendment) Act, 2021** to amend the **Income-tax (IT) Act, 1961** and the **Finance Act, 2012**, scrapping the 2012 retrospective tax law.

What is Retrospective Taxation?

Retrospective taxation is a 'backward looking' tax, allowing a country to pass a rule on taxing certain products, items or services and deals and **charge companies from a time behind the date on which the law is passed.** Used by number of nations to **remove taxation anomalies** through new or additional charge on past transactions, it helps in overcoming misuse of tax laws loopholes by companies.

What are the Negative impacts of Retrospective Taxation?

- **Goes against the Principle of Tax Certainty**: The Retrospective Tax removes the time limit provided under **Section 149** of the **Income Tax Act** and makes taxes uncertain.
- **Hurts Private investors/companies** by introducing new demands which can spoil the business planning and expectations.
- **Arbitration Issues:** Out of 17 cases, 4 invoked arbitrations under **Bilateral Investment Protection Treaty** with the United Kingdom and Netherlands.
    - Also, being a signatory to the **Convention on the Recognition and Enforcement of Foreign Arbitral Awards** (1958, also known as **New York Arbitration Convention**), the companies can enforce foreign and non-domestic arbitral awards enforced against Indian assets in numerous jurisdictions around the world.
- **Damaging India's Reputation:** Despite various financial and infrastructure reforms for Ease of Doing Business, it damages India's reputation with-
    - **Reduced FDI inflows** due to **reduced confidence** of **potential investors,**
    - **Reduced effectiveness of special initiatives** to attract investment like IFSC-GIFT city.
- Leads to a **Vicious Cycle** of **low investment** and **low tax revenue** along with **low growth** and **reduced employment opportunities**.

What are the changes introduced by Taxation Laws (Amendment) Act, 2021?

- Amends **Section-9 of IT Act, 1961** to **nullify the demands raised for indirect transfer** of Indian assets made before 28th May 2012 on fulfillment of specified conditions like withdrawal of appeal, petition, arbitration etc. in this regard.
- **Refund of any amount paid in these cases** without any interest under Section-244A.
- However, **offshore transactions involving Indian assets** executed after 28th May 2012 are **still taxable** as there is no retrospective application of the law.

Sovereign right to tax and its limits

- Right to tax is a **core sovereign power**.
- The Constitution of India empowers government to **levy or charge taxes except by the authority of law**.
- Though upheld by Investor-State Dispute Settlement (ISDS) tribunals as well, the Bilateral Investment Treaty (BIT) puts **certain limits on the right as:**
    - **Expropriation**, i.e., no confiscation or claim on property against owner wishes from government
    - **Fair and Equitable treatment**, i.e., the taxes should not be discriminatory
- In 2016, India framed **model BIT**, **excluding taxation measures from its scope**, reducing scope of ISDS to interfere in sovereign right to tax.

Conclusion

The new law leads to a more **transparent**, **stable,** and **predictable taxation regime;** sending positive signal to investors on ability of India to sort out legacy issues to **improve investments** through stable operating environment and **help in early recovery** from COVID-19 by expanding the industrial base for increased tax base, higher growth, and work opportunities.

3.4. FINANCIAL MOBILIZATION FROM NON-TAX SOURCES

FINANCIAL MOBILIZATION AT- A- GLANCE

Key targets

- **Generating revenue by monetization of idle resources** such as land, underutilized infrastructure etc.
- For 2021-22, the government has set a **disinvestment target of ₹1.75 lakh crore,** over five times what it raised in the FY21.

Current Situation

36% drop to 2.08 lakh crore was seen in non-tax revenue (collected from interest receipts on loans to States and UTs, dividends and profits from PSEs, RBI surplus, and external grants).

Decline of 3% was witnesses in net revenue (tax+non-tax) collection to Rs 16.32 lakh crore.

₹32,835 crore of disinvestment receipts were generated against expected ₹2 lakh crore.

Schemes/Initiatives

- National Monetisation Pipeline
- Policy on Strategic Disinvestment, 2021
- Monetisation of idle land or land banks
- RBI surplus transfer

Way Forward

- **Strengthen domestic resource availability** such as improving effectiveness of tax systems and strengthening international tax cooperation.
- **Widening of revenue base,** improving tax collection and combating tax evasion and illicit financial flows.
- **States** could also undertake **greater mobilization of own taxes** such as property tax, and taking specific steps to improve administration of GST to increase tax collections.
- **Supporting investments** through a predictable and stable tax policy.
- Subscribing to **achievable disinvestment targets.**

Constraints

- Tax concessions
- Deficit financing and excessive market borrowing
- High debt to GDP ratio
- Inefficiency in PSEs
- Increase in indirect taxes
- Populist policies

3.4.1. RBI SURPLUS TRANSFER

Why in News?

Recently, the Reserve Bank of India (RBI) approved the transfer of ₹99,122 crore as surplus (excess of income over expenditure) to the central government from its reserves.

How does RBI transfer surplus to the government?

- **As RBI is not required to pay income tax,** it transfers the surplus amount to the government.
- Earlier, RBI **used to keep a major chunk of this surplus for its Contingency Fund and Asset Development Fund.** However, **after the Malegam Committee (2013) recommendations its transfer of surplus to government increased.**

- Later, the **Bimal Jalan committee** provided a **revised Economic Capital Framework or ECF.** ECF provides a methodology for determining the appropriate level of risk provisions and profit distribution to be made under Section 47 of the RBI Act, 1934.
  - As per this revised ECF the **amount of surplus that the RBI must transfer to the Centre is determined based on two factors**
    - ✓ **Realized equity** (essentially existing amount in CF): The CF be maintained within a range of **6.5% to 5.5%** of the RBI's balance sheet and the excess amount is to be transferred to the government.
    - ✓ **Economic capital** (essentially CGRA): It should be kept in the range of **20-24.5%** of the balance sheet and rest should be transferred to government.

Why RBI surplus has gone up sharply this year?

- **Lower expenditure due to reduction in Provisioning amount** is one of the major reasons for higher surplus.
  - This time round, by announcing that it had decided to maintain CF at 5.5%, **RBI has chosen to maintain the lowest required buffer** while passing on to the government the maximum possible surplus.
- Rise in the RBI's surplus could also be linked to **higher income from its Open Market Operations as well as the sizeable rise in forex reserves.**
- Another reason could be the t**argeted long term repo operations (TLTROs).**
  - TLTROs refer to targeted long-term repo operations **used to infuse cash in the banking system** for on-lending to specific sectors.

Arguments in favor of transferring surplus to government

- **Maintaining fiscal deficit targets:** The excess surplus transfer offers a great opportunity to the government to contain and even lower the fiscal deficit.
- **Keeping interest rates low:** The large payout can help the government cut back on planned borrowings and keep interest rates relatively low. Besides, it will provide space for private companies to raise money from markets.
- **Providing stimulus to economy:** The move is expected to help the government at a time when India is going through a period of economic slowdown, triggered by slower consumption demand and weaker investment.
- **Meeting revenue targets:** It will help the government counter the shortfall in **revenue and tax collection**.
- **Global Benchmark:** RBI reserves stands around 26% of RBI's balance sheet. The global median is 16%.

Argument against transferring surplus to government

- **Need for adequate contingency fund with the RBI:** To tackle the potential threats from financial shocks, to ensure financial stability and provide confidence to the markets.
  - Contrary to this, the current massive payout has raised concerns that the government may resort to the RBI to meet its urgent spending needs, thus effectively turning the central bank into a banker for the government.
- **Maintaining autonomy:** Low capital will force RBI to turn to government in time of need. This will give government influence over the central bank.
- **Impact on credibility of RBI:** It can cause investors to lose confidence in the RBI's ability to preserve the value of the rupee.

Conclusion

The **COVID-19 crisis has posed a great challenge to debt sustainability** in emerging and advanced economies. Also, **widening fiscal deficit, challenges in meeting disinvestment targets, possible shortfall in GST collection** etc. will keep fiscal resources of the government under pressure.

The **surplus transfer from the RBI will provide some cushion.** However, the manner in which the funds are used will be critical. The share of capital expenditure as a percent of GDP has been falling in recent years. This time around, the **Centre will need to put the RBI's surplus funds to productive use that** can have a sustainable multiplier impact on overall growth in the economy.

3.4.2. ASSET MONETIZATION

Why in news?

The Union Budget 2021-22 has proposed many ways for Asset monetization.

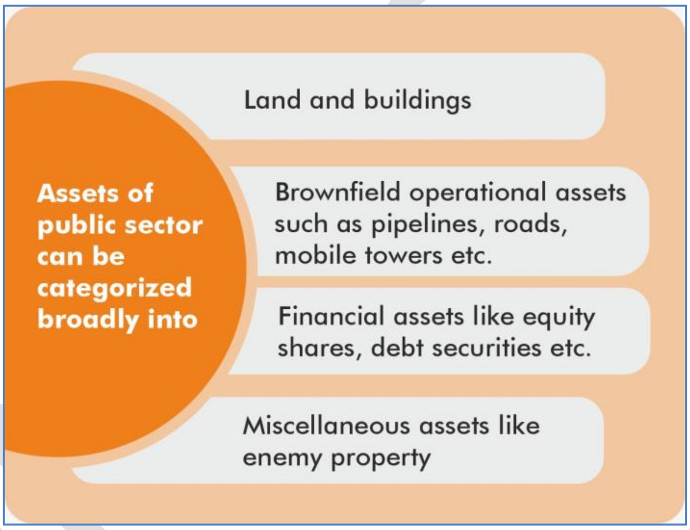
Various Proposals in discussion for Asset monetization

- **A Special Purpose Vehicle** (SPV) in the form of a company is proposed for land monetization.
- **National Monetization Pipeline** of potential brownfield projects.
- Transfer of five operational roads worth ₹5,000 crore to the **Infrastructure Investment Trust (InvITs)** of NHAI and also shift ₹7000 crore transmission assets to PowerGrid's InvIT.
- **Monetization of DFC (Dedicated Freight Corridor) assets by Railways,** operational toll roads of NHAI (National Highway Authority of Indian), oil and gas pipeline of IOC, GAIL, Hindustan Petroleum, warehousing assets of CPSEs (Central Public Sector Enterprises), and AAI's (Airport Authority of India) airports in tier 2 and tier 3 cities.

Related information

Monetisation experience so far

- **Roads:** NHAI has monetised hundreds of kilometres of operational toll roads through TOT concessions and has raised an impressive Rs 15,000 crore.
- **Railways:** As part of the railway station redevelopment program Habibganj and Gandhinagar railway stations are being redeveloped into airport-like world class stations by the Indian Railways Station Development Corporation (IRSDC).
- **Shipping:** Ministry of Shipping is in the process of recycling 11 assets, including 10 berths and the International Cruise Terminal at Goa Port.



Asset monetization

- Asset monetization, as a concept, entails **offering public infrastructure to the private sector or institutional investors** through structured vehicles and mechanisms.
  - Hence, monetization is **distinct shift from 'privatization'** or 'structured partnerships' with the private sector within defined contractual frameworks.
- **It serves three critical objectives:**
  - **Unlocks value from public investment** in infrastructure
  - **Taps private sector efficiencies.**
  - **Creation of new sources of revenue** by unlocking of value of hitherto unutilized or underutilized public assets.

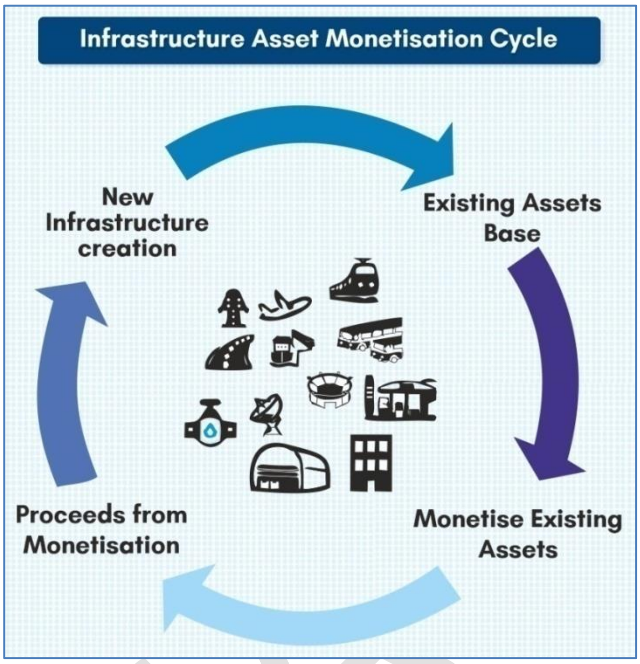
What is TOT Model?

- TOT is a model for monetizing operational national highway projects where **investors make a lump sum payment in return for long-term toll collection rights backed by a sound tolling system.**
- This model is more attractive for investors as they **don't have to build an infrastructure project from scratch.**

- **Some models for Asset monetization**
  - **Direct contractual approach:** This involves large upfront payment to the government coupled with small annual payments/no payments; or small/ no upfront payment coupled with annual payments. For ex: Toll-Operate-Transfer (TOT) model.
  - **Structured finance approach:** It allows a lender to sell a pool of assets on which bond market securities are issued. For example, INVITS, REITS etc.
  - **Land monetization:** So far this model has been centered around 'sell and lease' agreements across different public sector entities.

Benefits of Asset Monetization

- **Fully harnessing the potential of resources:** Many assets owned by these public sector units are sub-optimally utilized and hence have failed to yield adequate returns.
- **Meet the demand for infra development:** The additional resources from such return can be utilized for restructuring, reinvestment, and expansion. It can also trim market borrowings by PSUs and bring down interest payment burden.
  - Also, monetization would help in **better maintaining the existing infrastructure facility.** It would also lead to a comprehensive modernization drive with innovative techniques, ideas replacing the obsolete ones.



- **Saving the maintenance cost:** A lot of financial cost is incurred in maintaining the unutilized and sub-optimally utilized assets of PSUs. Monetizing assets is a sophisticated and effective way to outdo cost & expenses of public exchequer
- **Promote balanced regional development:** As of now, these assets have been lying idle. With private entities bidding for them, they will be utilized for creation of productive assets and setting up of factories leading to regional economic development.
- **Robust ecosystem for industrial expansion:** Private sector would get the required resources / opportunity for investment. Moreover, asset monetization would create new, unexplored sources of revenue which will improve public finances. Thus, asset monetization will create a robust ecosystem for industrial expansion.

Challenges in Asset Monetization

- **Administrative challenges:** These challenges include lack of proper maintenance of asset register and title, encroachment; improper planning; delayed approval and clearances; policy constraints and lack of coordination among stakeholders.
- **Correct valuation of the asset:** A detailed analysis of assets (both operational and financial) is needed. Also, valuation should be based on the current and future potential of assets.
- **Sensitive decision-making process:** Motivation of the policy formulating government should be clear. Further, the process needs to take into account the private sector's ability to fulfill the targeted objective.
- **Citizen centric approach:** Equally important is the willingness of the citizens to accept management of public infrastructure in the private hand. Their grievances, if any, needs to be promptly attended to by the operating private player. Otherwise, one wrong project may cause long lasting damage to public perception.

Way ahead

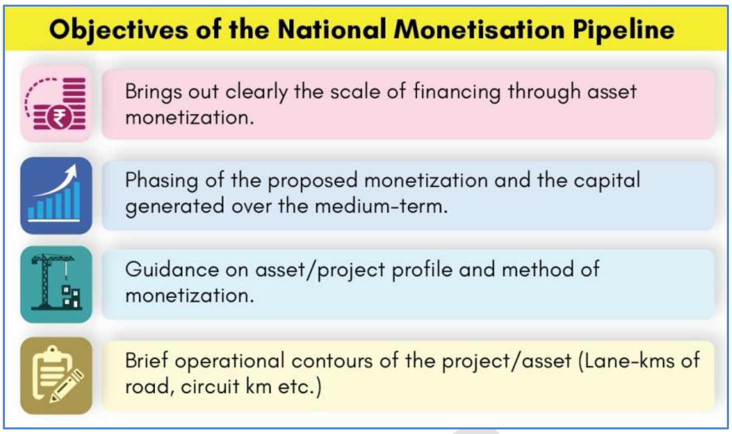
- **Repositioning monetization:** Monetization needs to be repositioned as a tool to leverage institutional capital. In order to do so, structured transactions with a mandatory transfer of assets back to the government should be given priority over slump sale models.
- **Perennial exercise:** Scanning of assets needs to be a perennial exercise and the ministries must proactively create 3-5-year asset pipelines commensurate with expansion plans.
- **Carefully manage stakeholders:** It would help resolve the regulatory and structural issues, which create formal as well as informal barriers.
  - **Monetisation needs to be made value-accretive** for entities undertaking the transactions. Collective taxation, comprising capital gains, stamp duty, GST, tax on upfront proceeds, can erode substantial value.
  - Dialogue is an effective way to **build strong public support** and dispelling doubts created by a few vested interests.
  - **Clear rules and guidelines** would reduce the possibility of long drawn litigations. Thus, more national and international investors could be attracted.
- **Clarity over tariff setting and concession period:** It would motivate the private sector for creating assets of national importance which are generally projects with long gestation period.

3.4.2.1. NATIONAL MONETISATION PIPELINE

Why in news?

Recently, the government of India has launched the **National Monetisation Pipeline (NMP),** a roadmap for asset monetisation of various brownfield infrastructure assets across sectors.

About National Monetisation Pipeline (NMP)



- NMP will help in **evolving a common framework for monetisation of core assets.** (Monetization through **disinvestment and monetization of non-core assets** have **not been included** in the NMP).
- The **total indicative value** of NMP for Core Assets of Central Government has been estimated at **Rs 6.0 lakh crore** over the 4 year period, FY 2022-2025.
    - This **corresponds to ~5.4% of the total infrastructure investment envisaged under the NIP** which is ~Rs 111 lakh crore.
- The **framework for monetisation** of core asset monetisation has three key imperatives:
    - **Monetisation of rights not ownership** which means the assets will have to be handed back at the end of transaction life.
    - **Brownfield de-risked assets with stable revenue generation profile and of critical importance.**
    - **Structured partnerships under defined contractual frameworks & transparent competitive bidding,** where Contractual partners will have to adhere to Key Performance Indicators(KPIs) and Performance Standards.

Challenges in implementation and associated risks

- **Financial Challenges-**
    - **Lack of identifiable revenue streams** in various infrastructure assets.
    - **Difficulty in attracting investors:** Less-than-encouraging bids in the recently launched PPP initiative in trains indicate that attracting private investors' interest is not that easy.
    - Leasing of public utilities to private investors **could lead to higher prices for consumers.**
- **Regulatory Challenges-**
    - **Lack of independent sectoral regulators** who could provide dedicated domain expertise and simultaneously aid development of the sector.
    - **Structural problems such as legal uncertainty and the absence of a deep bond market** that hold back private investment in infrastructure. This is further compounded by **Inefficient Dispute resolution mechanism.**
    - The allocation of assets owned by governments to private investors is often subject to **political influence, which can lead to corruption.**
- **Asset-specific Challenges-**
    - Low Level of capacity utilisation in gas and petroleum pipeline networks.
    - Regulated tariffs in power sector assets.
    - Low interest among investors in national highways below four lanes.

Way ahead

- **Contracts must be designed to allow for some flexibility** for addressing unforeseen developments (such as climate-related disasters) and to prevent needless and longwinded litigation.
- **Clear quality benchmarks must be set** for the assets that are handed over by the government and for KPIs expected of the private party for operating and maintaining the asset.
- There is a **need to set up a robust mechanism for dispute resolution relating to PPP contracts** as recommended by the Kelkar Committee on PPPs.

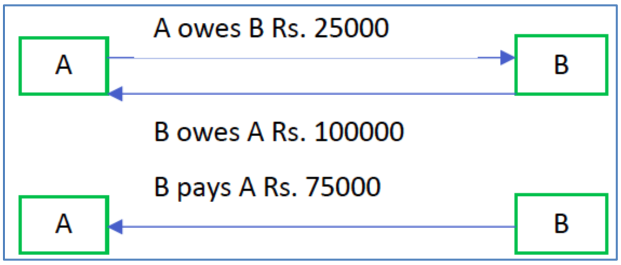
3.5. OTHER FINANCIAL NEWS

3.5.1. BILATERAL NETTING

Why in news?

Recently **Bilateral Netting of Qualified Financial Contracts Act, 2020** was enacted with an aim to ensure financial stability and promote competitiveness in Indian financial markets.

About Bilateral Netting



- A bilateral netting agreement enables **two counterparties in a financial contract to offset claims against each other** to determine a single net payment obligation due from one counterparty to the other.
  - **Netting** refers to offsetting of all claims arising from dealings between two parties, to determine a net amount payable or receivable from one party to other. (see infographic)
  - Similarly, a **multilateral netting agreement allows counterparties** to offset claims against each other through a Central Counterparty (CCP) in a clearing house under the Payment and Settlement Systems (Amendment) Act (2015).
- Earlier, **Indian financial contract laws did not permit bilateral netting**, however, they did allow multi-lateral netting.
- In India, **Bilateral contracts constitute 40%** of total financial contracts, while multilateral contracts constitute 60%.
- **Netting is very common in advanced economies** where the settlement is based on net positions in bilateral or multilateral financial arrangements rather than by gross positions.
  - At present, major jurisdictions such as the **U.S., U.K., Australia, Canada, Japan, France, Germany, Singapore and Malaysia** have legal provisions in place for netting agreements.
  - Global regulatory bodies such as the **Financial Stability Board (FSB) and the Basel Committee on Banking Supervision have supported** the use of such netting.

About Bilateral Netting of Qualified Financial Contracts Act, 2020

- It seeks to provide a **legal framework for bilateral netting of qualified financial contracts (QFC)** which are over the counter derivatives (OTC) contracts.
- **Act seeks to provide**
  - **designation of any bilateral agreement** or contract or transaction, or type of contract, as qualified financial contract by the **Central Government or any of the financial regulatory authorities** like RBI.
  - **determination of the net amount payable** under the close-out netting in accordance with the terms of the netting agreement.
  - **imposing of certain limitations** on powers of administration practitioner.

Significance of this move

- **Reduce credit risk and regulatory capital burden** for banks, freeing up capital for other productive uses and also reduce systemic risk during defaults.
  - Without bilateral netting, Indian banks have had to set aside higher capital against their trades in the over- the-counter (OTC) market, which impacts their ability to participate in the market.
  - The capital saving would enable banks to provide price efficiency in offering hedging instruments to businesses in India, and catalyse the corporate bond market through developing the credit default swap (CDS) market.
- **Reduce hedging costs and liquidity needs** for banks, primary dealers and other market-makers, thereby encouraging participation in the OTC derivatives market to hedge against risk.
  - Increased market participation in the CDS market would also provide an impetus for corporate bond market development.
- **Establish an efficient recovery mechanism** for financial contracts under instances of default by a counterparty.
- **In compliance to India's G20 and FSB commitment** to implement global regulatory reforms in the OTC derivatives market.
  - A strong netting system generally gives rise to a thriving derivatives market, as it provides the most accurate picture of a company's financial position, solvency and liquidity risk.

3.5.2. SOCIAL STOCK EXCHANGE

Why in News?

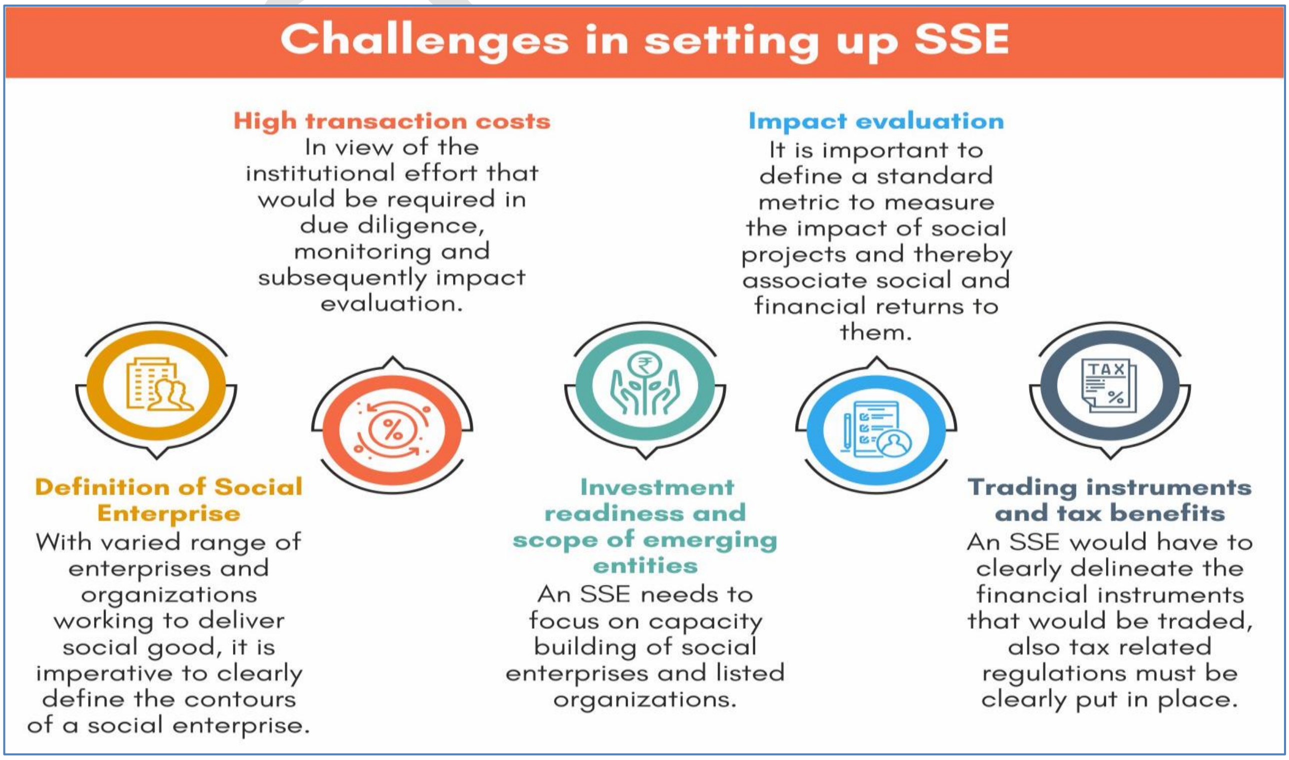
Recently, Securities and Exchange Board of India (SEBI) developed the framework on Social Stock Exchange (SSE).

About Social Stock Exchanges (SSE)

- SSE functions as **a regulated funding platform** to allow For-Profit Social Enterprises (FPEs) and not-for-profit organisations (NPO) with a social purpose, to raise funds.
- It provides a mechanism to **preserve the social and environmental mission of the organizations,** giving the **investors opportunities to mitigate socio-economic problems**.
- **Some of the most prominent SSEs are:** UK (Social Stock Exchange), Canada (Social Venture Connexion), South Africa (South African Social Investment Exchange), Singapore (Impact Investment Exchange).

Why do we need an SSE?

- **Improved market access:** An SSE would facilitate a meeting ground between social sector (FPEs and NPO) and investors with inbuilt regulation and will ensure larger visibility of investor and investees.
- **Synergy between investor and investee in social aims:** Canvas of choice would be much wider allowing investor and investees with similar visions and missions to connect seamlessly.
- **Transparency and accountability:** Because of rigorous due-diligence and performance metrics that an SSE would be installing for background checks for investors.
- **Performance- based Philanthropy:** As performance of the enterprises listed on an SSE would be closely monitored, it will result into better project implementation.
- **Reduced burden on government:** SSE would leverage private sector participation in some key areas, engendering a collaborative approach with government in achieving the developmental goals.

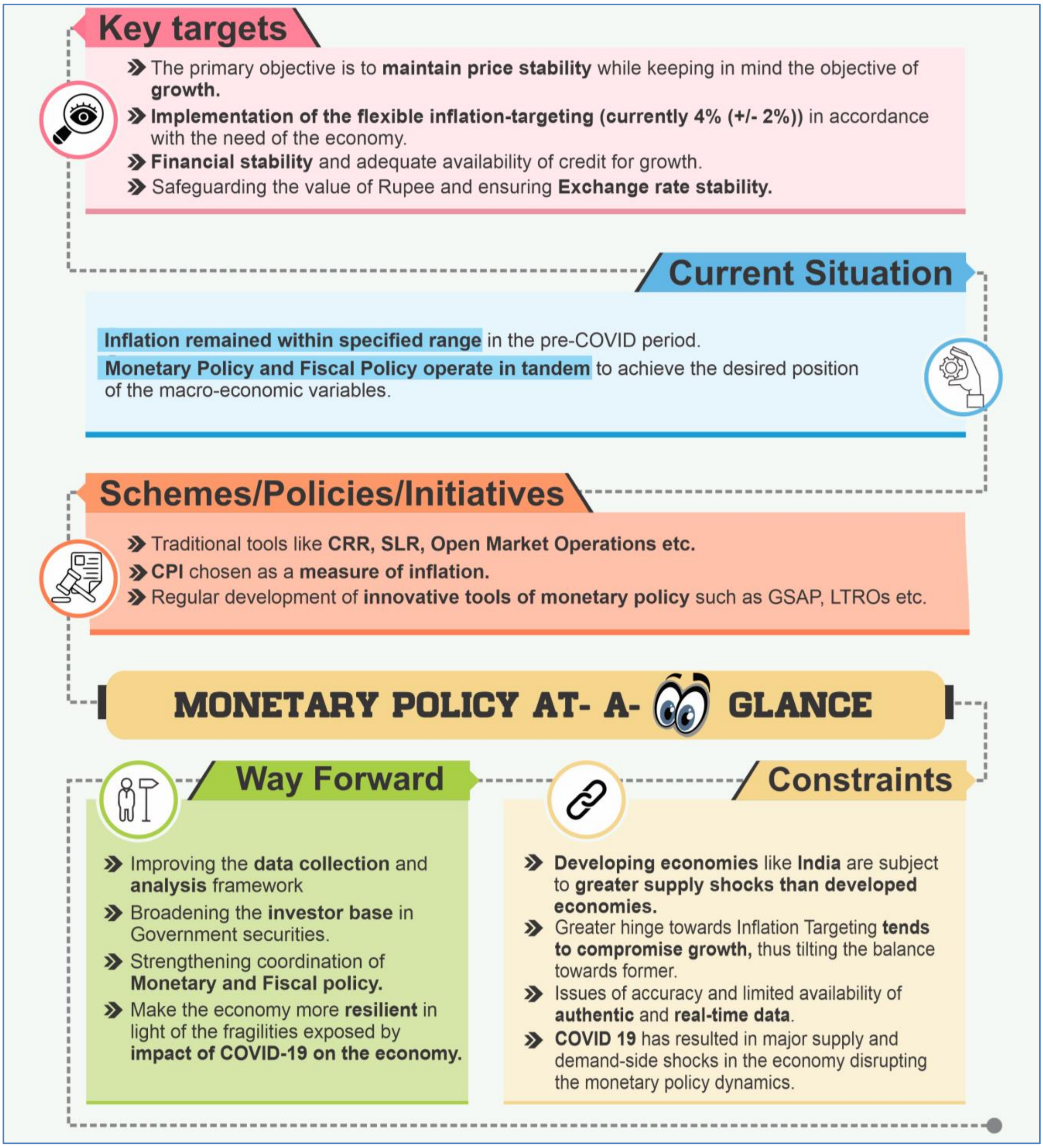


Way forward to building an ecosystem that will enable the SSE to thrive and flourish in India

- **Social impact reporting:** Common minimum standards for reporting on social impact for both classifications (FPEs and NPOs), to reduce information asymmetry.
- **Tax benefits:** Need to synchronise tax laws relating to social sector to increase the reception of these funding models amongst various classes of investors.
- **Setting up a Self-Regulatory Organization and Information Repositories:** These would work on enumeration of NPOs, their activities and areas of operation as well as provide credible and standardized information about NPOs.
- **Rigorous regulatory scrutiny:** To ensure that only bonafide FPEs/NPO are able to associate with SSE, SEBI should work out a mechanism for assessing credentials of the social impact dimensions self-declared by such organisations.
- **Awareness campaigns:** for social enterprises to list on the SSE and to ensure reception amongst both investor and investee groups.

4. MONETARY POLICY, BANKING AND PAYMENT SYSTEMS

4.1. MONETARY POLICY



4.1.1. INFLATION TARGETING

Why in news?

In March 2021, the Inflation Targeting regime in India will complete 5 years. This has brought to the fore the need for a performance review of the current framework.

What is inflation targeting (IT)?

A central bank commits to keeping inflation below a certain threshold and use tools like interest rates and other liquidity adjustment measures to achieve this objective while maintaining growth. For example, if inflation is high, RBI can increase the Repo rate which decreases the available liquidity in the market and consequently the Inflation.

In the recent past, several countries have been opting for inflation targeting as a monetary policy objective due to following reasons:

- **Strong correlation with market demand:** Various studies have shown that price levels have a direct correlation with market demand. As a result, inflation targeting has the potential to tweak demand for ensuring both financial stability and continuous growth.
- **Predictable and easy to understand for private sector and residents:** Under IT, monetary policy is designed towards an unambiguous goal of achieving price stability upon which the private sector can anchor its expectations about future inflation. Also, inflation as a nominal anchor is simple and easily communicated by the public at large.
- **Targeting mechanisms generally increase transparency:** The targeting regime is generally accompanied by regular communication of Monetary Policy stance through regular publication of policy statements and policy reports. This transparency enables the government and the public to assess information about whether the central bank has achieved its objectives.
- **Impact on other economic parameters:** Some countries have seen other benefits like declining exchange rate volatility and improved financial credibility of government post implementation of an IT regime.

How the inflation targeting framework operates in India?

The IT framework in India was initiated through the Inflation targeting agreement of 2015 which further culminated into the amendment of the RBI Act in 2016. The Act provided for the following framework:

- It tasked the monetary policy with the goal of **achieving price stability** while **keeping in mind the objective of growth.**
- To fulfill this objective, a **Monetary Policy Committee (MPC)** was created by **amendment of the Reserve Bank of India Act, 1934.**
  - The **MPC** has been entrusted with the **task of fixing the policy rate** required to achieve the inflation target.
- The Act adopted year-on-year changes in the headline **Consumer price Index (CPI)** as the measure of inflation target. The **target was fixed at 4% with an upper and lower tolerance band of 2%.**
  - This target is to be **reviewed every five years.** (Note that the law requires a review of the inflation target and not the framework as a whole)

Why was CPI chosen as measure of Inflation?
CPI measures the inflation levels at the level of the consumer expenditure. By virtue of its construction, it has following advantages:

- CPI **represents consumer baskets better** than the other measures like WPI.
- CPI provides **information on price movements in services sector** also.
- CPI **includes Food Inflation** which is a critical part of price stability objective in emerging markets like India.

Performance of Inflation targeting in India

- **Control over inflation:** Inflation reduced from a high of **more than 10% before 2014** to a more comfortable value after IT. For instance, the average inflation rate between October 2016 and March 2020 was **below 4%.**
- **Stability in Inflation expectations:** The inflation forecasts of financial professionals and the responses to inflation forecasts of households declined with the shift to IT, although household expectations of inflation continue to consistently exceed actual outcomes. As a result, increases in actual inflation now do less to excite inflation expectations, indicative of improved anti-inflation credibility.
- **Behavior of ancillary variables:** The IT regime has had a **stabilizing effect on ancillary variables like exchange rates, equity markets** etc. For example, the money market conditions have been broadly orderly and in tandem with the changes in repo rate.
- **Increased expression of diversity at policy level:** The working of MPC has saw expression of independent viewpoints from both external and internal members. This indicates towards improved robustness of the Monetary Policy Framework which indirectly ensures a delicate balance between price stability and economic growth.

What are the challenges that still remain?

- **Narrow objective:** Some experts argue that RBI has objectives to take care of other parameters like economic growth, stable exchange rate and financial stability, and cannot restrict itself to the single objective of inflation.
    - For instance, some market stakeholders believe that the RBI does not cut rates easily or as much as they would like to see. This is **interpreted as the RBI not giving growth as much importance as inflation.**
- **Pre-requisites of effective inflation targeting:** IT demands a number of pre-conditions for its successful implementation in the long-term such as independence of central banks, well developed financial markets, flexible exchange rate, etc. Most emerging economies, including India may not be able to fulfil it in the near future.
- **Issue of accuracy and limited availability of data:** An inflation-targeting regime requires vast amount of data in the form of assessment of inflation in the medium term, forecasts on economic growth and other indicators of financial stability like estimates of foreign investment etc. There is a limited buffet of indicators that the RBI can use.
- **Designed for demand driven inflation systems:** It is argued that the IT system is mainly designed for countries where the inflation is due to demand factors, whereas in India, it is the supply side factors which are causing inflation.

COVID-19 and Inflation targeting

The outbreak of such pandemic and its effect on the economy creates a precarious situation where the economy **faces a negative supply shock as well as a negative demand shock,** as firms halt investment projects and households increase their precautionary saving and see their incomes fall.

This creates ambiguity for the IT regime because **raising the policy rates can further dampen the demand and economic growth.** Also, **cutting the policy rates could spur inflation and decrease the confidence of market participants** in the IT regime consequently triggering non-responsiveness on MPC decisions.

Being on the safer side, the standard course of action for an inflation-targeting central bank would be to **cut rates – or at least to refrain from raising them** – if the negative supply shock is temporary. If the shock is temporary, there will be higher prices and inflation now but lower prices and less inflation, or even deflation, in the future. The central bank should therefore be able to "look through" today's inflation and adopt a relatively long horizon when formulating its inflation forecast.

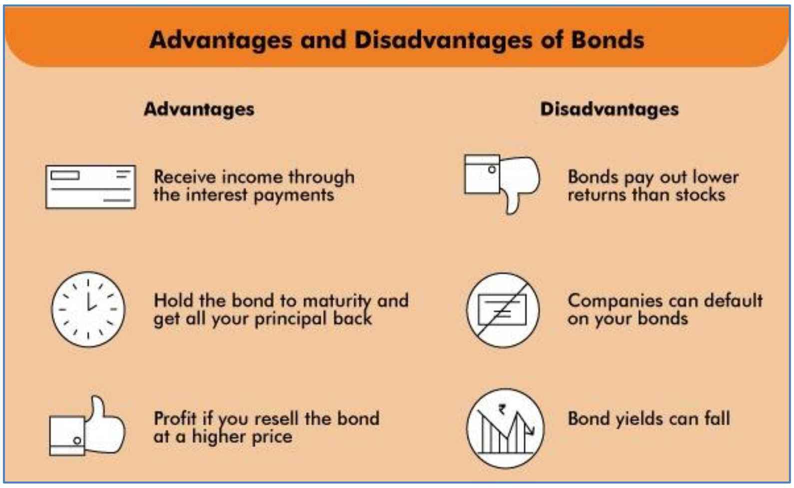
What can be done to overcome these challenges and further strengthen the IT regime?

- **Coordination between Monetary Policy and Fiscal Policy:** Many central banks (e.g., UK) worldwide have the concept of a non-voting representative from the Treasury who attends meetings, expresses the views of the Ministry of Finance, and participates in the discussions. A government non-voting member is a way to coordinate and yet not interfere. This could ensure the much-needed balance between inflation control and economic growth.
- **Improving data collection and analysis framework:** Reforming the data collection methodologies and framework on lines of draft National Statistical Commission Bill, 2019 can be envisaged.

4.1.2. BOND YIELDS

Why in News?

Recently, the US 10-year Treasury Bond yields have witnessed a sharp increase. Experts estimate that this development will have an indirect effect on the Indian Economy.



What are Bonds?

A bond is a fixed income instrument that **represents a loan made by an investor to a borrower (typically corporate or governmental)**. A bond could be thought of as a contract between the lender and borrower that includes the details of the loan and its payments.

Bonds are of several types including Corporate Bonds, Municipal Bonds, Agency based bonds and Government Bonds. In general parlance, **discussion on Bonds and Bond Yields invariably refers to the Government Bonds** (in most cases the 10-year tenored Government Securities). **Henceforth, further discussion would be in context of the Government Bonds.**

What are Bond Yields and how are they determined?

- Bond Yields **in essence shows the financial return**, the owner of the bond is going to get from the bond at any given time. The simplest version of yield is calculated in the following manner:
- **Yield = [coupon amount x 100]/price.** If the price of the bond remains constant (i.e., equal to the face value), then the yield of the bond is same as the coupon rate.
- **But the Bond prices** seldom remain constant and are **subject to change on a daily basis due to factors like money supply in the economy, interest rates etc.** (we shall see these relationships in the next section) The fluctuations in prices of Bonds leads to two scenarios-
    - **Bonds trading at a premium:** If the Bond is trading at a value higher than its face value, it is said to be trading at a premium. In this case, **Yield of the bond goes lower than the coupon rate.**
    - **Bonds trading at a discount:** If the Bond is trading at a value lower than its face value, it is said to be trading at a discount. In this case, **Yield of the bond goes higher than the coupon rate.**

When Bond prices increase, Bond yields decrease and vice versa. Therefore, it can be said that the **Bond Prices have an inverse relationship with Bond Yields.**

Impact of interest rates on Bond yield and prices

Interest Rates	Bond Yields	Bond Price
↑	↑	↓
↓	↓	↑

How Bond Yields interact with other key economic variables?

- **Interest Rates and Monetary Policy:** Prevailing interest rates in the market indirectly determine what the market rate of return for the investment is. The Bond yields are evaluated against this market return.
- **Stock Prices:** The government bond yields act as a proxy for the 'risk-free rate' prevailing in the market. Therefore, if government Bond yields are higher, the return provided by the stock market becomes less attractive, thus driving down the general demand and price of the stocks. Also, if the yields are lower, opposite outcome would take place.
    - The higher bond yields also indirectly **push up the borrowing costs for companies as well as individuals**. This reduces the earnings available for shareholders as dividends and directly affects the budgets of retail borrowers.

What could be the impact of rising US Bond Yields on India?

Since capital flows from one country to another, changing market dynamics of one large economy directly or indirectly has an impact on other large economies. Impacts of rising US Bond prices could be of following nature-

Reasons for rising US Bond Prices

- A **potential recovery** of the US Economy after it was hit severely hit by the COVID-19 crisis.
- Tightening of Monetary Policy by US Fed and **consequent rise in Inflation** in the US Economy.
- These reasons have resulted in the **rising of yield on the benchmark 10-year Treasury note in US.**

- **Decreased flow of investment:** The US is a source of flow into equity markets of other countries, including India, and a rise in rates in the US makes **keeping money in domestic bonds lucrative for the country's investors.**
- **Potential depreciation of Rupee:** The flow of capital that gets decreased due to rising yields can directly affect the prevalent Rupee-Dollar market equilibrium and may lead to depreciation in Rupee.
- **Driving up domestic borrowing costs:** If bond yields in the US push up yields in India, this can affect the returns of companies by increasing their borrowing costs.

Way Forward

The rising US Bond Yields could have a noticeable impact on the Indian Economy. But, at the same time, most experts expect **monetary policy from the world's central banks to remain accommodative and hence global bond yields to remain broadly low**. This warrants a measured and patient approach from the perspective monetary and fiscal management.

4.1.3. INDIA'S FOREX RESERVES

Why in News?

Recently, Indian Foreign Exchange reserves hit new lifetime high of around **US$ 612 billion**, making India the **fourth largest Forex reserve** holder after China, Japan, and Switzerland.

Forex Reserves Management in India and recent rise

- Central bank of India, the **Reserve Bank of India** is responsible for management of Forex reserves under:
  - **Reserve Bank of India Act, 1934** and
  - **Foreign Exchange Management Act,1999**
- Though Indian reserves are rising since its **1991 Balance of Payment (BoP) crisis,** the speed of rise is significant in last 2-3 years.
- Some of the major reasons for this sudden rise includes:
  - **High Foreign Capital Flow** in terms of Rising Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI) due to its large market size, growing startups, corporate tax cut, higher returns etc.
  - **Reduced Capital outflow** due to reduced consumptions under Covid-19 and curbs on foreign travel. E.g., In 2020-21, India's BoP was at record **surplus of $87 billion.**
  - **Record remittances** from its Diaspora in last two years (**above US$80billion**), and
  - **Massive Liquidity injection** in USA through stimulus measures against economic impact of Covid-19 pandemic. E.g. US$2.3 trillion lending support from Federal Reserve to households, financial markets, government etc.

Arguments for maintaining High Forex Reserves

Benefit of High Forex	Provides Solution Against
Reduced risk from External Vulnerabilities	• **Volatile Oil Prices,** • **Meet external obligations and liabilities** on high outflow of hot money (FPIs)
Exchange Rate Management	• Though market-determined since 1993, high Forex allows **occasional RBI intervention** to curb excessive volatility in the foreign exchange market • Help in growth of currency market
Generate Investors Confidence	• Helping to finance India's **Current Account Deficit** • Minimize impact of just **above Junk Category** rating and a **net international investment position** of -12.9% of GDP
Emerge as Regional Leader	• Expands India's ability to open currency swap lines for others, especially our neighbors like SAARC nations for which India started currency swap mechanism in 2012
Liquidity against Economic Risks	• Overcome **domestic financial system crisis** like **High NPAs,** corporate bond market crisis due to IL&FS payment default, risks of telecom sector challenges due to AGR • Overcome **Global economic crisis** due to Covid-19 related uncertainties
Cushion against monetary stimulus withdrawal	• In 2013, Fed tapering created **external sector crisis** with over 10% **currency fluctuation** and only Japan as help via currency swap • High Forex ensures liquidity against US monetary Stimulus withdrawal and subsequent capital outflows from developing nations like India

Arguments against maintaining High Forex Reserves

- Low returns on **Forex reserves-** usually around 1% or less due to near zero interest rates in advanced economies,
- **Large infrastructure** financing needs of India to meet development aspirations and utilize young demography.
- It may lead to several **other issues like-**
  - **High opportunity and fiscal costs** of sterilization of liquidity, i.e., unused excessive cash despite development needs, poverty and large youth population,
  - High Forex reserves shows **lack of confidence** from government on: Resilience of its economy; Measures to raise capital (e.g. Disinvestments) or exports (Atmanirbhar Bharat); and Soundness of macroeconomic management.

Way Forward

The level of Forex reserves should include not just present risks and exposures but **India's future aspirations and optimum utilization of resources as well.** In that context, it is important that **maintenance of forex reserves is looked at not only from financial security perspective but also from a broader macroeconomic perspective.**

4.2. BANKING

BANKING AT- A- GLANCE

Key targets

- Promote a **diversified, efficient, and competitive financial system.**
- **Improve the allocative efficiency of resources** through operational flexibility, improved financial viability and institutional strengthening
- **Removing financial repression** through reductions in statutory pre-emptions, while **stepping up prudential regulations** at the same time.

Current Situation

- **15.8%** was the CRAR of Scheduled Commercial Banks (SCBs) in September 2020.
- **7.5%** was the Gross NPA ratio of the SCBs
- **74.4%** was the Provision Coverage Raito (PCR) of SCBs.
- **Expansion in the market borrowing** programme was undertaken by the government due to revenue shortfalls.

Schemes/Policies/Initiatives

- **Enhanced Access and Service Excellence (EASE) 4.0 for PSBs.**
- Platform for Regulated Entities for Integrated Supervision and Monitoring **(PRISM).**
- Creation of **Regulatory Review Authority 2.0.**
- Regulatory reforms including **expansion of the Bank Licensing Framework.**
- **Supervisory** initiatives such as **Prompt Corrective Action (PCA).**

Way Forward

- **Restoration of public sector banks' net worth** through recapitalization where needed.
- **Streamlining of the supervision process** with combination of on-site and off-site surveillance along with external auditing.
- **Introduction of the process of structured and discretionary intervention for problem banks through a PCA mechanism.**
- Institutionalisation of a mechanism facilitating greater coordination for regulation and supervision of financial conglomerates.
- **Strengthening creditor rights**
- Increasing emphasis on **corporate governance.**

Constraints

- **High proportion of NPAs** especially for Public Sector Banks (PSBs).
- **Capital Adequacy** has declined steadily for Indian banks, especially for PSBs.
- **Lack of integration** in different sectors of the financial system i.e., Banks, NBFCs, FinTech sector etc.
- **Limited adoption of technology** especially at the ground level.
- In addition to these, **PSBs also face other problems** like bureaucratization, political interference etc.

4.2.1. REVISED PRIORITY SECTOR LENDING (PSL) GUIDELINES

Why in news?

The Reserve Bank of India (RBI) revised priority sector lending (PSL) guidelines to include entrepreneurship and renewable resources, in line with emerging national priorities.

What is Priority Sector Lending (PSL) and how it works?

The concept of 'Priority sector lending' focuses on the **idea of increasing the lending of the banks towards few specified sectors** and activities in the economy. The banks are mandated to encourage the growth of such sectors with adequate and timely credit.

What has been changed in the revised PSL guidelines?

For this review, RBI considered the recommendations made by the **UK Sinha-led expert committee on Micro, Small and Medium Enterprises** and the **MK Jain led Internal Working Group to Review Agriculture Credit** apart from discussions with all stakeholders. Some of the salient features of revised PSL guidelines are:

- **Fresh categories included** in the PSL category:
    - bank finance of up to ₹50 crore to **start-ups.**
    - **loans to farmers both for installation of solar power plants** for solarisation of grid-connected agriculture pumps.
    - for **setting up compressed biogas (CBG) plants**.
- **Higher weightage** has been assigned to **incremental priority sector credit** in **'identified districts'** where **priority sector credit flow is comparatively low.**
    - Accordingly, from FY 2021-22, a higher weight (125%) would be assigned to the incremental priority sector credit in the identified districts where the credit flow is comparatively lower and a lower weight (90%) would be assigned for incremental priority sector credit in the identified districts where the credit flow is comparatively higher.
- **The targets prescribed for 'small and marginal farmers' and 'weaker sections' are being increased** in a phased manner.
- **Higher credit limit** has been specified for **farmer producer organisations (FPOs)/farmers producers companies (FPCs)** undertaking farming with assured marketing of their produce at a pre-determined price.
- **Loan limits for renewable energy** have been **doubled.**
- For improvement of health infrastructure, **credit limit for health infrastructure** (including those under 'Ayushman Bharat') has been **doubled.**

What are potential benefits from this revision?

- **Provide support to farmers:** Provisions like support for installation of solar power plants and support to small and marginal farmers **provide the requisite financial support farmers**, thus encouraging the agricultural sector.
    - Also, higher credit limit to FPOs/FPCs would encourage development of such institutions.
- **Address regional disparities:** New guidelines have the **potential to address the regional disparities** in the flow of priority sector credit via the new **'identified districts' methodology.**
- **Create environmentally friendly lending policies:** Encouragement to sectors like renewable energy and development of Biogas Plants also aim to encourage and support environment friendly lending policies to help achieve Sustainable Development Goals (SDGs).
- **Health Infrastructure:** The revision in PSL guidelines will incentivise credit flow towards health infrastructure thus providing increased financial space to developing agencies in COVID and post-COVID financial scenario.

4.2.2. INTEGRATED OMBUDSMAN SCHEME

Why in news?

Recently, **Reserve Bank of India (RBI) announced an integrated ombudsman** scheme "**One Nation One Ombudsman**" to improve grievance redressal mechanism for bank customers.

More about News

- **Currently, there are three separate ombudsmen** for banks, non-banking finance companies (NBFCs) and non-bank prepaid payment issuers (PPIs) that are wallets.
- **These are operated by the RBI** from 22 ombudsman offices located across the country.
- Now, the RBI has decided to integrate the three Ombudsman schemes and introduce centralised processing of grievances following **a 'One Nation One Ombudsman' approach.**
- The move is expected to make the ombudsman mechanism **simpler, efficient and more responsive.**

About Bank Ombudsman (BO)

- BO is quasi-judicial authority which is an **Alternate Dispute Redressal mechanism** for resolution of disputes between a bank and its customers.
- It covers grievances of the customers against **Commercial Banks, Scheduled Primary Cooperative Banks and Regional Rural Banks**.
- One can file a complaint before the BO **if** the bank rejects the complaint **or the satisfactory reply is not received from the bank within a period of one month** after the bank concerned has received one's complaint.

Advantages of the Bank Ombudsman

- **Accessible and simple:** Customers are not required to approach the judiciary. This makes grievance redressal under the OBS smoother and accessible.
- **Not bound with the precedents:** Ombudsman can dispense justice without being restricted by precedents. In exceptional situations, the ombudsman can even overlook the technicalities and legal formalities of evidence when settling the contestation between the individual and the bank.
- **Maintaining the financial health:** This is ensured due to strengthening the fiduciary relationship between banks and customers.

Related information

Internal Ombudsman (IO) Scheme, 2018

- It was launched by the RBI to **strengthen the internal grievance redressal system** of banks and ensure the complaints of the customers are redressed at the level of the bank itself.
- The IO is mandated to **examine customer complaints** related to the **deficiency in service** on the part of the bank (including those listed in the BOS 2006**)**.
- **Banks** are mandated to **internally escalate all the complaints which are not fully redressed** to their respective IOs before conveying the final decision to the complainant.
    - Thus, the **customers of banks need not approach the IO directly.**
- **Banks' internal audit mechanism** is required to monitor the scheme apart from regulatory oversight by RBI.

Ombudsman Scheme for Digital Transactions (OSDT)

- RBI launched OSDT in 2019 **under Payment and Settlement Systems Act, 2007.**
- It provides a **cost-free and expeditious complaint redressal mechanism relating to deficiency in customer services in digital transactions** conducted through non-bank entities (like mobile wallets or tech enabled payment companies using UPI for settlements) regulated by RBI.
- **Ombudsman for Digital Transactions** is a senior official appointed by the RBI (appointed for a period not exceeding 3 years at a time).

4.2.3. CHANGES IN BANK LICENSING FRAMEWORK

Why in news?

Recently, the Reserve Bank of India's (RBI's) Internal Working Group (IWG) has suggested revised the licensing norms for the Banking Industry.

What is a Banking License?

According to the **Banking Regulation Act, 1949**, no company in India shall **carry on banking business, unless it holds a license issued in that behalf by the Reserve Bank of India** and any such license may be issued subject to such conditions as the Reserve Bank may think fit to impose.

The licensing arrangement **facilitates the regulation of the sector** by ensuring that the banking activity is seamless and adheres to financial probity and adequate protection is provided to the depositors by the Bank.

What are the suggested changes by the IWG?

- **Large corporate and industrial houses** may be allowed as promoters of banks.
- **Well-run large non-banking finance companies (NBFCs),** with an asset size of Rs 50,000 crore and above, including those which are owned by a corporate house, may be considered for conversion into banks, subject to completion of 10 years of operations.
- Other changes suggested by the report:
    - **Small Finance Banks and Payment Banks:** The panel also suggested that payments banks can convert into small finance banks after three years of operations, potentially benefiting Paytm, Jio and Airtel payments banks.

- **Capping of banks' investment in any new or existing entity to 20%.** However, they may be permitted to make total investments in a financial or non-financial services company, which is not a subsidiary or joint venture or associate up to 20% of the bank's paid-up share capital and reserves.

4.2.3.1. BANKING LICENSE TO LARGE CORPORATE HOUSES

Introduction

This step comes a decade after the global financial crisis, after which **most developed nations turned cautious on this idea.** For instance, in the recent past, **RBI has not been very liberal with banking licenses**. The last two licenses were given seven years ago to IDFC First Bank and Bandhan Bank with a specific objective of achieving financial inclusion. Before these, RBI gave two licenses to Kotak Mahindra Bank and YES Bank.

Potential benefits from implementation of the suggestion

- **Aid in capitalization:** The recommendations could usher in a fresh wave of consolidation in the sector as several lenders are struggling to meet minimum capital norms because of a surge in bad loans. Larger play by private sector in the lending space could help in capitalization of the sector as state's capacity is limited.
  - A direct corollary of capitalization by the private sector would be **decreased pressure on the fiscal balance sheet with regard to recapitalization of PSBs.**
- **Re-entry of India Inc in the Banking Sector:** Many of the biggest industrial groups had aspired for this ever since private players were allowed into banking after 1993. This may help enlarge the Banking industry in India which is nascent when compared at the global stage.
- **Greater Competition:** The entry of corporate players would engender greater competition in the Indian banking sector by increasing the supply of financial products available to the customers.
- **Diversifying banking option for depositors:** Recommendations promote greater access to the country's deposit base, while charting a future course for asset specialists too. Business models that stand on a single solid leg (asset or liability) will see future in partnership or merger.

Potential challenges arising from its implementation

- **The problem of connected lending:** Connected lending happens when promoters of private banks, corporate and industrial houses channel large sums of low-cost depositors' money into their own group companies.
  - **During 1947-58, connected lending practices were rampant in India**. These practices created a scenario where bank failures ballooned, for instance, 361 banks of varying sizes failed in India.
  - Also, over the years, the **potential risks associated with connected lending have increased** manifold because of the quantum leap in size and complexities in corporate India.
- **Circular Banking:** Under circular banking, a corporate-owned bank A would finance the projects of corporate-owned bank B, B would finance the projects of corporate-owned bank C, and C would finance the projects of A, completing the cycle. This creates a backdoor for bypassing the regulations against connected lending.
- **Large stakes:** India follows a bank-based financial system with banking assets accounting for 75% of the total assets held by the financial system. Entry of large corporates into the banking sector could endanger the sector because of governance and financial stability concerns.
  - Further, **corporate ownership of banks would further concentrate economic power** in the hands of a few corporate and industrial houses.
- **Excessive competition could be counter-productive:** There is a growing recognition in academic and policy circles that increased competition in the banking industry may be good for efficiency and innovation but bad for financial stability. The 2008 global financial crisis is a case in point.
  - **Maintaining a fine balance between efficiency levels of competition and financial stability remains a key challenge for bank regulators.**
- **Corporate Governance Issues:** The IWG has admitted that- "the prevailing corporate governance culture in corporate houses is not up to the international standard and it will be difficult to ring fence the non-financial activities of the promoters with that of the bank."
  - In India, incidents of **frauds and defaults are increasing at an alarming rate** across the spectrum. For instance, the Satyam Computer Services scandal reflects the loopholes prevalent in Corporate Governance framework.

Way forward

The IWG recommends that large corporate/industrial houses may be permitted to promote banks only after necessary amendments to the Banking Regulations Act, 1949 to deal with connected lending and exposures between the banks and other financial and non-financial groups.

Alongside this amendment, efforts should be made to ensure that the financial stability of the banking sector is not disturbed and internal reforms within the organizations are nudged, thus moving them towards more honest and robust corporate governance.

4.2.3.2. BANKING LICENSE FOR NBFCS

Introduction

If RBI allows the large industrial houses to convert their NBFCs to full-scale banks, they straightaway will be bigger than many mid-sized banks thus inducing big changes in the banking landscape. This step becomes even more significant in the light of large-scale consolidation of the Public Sector Banks (PSBs).

Potential benefits from implementation of the suggestion

- **The asset liability mismatch issue highlighted by the IL&FS crises:** The current change in thinking in the RBI and the government is also because of the risk large NBFCs pose to the financial system. The debacle of IL&FS and Dewan Housing Finance Corporation Limited (DHFL) has shown that asset liability mismatches could create a problem for the entire financial services sector.
- **Access to deposits:** The access to public deposits which the NBFCs will enjoy after converting to a bank would help the sector riddled with liquidity crunch. This may help resolve the liquidity problems faced by the financial sector as a whole.
- **Opportunity of better oversight:** Major NBFCs with regard to their size of operation deserve to get bank license in the private sector. They are already regulated and supervised by the RBI. Turning them into banks will give RBI the opportunity for greater oversight.

Potential challenges arising from its implementation

- **Associated costs in becoming a bank:** Maintenance of cash reserve ratio, statutory liquidity ratio and cap on promoter shareholding are some of the rules that may make it expensive for NBFCs to become a bank.
- **Possible reluctance of NBFCs:** Indian business houses may not be entirely comfortable with the potential increase in oversight on their group company activities that the banking regulator may have. Increased regulation would mean less freedom and flexibility in conducting business.
- **Poor performance of NBFCs:** In the recent past, the financial performance of NBFCs has not been up to the mark which will make investors skeptical. In this regard, the investor confidence and the potential success of this step is to a large extent dependent on the performance of NBFCs in the next few quarters.

Way forward

Conversion of larger non-banking financial companies (NBFCs) to bank can help through **reduced dependence on wholesale liabilities, better regulatory supervision, timely regulatory intervention** in case of a failure and **asset diversification** in loner run. But this needs to be accompanied by incentives for the NBFC sector and simultaneously governance reforms in the sector to improve investor confidence.

4.2.4. REGULATION OF NBFCS

Why in news?

Recently, the RBI has proposed a significant shift in its regulatory approach towards India's non-banking financial companies (NBFCs).

What is a NBFC and what role does it play in India's Banking sector?

A NBFC is a company registered under the Companies Act, 1956 engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities issued by Government or local authority or other marketable securities of a like nature, leasing, hire-purchase, insurance business, chit business etc.

- **Significance of NBFCs:** NBFCs as a collective play a crucial role in the banking sector by **increasing the penetration of financial products** to unbanked areas, **providing innovative products** for both rural and urban customers, **catering to the need of infrastructure lending** and to **other areas where long term financing is needed.**

- **Status:** In the recent times, the **NBFC sector has seen tremendous growth.** For instance, in last five years alone, size of balance sheet of NBFCs has more than doubled from Rs 20.72 lakh crore (2015) to Rs 49.22 lakh crore (2020). As of now, there are **close to 9,560 NBFCs in India.**

Why is there a need for change in regulation of NBFCs?

- **Threat of systemic risks:** Financial issues faced by key NBFCs like Infrastructure Lending and Financial Services Limited (IL&FS) and Dewan Housing Finance Corporation Limited (DHFL) has **raised the threat of systemic risks** posed by the NBFC sector to the overall financial sector.
  - The crises faced by **IL&FS lowered the credibility of all major NBFCs.** Alongside this, DHFL faced an allegation that its promoters were involved in a scam to siphon of money.
- **Allowing large NBFCs to seamlessly become banks:** Since key NBFCs are to potentially become Banks, there is a need to bring consistency in regulation of Banks and NBFCs, so that the transition of NBFCs to Banks is seamless.
  - For example, if a large NBFC has a Capital Adequacy Ratio (CAR) similar to banks, it would be easier for it transition to become a bank as compared to with a lower CAR.
- **Emergence of FinTech Sector:** Emergence of the Financial Technology sector has changed the way Banking sector operates by creating innovative financial services which do not fit in traditional definitions. In this light, reforms in regulation of NBFCs can bring synergy between seamless operation and interaction of Banks, NBFCs and newly emerging element of FinTech.

What are the changes that RBI has proposed?

Broadly, RBI has proposed to move from a general approach of light touch regulation to one that monitors larger players almost as closely as it does banks. To enable this idea, it has proposed following changes:

- **Creation of four-layer regulatory framework** which includes a Base layer, a Middle layer, Upper layer and a Top layer. The degree of regulation in each sector is proportional to the perception of risk in that sector.
- **Classification change for NPAs:** It has also proposed classification of non-performing assets (NPAs) of base layer NBFCs from 180 days to 90 days overdue.

What would be the potential impact of these changes?

- **Balance between flexibility of NBFCs and the potential systemic risks:** The four-layered structure entails a largely laissez-faire approach for smaller NBFCs, plugging some of the arbitrages available to mid-sized NBFCs vis-à-vis banks, and imposing tougher 'bank-like' capitalization, governance and monitoring norms for the largest players and those which could pose a systemic risk due to the nature of their operations.
- **Improved trust and confidence in the NBFC Sector:** Stricter regulation by RBI alongside early reporting of NPAs will instil confidence in the NBFC market potentially driving up the share prices, attracting more depositors and translation to better credit ratings.
- **Increased transparency in the sector:** The primary issue that the NBFC sector faced was the lack of transparency which created financial risks for the overall banking system. Thus, more transparency in NBFCs via regulatory route would enable seamless flow of information, thus improving the transparency and risk assessment for the whole financial sector.

Conclusion

Given the banking sector's own woes over the past two years (PMC Bank, Yes Bank, Lakshmi Vilas Bank), a holistic reboot of the oversight mechanism for NBFCs and banks is critical to retain confidence and maintain financial stability.

4.3. ASSET QUALITY AND RESTRUCTURING

ASSET QUALITY AND RESTRUCTURING AT A GLANCE

Non-Performing Assets (NPA)

A non-performing asset (NPA) refers to a classification for loans or advances of a bank that are in default or in arrears.They are further sub-classified into sub-standard (NPA < 12 months), doubtful (NPA > 12 months) and loss assets. Development of an NPA crisis creates an impact on following areas-

- **Banking Sector:** It directly impacts the profitability and credibility of the Banking system.
- **Industrial Sector:** It decreases the availability of credit and consequently makes credit expensive.
- **Overall Economy:** Creation of NPAs obstructs the flow of money leading to slowdown in the economy and at times snowballing into a full-fledged economic crisis.

Characteristics of India's NPA problem

- The NPA crisis has been **accompanied with other macroeconomic problems** like slowing economic growth and twin balance sheet issue.
- The crisis is **larger and more broad-based** than India's Banking Sector has ever experienced before.
- **Disproportionate share of Public Sector Banks (PSBs)** i.e., about 9/10th of NPAs are from advances of PSBs.
- The **sectoral share of the NPAs is dominated by the infrastructure** sector followed by Metals and Textiles among others.
- **India's NPA crisis has been one of the worst among affected economies** from the Global Financial Crisis of 2008.

Reasons for emergence of the India's NPA problem

- **Economic Reasons:**
  - **Overoptimism** in relation to the growth experienced in 2006-08 period.
  - **Global Economic Slowdown** post the GFC of 2008.
  - **Structural issues** in the economy such as poor Ease of Doing Business (EoDB).
- **Systemic Reasons:**
  - **Absence of a swift NPA identification** mechanism accompanied with a prolonged policy of **regulatory forbearance.**
  - **Abandoning of projects** due to loss of promoter and banker interest in the project.
  - **Governance issues** such as weak corporate governance and foot-dragging with respect to permissions by government.
- **Ethical Reasons:**
  - **Malfeasance by Bankers** in the form of limited due diligence or outsourcing of analysis.
  - **Fraud by promoters** increases fraudulent tendencies.
  - **Manipulation of the restructuring process** by the promoters.

Steps taken to halt the growth of NPAs

- **Recognition:** Post the Asset Quality Review of 2015, NPA recognition steps include Prompt Corrective Action Framework and Creation of a large credit database among others.
- **Recapitalization** includes Budgetary allocations and schemes like Mission Indradhanush.
- **Resolution:** These include Insolvency and Bankruptcy Code (IBC), Project Sashakt, RBI's framework for COVID-19 related stress and other specific schemes like MSME SAMADHAN.
- **Reform:** Long-term steps for sectoral reformation have been taken such as implying a more robust Credit Risk Management system, widening of powers of RBI and key reforms undertaken for PSBs.

Challenges that still remain

- **Apathy in decision making process** due to risk-averse nature of bankers.
- **Absence of clear accountability** flows creates the issue of moral hazard and inadequate due diligence.
- **Corporate Governance Issues,** especially with PSBs in the form of appointment delays, interference etc.
- **Absence of integrated approach** towards asset quality in the financial sector as the Banking sector, NBFC sector and other elements of financial sector are not viewed together.
- **Growth of the ARCs has not been consistent** and not always been synchronous with the trends in NPAs of banks.

NPA resolution as a catalyst for reformation of the Banking Sector

- **Strengthening the core banking function** by making lending practices more efficient.
- **Enhancing the level of governance** through transparency and creation of clear communication channels.
- **Attitudinal change among all stakeholders** by clearly highlighting that **regulatory forbearance should be an exception and not a staple diet.**
- **Accelerating the use of technology** through tools like Blockchain, Artificial Intelligence etc.
- **Driving integration in the financial system** by addressing the connected issues in the NBFC and FinTech sector.
- **Development of linkages between the industrial sector and the financial sector.**

4.3.1. INSOLVENCY AND BANKRUPTCY CODE (IBC)

Why in News?

This May, the Insolvency and Bankruptcy Code (IBC) completed five years since it was passed by Parliament in 2016.

Assessment of Insolvency and Bankruptcy Code (IBC)

Achievements

- **Reducing the bankruptcy resolution time:** The average time taken for resolution was reduced from **4.3 years in 2017 to 1.6 years in 2020.**
- **Behavioural change for the wider lending ecosystem**: The threat of promoters losing control of the company or protracted legal proceedings is forcing many corporate defaulters to pay off their debt even before the insolvency can be started.
- **Improvement in India's 'ease of doing business' and 'getting credit' rank**: India's rank in ease of doing business improved from 155 in 2017 to 63 in 2020, getting credit rank improved from 62 in 2017 to 25 in 2020 and Starting a business rank improved from 151 in 2017 to 136 in 2020.
- **Rescued corporate debtors in distress:** The code has rescued 348 corporate debtors through resolution plans (21 percent of completed Corporate Insolvency Resolution Process (CIRP)).
- **Resolution of cases:** Out of total 32,547 cases filed under IBC in the NCLT, 19,377 have been disposed of.
- **Continuous updation of the Code:** IBC has undergone six amendments since its enactment introducing provisions such as clarifying the status of homebuyers as financial creditors; reducing the voting threshold of CoC from 75% to 66% etc.

INSOLVENCY AND BANKRUPTCY CODE

- **Covers:** All individuals, companies, Limited Liability Partnerships (LLPs) and partnership firms.
- **The insolvency resolution process can be initiated by any of the stakeholders of the firm:** Firm/ Debtors/ Financial or Operational creditors/ Employees.

Pillars of IBC

Insolvency Professionals (IPs) and insolvency Professional Agencies (IPAs)	Information Utilities (IUs)	Adjudicating Authorities	Insolvency and Bankruptcy Board of India (IBBI)
Class of regulated professionals to act as intermediaries in the insolvency resolution process.	Store facts about lenders and terms of lending in electronic databases and used by the Adjudicating Authority to ascertain 'default'. National E-Governance Services Ltd. (NeSL)is the sole IU registered by IBBI under the Code.	National Company Law Tribunal (NCLT) for insolvency cases of companies and Limited Liability Partnerships (LLPs) and Debt Recovery Tribunals (DRTs) for individuals and partnership firms.	Regulates service providers (IPs, IPAs, IUs) as well as transactions- namely, Corporate Insolvency Resolution Process, Corporate Liquidation, Individual Insolvency, and Individual Bankruptcy.

Challenges that remain

- **Low recovery rates:** Public and private sector banks, non-banking financial institutions, and other financial lenders to companies undergoing CIRP have taken a **cumulative haircut of 61.2 per cent of their admitted claims**.
- **Delays**: Among the 13,170 IBC cases pending with the NCLT, 71% of these cases have been pending for more than 180 days. This happens to delays caused at various stages, which causes several issues like-
    - **Delays in admission of cases in NCLT**: During this time the company remains under the control of the defaulting owner enabling value shifting, funds diversion, and asset transfers.
    - **Delays due to unsolicited, late bids**: It creates tremendous procedural uncertainty which discourages genuine bidders from bidding at the right time.
    - **Delays due to appeals**: NCLT judgments are litigated continuously in the NCLAT and Supreme Court further delaying resolution and recovery.
- **Staffing and infrastructure issues in NCLT**: More than 50% of the sanctioned strength in NCLT is lying vacant (vacancy of 34 members, including the President, against the total of 63).
- **Need for strengthening homebuyer rights**: According to a 2018 amendment to the IBC, a minimum of 100 home buyers, or 10% of the total flat purchasers, are needed for initiating the process.
    - However, homebuyers are facing practical difficulties in gathering the required number of home buyers to initiate insolvency Proceedings against the real estate owner.

- **Lack of flexibility**: The resolution professional does not currently have the flexibility with in the IBC to dispose of the corporate defaulter across multiple bidders.
- **Presence of multiple IPAs for regulating IPs** which results in absence of appropriate standards for selection process and conduct of the resolution professionals.
- Other issues:
  - Absence of **provisions for cross-border insolvency resolutions**
  - **Lack of uniformity** in decision making process of the **CoC.**
  - **Need for data relating to IBC cases** in granular form for researchers and analysts.

Way forward: Recommendations for reforms

The parliamentary standing committee on finance recommended following reforms for efficient functioning of IBC-

- **Setting benchmark for the quantum of haircuts allowed** as per global standards.
- **Formulating a professional code** for the CoC, who take over a company in distress.
- **A single professional self-regulatory body** that functions like the Institute of Chartered Accountants of India (ICAI) may be established to oversee and regulate the functioning of RPs so that there are appropriate standards and fair self-regulation.
- **Adoption of UNCITRAL (United Nations Commission on International Trade Law) Model Law on Cross border insolvency:** in Indian context to provide internationally competitive and comprehensive insolvency framework for corporate debtors under the Code.
- **Conducting an analysis of the requirement of capacity in dealing with projected cases** in the next three- four years to suitably plan recruitment process in advance.
- **NCLT and NCLAT should completely digitize their records and operations** with provision for virtual hearings to get through the backlog and deal with the pending cases swiftly.
- **Strengthening home buyer rights:** For instance, once a single homebuyer decides to initiate insolvency Proceedings in NCLT, the real estate owner should be obligated in the Rules/ Guidelines to provide details of other home buyers of the project to the concerned homebuyer so that the required 10% or 100 homebuyers can be mobilised.
- **National Law Schools should be involved in the NCLT system** so that they can conduct academic research, develop suitable case-based training materials, and provide appropriate support through law clerks etc.

4.3.1.1. PRE-PACKAGED INSOLVENCY RESOLUTION

Why in News?

The Parliament recently passed the **Insolvency and Bankruptcy Code (Amendment) Bill 2021**, allowing the use of "pre-packs" to resolve insolvency proceedings involving micro, small and medium-scale enterprises.

What is Pre-packaged insolvency resolution?

- A pre-packed insolvency resolution mechanism is a **process wherein a resolution arrangement is agreed upon between the distressed corporate debtor (CDs) and lender before approaching the National Company Law Tribunal (NCLT)** for bankruptcy proceedings.
- It gives legal sanction to a plan agreed among banks, promoters and the buyer.
- It follows a **debtor-in-possession model**.
- **Protection against Fraudulent activities/mismanagement**: The CoC can, with a 66 per cent vote share, make an application for change in the management of the company and pass control to the resolution professional. This can be done if CoC finds that the company is being run in a fraudulent manner or there has been gross mismanagement of company affairs by the promoter.
- **It allows for a Swiss challenge to the resolution plan submitted by a CD** in case operational creditors are not paid 100 per cent of their outstanding dues.
- Under it, any **third party would be permitted to submit a resolution plan for the distressed company** and the original applicant would have to either match the improved resolution plan or forego the investment.

Differences between PIRP and Corporate Insolvency Resolution Process (CIRP)

Criteria	PIRP	CIRP
Control of the firm during insolvency process	Debtors remain in control of their distressed firm.	Company is managed by the resolution professional.
Deadlines	To be completed within a period of 120 days of the commencement date.	To be completed within a period of 270 days of the commencement date.
Process of resolution of the debt	Distressed company enters into direct agreement between secured creditors and the existing owners or outside investors.	Resolution through open bidding system.

Benefits of PIRP

- **Quicker, cost-effective insolvency resolution process**: Being a debtor-initiated process, it is expected to involve less legal disputes, reduce the cost of bankruptcy proceedings in court and provide faster resolution than a CIRP.
- **Least disruptive to the businesses**: The creditors and business owners along with interested buyers are better suited to make these crucial business decisions than resolution professionals in courts.
- **Reduced burden of benches of the National Company Law Tribunals**: The new amendment could help bankruptcy courts, which were already struggling to deal with pending cases and a flood of new cases owing to the pandemic.

Possible issues in implementation

- **Uncertainty:** Initiation of PIRP can worsen in the behaviour of its suppliers, workers, creditors and so forth who begin to feel uncertain about the future. For instance, suppliers may stop sending supplies as the creditworthiness of the business becomes doubtful.
- **Challenging for CoC members to decide on the Base resolution Plan:** within the prescribed short period without any broad parameters on which the Resolution Plan be approved.
- **CD may not raise additional capital or debt from Investors or Banks:** Due to the risks involved, the Corporate Debtor may find it challenging to bring new investor and raise fresh equity at a level which can reduce the debt at a sustainable level.

4.3.2. RESTRUCTURING OF LOANS

Why in News?

Recently, Reserve Bank of India (RBI) appointed K V Kamath committee submitted its report on resolution framework for bank loans which were stressed on account of the COVID-19 pandemic.

About Loan restructuring

- It is a process **used by companies and individuals facing financial distress or on the brink of insolvency** to lower and renegotiate their debts and restore liquidity so that companies can continue their business.
- Basically, loans are restructured to avoid the risk of default on existing debt. **The restructuring enables borrowers to** reschedule their loan payment, get a limited loan repayment holiday, or lower interest rates on their existing loans.

Key Findings/Suggestions made by the Committee

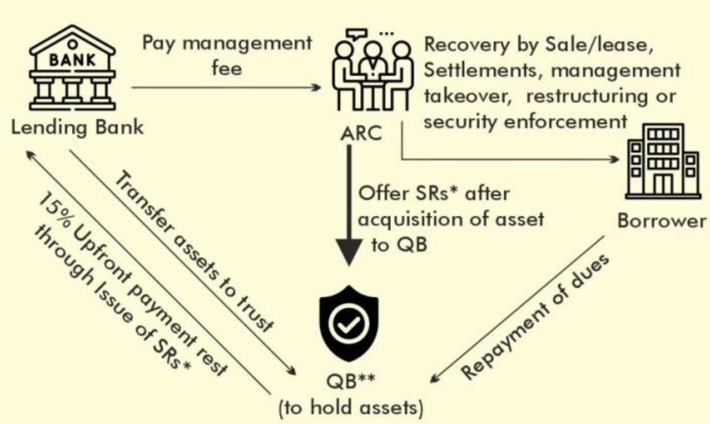
- It recognizes that **COVID-19 pandemic has affected the best of companies**, these businesses were otherwise viable under pre-COVID-19 scenario, its impact is pervasive across several sectors but with varying severity – mild, moderate, and severe.
  - A segmented approach of **bucketing these accounts under mild, moderate, and severe stress, may ensure quick turnaround.**
- **About 70% of banking sector loans have been impacted** due to the COVID-19 pandemic, adding that about 45% were stressed even before the pandemic, and only 30% is impacted due to COVID-19 and the consequent lockdown.
- The Committee identified financial **ratios related to solvency, liquidity, and coverage for assessment of resolution plans.**
  - **Solvency ratios** (such as total debt to earnings before interest, depreciation and tax ratio) denote the ability of a company to meet long-term financial obligations.

- ○ **Liquidity ratio** or current ratio denotes the ability to meet short-term obligations.
- ○ **Coverage ratio** (such as debt service coverage ratio) denotes the extent to which cash flow can cover debt payments (in a given time period).
- Based on the outstanding and the severity impact, the **Committee selected 26 sectors including power, construction, NBFCs and real estate,** for the purpose of recommending financial parameters to be factored in the Resolution plan.

4.3.3. NATIONAL ASSET RECONSTRUCTION CO. LTD. (NARCL)

Why in News?

Recently, RBI gave Asset Reconstruction Company (ARC) license to **NARCL**, set up with the aim of cleaning up the **bad loans** from bank books.



Working of ARCs

*SR or Seurity receipt is a receipt/security, issued by an ARC to any QBs on purchase/acquisition of an undivided right, title or interest in the financial asset
**QB or Qualified buyer represents the corporate entities like FIs, Insurance Company, Bank, Trustee,AMC etc. or any category of non-institutional investors specified by RBI or by SEBI

About Asset Reconstruction and ARC

- Asset reconstruction is defined as the **acquisition of banks/financial institutions right or interest in any financial assistance** by an ARC for realization of such financial assistance.
- So, ARCs or bad bank are the **specialized agencies** which facilitate bad loan resolution for banks by **buying the debtors of the bank** at a mutually agreed value and attempts to recover the debts or associated securities by itself; making its own profit by **selling the loan at a price higher** than what it paid to acquire the loan.
- In India, ARCs are incorporated under the **Companies Act** and registered with RBI under **section 3** of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest **(SARFAESI), Act 2002.**
- ARCs need to maintain a **minimum NOF (Net Owned Fund) of Rs 100 crore and a capital adequacy ratio of 15%** of its risk weighted assets.
  - ○ **Asset Reconstruction Company (India) Ltd or Arcil,** was **first ARC of India** set up in 2002 by four banks- SBI, ICICI Bank, PNB and IDBI Bank.

Potential benefits of NARCL

- With existing **ARCs** not adequately capitalized to deal with huge NPA problem of banks, **NARCL can help banks in reducing NPAs,** yielding other benefits as well like-
  - ○ Allowing banks to focus on **normal banking functions,**
  - ○ Improved lending's to productive sectors for **faster economic recovery,**
  - ○ Help government in **banks privatization** with **improved PSBs valuations.**
- **Opportunities for other ARCs at MSME's level:** NARCL will reconstruct assets only where the total exposure of the banking sector is **more than ₹500 crore**. With limited capitalization of other ARCs, they can focus at huge business opportunities in retail and MSMEs with stressed assets aggregating about ₹1 lakh crore.
- **Aggregating debt:** Set up of NARCL will help in addressing the problem of contradictory views (lack of consensus) among different lenders, allowing debt recasts.
- **Unrealized Potential:** Despite different ways to solve problems or flexibilities in working, the potential of ARCs is not fully realized in India due to lack of funding, limited number of qualified professionals or other limitations. With government-backed guarantees (for 5 years), NARCL entry can bring new culture and values in sector.
- **Promote Competition:** Assets allocated to NARCL will go through '**Swiss challenge**', i.e., giving other ARCs an opportunity for highest evaluation. It will promote competition and help banks in overcoming valuation concerns through maximum recovery.

Challenges with NARCL

- **Risk of Moral Hazard:** Shifting of NPAs without accountability risks moral hazard of reckless lending which can further amplify the problem.
- **Lack of Urgency:** For **restructuring and turning around** of bad loans, NARCL need **separate Asset Management Company** (proposed as India Debt Management Agency or IDMA. But no steps are taken for its establishment yet.
- **Qualified Professionals:** India lacks adequately trained manpower.
- **Mere Shift of Bad Asset:** With PSBs as stakeholders and at top positions, NARCL risks the mere shift of bad loans from government owned banks book to government backed NARCL.
- **Capital Requirements:** With 15% upfront payment needs, NARCL will require capital somewhere between **₹ 6,500-7000 crore** to resolve **₹ 89,000 crore NPAs.**

What makes NARCL different from other Asset Reconstruction Companies (ARCs)?

Other ARCs	NARCL
▪ Private companies which limit the assets transfer from PSBs because of fears related to investigation. ▪ Buy assets at a steep discount from actual loans with low recoveries. ▪ Except few, most are thinly funded as they largely borrow funds from banks and face various issues like different compulsions from different lenders, which delays whole process.	▪ With PSBs as main stakeholders and government backing, assets transfer can happen more freely. ▪ Allows Swiss Challenge to get best for banks from stressed asset. ▪ Designed on international experiences of government backed ARCs in South Korea, Sweden and US, NARCL won't have capital issues and it can aggregate bad loans for faster reconstruction.

Other issues with ARCs

- **Lack of flexibility in controlling structure of an ARC,** as they are either owned by the private parties or the bank (i.e. not by the government) with **restrictions on a controlling stake and minimum investment by a single party**.
- **Regulatory ambiguity** in functioning of ARCs. For ex: Insolvency and Bankruptcy Code, 2016 (IBC) has provisions for submission of 'resolution plans' by financial entities (including an ARC), the SARFAESI Act **does not explicitly permit ARCs to 'invest' in or acquire equity in firms**.

Way Forward

Based on past failures and the existing issues, Indian ARCs need to have more teeth to deal with the huge bad loan issue through major reforms like:

- **Amending SARFAESI Act to close regulatory gap between it and IBC.**
- **Setting up of a Distressed Loan Sales Trading Platform** for receiving bids for NPAs for better price discovery.
- **Governance reforms in the banks**: There is a need for reforms in critical governance pillars such as the conduct and operations of risk management departments in financial institutions, auditors, boards, rating agencies, independent analysts and regulatory supervisors.
- **Preparing a panel of sector specific management firms/individuals** having expertise in running firms/companies which could be considered for managing the (acquired distressed) companies.
- **Relaxation in controlling structure norm** to encourage more private entities in this sector, bringing more specialists and depth into the asset reconstruction for greater competition and transparency.
- **Learning from international experiences** like **Malaysia post Asian crisis** to address **crucial design imperatives** like-
    - **Effective management:** The ARC has to be manned by seasoned distressed debt management professionals.
    - **Fair price for asset purchases:** The transfer of stressed assets to the ARC has to be at just right price neither too high, nor too low, ensuring that resolution process is neither impaired, nor any supernormal profits accrue to any stakeholder.
    - ARC should have a **pre-defined, limited shelf-life** with **support from stakeholders.**

4.4. PAYMENT SYSTEMS

Key targets

- Providing **real-time, secure, accesible and easy payment** mechanisms.
- The transfusion of one form of payment to another is seamless, thus envisaging an **integrated payment system.**
- **Creating institutional, digital and physical infrastructure** to manage and sustain high transaction volumes.
- Making the **transaction costs as low as possible.**

Current Situation

- **89%** of all the transactions in volume are still cash-based.
- **50% volume** of India's digital payments is dominated by Debit Cards, PPIs and IMPS.
- **53% value** of India's digital payments is dominated by RTGS and NEFT.
- **22.4 digital transactions** were happening per capital in 2019 (from 2.4 in 2014).
- **261 banks** are currently live on the NPCI-UPI platform.

Schemes/Policies/Initiatives

- NEFT, RTGS, Credit Cards, Debit Cards
- NPCI products- UPI, IMPS, RuPay, Bharat Bill Pay, etc.
- Payments Infrastructure Development Fund (PIDF) by RBI
- Reserve Bank of India (Digital Payment Security Controls) directions, 2021
- Rationalisation of Merchant Discount Rate (MDR)
- Regulatory Sandbox (RS) initiative of RBI which has currently covered Digital Payments, Cross border Payments and MSME Lending.

PAYMENT SYSTEMS AT- A- GLANCE

Way Forward

- Need of **Single Regulatory mechanism** for the system.
- Providing more option for **off-line payments through mobile devices.**
- **Digital Payment Awareness** along with Financial Literacy.
- To measure the adoption of digital payments, **geo-tagging can be used.**
- Increased **coordination among regulators.**
- **Internet penetration, financial education, financial inclusion, and growth in payment systems** need to be pursued in tandem.

Constraints

- Migration of the economy from predominantly a cash-based to a **predominantly digital has only gradual acceptance.**
- **Lack of Digital Financial Awareness** and Digital Financial Literacy.
- Less digital payment products for the **non-smartphone users.**
- **Customer Protection** and Security of Digital Payments.
- Issue of **cost and connectivity** especially in the hinterland.

4.4.1. DIGITAL PAYMENT ECOSYSTEM

Why in news?

Reserve Bank of India (Digital Payment Security Controls) directions, 2021 has been published to strengthen India's digital payments architecture.

About Reserve Bank of India (Digital Payment Security Controls) directions, 2021

- Directions are issued to set up a **robust governance structure and implement common minimum standards** of security controls for digital payment products and services in following way.
- **Applicability:** Applicable to Regulated Entities (REs) **scheduled commercial banks, small finance banks, payment banks and credit card-issuing NBFCs**.
  - It is also applicable to **third-party payment applications, payment operators and gateways.**
- **Under the directions**
  - **REs shall formulate apolicy with approval of Board** for digital payment products and services.
  - REs shall **implement multi-tier application architecture**, **segregating application, database and presentation layer** in the digital payment products and services, by following 'secure by design' approach.
  - REs shall have **Fraud Risk Management.**
  - A **real time/ near-real time reconciliation framework** for all digital payment transactions between RE and all other stakeholders.
  - **Customer Protection, Awareness and Grievance Redressal Mechanism.**
  - **Internet banking, Mobile payments application, Card payments security controls.**

About Digital Payment Ecosystem in India

- **Payment and Settlement Systems Act, 2007 (PSS Act, 2007) defines Digital Payments/electronic funds transfer**.
- Digital payment can be done by different modes like **NEFT, RTGS, IMPS, debit and credit cards, UPI** etc.
- In India **volume segment of digital payments is dominated by Debit Cards, PPIs and IMPS** and constitute close to 50 % of the total volume.
- While, **value segment is dominated by RTGS and NEFT** and constitute about 53 % of the total value of Digital Payments.
- **Digital transactions per capita** increased from 2.38 transactions per capita in financial year 2014 to **22.42 in financial year 2019.**

Challenges in digital payment ecosystem

- **Technological:** Lack of integration of online payment systems run the across hardware and software platforms results in processing and payment delays, lost transactions, and expensive fees.
- **Security:** Digital transactions are vulnerable to cybercrimes and risks for data theft is the biggest concern.
  - Hacking and security breaches can cause financial loss of consumers and reputational loss for the company.
- **Infrastructure:** Small Service providers **don't have enough resources** to invest in electronic payment infrastructure. (E.g., Point of Sales machines).
  - A report by Nielson in 2019 concluded that **70% of the rural population does not have an active internet facility** with states like West Bengal, Bihar, Jharkhand, and Odisha having the lowest internet penetration.
- **Digital illiteracy:** According to NSSO data, only **4.4% of rural households and 23.4% of urban** households own computers, while out of this **42% of urban households have a computer with an internet** connection and **only 14.9% of rural households**.
- **Transaction charges and Merchant discount rate:** Transaction charges for consumers and MDR for retailers is seen as the additional tax, hence they hesitate to prefer digital mode of transaction.

Further initiatives required to improve digital payments ecosystem

- **Standardization of devices and browsers:** It is needed to make payments uniform across all kinds of browsers, devices, and gateways and engage the confidence of users in digital payment systems**.**

- **Awareness and education:** Many consumers are still wary about using digital payments and technology; hence companies need to educate their customers on the security advantages of digital payments in more traditional manner.
- **Internet and mobile phone accessibility:** Currently, internet and mobile phones accessibility at rural and remote areas is poor, hence government and stakeholders involved needs to take initiatives in improving internet penetration.
- **Incentives and rewards:** More consumers will switch to digital payments if they receive higher rewards and redeeming rewards with simplicity and faster.

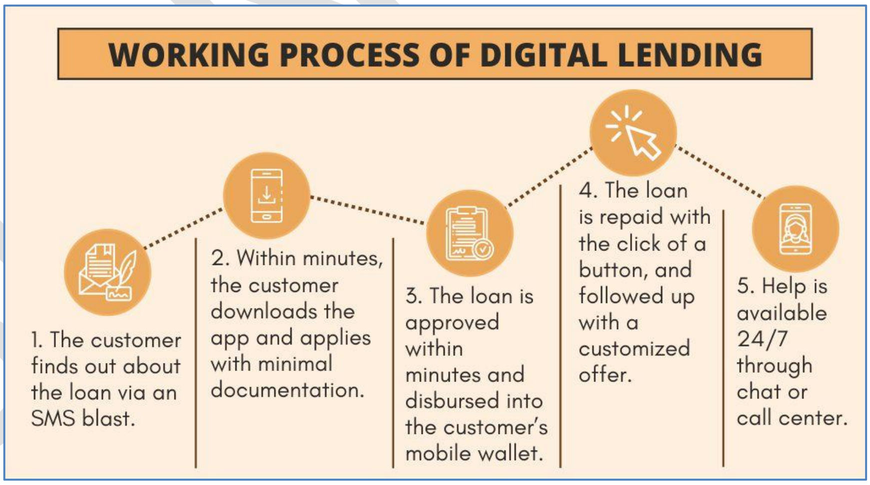
Various initiatives taken to promote digital payments

- **Payment and Settlement Systems (PSS) Act 2007:** It **provides for the regulation and supervision of payment systems in India** and designates RBI as the authority for that purpose and all related matters.
- **Rationalisation of Merchant Discount Rate (MDR)**
    - MDR is the rate **charged to a merchant for the payment processing of debit and credit card** transactions.
- **Payments Infrastructure Development Fund (PIDF) by RBI** to encourage acquirers to deploy Points of Sale (PoS) infrastructure.
- **DigiShala:** Free Doordarshan DTH educational channel for creating awareness regarding various forms of electronic payment.
- **Vittiya Saksharta Abhiyan:** It aims to actively engage the youth/ students of Higher Education Institutions to encourage and motivate all payers and payees to use a digitally enabled cashless economic system for transfer of funds.
- **E-RUPI:** e-RUPI" is an **electronic voucher based digital payment system** which is **person-specific and purpose-specific payments system.**
- **Card Tokenization: Tokenization refers to replacement of card details with an alternative code called a 'token',** which is unique for a combination of card, token requestor (the entity that accepts a request from the customer for tokenization of a card and passes it on to the card network to issue a token) and the device.

4.4.2. DIGITAL LENDING

Why in news?

The Reserve Bank of India (RBI) has constituted a working group on digital lending.



More about news

- RBI had earlier clarified that **legitimate public lending activities can be undertaken by banks, non-banking financial companies (NBFCs) registered with RBI** and other entities that are **regulated by the State governments under statutory provisions,** such as the money lending acts of the States concerned.
- Further the RBI mandated digital lending platforms used on behalf of banks and NBFCs to **disclose name of the bank or NBFC upfront to the customers.**

About digital lending

- Digital lending is the **process of offering loans that are applied for, disbursed, and managed through digital channels**, in which lenders use digitized data to inform credit decisions and build intelligent customer engagement.
- The digital lending ecosystem is **complex and evolving**. Around the world, **digital lending models (see infographic)** are characterized by distinct market structures, regulatory environments, and customer needs.
- In India government already created **stack of public digital identity, payments, and documentation infrastructure,** which conducive to digital lending.
- Also, **Aadhaar Enabled Payments System (AEPS) and highsmartphone penetration and a focus on digital India programme** adds complements to India's enabling regulation.

How digital lending will impact financial service ecosystem in India?

- **Efficiency and reach:** Digital lending are enabling financial service providers (FSPs) to offer better products to more underserved clients in faster, fair, efficient and inclusive manner.
- **Innovation and competitiveness:** Cost-efficiency gains from FinTech models drive product innovation, which will diversify and specialise business models to target wider markets. Also, it will increase participation of non-traditional players.
- **Credit risk management:** Enhancements to underwriting/ credit models using data from non-traditional data sources will improve robustness in credit risk management.
- **Ecosystem of growth and partnership:** Supportive and collaborative regulators will aid further growth of the FinTech ecosystem in convenience of segmentation, targeting and positioning (STP) online models and consumers to increase financial inclusion and mobile penetration.

DIGITAL LENDING MODELS

Online Lender
FSPs that provide end-to-end digital lending products via a website or mobile application.

P2P Lender
Digital platforms that facilitate the provision of digital credit between many borrowers and lenders, typically playing an ongoing central role in the relationship between these parties.

e-Commerce and Social Platforms
Digital platforms wherein credit is not their core business, but that leverage their digital distribution, strong brand, and rich customer data to offer credit products to their customer base.

Marketplace Platforms
Digital platforms that originate and match one borrower with many lenders for an origination fee; the lender and borrower then enter into a bilateral agreement.

Supply Chain Lender
Non-cash digital loans for specific asset financing, invoice financing, or pay-as-you-go asset purchase within a supply chain or distribution network.

Mobile Money Lender
Partnership model wherein lenders work with mobile network operators (MNOs) to offer mobile money loans to their customer base, leveraging mobile phone data for scoring.

Tech-enabled Lender
Traditional FSPs that have digitized parts of the lending process, either in-house or through partnerships.

What are the challenges faced by the digital lending ecosystem in India?

- **Unauthorised digital lenders:** There are cases about individuals and small businesses falling prey to a growing number of unauthorised digital lending platforms/mobile apps.
- **Over-indebtedness and NPA:** Taking out multiple simultaneous loans due to ease of access, limited or no evaluation of capacity to repay, limited customer understanding, could lead to over-indebtedness of consumers and NPA of lenders.
- **High interest rates and aggressive collection:** Unauthorised digital lending platforms are charging excessive rates of interest and high-handed recovery methods.
- **Data privacy:** There are concerns raised about misuse of agreements to access data on the mobile phones of the borrowers by digital lending platforms.

How Digital/FinTech lending help in accessing underserved markets?

Limitations of access to underserved markets	How FinTech lending overcomes the limitations
Requirement for **physical verification and high costs.**	Utilises **digital footprint as a substitution for physical documents** for verification and/or **usage of third-party** data (e.g. e-commerce) in order to define eligibility, **which lowers operational costs** compared to conventional lending.
The underwriting process requires a **credit history or proof of a steady income or an asset-based collateral.**	Processes the **underwriting assessment** through **digital processing platform with various data points,** to identify **typical attributes for interest rates** to be charged, without prior collateral.
Cooperatives are relatively **small in size** and **lack of competitiveness** to attract money suppliers in the market.	Developed a **simple and convenient platform** for attracting investment, as most of the **processes are completed through digital platforms,** which attracts large number of potential lenders.
Risk of irrational credit and limited funding opportunities	Customised **credit assessment models,** which employ **behavioural data to identify typical attributes for charging interest rates,** supported by large amounts of funding from retail and institutional lenders.

How challenges in digital lending ecosystem can be tackled?

- **National Lending Corporation (NLC):** An umbrella body NLC focused on regulation over lending on line of the National Payments Corporation of India (NPCI) needs to be formed under the oversight of RBI.
- **Use of technology:** Application of artificial intelligence, machine learning, and blockchain in the lending space should be increased to evaluate capacity of consumers to overcome problem of Over-indebtedness and NPA.
- **Financial literacy:** It is vital to make aware consumers about frauds by unauthorised digital lenders and understand the digital lending ecosystem well.

- **Data protection:** There must be clear guidelines to ensure data security, privacy and confidentiality of consumers.
- **Code of conduct:** Digital lenders should proactively develop and commit to a code of conduct that outlines the principles of integrity, transparency and consumer protection, with clear standards of disclosure and grievance redressal.

4.4.3. NEW UMBRELLA ENTITY

Why in News?

Recently, Reserve Bank of India (RBI) extended the deadline to apply for NUE (New Umbrella Entity).

About NUE

- **Objective is to** set up new pan-India umbrella entity / entities **focusing on retail payment systems.**
- NUE will be **authorized under the Payment and Settlement Systems Act, 2007** and shall be a company incorporated under the **Companies Act, 2013.**

Scope of Activities

- **It will set-up, manage and operate new payment system (s)** in the retail space comprising, but not limited to ATMs, white label PoS, Aadhaar-based payments and remittance services, among others.
- It will **develop new payment methods**, standards and technologies; monitor related issues in the country and internationally.
- It will **take care of developmental objectives** like enhancement of awareness about the payment systems.
- **It will operate clearing and settlement systems** for participating banks and non-banks, **identify and manage relevant risks**, monitor retail payments system developments and related issues in the country and internationally.

Need for NUEs

To prevent monopoly and concentration risk	To reduce dominance of NPCI	To bring more people into digital payments channel
Currently, National Payments Corporation of India (NPCI) is the sole umbrella organisation for operating retail payments and settlement systems in India.	NPCI which controls over 60% of retail payments, has become 'too big to fail'.	As digital transactions are more transparent and tax authorities can keep an eye on money movement, unlike cash exchanges.

Benefit of the move

- **More such entities willencourage competition** and will offer more retail payment solutions to customers.
- **NUE will offer innovative payment systems** to include hitherto excluded cross-sections of the society and will also enhance access, customer convenience and safety.
    - Just like NPCI runs UPI, IMPS and other payment modes, the NUEs will create similar mechanisms which will then be used by banks and fintech companies.
- Entities planning to establish these NUEs **aim to get an even bigger share in the digital payments sector**.

4.4.4. DIGITAL CURRENCY

Why in News?

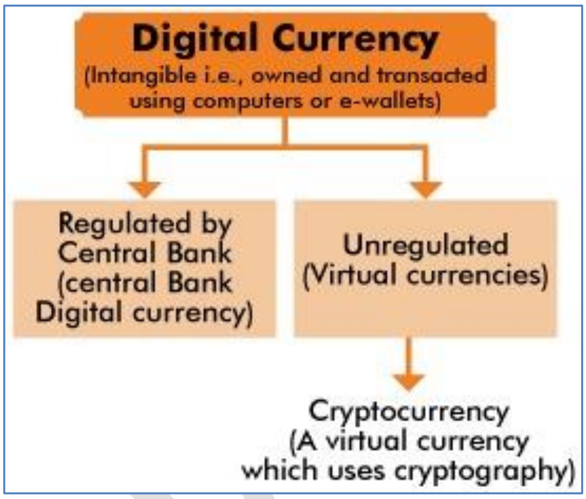
Recently, China has floated its own Central Bank backed digital currency, namely eCNY in selected cities on a trial basis.

What is a Digital currency?

In the broadest sense, a digital currency is a form of currency that is available only in digital or electronic form, and not in physical form. It is also called **digital money, electronic money, electronic currency, or cyber cash**.

What are potential benefits of using a Central Bank Digital currency?

- **Transactions are low cost:** As payments in digital currencies are made directly between the transacting parties without the need of any intermediaries, the transactions are usually instantaneous and low-cost.
- **Increased safety of the financial system:** Allowing individuals, private sector companies, and non-bank financial institutions to settle directly in central bank money (rather than bank deposits) significantly reduces the concentration of liquidity and credit risk in payment systems.
- **Encourage competition and innovation in the payment systems**: Digital currency would create a level playing field in the payments sector, which could encourage multiple start-ups and development of new products in the sector.
- **Improve financial inclusion**: Digital Cash Account Providers are likely to reach the segments which are currently excluded from conventional banking services.



- **Possibility of a better directed monetary or fiscal policy**: Digital currency provide an opportunity to authorities to issue currency with additional conditions. For instance, these currencies can enable direct handouts of money that expire if not used by a particular date and can make it easier for governments to track financial transactions to stamp out tax evasion and crackdown on dissidents.

What are the challenges that may arise in adoption of digital currencies?

- **Privacy issue:** Central banks would have increased control over money issuance and greater insight into how people spend their money, this data can potentially affect the privacy of the users.
- **Cybersecurity threats:** Transactions in digital currencies removes Banks as intermediaries which makes users all the more vulnerable to cyber frauds and increases the fragility of the overall system.
- **Need for large-scale digital infrastructure:** Floating a digital currency requires pre-requisites such as large-scale internet penetration, reliable network infrastructure and handling capacity for large scale data such as data centres among others.

How has Indian dispensation responded to developments regarding digital currency?

In India, despite government threats of a ban, cryptocurrency transaction volumes have been rising and about 8 million investors now hold 100 billion rupees ($1.4 billion) in crypto investments. User registrations and money inflows at local crypto exchanges such as ZebPay, Unocoin etc. have been soaring especially in the last 2-3 years.

In this context of large demand for digital currencies, following steps have been seen-

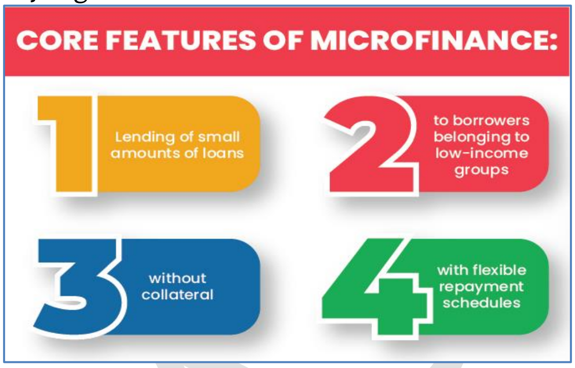
- The **Reserve Bank of India** voiced its **concern against cryptocurrencies**. At the same time, moving forward for developing its own digital currency.
- In this context, the Government of India is mooting a **law to ban mining, trading and holding of cryptocurrencies.**
    - Also, further tightening the regulatory regime, the **Ministry of Corporate Affairs (MCA)** has made amendments to rules in the Companies Act, **mandating firms to disclose their investments in cryptocurrencies.**
- The measure is in line with a **government agenda** that called for **banning private virtual currencies such as bitcoin** while building a framework for an official digital currency.

4.5. OTHER DEVELOPMENTS

4.5.1. MICROFINANCE REGULATIONS

Why in news?

The Reserve Bank of India (RBI) has proposed a new regulatory regime for microfinance with uniform set of guidelines for all lenders.



About Microfinance

Microfinance is a **form of financial service which provides small loans and other financial services to poor and low-income households** to enable borrowers to work their way out of poverty by undertaking income generating activities.

Overview and background

- Indian microfinance sector has **witnessed phenomenal growth over past two decades** in terms of increase in both the number of institutions providing microfinance and quantum of credit made available to the microfinance customers.
  - Currently it is **serving around 102 million accounts** of the poor population of India.
- However, as the sector grew, certain inadequacies and failures became apparent culminating in the **Andhra Pradesh microfinance crisis in 2010.**
  - This crisis was attributed to the irrational exuberance of some MFIs who, in their eagerness to grow business, had given a go by to the conventional wisdom and good practices such as due diligence in lending and ethical recovery practices.
- In the wake of this crisis, RBI constituted **Y H Malegam Committee** to study issues and concerns in the MFI sector.
  - Based on the recommendations of the Malegam Committee, RBI introduced a **comprehensive regulatory framework for NBFC-MFIs in 2011.**

This comprehensive regulatory framework is however, **applicable only to NBFC-MFIs, whereas other lenders, which comprise of around 70 per cent share in the microfinance portfolio, are not subjected to similar regulatory conditions.**

The RBI is therefore now proposing **a single uniform set of regulations for all Regulated entities (REs) of RBI operating in the microfinance sector**.

Need for review of the current regulatory framework

- **Over-indebtedness of borrowers:** Current regulations which do not permit more than two NBFC-MFIs to lend to the same borrower give space to other lenders. As a result, small borrowers are increasingly able to get multiple loans from several lenders, contributing to their over-indebtedness leading to difficulties in repayments and forced recoveries.
  - The recommendation of **linking the loan amount to household income in terms of debt-income ratio** is to ensure that the household is not strained.
- **Creating a level playing field:** Prevailing regulations on interest rate ceiling has been keeping the interest rates at a higher level for NBFC-MFIs. As a result, lending rates of banks also hover around this ceiling rate, despite comparatively lower cost of funds.
  - The removal of capping on interest rate of NBFC-MFIs could enable the market mechanism to bring the interest rates downwards in the microfinance sector.
- **Increasing accessibility of microloans by withdrawing the need for collateral:** Low-income borrowers often lack the type of collateral often preferred by the lenders and what they have for pledging, instead is of little value for the lenders but is highly valued by the borrower (e.g. household items, furniture, etc.).

- **Obviating the dependency on informal sources of credit:** Committee on Comprehensive Financial Services for Small Businesses and Low-Income Households' had recommended that over-emphasis on income-generating loans may drive the borrowers towards more expensive informal loans for fulfilling their entire financial needs.
    - Therefore, limits regarding minimum 50 per cent of loans for income generation purpose, which are presently applicable only to NBFC-MFIs, are proposed to be withdrawn.
- **To prevent trickling down of the risks:** Section 8 companies are dependent for their funding needs on public funds including borrowings from banks and other financial institutions. Due to their interconnectedness with other financial intermediaries, any risk arising out of their business can get transmitted to the financial sector. Thus, companies having asset size more than 100 crores are not exempted from RBI regulations.

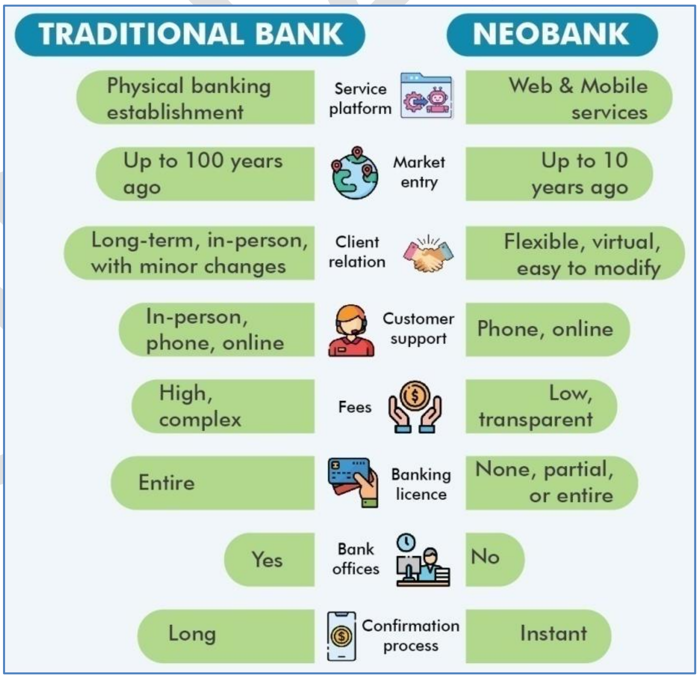
Conclusion

Microfinance is doing very well, and RBI's forward-looking ideas for updating its regulatory framework can further secure the foundations for this weapon to fight poverty.

4.5.2. NEO-BANKS

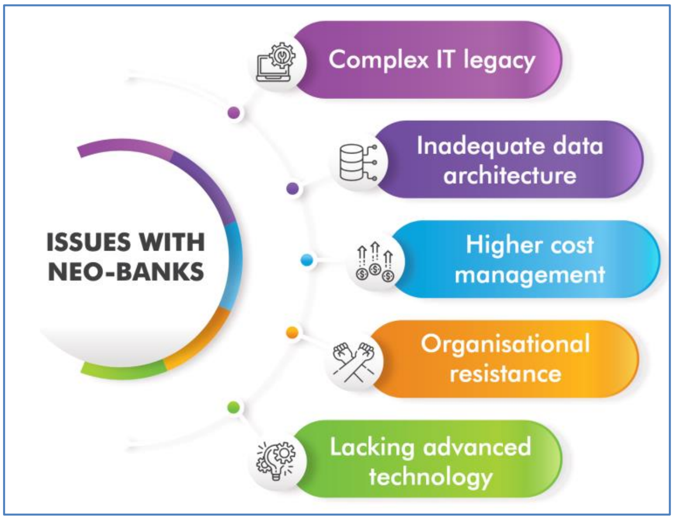
Why in news?

Recently, Fintech platforms, which sometimes refer to themselves as neo-banks, are increasingly making inroads into the Indian market.



Neo-Bank and its mechanism

- Neo-bank is a term for 'fintech firms' with only a digital presence and no physical branches. They **provide banking services use** such as savings accounts, instant loans, credit cards, mutual funds, and fixed deposits.
    - They do this via **tie-ups with Reserve Bank of India (RBI)-licensed banks**.
    - In the case of products such as wealth management, neo-banks generally get investment adviser licenses. Usually, they **tie-ups are with small finance banks or small scheduled commercial banks.**
    - Some countries such as the UK have a formal regulatory license for neo-banks, but that is not the case in India.
- There is **no such category of banks under the RBI rules**.
- Neo banks are different from traditional banks in every aspect from business models to customer care. (refer infographic)



Benefits of Neo-Banks

- They are usually mobile-first, **leveraging technology to minimise operating costs** and offer a customer-friendly interface.
- Tie-ups of neo-banks with small banks allow them to **offer higher interest rates on savings accounts.**
    - Single neo-bank can tie up with multiple regulated banks.
- They help to **analyze and track the spending.**

- They offer wider choices and better customer experiences with the following features:
  - **New account** online can be **opened in just a few minutes.**
  - **Connecting of existing bank accounts.**
  - **Receive payments immediately** with integrated payment gateways.
  - **Pay bills through multiple options.**

4.5.3. ACCOUNT AGGREGATOR

Why in News?

Account Aggregator System Launched to Bolster Lending Ecosystem

About the System

- India unveiled an **Account Aggregator (AA) system - a data-sharing system** that aims to **revolutionize investing and credit.**
- An account aggregator is a financial entity, **which obtains and consolidates all the financial data of an individual, and presents the same in a manner that allows the reader to easily understand and analyse** the different financial holdings of a person.
- In 2016, under the RBI Act, 1934, RBI released the "Non-Banking Financial Company - Account Aggregator (Reserve Bank) Directions, 2016" with:
  - Account Aggregator as a special class of NBFC under **section 45-I of RBI Act**, to
    - ✓ Enable easy sharing of financial data,
    - ✓ Provide inbuilt consent framework for users etc.

Significance of such a System

- Firms will be able access **timely quantitative and qualitative data which can help them to assess the creditworthiness** of small businesses, recommend wealth management product for an individual, or tailor an insurance policy for a family.
- **No other country in the world has developed such thorough data-sharing framework** that can be deployed to cover over 50 million businesses and over a billion people.

5. TRADE AND INVESTMENT

5.1. INTERNATIONAL TRADE

5.1.1. INDIA'S EXPORTS

Why in news?

Recently various developments took place in India's exports sector.

Trends in India's overall trade

- India's overall exports (merchandise and services combined) in 2019-20 were US$ 526.6 billion as against US$ 538.1 billion in 2018-19 mainly due to the ongoing global slowdown, which got aggravated due to the current Covid-19 crisis.
- India's **share in world exports has increased from 0.6% in 1991 to 1.7%** in 2018 but remains paltry compared with China's ~13% and US' ~9%.
    - **India ranked 18th** on the list of the top exporting countries worldwide in 2019.
- As percentage of GDP, **India's exports are about 18 per cent of GDP.**
- India's **services trade has been a major driver of exports** as the sector has exhibited high growth and trade surplus.

Reasons for India's Underperformance in Exports

- **Low Level of Participation in Global Value Chains (GVCs):** India's participation in GVCs has been low compared to the major exporting nations in East and Southeast Asia.
- **Limited diversification of India's export basket:** The top 10 principal exports in terms of commodity groups accounts for as much as 78 per cent of total merchandise exports.
- **Low competitiveness of Indian Products**: The domestic factors like lackluster infrastructure, complex land and labour laws, fragmented and unregulated logistics sector have impeded the creations of conditions for Indian companies to compete in global markets.
- **Regional Disparities:** 70 per cent of India's export has been dominated by five states — Maharashtra, Gujarat, Karnataka, Tamil Nadu, and Telangana. India faces three fundamental challenges **with regard to export promotion**:
    - **Intra- and inter-regional disparities in export infrastructure** as coastal states have performed extremely well compared to the landlocked states in developing export promotion parks and hubs.
    - **Poor trade support and growth orientation among states.** Other than Uttarakhand and the coastal states, there is an absence of strong support towards the exporters from the respective state governments in improving their quality or quantity.
    - **Poor research & development infrastructure to promote complex and unique exports** curbing the innovative tendencies at the sub-national level: 'Himalayan' states for instance have performed inadequately in this area due to the scarcity of research and quality check institutes.
- **Inability to exploit comparative advantage** in lower-skilled and labor-intensive exports. India has seen its share of world trade in textiles, garments and footwear decline in recent years while Bangladesh has almost caught up to India, and Vietnam has well overtaken it.

Why India needs an Export Led growth?

Economic Survey 2019 has advocated an export-led growth model for India for reasons such as:

- Exports can help India to achieve the target of making India a developed economy by focusing on '**Atma Nirbhar Bharat'**.
- **Economic Growth:** Higher exports draw more foreign remittances, create more jobs and lower the current account deficit, creates demand and infrastructure.
    - Major economies around the world are also major exporters. To corroborate this claim, it is to be noted that China is the world's leading exporter of goods.
- **Becoming a part of Global Value Chains:** Exports give domestic sellers increased access to the market that helps in presenting a golden opportunity to capture a good chunk of global market share.

* **Mitigate Regional Disparities:** Improving the export competitiveness of states can mitigate regional disparities through export-led growth and the consequent rise in standard of living.
    * The Economic Survey established that states which engage with the world markets as well as with the other states within the country are richer.

Steps taken to boost India's exports

Export Promotion Schemes	• **RoDTEP (Remission of Duties and Taxes on Exported Products) Scheme:** It **enables zero-rating of exports by ensuring domestic taxes are not exported** and aims to refund all hidden taxes, such as the central and state taxes on the fuel used for transportation of export products, duties levied on electricity used for manufacturing, MANDI tax and others. • **Service Exports from India Scheme (SEIS):** Service providers of notified services are eligible for freely transferable duty credit scrip @ 5% of net foreign exchange earned.
Duty Exemption/Remission Schemes	• **Advance Authorisation Scheme (AAS)** allows traders to import raw materials at 0% import duty if those raw materials will be used to manufacture export products. • **Duty Drawback Scheme (DBK Scheme)**: Exporters are given compensation on customs and central excise duties incurred on materials used in the manufacture of exported goods.
Export Promotion Capital Goods Scheme (EPCG Scheme)	Facilitates the imports of capital goods to produce goods and services by manufacturers to enhance India's export competitiveness.
Export Oriented Units (EOU)	Aims to increase exports by providing a favorable ecosystem to companies, which are 100% exporters. This scheme allows certain waivers and concessions in compliance and taxation matters.
Recent Initiatives	• **IndiaXports Initiative:** Aiming to increase MSME exports by 50% in 2022, it features an Info Portal which will serve as a knowledge base for exports by Indian MSMEs with the required information related to export potential, potential markets as well as trends in exports, etc. • **Capital Infusion in Export Credit Guarantee Corporation:** ECGC was set up in 1957 to promote exports by providing Credit Risk Insurance and related services for exports. • **Export Preparedness Index' (EPI) was r**eleased by NITI Aayog recently which discusses the export potential of each state and the role of regional level economies in enhancing India's share in the global trade. • **Continuation of National Export Insurance Account (NEIA) and infusion of 1,650 crore** over five years (2021-2022 to 2025-2026). o NEIA Trust was established in 2006 **to promote project exports from India that are of strategic and national importance.**

Others	• **Transport and Marketing Assistance Scheme (TMA Scheme)**: freight costs up of to a certain amount will be reimbursed by the government to make Indian agricultural products competitive in the global space.
	• **Market Access Initiative (MAI) Scheme** to promote marketing, market research, promotion and branding in new markets.
	• **Interest Equalisation Scheme (IES)** provides 5% interest support to all manufacturers in the MSME sector and 3% support to all exporters in the identified 416 tariff lines.
	• **NIRVIK Scheme**: Introduced by the Export Credit Guarantee Corporation of India (ECGC) it provides high insurance cover, reduced premium for small exporters and a simplified claim settlement process.
	• **Trade facilitation initiatives**
	  o Simplification of procedures and customs clearances for imports and exports.
	  o Indian Customs Electronic Gateway (ICEGATE).
	  o Single Window Interface for Facilitation of Trade (SWIFT).
	  o Direct Port Delivery and the Direct Port Entry facilities.
	  o Increased use of the Risk Management System (RMS)

Way ahead for post COVID times

* **Increasing Competitiveness of Made in India Products:**
    * **Promoting Ease of doing Business:** Need to focus on boosting competitiveness — building infrastructure, ensuring cheap power, reforming land and labour markets, and creating conditions for companies to compete in global markets. It **will also improve India's FDI attractiveness.**

- Improving India's manufacturing base: This can be achieved by augmenting the competitiveness of MSMEs and make India a preferred destination for manufacturing for the world.
  - **Trade Liberalization:** In order to improve the country's participation in the global value chain it is important to **bring down import tariffs**, which have been raised in the past few years.
  - **Research and Development (R&D):** R&D plays a significant role in **improving the quality of products** to match up to the international standards and enables greater innovation.
- **Exploring and strengthening potential sectors:**
  - **Need for diversification of India's export basket** as well as identification of new products that can be exported and relevant markets for such items and prepare strategies for that.
    - ✓ For instance, India's **textile portfolio can be diversified to include man-made fiber and technical textile** in addition to cotton and cotton-based textile.
  - **Promote local manufacturing in potential sectors:** SEZs can be set up in sectors identified under the PLI scheme for improving the manufacturing infrastructure.
- **Robust Foreign Trade Policy:** It is important to adopt an integrated approach in the new FTP which is being formulated for implementation.
  - The new FTP should **explore the under-tapped markets like Africa** by reviving ties with them through trade and investment. It should also find ways for **increasing people-to-people cooperation and providing technical support to exporters** for understanding the legal and business environment.
- **Enhancing trade relations with countries:** Emphasis must be given to enhancing trade relations with neighboring countries like Bangladesh and Sri Lanka strengthening the Act East policy. India should pave the path for meaningful negotiation with the EU for a free trade agreement (FTA).
- **Learning from neighbors:** Bangladesh has become the second largest apparel exporter after China, Vietnam's exports have grown by about 240% in the past eight years.

5.1.2. INDIA AND WTO

INDIA AND WTO AT A GLANCE

INDIA AND WORLD TRADE ORGANIZATION

WORLD TRADE ORGANIZATION: EVOLUTION AND ROLE IN GLOBAL TRADE

The WTO is the only global international organization dealing with the rules of trade between nations. It is the successor of General Agreement on Tariffs and Trade (GATT). The WTO has evolved through negotiation rounds-

- **Uruguay Round (1986-1994):** After the Uruguay round negotiations, WTO came into being in 1995. It added several other agreements like GATS, Agreement on TRIPS, Understanding on Rules and Procedures Governing the Settlement of Disputes and Trade Policy Review Mechanism.
  Doha Development Round (2001-present): It was adopted in the 4th Ministerial Conference in 2001. It covers about 20 areas of trade such as Agriculture, Services, Trade and environment, Geographical indication etc. Key developments in these negotiations were:
  - The Negotiations were stalled in 2008 due to issues regarding agricultural subsidies, patented medicines among others.
  - Attempts have been made to revive the negotiations between developed and developing countries through various initiatives like Bali Package and Nairobi Package.

The WTO plays broadly three major roles vis-à-vis world trade:

- Acting as a single international forum for regulating global trade.
- Protecting the interests of small and weak countries from trade discrimination.
- Acting as a bulwark for moving towards a Globalized World Order.

UNRESOLVED ISSUES IN NEGOTIATIONS AND INDIA'S STAND ON THEM

- **Agricultural subsidies issue:** India has taken a stand based on food security, poor estimation methodology for subsidies and subsidies given by developed countries.
- **Fisheries subsidy issue:** India states that developing countries should be exempted from global commitments.
- **Movement of Labour:** India stands on increased liberalization of movement of professionals.
- **Access to affordable medicines:** India seeks revision to TRIPS agreement to improve global access of pharmaceuticals.
- **Non-tariff barriers to trade:** India advocates for their rationalization and standardization.
- **Negotiations on Non-trade issues:** India argues that they should be completely kept out of negotiating table.
- **Investment Facilitation:** India argues that developing countries should be given flexibility in application of TRIMS.
- **E-commerce:** India states that e-commerce talks should be embedded in the WTO's digital trade agenda of 1998.

SUCCESSES OF WTO IN THIS ROLE-

GLOBALLY:

- Wide coverage of both product and geographies.
- Accelerated growth in the global trade.
- Acted as an enabler of domestic reforms for countries.
- Increased economic efficiency via development of Global Value Chains (GVCs).

FOR INDIA:

- India's exports almost doubled in less than a decade.
- Rapid growth in export of Software Services due to liberalization of trade.
- Employment Generation due to growth of labour intensive sectors.
- Poverty alleviation transmitted through economic growth.

FACTORS CURRENTLY AFFECTING THE WTO WITH POTENTIAL BEARING ON ITS FUTURE

- Newer areas of discussion coming to the fore such as E-commerce.
- Changed Global Economic distributions from 1995 in the form of growth in developing countries.
- Emerging trade war between China and United States.
- WTO appellate body has become dysfunctional in the recent past.
- Move towards bilateral/regional/plurilateral trading regimes such as RCEP.
- The effect of COVID-19 has permanently disrupted some Global Supply Chains (GSCs).
- Threat of waning of globalization due trends of reverse globalization among countries.

STEPS THAT INDIA CAN TAKE TO SAFEGUARD ITS INTERESTS

- **Institutionally linking national goals with global goals:** This will help resolve the persistent dichotomy of choosing between national priorities and international commitments.
- **Balance between self-sufficiency and comparative advantage:** Atmanirbhar Bharat should be accompanied with additional focus on comparative advantage areas like the labour intensive sectors.
- **Building geo-political capital** to better transition to a changed global trading scenario.
- **Playing proactive role in emerging areas** like e-commerce.
- **Preferring WTO reform over other methods like trading blocs** to safeguard non-discrimination and equity in global trade.
- **Focussing on domestic reform** alongside engaging in global trade for making the economy globally competitive and simultaneously opening the economy further.

5.1.3. AGREEMENT ON AGRICULTURE

Why in News?

Recently, Minister of Commerce & Industry stated that World Trade Organization (WTO) Agreement on Agriculture is tilted against developing countries.

About Agreement on Agriculture (AoA)

- It **provides a framework for the long-term reform of agricultural trade and domestic policies,** with the aim of leading to fairer competition and a less distorted sector.
- **Agreement covers:**
  - **Market access:** the use of trade restrictions, such as tariffs on imports
  - **Domestic support:** the use of subsidies and other support programmes that directly stimulate production and distort trade
  - **Export competition:** the use of export subsidies and other government support programmes that subsidize exports.
- Under the Agreement, **WTO members agree to "schedules" or lists of commitments that set limits on the tariffs they can apply** to individual products and on levels of domestic support and export subsidies.
- Agricultural trade reform did not end with the birth of the Agriculture Agreement. **WTO members are continuing to negotiate agricultural trade reform.**

Concerns raised by India and other developing nations on AoA

Provisions	Concerns	India's proposals to address these concerns
Permanent & Workable solution to food security	• India insists that member countries of the WTO agree to a **permanent solution to the dispute over public stockholding of foodgrains.** • Developing countries insist that they **should not be penalized for breaching any limits,** arguing that such stockholdings are crucial for food security. • India is **not satisfied with the peace clause negotiated at Bali conference** that allowed it to go beyond the 10 % cap for its MSP with immunity from legal challenge from other WTO member countries for the next four years. • Furthermore, even at Nairobi and the eleventh Ministerial Conference in Buenos Aires, there was **no outcome on public stockholding for food security purposes or on other agriculture issues.**	• Food security which is not only of great economic relevance but also a very important socio-political concern in large agrarian economies like India **needs to be addressed up-front in the ongoing negotiations** on agriculture. • All measures taken by the developing countries for **poverty alleviation, rural development, rural employment and diversification of agriculture should be exempted** from any form of reduction commitments. • **Product coverage requires rationalisation** by including primary agricultural commodities such as rubber, primary forest produce, jute, coir, abaca and sisal etc.
High farm subsidies provided by developed countries	• WTO rules make it possible for **rich countries to get away with such high subsidies.** But as per developing nations these subsidies **destabilise and depress the international market prices** impacting adversely farm incomes in developing countries. • In 2015, **US government provided a subsidy of $7,860 on an average to each of its farmers.** On the contrary, in 2014, Indian government provided on average a subsidy of $417 to 9.05 crore farmers.	• **All forms of export subsidisation** including export credit, guarantees, price discounts and insurance programmes etc. in developed countries **should be added to the export subsidies.**
Market Access	• Opening of the markets has taken place **mainly in the developing countries.** • Access for products from developing countries, **continues to be impeded in the developed country markets** due to their high trade distorting domestic support policies coupled with high tariffs.	• Developed country members **should not be allowed to use** overly stringent trade restrictive **SPS measures for protectionist purposes** against developing countries. • Developing country members **should be exempt from any obligation to provide any minimum market access.**

	• **Use of Sanitary & Phytosanitary (SPS)Measures & Technical Barriers to Trade by Developed Countries** to selectively ward off imports from developing countries by imposing higher standards than those imposed by international bodies.	• Developing country members **should be allowed to maintain appropriate levels of tariff bindings** keeping in mind their developmental needs and the high distortions prevalent in the international markets.

5.1.4. INDIA AND FREE TRADE AGREEMENTS (FTAS)

India and FTAs at a Glance

Free Trade Agreements (FTAs)

- **Definition:** Arrangements between two or more countries or trading blocs that primarily **agree to reduce or eliminate customs tariff and nontariff barriers** on substantial trade between them.
- **India's major FTAs:** India ASEAN Trade in Goods Agreement, South Asia Free Trade Agreement (SAFTA), India Korea CEPA, Japan India CEPA etc.
- **Importance of FTAs**
  - **Creating a more Dynamic Business Climate** by encouraging competition on a global level.
  - **Abolition of global monopolies.**
  - Promotes **regional economic integration and global economic growth.**

Significance of FTAs for India

- **India's real market size is not sufficiently big** to support domestic demand led economic growth and **exports have been a crucial component of India's growth.**
- **Post COVID world presents several Opportunities for India:** Structural changes could boost demand for tradable services from India; India is small enough to gain market share even if overall global imports of goods grow slowly; Enormous potential in India to increase unskilled labor exports.
- **Connecting India with Global Value Chains (GVCs).**

India's experience with FTAs

- **Overall increase in India's exports** to the partners.
- **Gains from SAFTA** with significant rise in trade surplus with SAFTA countries.
- **Substantial rise in trade deficits with ASEAN, South Korea and Japan post FTAs.**
- **Low utilization** of FTAs and **limited export growth in Value added sectors.**
- **Withdrawal from RCEP negotiations** due to reasons such as trade imbalance with RCEP members, Geopolitical and Security considerations, inadequate protection against import surge, apprehensions from local industries etc.

Why are FTAs not working as expected for India?

- **Asymmetrical and unfavorable tariff commitment.**
- **Non-tariff barriers in partner countries** like import controls, sanitary and phyto-sanitary measures, etc.
- **Lack of Ease of trading through FTA routes:** due to factors such as complex rules of origin criteria, higher compliance costs and administrative delays etc.
- **Absence of services component .**
- **Domestic factors constraining export growth** such as higher logistics costs, supply-side constraints like energy shortages etc.
- **Circumvention of rules of origin.**
- **Global perception of India being protectionist.**
- **Spaghetti bowl effect** (overlapping FTAs between countries creating inconsistencies).
- **Slow pace of negotiations.**

Steps taken by India

- **Strengthening RoO mechanism:** Notified the Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020.
- **Revision of Bilateral Investment Treaties (BITs):** In 2015, India decided to review all of its existing BITs and released a Model BIT in 2016.
- **Reviewing existing FTAs:** In 2019, India and the ASEAN decided to initiate the review of the ASEAN-India Trade in Goods Agreement.

Suggested approach for strengthening FTAs

- **Strong safeguard clauses within existing/future FTAs.**
- **Participating in Confidence building measures** using Early Harvest Scheme/Programme (EHS).
- **Aligning future FTA negotiation strategy/tariff schedules with the Atmanirbhar Bharat strategy.**
- **Building new relationships in Post-COVID world order** by leveraging its geopolitical relations.
- **Pick and choose partners where** trade complementarities and margin of preference are high.
- **Making trade through FTA routes easier** by conducting awareness outreaches, reducing compliance cost and administrative delays etc.

5.2. INTERNATIONAL INVESTMENT

Key targets

- Creating framework for **investment facilitation and promotion.**
- **Improving FDI growth through the FDI policy liberalization** by improvements in the easiness of doing business.
- Provide **sector and specific state inputs** and other supports to investors throughout the entire **investment** cycle.
- Engaging in **long-term partnership** with especially with **strategic and institutional investors.**

Current Situation

10% growth has been witnessed in growth of FDI in 2021 compared to 2020.

5th largest recipient of FDI with US being first and China second.

Computer Software & Hardware' has emerged as the top sector during 2020-21 with around 44% share of the total FDI Equity inflow.

More than 100% jump was recorded in major sectors, namely Construction (Infrastructure) Activities, Computer Software & Hardware, Rubber Goods, Retail Trading, Drugs & Pharmaceuticals and Electrical Equipment.

Schemes/Policies/Initiatives

- **Liberalization of FDI in sectors** like Insurance, Power exchanges etc.
- Investment promotion and facilitation through **Invest India Programme.**
- Attracting foreign investment through **initiatives like Make in India.**
- Specific partnerships like **India and the UK** agreed for an investment boost to strengthen bilateral ties for an **'Enhanced Trade Partnership'.**
- **Project Development Cell (PDC)** in the ministries/departments with a view to attracting investments.

INVESTMENT AT- A- GLANCE

Way Forward

- **Streamlining the Regulatory issues** through initiatives like One-stop centres.
- **Structural reform in the economy** to increase Ease of doing business in the long-term.
- **Policy stability and stability of macro- economic variables** to create confidence among the investors.

Constraints

- Although, investment is increasing, investment in **Greenfield projects in India contracted by 19% in 2020.**
- **Poor Ease of doing business** discourages long-term investment.
- **Regulatory complexity** and restrictive environment.
- **Limited information and information asymmetry** as a large section of the population works in unorganized sector.

5.3. INTELLECTUAL PROPERTY RIGHTS

Key targets

- **Creating IPR Awareness** leading to outreach and promotion.
- **Stimulate the generation** of IPRs.
- **To have strong and effective IPR laws,** which balance the interests of rights owners with larger public interest.
- To **modernize and strengthen** service oriented **IPR administration.**
- Get value for **IPRs through commercialization.**
- To **strengthen the enforcement and adjudicatory mechanisms** for combating IPR infringements.
- To **strengthen and expand human resources, institutions and capacities** for teaching, training, research and skill building in IPRs.

Current Situation

More than 4 times growth has been witnessed in the number of patents filed from 2015-16 to 2020-21.

Schemes/Policies/Initiatives

- **National IPR policy 2016**
- Several IP **Training, Awareness and Outreach Activities.**
- **National and international symposia/ seminar/workshops** on IP are organized for potential IP users
- India becoming **recognised member of International Search Authority and International Preliminary Examining Authority.**

INTELLECTUAL PROPERTY RIGHTS AT- A- GLANCE

Way Forward

- **Strengthening the institutional as well as infrastructural framework** of the IPR regime for better enforcement.
- **Encouraging IPR awareness in Tribal areas** and hinterland through initiatives like Traditional Knowledge Digital Library (TKDL).
- **Regular engagement at global level** through diplomatic channels to balance domestic needs and TRIPS compliance.
- Promoting an environment of **innovations in academic curriculum.**

Constraints

- **Enforcement of the Copyright act is weak,** and piracy of copyrighted materials is widespread.
- **IPR lacks its roots in remote areas,** such areas are considered to be the hot bed of inventions.
- **TRIPS flexibilities and their application** such as evergreening of patents, Compulsory Licensing and Data Exclusivity.
- **Government use of patents** under the current regime is still ambiguous.

5.3.1. COPYRIGHT (AMENDMENT) RULES, 2021

Why in news?

Recently, the **Ministry of Commerce & Industry** has notified Copyright (Amendment) Rules, 2021.

Copyright regime in India

- In India, the copyright regime is governed by the **Copyright Act, 1957** and the **Copyright Rules, 2013**.
  - The Copyright Rules, 2013 was last amended in 2016 through the Copyright Amendment Rules, 2016.
- **India is signatory to following International Copyright treaties:**
  - **Berne Convention, 1886:** It is for the **Protection of Literary and Artistic Works** under which **Indian copyright law applies to anything published or performed in India**.
  - **The Universal Copyright Convention (UCC)**: It gives protection for **original literary, artistic and scientific works.**
  - **Trade related aspects of Intellectual Property Rights (TRIPS)**: The provision of TRIPS Agreement are the most extensive and rigorous in nature as these protect all forms of IPR collectively including Copyrights and other related rights.
  - **WIPO Copyright Treaty, 2002:** It is a **Special agreement under Berne Convention** and it has been adopted by **96 contracting parties**.
  - **WIPO Performances and Phonograms Treaty (WPPT), 2002:** It deals with rights of two kinds of beneficiaries, particularly in digital environment- **performers** (actors, singers, musicians etc.), and **producers of phonograms** (Sound recordings).
- **India is not a signatory to Rome Convention.**
  - The Rome Convention secures protection in **performances for performers, in phonograms for producers of phonograms and in broadcasts for broadcasting organizations**.
    - ✓ **WIPO (World Intellectual Property Organization)** is responsible for the administration of the convention jointly with the International Labour Organization (ILO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

In this context, the amendment to the Copyright (Amendment) Rules, 2021 aims to **bring parity of the rules with existing legislations** and **enable smooth adoption of electronic means as primary mode of communication and working** in the Copyright Office.

Provisions of new amendment

- **Publication in official gazette:** It included a new provision that **eliminates the mandatory requirement** of publication in the Official Gazette.
- **Royalty management**: It aims to **encourage accountability and transparency** by introducing new provisions to deal with the undistributed royalty amounts and use of electronic and traceable payment methods for collection and distribution of royalties.
- **Registration of software works:** The compliance requirements for **registration of software works have been reduced** and the applicant can file the first 10 and last 10 pages of source code, or the entire source code if less than 20 pages, with no blocked out or redacted portions.
- **Annual Transparency Report:** The copyright societies will be required to draw up and make public an Annual Transparency Report for each financial year. It is aimed to **reinforce transparency** in working of copyright societies.
- **Institutional mechanism:** The amendments have harmonized the Copyright Rules with the provisions of **Finance Act, 2017** whereby the **Copyright Board has been merged with Appellate Board**.
- **Powers to High Courts**: New rules replace powers in favor of the **Intellectual Property Appellate Board (IPAB)** from the Copyright Board but due to **newly notified Tribunals Reforms** (Rationalization and Conditions of Service) Ordinance, 2021 that has abolished the IPAB, all the powers that are supposed to vest with the IPAB are actually vesting with the **High Courts**.

Challenges for the enforcement of copyright rules in the digital domain

- **Piracy:** It is a form of **online copyright infringement**, wherein games, movies, software, etc. are sold and distributed without the knowledge or permission of the original creator.

- **Reproducing work in digital domain**: The facility of reproducing and disseminating copyrighted works via the Internet at zero cost pose a great challenge.
- **Public Vs Private Use**: The **Copyright Act of 1957** provided for distinction between the reproduction of particular content in public and private domain but since one person can transfer material to several people through the internet, the copyright laws regarding public and private spaces have become difficult to enforce.
- **Issue of Enforcing Liability**: The major issue with regards to copyright infringement over the internet is liability as it is **important to determine where the liability lies** to enforce punishment against the offender. However, there can be involvement of several people in one issue related to copyright infringement over the internet.
    - **For example, in Kerala in 2012**, the anti-piracy cell ended up tracing the IP addresses of around a thousand people who were involved in illegal uploading and downloading of a movie.
- **Lack of legislative harmony**: There is a lack of harmony between the state IPR laws about copyright violation on the internet. The varying domestic laws regarding digital piracy and copyright infringement in different states make effective implementation very troublesome.

Way forward

- **Legal Approach**: There is a need for new approach through legalization of certain practices in order to ensure that the copyright system continues to fulfil its basic function i.e., **protection of creators** and encouragement **of creativity**.
- **Harmonization of state laws**: Since there are differences in the laws about copyright breach in different states which makes it difficult to take quick action. So, it is important to have **uniformity** in the domestic cyber laws regarding copyright breach.
- **Determination of liability**: There are several cases where it is difficult for the courts to decide who exactly will be liable in case of copyright violation. Therefore, it is important to have clear cut rules that govern liability in cases where multiple countries are involved.
- **Human resource capability:** There is a huge need of well skilled and trained human resource that can detect copyright infringement and can stop it as well as enforce legal protection.

5.3.2. COVID-19 VACCINE AND IP WAIVER

Why in news?

Recently, the United States (US) announced support for waiving intellectual property protection for COVID-19 vaccines.

Factors driving demand for IP waiver

- **To meet the unprecedented demand:** Before the pandemic, the global demand for all vaccines was around 5.5 billion doses a year. Now, the requirement has increased at least three times of this for COVID-19 alone.
- **Concentration of resources:** The core problem is that vaccine manufacturing, research and development is too heavily concentrated in a small group of high- and middle-income countries.
- **Ethical perspective:** Vaccine production is being limited by patents and other IP rights and that these should be waived. Therefore, from a humanitarian, moral and pragmatic perspective, all the countries must unite to ensure fair and rapid access to these vaccines worldwide.

Factors against IP waiver

- **IP is not the main barrier to accessibility:** Technical and logistic issues are the biggest barriers currently standing in the way of increasing vaccine production and deployment. To boost vaccine availability right now, it would be better to address them on priority.
- **Expanding production capacity is not instantaneous:** Transferring the manufacturing process from one facility to another always takes significant resources, as staff at the new site need to be trained in every aspect of production and quality assurance.
- **Alternative to IP waiver is already available:** Compulsory licensing could be explored. Also, the technology transfer is already happening and continues. Several COVID-19 vaccine manufacturers

transferring their technology, under license, to sub-contractors. An example is the licensing of the AstraZeneca vaccine to the Serum Institute of India.

- **IP remains useful for dealing with the current emergency:** Given the current emergency, companies that are normally competitors are working together to produce vaccines. Here, IP can facilitate cooperation.

Way ahead

- **Supply of raw material:** One obstacle to increasing production is the supply of raw materials needed to make and deploy these vaccines. This needs to be ensured alongside testing and approving of vaccines still in development.
- **Capacity building:** For technology transfer to work, countries must have specialised facilities and a skilled workforce capable of making vaccines. They also need robust regulatory authorities to audit and approve the safety of what's produced.
    - Advocating for long-term commitments to increasing these skills around the world could be a more successful way of increasing the number of countries manufacturing vaccines in the long term, compared to waiving IP rights.
- **Resolving other issues:** For example, pricing, as well as allocation and deployment mechanisms, such as COVAX, must be optimized to allow equitable vaccine deployment.
    - COVID-19 Vaccines Global Access (COVAX) is a worldwide initiative aimed at **equitable access to COVID-19 vaccines** directed by **Gavi, the Vaccine Alliance, the Coalition for Epidemic Preparedness Innovations, and the World Health Organisation.**
    - COVAX is one of three pillars of the Access to COVID-19 Tools (ACT) Accelerator, which was launched by the WHO, the European Commission and France in response to this pandemic.

6. AGRICULTURE AND ALLIED ACTIVITIES

6.1. AGRICULTURAL INPUT MANAGEMENT

Key targets

- Maintaining **soil richness and fertility** without compromising on yields.
- Making **quality seed material** accessible to every farmer at an affordable price.
- **Optimizing the resource efficiency** of input such as land, water and labour.
- Encouraging **judicious use of fertilizers and pesticides** and creating a vibrant industry to enable the same.
- Transitioning towards more **mechanized and modernized farming techniques.**

Current Situation

>20 lakh soil health cards have been issued till date.
4.29 lakh Seed villages have been created under Seed Village Programme.
3rd largest fertiliser industry in terms of production in the world.
2nd largest fertilizer industry in terms of consumption in the world.
40%-45% farming in India can be currently called mechanized.

Schemes/Policies/Initiatives

- Soil Health Card
- Seed Village Programme
- Sub Mission on Plant Protection and Plant Quarantine (SMPPQ) under the Green Revolution-Krishonnati Yojana.
- Fertilizer subsidies- Nutrient Based Subsidy (NBS)
- Sub Mission on Agricultural Mechanization (SMAM)

AGRICULTURAL INPUT AT- A- GLANCE

Way Forward

- Encouraging growth of **agro-climatically suitable crops.**
- **Dynamic seed development plans,** that may be based on crop wise area (each season separately), seed rate per hectare used, desired/targeted seed replacement rate and crop wise seed requirement.
- **Efficient fertilizer usage** in conjunction with the soil health.
- Research & Development, Use of Technology, and subsequent use in improving **seed, fertilizer and pesticide quality.**
- Efficient **information dissemination for farmers.**
- Community level engagement for **land digitalization program.**
- Encouraging farm mechanization the **leasing of farm equipment to small and marginal farmers.**

Constraints

- **Deteriorating soil quality** due to irresponsible agricultural practices like overuse of fertilizers and overirrigation in some areas.
- **Availability and affordability of quality seed material** remains an issue.
- **Inefficient use of fertilizers,** need for rationalization of fertilizer subsidies.
- **Reluctance** at community level for **Land survey and mapping.**
- Absence of adequate capital resulting **poor quality input and low farm mechanization.**

6.1.1. PESTICIDE USAGE IN INDIA

Why in news?

According to a recent study, **64% of global agricultural land (approximately 24.5 million km²) is at risk of pesticide pollution** by more than one active ingredient.

Pesticide usage in India

- Pesticides are **chemical compounds that kill pests** such as insects, rodents, fungi and unwanted plants (weeds) and mainly include insecticides, fungicides and herbicides.
- India is the **fourth-largest producer of pesticides** in the world, with the market segmentation tilted mainly towards insecticides.
- **Total pesticide consumption is the highest in Maharashtra,** followed by Uttar Pradesh, Punjab and Haryana.
  - On the other hand, **per hectare consumption of pesticides was the highest in Punjab**.
- Amongst the crops, **paddy accounts for the maximum share of consumption (26-28%),** followed by **cotton** (18-20%).
- Pesticides are regulated in India through **the Insecticides Act, 1968 and Insecticides Rules, 1971.**
  - Insecticides Act, 1968 **governs the use, manufacture, distribution, sale and transport of insecticides** with a view to lowering risks to human and animal health.

Concerns associated with Pesticide usage in India

- **Rising usage: Warmer climate and growing population** are expected to increase the use of pesticides to combat the possible rise in pest invasions and to feed more people.
- **Pesticide poisoning**: According to NCRB, **in 2019, 6,962 deaths were reported** out of 7,007 pesticide poisoning cases.
- **Lack of information, awareness and training** among farmers on safe use of pesticides further increases the risk.
- **Environmental contamination**: Pesticides can be transported to surface waters and groundwater through **runoff and infiltration**, polluting water bodies, thereby **reducing the usability of water resources.**
- **Opaque and out of date regulatory framework**:
  - **Pesticide Management Bill (PMB)** has been in discussion since 2008. Latest draft was approved by cabinet in February 2020.
  - Government's efforts in form of creation of **Integrated Pest Management centres are largely inadequate** (only 35 centres across country) in light of widespread usage.
- **Monopoly of private sector:** There is monopoly of the private sector in managing 90% of the retail trade across the country, leading to unregulated sale guided by the profit motive alone.
- **Lack of Power with States:** Agriculture is a state subject, but **control for pesticides is vested with the Centre.**
  - This means that even if the Centre abdicates responsibility for ensuring that only safe pesticides reach users, states cannot step in and ban unsafe pesticides on their own.
- **Other concerns:** Spurious and counterfeit pesticides often become reason for excessive usage, increase in cost of cultivation, crop failure, loss of confidence among farmers and health hazards which also hinders export of agri commodities.

Steps taken by Government

- **Ban and restrictions on pesticides:** Ministry of Agriculture has so far **banned or phased out 46 pesticides and four pesticide formulations** for import, manufacture, or sale in the country.
  - **Anupam Verma committee** had completed the process to review 66 pesticides that are banned, restricted or withdrawn in some other countries, but are used in India.
- **Monitoring of Pesticide Residues at National Level':** Government is implementing this scheme under which samples of vegetables, fruits and other crops are collected and analysed by enlisted NABL laboratories for pesticide residues.
- **Ban on Persistent Organic Pollutants ("POPs"):** Govt has ratified the ban on **7 Persistent Organic Pollutants ("POPs")** considered hazardous and listed under the **Stockholm Convention**.
  - These chemicals are used in **insecticides, pesticides, fungicides etc.**

Way Forward

- **Legislative measures**: PMB 2020 should be brought into force to rectify concerns arising from usage of Pesticides.

- **Advanced technology to weed out fake pesticides:** Using digital tools like securing hologram seals and labels, light-sensitive ink designs, low-cost transport tags integrated with track-and-trace technologies like QR codes etc. can help in the identification of genuine pesticides.
- **Ensuring strict implementation:** There is a need to **improve coordinated functioning** of central and state-level functionaries of enforcement teams.
- **Educating farmers about judicious usage of pesticides:** Farmer producer companies, cooperatives and extension workers can help **create awareness** among farmers.
  - Only **trained and accredited workers** should be allowed for on-farm application of pesticides.
- **Eco-friendly alternatives:** Encouraging use of **alternative practices like organic farming and use of bio pesticides** like neem and plant-based formulations like Repline, Neemark and Indene can go a long way in preventing the negative impacts of pesticides on the health and environment.

6.1.2. FARM MECHANISATION

Why in news?

The government is focusing on farm mechanisation with a target to double farm mechanization per hectare in next 10 years.

About Farm Mechanisation

- It refers to the **development and use of machines that can take the place of human and animal power in agricultural processes** with the end objective **to enhance the overall productivity and production with the lowest cost of production.**
- Farm mechanization in India **stands at about 40-45%** with states such as UP, Haryana and Punjab having very high mechanisation levels but northeastern states having negligible mechanisation.
  - However, it has been **lower in India compared to other countries** such as USA (95 per cent), Brazil (75 per cent) and China (57 per cent).
- **Factors emphasizing the need for Farm Mechanization** includes:
  - **Increased migration** of rural workers to urban areas increases the cost of farm labour.
  - Due to **intensive involvement of labour in different farm operations,** there is a need for high cost machinery for better turnout in shorter time.
  - **Sustainable agricultural productivity.**
  - **Over dependence on monsoons.**
  - The **use of tractors enhanced agricultural productivity** due to better seed-bed preparation, timeliness of operations and precision in distribution and placement of seed and fertilizer.

Initiatives taken by the government

- **Sub mission on Agricultural Mechanization (SMAM)** was launched in 2014- 15 to increase the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low.
  - Under the scheme, **assistance is provided to State governments to impart training and demonstration of agricultural machinery**, provides assistance to farmers for procurement of various agricultural machineries and equipment and for setting up of Custom Hiring Centre.
- **Multilingual Mobile App, 'CHC-Farm Machinery'** also known as "FARMS-app" developed by Ministry of Agriculture, connects farmers with Custom Hiring Service Centres situated in their locality to take machines on rental basis for agriculture practices.
- Government has given **massive thrust to promoting latest agricultural machineries**, like laser leveller, happy seeder technology, combine harvesters and small equipment like power weeders.
- **Crop Residue Management (CRM)** scheme by Ministry of Agriculture & Farmers Welfare was initiated in 2018 with an objective of moving away farmers of northern region from the practice of crop residue burning causing pollution.
  - Under the scheme **farmers are provided machinery for in-situ management of crop residue** through establishment of CHCs (Custom Hiring Centres).

Benefits of Farm mechanization

- **Input savings:** Studies have shown a direct relationship between farm mechanization (farm power availability) and farm yield. Farm mechanization is said to provide a number of input savings:
- **Increase in efficiency**: It is estimated that farm mechanization can help reduce time by approximately 15-20 percent thus increasing the efficiency of farm labour and reducing drudgery and workloads.
- **Other Socio-economic benefits:** There are various social benefits of farm mechanization:
  - It **helps in conversion of uncultivable land to agricultural land** through advanced tilling techniques and also in shifting land used for feed and fodder cultivation by draught animals towards food production.

- Decrease in workload on women as a direct consequence of the improved efficiency of labour.
  - **Improvement in the safety of farm practices.**
  - Helps in **encouraging the youth to join farming** and attract more people to work and live-in rural areas.
- **Improvement in the cropping intensity and making agricultural land commercially more viable**: Effective use of agriculture machinery helps to increase productivity & production of output, undertake timely farm operations and enable the farmers to quickly rotate crops on the same land. **This boosts farm output and thus farm income.**
- **Sustainable Agriculture:** Farm mechanization provides **optimal utilization of land and water resources that can influence the environmental footprint of agriculture** leading to sustainable outcomes.

Challenges with farm mechanisation in India

- **Economies of scale and operations:**
  - India has **very small average land holding size** (2.66 acres as per Agri Census, 2015-16) and that too is scattered over different places in small parcels. This is **making individual ownership of agriculture machinery economically unviable.**
- **Low income level of farmers:** 86 percent of farmers in India are small and marginal and earns on an average Rs 6,426 per month as per 2016 NSSO report. This **hinders huge investment needed for mechanisation of agriculture.**
- **Credit procedure:** The procedure to avail agriculture term loan for various activities helping farm mechanization **is very cumbersome**. Also, the **rate of interest is higher** for such loans in comparison to crop loans.
- **Subsidy limitations:** Farm mechanization requires substantial investment. Central Govt. and various State Govts. have been providing subsidy for Individual/ Group of farmers/ Cooperative to invest. These subsidies are however available **based on the budget allocation, and not on farmer's requirement basis**.
- **Low awareness:** Barring big machines like tractors, harvesters etc., most farmers lack awareness on machines, implements and methods which are suitable for small land holdings and used by individual farmers.
- **Variability in farm power:** Power availability varies highly from one state to the other as well as according to the agro-climatic regions. **Lack of access to power results in slow uptake of farm mechanization** and hence non-intensification of farm productivity, particularly among small and marginal farmers.

Way forward

- **Consolidation of land holdings:** Small farmers will continue to be the mainstay of Indian agriculture. It is, therefore, necessary to consolidate the land holdings to reap the benefits of agricultural mechanization.
- **Small farm machineries / implements (individually operated)** need to be promoted keeping in view the versatility of various crops, cropping pattern and agriculture operations.
- **Advanced machineries and implements**: 'Make in India' initiative can be used to support the manufacture of inputs and farm implements currently being imported. This would help in reducing the overall capital cost.
- **Need to innovate custom hiring service** or a rental model by institutionalization for high cost farm machinery such as combine harvester, Sugarcane harvester, paddy transplanter, laser guided land leveller etc. to reduce the cost of operation.

Ease of financing: Like KCC, procedures to avail term loan may be simplified with minimum documentation. Capacity building of bank staff dealing with agriculture term loan products may be ensured.

Recommendations of Committee on Doubling Farmers' Income headed by Ashok Dalwai

- **Farm power:** The consumption of farm power in India stands at an average of 2.02 kW/ha in 2017-18 and compares very poorly even with Asia-Pacific countries. **A target of at least 4 kw/ha should be the aim by 2022.**
- **R&D:** Considering the preponderance of small & marginal holdings in the country, R and D **should aim at developing and designing scale-neutral machinery.** Further, machinery that can suit different terrain of the geography deserves priority attention.
- **'State/Regional Services'** possessing more sophisticated and heavier machineries, that can service larger areas to meet certain specific demands; and **also possess ICT/GIS/ Space technology based services.**
- **CHCs at different levels, should be supported to broaden their technologies to include modern systems** like drones, sensor based applications, etc. and also those needed in the sub-sectors of animal husbandry, fisheries, etc.

6.2. IRRIGATION SYSTEMS

IRRIGATION AT- A- GLANCE

Key targets

- **Maximizing the irrigation coverage** given dependency of large population on Agriculture.
- India has set a target of **100 lakh hectares under micro-irrigation** in five years.
- Adoption of more **environmentally sustainable and water-efficient methods** of irrigation.

Current Situation

- **48%** of the total cropped area is irrigated.
- **11 lakh farmers** have benefitted by the adoption of drip and sprinkler irrigation system in 2019-20.
- **5 states** account for 78% of progress in micro-irrigation.

Schemes/Policies/Initiatives

- Pradhan Mantri Krishi Sinchayee Yojana
  - Accelerated Irrigation Benefit Programme
  - PMKSY (Har Khet Ko Pani)
  - PMKSY (Per dDrop More Crop)
  - PMKSY (Watershed Development)
- Kisan Urja Suraksha evam Utthaan Mahaabhiyan (KUSUM)
- Micro Irrigation Fund (MIF) with National Bank for Agriculture and Rural Development (NABARD)

Way Forward

- **Infrastructural development** for adequate and regular water supply.
- **Improving irrigation efficiency** with help of technology.
- **Virtual water trade**, there is a need to revisit trade policies to reduce virtual water flow from India.
- **Comprehensive revision of the guidelines** regarding irrigation projects.
- **Efficient fiscal management** in implementation of schemes and projects.
- **Improved monitoring** of the schemes.
- **Provide technical know-how, extension services,** etc. to the farmers.

Constraints

- **Depletion of Water table.**
- Uneven **rainfall distribution.**
- Poor **irrigation efficiency.**
- Huge and **increasing gap between created and utilized irrigation potential.**
- **Frequent modification in design and scope** of the work of various irrigation projects.
- **Deficiencies in financial management and monitoring** of various projects.
- Farmers, by and large **lack the necessary knowledge to optimise irrigation use.**

6.2.1. ACCELERATED IRRIGATION BENEFITS PROGRAMME (AIBP)

Why in news?

Recently, the Public Accounts Committee submitted its report on the Accelerated Irrigation Benefits Programme (AIBP).

Accelerated Irrigation Benefits Programme (AIBP)

- **Objectives:**
  - To accelerate implementation of such projects which were beyond the resource capability of the states.
  - To focus on faster completion of ongoing Major and Medium Irrigation including National Projects.
- After launch of Pradhan Mantri Krishi Sinchai Yojana (PMKSY) in 2015-16, **AIBP became a part of PMKSY.**
  - PMKSY aims to ensure **access to some means of protective irrigation to all agricultural farms** in the country, to produce 'per drop more crop', thus bringing much desired rural prosperity.

Shortcomings in AIBP

- **Frequent modification in design and scope of the work:** This happened due to the following deficiencies in preparation and planning of Detailed Project Reports (DPRs) like
  - Inadequate surveys
  - Inaccurate assessment water availability
  - Inaccurate calculation of Cost Benefit (CB) ratio.
  - Revision in cost estimates after commencement of work also **adversely affecting the schedule of implementation of the project.**
- **Violation of project guidelines:** According to the PAC projects and schemes were included in the programme in violation of project guidelines resulting in irregular release of Rs. 3,718 crore.
- **Deficiencies in financial management:** The PAC noted many cases of **non/short release of funds, delay in release of funds at** various levels and non-adjustment of unspent balances of funds in the subsequent release.
- **Deficiencies in monitoring:** Lax monitoring by the central and state agencies is also a major proble

Way ahead

- **Comprehensive revision of the guidelines:**
  - Ministry should also **frame timelines for the inclusion of projects**, which may include the possibility of changes, so as to remove the need for frequent revisions.
  - **Concrete action should be taken to adhere to the guidelines and timelines thus formed.**
- **Changes in implantation of the projects:**
  - **The deficiencies in preparing and processing of DPRs** such as delays, inadequate surveys, and inaccurate assessment of command area **should be rectified.**
- **Fiscal management:**
  - A **uniform parameter for calculation of CB ratio** should be adopted.
    - ✓ CB ratio for projects should be **reviewed continuously and be based on realistic assumptions.**
  - The government should take **strict actions on instances of short/non- realisation of revenue.**
  - The government should **form a separate cell to examine cases of undue benefits to contractors.**
- **Transparency and Accountability:**
  - The PAC has advised that **more DPRs of the projects** being implemented under AIBP **should be open for audits**
  - The government should put in place a **mechanism to monitor the due diligence of states** in adhering to guidelines.
- **Improving monitoring of the scheme:**
  - The use of **satellite imagery and field reports** can increase effective monitoring of the irrigation potential.
  - Strengthening the **participatory model of irrigation** through Water Users Associations to tackle various issues related to irrigation.
  - Ministry of Jal Shakti should also increase its efforts in facilitating the formation of **Water Users Associations in all states.**

6.3. AGRICULTURAL MARKETING

Agricultural Marketing at a Glance

APMCs and their role

- It is a **statutory market committee constituted by a** State Government.
- APMCs are a **part of the wholesale marketing system.**
- Their objective is to- increase transparency in the pricing systems, providing extension services to farmers, value addition in agriculture etc.

Agricultural Marketing: Meaning and Methods

It can be simply defined as the commercial functions involved in **transferring agricultural products from producer to consumer.** Majorly, following three methods are used for Agri-marketing:

- **Traditional Marketing Methods:** They start with sale by farmer and involve a number of intermediaries at different levels from rural markets to terminal markets.
- **Cooperative based marketing:** In this method, agri-products are directly purchased from farmers through marketing network of NAFED, thus eliminating middlemen.
- **Emerging models of agricultural marketing:** Several innovative marketing methods have evolved over time, like eNAM, creation of FPOs, Contract Farming, Commodity and Futures Market etc.

Importance of agri-markets

- **Monetization of agricultural produce** in the market.
- Acting as a source of market information and price signal.
- **Reducing the role of intermediaries.**
- Encouraging **capital formation** and investment in technology.
- **Value addition in agriculture** by providing production with forward and backward linkages.

Issues faced by these markets in India

- **Institutional Issues** like **licensing barriers for new traders** for entering the market, **high incidence of market charges** (including in APMCs) and **absence of standardized grading mechanism** for the produce.
- **Infrastructural Issues** like **limited Access of Agricultural Produce Markets** in some parts of the country, **poor Infrastructure in Agricultural Markets** such as drying yards or cold storage and **long gestation period and economic unviability** of agricultural infrastructure projects.
- **Market information system issues** like **absence of efficient real-time informational channels** leading to lag in demand signals, **limited information and content** is available to farmers and **lack of awareness among farmers** vis-à-vis the new information channels.
- **Other issues** like **absence of a National Integrated Market** despite a large physical network of APMCs and **limited public investment** on marketing infrastructure development.

Effect of the recently launched agri-reforms on these issues

- **Checking Monopolies** by creating an ecosystem where the farmers and traders enjoy **freedom of choice of sale and purchase** of agri-produce.
- Taking forward the **idea of 'one Nation, one Agri-market'** by Abolition of market fee and giving permission for electronic trading of agri-produce.
- **Encouraging private sector participation** by providing the **legislative framework needed to boost contract farming.**
- **Better inventory management of Agricultural Produce** due to removal of restrictions through on storage of food commodities.
- **Improving price discovery and realization for farmers** by creating alternate and direct channels of marketing which decreases the interference of intermediaries.

Way Forward to ensure holistic reformation of the markets

- **Reforms in APMCs** like appointment of an independent regulator and encouraging private sector participation in APMCs (through Private Wholesale Markets, Unified Single Registration etc.).
- **Creating a National Integrated Market via strengthening e-NAM** by creating a third party assessment certification, encouraging involvement of farmer groups and other intermediaries.
- **Promotion of Investment in Marketing Infrastructure Development** by creating a long-term National Policy on storage and movement of agricultural produce, increasing infrastructure investment in RKVY and prompting states to promote PPP Model for infrastructure development.
- **Creating more robust Information dissemination systems** by popularizing more accessible methods, catering to personalized information needs via Mobile devices and providing farmers a broader set of information.
- **Rationalization of Market Fee/ Commission Charges** to maximum 2% of the value of the produce.
- **Other reforms** can also be taken like encouraging grading and standardization in produce, organization of farmer groups to enhance their bargaining power and developing a more consistent import-export policy.

6.3.1. THE FARMERS' PRODUCE TRADE AND COMMERCE (PROMOTION AND FACILITATION) ACT, 2020

Key features of the Act

- **Trade of farmers' produce:** The Act allows **intra-state and inter-state trade of farmers' produce outside:** (i) the physical premises of market yards run by market committees formed under the state APMC Acts and (ii) other markets notified under the state APMC Acts.
- **Electronic trading**: It permits the electronic trading of scheduled farmers' produce (agricultural produce regulated under any state APMC Act) in the specified trade area.

* **Market fee abolished**: The Act prohibits state governments from levying any market fee, cess or levy on farmers, traders, and electronic trading platforms for trade of farmers' produce conducted in an 'outside trade area'.

Intended benefits of the Act

* **Reduced role of intermediaries**: The new legislation could create an ecosystem where the farmers and traders will enjoy **freedom of choice of sale and purchase** of agri-produce. Thus, ending the monopoly exercised by traders and other intermediaries resulting in full realization of the price.
    * For example, a turmeric farmer now could sell her produce to BigBasket in Delhi, without any mandi tax or trader commission, at a mutually agreed upon price.
* **Integrated Market**: Barrier-free inter-state and intra-state trade and commerce would enable **farm surplus to move freely from surplus to deficit regions.** It will advance the **idea of 'one Nation, one Agri-market'.**
* **Encouraging APMC reforms**: Private markets could put pressure on APMC markets (**the Act does not repeal the APMC laws**) to infuse more **transparency and efficiency in their functioning.** The State governments have a significant role in reforming the APMC system:
    * Depoliticize the committees and make them more farmer friendly.
    * To allow APMC markets to compete with private markets; the cess levied on market transactions can be waived.
    * Privatizing mandis that are not viable.

Potential issues from the Act

* **Sudden changes** in market mechanisms **may not bode well** for the market. For instance, in 2006, Bihar repealed its APMC Act with an objective to attract private investment in the sector and gave charge of the markets to the concerned sub-divisional officers in that area. This resulted in:
    * Erosion of **the existing infrastructure over time due to poor upkeep.**
    * farmers facing issues such as **high transaction charges and lack of information on prices** and arrival of produce.
* The Act creates an **artificial distinction between "market areas"** (regulated by the mandi system under state governments) and **"trade areas"** (now under the central Acts), thus risking a problem of dual regulatory market.
    * Also, the **new unregulated market space** called the 'trade area' will have **no oversight and the government will have no information or intelligence** about who the players are, who is transacting with who for what quantities and at what prices.
* The newly created 'trade areas' would have a clear regulatory advantage over 'market areas' vis-à-vis the mandi tax. This could potentially lead to a **collapse of the APMC system** and **initiatives like e-NAM** which are riding on top of physical mandi structure in the country.
* The Act leaves a critical institutional space- **how state-specific implementation investments,** crucial for running efficient markets, **will be negotiated and managed**, if APMC are bypassed.
* **State Governments will lose mandi tax**, which is a major source of revenue for States like Punjab and Haryana.

6.3.2. THE FARMERS (EMPOWERMENT AND PROTECTION) AGREEMENT ON PRICE ASSURANCE AND FARM SERVICES ACT, 2020

Key features of the Act

* **Farming agreement**: The Act provides for a **farming agreement between a farmer and a buyer** prior to the production or rearing of any farm produce.
    * The minimum period of an agreement will be one crop season, or one production cycle of livestock. The maximum period is 5 years, unless the production cycle is more than 5 years.
* **Pricing of farming produce**: The price of farming produce should be mentioned in the agreement. For prices subjected to variation, a guaranteed price for the produce and a clear reference for any additional amount above the guaranteed price must be specified in the agreement.
    * Further, the process of price determination must also be mentioned in the agreement.
* **Dispute Settlement**: A farming agreement must provide for a conciliation board as well as a conciliation process for settlement of disputes. The Board should have a fair and balanced representation of parties to the agreement.

Intended benefits of the Act

- **Promote Contract Farming**: Giving a legal framework to contract farming will ensure groups of **growers and entrepreneurs come together in a contractual relationship** which will provide a ready market for growers for their produce, and ready access to raw material for the entrepreneurs (sponsors).
  - The Act empowers farmers to engage with processors, aggregators, wholesalers, large retailers, exporters etc., on a level playing field without any fear of exploitation.
- **Lower risk for farmers**: It will **transfer the risk of market unpredictability from the farmer to the sponsor**. Due to prior price determination, farmers will be shielded from the rise and fall of market prices.
- **Improved inputs**: It may provide farmer access to high quality seeds, better technology, fertilizers and pesticides along with **impetus to research and new technology in agriculture sector.**
- **Attracting investments**: This Act will act as a catalyst to **attract private sector investment for building supply chains** for supply of Indian farm produce **to national and global markets**, and in agricultural infrastructure.
- **Reduced cost of marketing for farmers**: Since, after signing contract, farmer will not have to seek out traders. **The purchasing consumer will pick up the produce directly from the farm.**
- **Dispute Resolution**: The Act also **provides for effective dispute resolution mechanism** for clear timelines.

Potential Issues from the Act

- Farmers have expressed **apprehension** that once these Acts are passed, they would **pave the way for dismantling of the minimum support price (MSP) system** and leave the farming community at the "mercy" of big corporates.
  - As a corollary, the farmers feel that the proposed legislations will **suit big corporations more than farmers** who will subsequently dominate the market.
  - However, the Government has clarified that these Acts would **not have any impact on the Minimum Support Price (MSP) mechanism** which will continue.
- The Act, while offering protection to farmers against price exploitation, **does not prescribe the mechanism for price fixation or a methodology for regulatory oversight.**
- According to the Act, **companies are not required to have a written contract with the farmer**, making it difficult for farmers to prove terms.
  - As a result, if a farmer gets into a dispute regarding her/his contract with a private company, it will be **very difficult for the farmer to have the dispute settled in her/his favor**.
  - Also, in case of disputes, the **District Administration has been entrusted** with the responsibility to resolve; but it **may not be well equipped to settle disputes.**

6.3.3. THE ESSENTIAL COMMODITIES (AMENDMENT) ACT, 2020

Key features of the Act

- **Regulation of food items**: The Act provides that the central government may regulate the supply of certain food items including cereals, pulses, potatoes, onions, edible oilseeds, and oils, only under extraordinary circumstances. These include: (i) war, (ii) famine, (iii) extraordinary price rise and (iv) natural calamity of grave nature.
- **Stock limit**: The Act requires that imposition of any stock limit on agricultural produce must be based on price rise.

Intended benefits of the Act

- **Ends harassment of Businessmen and traders:** Governments had restrictions on hoarding on food commodities and could seize any excess stocks maintained by the traders. This resulted in widespread harassment of traders and **rent-seeking behavior**. Now with the new Act, inventories can be managed without such interference.
- **Helps reduce wastage as storage facilities improve:** Despite India **losing a third of the agri. produce post-harvest**, businesses found it difficult to devise solutions to decrease that loss, mainly due to the regulation.
- **Likely to attract private investment in Cold Storage, warehouses, and processing:** These reforms **may accelerate growth in the sector** through private sector investment in building infrastructure and supply chains for farm produce.

- **Will bring price stability and raise farm incomes:** Exempting selected commodities from ECA will improve the marketability of the crop for growers. Processors, exporters and traders will now be able to build inventory without fear of penal action.

Potential Issues from the Act

- Some experts fear that the Act **would effectively legalize hoarding**, as licenses will no longer be required to trade in these commodities.
  - Such a situation can lead to anti-competitive behavior by particular buyers in the food chains.
- Complete deregulation of these commodities could lead to **dangerous situation of food supplyproblems during extraordinary circumstances** as the Government will have no information on who the players are, and the levels of stocks are not clear.

6.3.4. AGRICULTURAL INFRASTRUCTURE FUND (AIF)

Why in News?

In the Union Budget 2021-22, Finance Minister announced that Agricultural Produce Marketing Committees (APMCs) will become eligible beneficiaries to utilize Agriculture Infrastructure Fund (AIF).

About AIF

- It is a Central Sector Scheme, under Ministry of Agriculture & Farmers Welfare, to provide **medium - long term debt financing facility** through interest subvention and credit guarantee.
- Under AIF, **Rs. 1 Lakh Crore will be provided by banks and financial institutions as loans** with interest subvention of 3% per annum on loans up to Rs. 2 crore, this subvention will be available for a maximum period of 7 years.
- AIF will be managed and **monitored through an online Management Information System (MIS) platform.**
  - **National, State and District Level Monitoring Committees** will ensure real-time monitoring and effective feedback about the implementation of scheme.

Need for a better agricultural Infrastructure

- **Impact on farm productivity: For ~58% of total population** of India, agriculture and allied activities are the primary income sourceand adequate infrastructure **raises farm productivity and lowers farming costs.**
- **Reduction in wastage: India has limited infrastructure connecting farmers to markets** and hence, 15-20% of yield is wasted which is relatively higher vs. other countries where it ranges between 5-15%.
- **Improving farmer's income: Value addition, packing, branding and good marketing** network also adds to the income of the farmer.
- **Provide testing facilities:** to assess the quality of product thereby help in fixing better rates in the market.
  - It canhelp the farmers to assess the quantity in a better manner to predict the outcome.
- **Modernize the trading activities:** helping the farmers/traders to instantly decide and convey the decisions to initiate the action as early as possible (Ex: e-trading and internet auctions).

Other schemes that impact agricultural infrastructure

- **National Agriculture Market (eNAM):** It is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.
- **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY):** It has been formulated with the vision of extending the coverage of irrigation 'Har Khet ko pani' and improving water use efficiency 'More crop per drop.
- **Integrated Scheme for Agricultural Marketing (ISAM):** To promote creation of agricultural marketing infrastructure, creation of scientific storage capacity, framing of grade standards and quality certification etc.
- **Pradhan Mantri Gram Sadak Yojana (PMGSY):** It linked India's hinterland to towns and cities speaks to the multiplier effect that enabling infrastructure can have on rural communities.
- **Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY):** It aims to provide free electric connections to the underprivileged. DDUGJY is crucial for its feeder separation. It separated agricultural and non-agricultural power supply.

Role played by the scheme

Stakeholder	Intended benefits of Scheme
Farmers (including FPOs, PACS,	• Improved marketing infrastructure to **allow farmers to sell directly to a larger base of consumers** and hence, increase value realization for the farmers.

Cooperative Societies)	• Investments in logistics infrastructure **will reduce post-harvest losses** and number of intermediaries. • **Community farming assets for improved productivity** and optimization of inputs will result in substantial savings to farmers.
Government	• It will be able to **direct priority sector lending in the currently unviable projects** by supporting through interest subvention, incentive and credit guarantee. • Government will further be able to **reduce national food wastage percentage** thereby enable agriculture sector to become competitive with current global levels. • Central/State Government Agencies or local bodies **will be able to structure viable PPP projects for attracting investment** in agriculture infrastructure.
Agri entrepreneurs and startups	• With a dedicated source of funding, entrepreneurs will **push for innovation in agriculture sector** by leveraging new age technologies including IoT, AI, etc. • It will also connect the players in ecosystem and hence, **improve avenues for collaboration** between entrepreneurs and farmers.
Banking ecosystem	• With Credit Guarantee, incentive and interest subvention, **lending institutions will be able to lend with a lower risk.** • This scheme will help to **enlarge their customer base and diversification of portfolio.** • Refinance facility will enable **larger role for cooperative banks and RRBs.**
Consumers	• With reduced inefficiencies in post-harvest ecosystem, key benefit for consumers will be a larger share of produce reaching the market and hence, **better quality and prices.**
APMCs	• With access to low-cost credit, APMCs can set up post-harvest infrastructure such as sorting and grading units, assaying units, drying yards, cold storages, and warehouses etc. This will result in better price realization for farmers of quality produce, ability to store and sell at a better price and minimize post of harvest losses.

6.4. MSP AND PROCUREMENT

Why in news?

The recently passed Agri.-reform Bills have created apprehensions among farmers that these legislations will ultimately lead to the dismantling of the MSP regime.

Procurement regime in India

The procurement mechanism in India functions as an assured market for farmers and plays a role to guide the cropping patterns and incentivize production. To enable procurement Government has instituted a floor price for agricultural produce, namely Minimum Support Price (MSP).

MSP serves as a Procurement Price and is used as a market price benchmark. Government notifies MSPs annually for 23 commodities inclusive of 14 kharif, 7 rabi and 2 calendar year season crops.

A2 vs. C2 debate

The CACP determines the MSP based on the expenses incurred by the farmer. It is determined in following manner:

- **Expenses incurred (A2)** is estimated by considering cost of production, changes in input price, trends in market prices, demand and supply situation, inter-crop price parity, effect on general price level, effect on cost of living, international market price situation, etc.
- The final MSP is determined as a **function of expenses incurred (A2) and the imputed value of family labour (FL).**

There have been demands for considering a different costing method (C2). Adopting C2 will entail following changes:

- It would include the **rent paid for any leased-in land**, the **imputed rent** for the owned land, the **interest on owned fixed capital**, and **imputed value of wages to family labour**, in addition to the Cost A2.
- It is also argued that **50 per cent of Cost C2 should be added as the profit component**, for determining the MSP.

With the aforesaid framework for MSP, the existing procurement mechanisms by the government are implemented under:

- **Price Support Scheme (PSS):** Applicable in case of MSP notified crops.
- **Market Intervention Scheme (MIS):** To support commodities, for which MSPs are not notified - fruits/vegetables/other horticultural products.
- **Price Stabilization Fund (PSF):** A scheme to protect consumers from rising prices.
- **Food Corporation of India operations for Central Pool:** Wheat and Paddy is procured to meet buffer norms and for meeting targets of the public distribution system.

Reform initiated through PM-AASHA

An umbrella scheme has been initiated to further ensure remunerative prices to the farmers for their produce, namely Pradhan Mantri Annadata Aay SanraksHan Abhiyan (PM-AASHA). Following are the key components of the Scheme:

- **Price Support Scheme (PSS)**: In Price Support Scheme PSS, physical procurement of pulses, oilseeds and Copra will be done by Central Nodal Agencies with proactive role of State governments.
- **Price Deficiency Payment Scheme (PDPS)**: Under PDPS, direct payment of the difference between the MSP and the selling/modal price will be made to pre-registered farmers selling his produce in the notified market yard through a transparent auction process.
- **Pilot of Private Procurement & Stockist Scheme (PPPS):** In addition to PDPS, it has been decided that for oilseeds, states have the option to roll out Private Procurement Stockist Scheme (PPSS) on pilot basis in selected district/APMC(s) of district involving the participation of private stockist.

What are the prevalent issues with the procurement framework in India?

- **Limited reach of procurement:** Status of procurement linked to MSP has not been secular either in terms of crops covered or geographic spread. For example, in case of wheat, of the average of 33 per cent of marketed surplus procured, 90 percent procurement is accounted only from Punjab, Haryana and Madhya Pradesh.
- **Largely benefited wheat and paddy farmers:** The procurement of other MSP notified commodities has not been very encouraging. For instance, procurement of oilseeds remained at abysmally low 0.66 percent of the total production.
- **Poor operation of the Price Support Scheme** as can be seen with total procurement of pulses being at only 10 percent of the marketed surplus.
- **Procurement of perishables under MIS is still negligible.**
- **Delayed action:** Market participants have argued that delayed intervention on part of the government in distress situation **benefits the intermediaries more than the farmers**.
- **Shift in production and consumption patterns:** The price and procurement-based interventions have contributed towards higher supply and a supply driven shift towards rice-wheat consumption and cropping. The unseen consequence of this calorie-dominant food security approach has been nutritional deficiency.

What can be done to overcome these issues and strengthen the procurement system in India?

Following recommendations have been suggested by the Report of the Committee on Doubling Farmer's Income (chaired by Ashok Dalwai):

- **Adopting a more robust system of procurement**: It recommended, that in addition to strengthening the existing procurement schemes, more such tools be developed and deployed to **enhance the support and its reach across the country & across crops**, besides **improving speed of response and effectiveness of procurement**, in cases where prices may drop below MSP.
- **Timely market interventions:** Market interventions are also triggered by price linked eventualities. The extent and time of any market intervention should aim also at normalizing the fluctuations in market prices and more importantly the downslide of prices due to temporal post-harvest gluts.
- **Increasing diversification in procurement interventions** There is need to revisit the strategy on demand and supply, including PDS system, for balancing the nutritional security of the population. Such interventions should therefore have differentiated outcomes and appropriate sunset clauses.

6.5. FINANCIAL SUPPORT TO FARMERS

FINANCIAL SUPPORT TO FARMERS AT- A- GLANCE

Key targets

- **Provide income support** to all landholding farmers' families (irrespective of the size of landholdings) in the country.
- **Supplement financial needs of farmers** for procuring various inputs related to agriculture and allied activities as well as domestic needs.
- Providing an additional measure to ensure that **farming practices remain remunerative.**

Current Situation

5.5 crore farmer applications year on year are covered by PMFBY.
1/5th of the aggregate farm income is in the form of subsidies.
9.75 crore farmers to get over Rs 19,500 crore under PM-KISAN.
Overall 2-2.5% of GDP is provided as subsidy annually in the form of fertilizer, credit, crop insurance and price support subsidies.

Schemes/Initiatives

- Kisan Credit Card
- Interest Subvention Scheme
- PM KISAN
- PM Fasal Bima Yojana (PMFBY)
- PM Kisan Man Dhan Yojana
- PM-AASHA

Way Forward

- Strengthening the **institutional and digital infrastructure.**
- Gradually transitioning all **subsidies to the process of DBT.**
- **Enhancing investments in rural infrastructure** (roads, irrigation, marketing infrastructure, etc.) and agricultural R&D.
- **More freedom to states:** A bottom-up strategy and well-planned implementation mechanism should be adopted
- **Region specific schemes** & interventions.
- **More awareness** regarding various schemes among farmers.

Constraints

- Lack of **farmer database**
- Difficulty in **Identifying Beneficiary Farmers**
- **Inadequate financial room** available to government results in creation of a trade-off between farmer support and agri-investment
- **One-size fits all approach**
- **Lack of farmer's awareness** regarding various schemes and programs
- Dependence upon **non-institutional sources for credit requirement.**

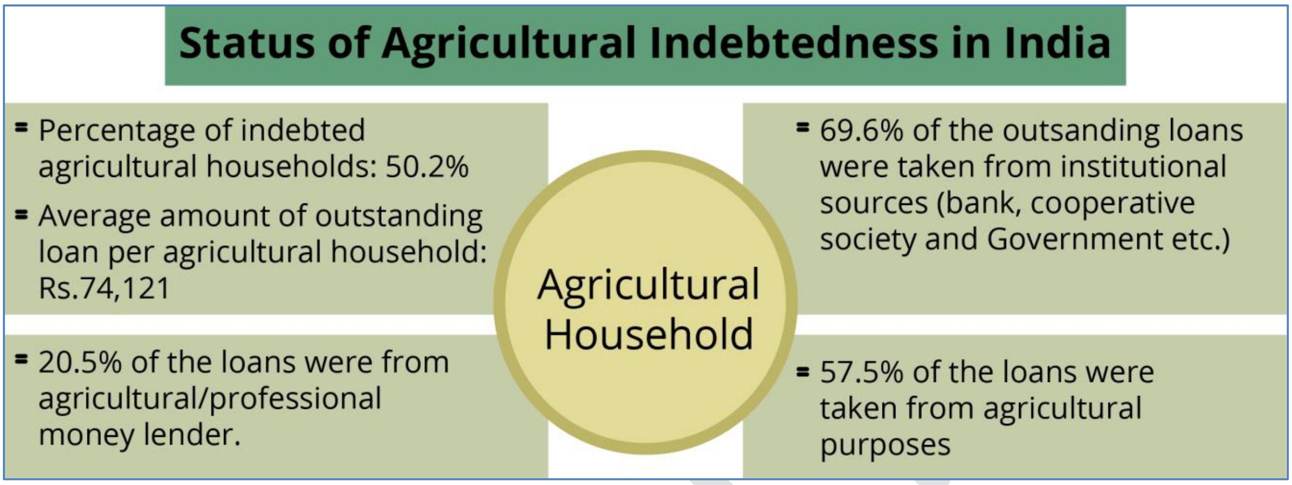
6.5.1. AGRICULTURAL INDEBTEDNESS IN INDIA

Why in News?

The average outstanding loan per agricultural household increased 57.7 per cent from 2013 to 2018, according to the latest findings of a **'Situation Assessment of Agricultural Households and Land Holdings of Households in Rural India, 2019' survey by the National Statistical Office**.

Key findings of the report

- **Average income of agricultural households** and farm incomes have **increased**.



Reasons for rising indebtedness

Indebtedness can be described as impoverishment by debt or as a situation where a household is caught in spiral debts. Following factors can be held responsible for rising indebtedness in agricultural households-

- **Inadequate growth in farm productivity and income**: This can be attributed to factors like-
  - **Rising cost of cultivation:** The loans are used to invest in farm mechanization (almost 95 per cent tractors are taken on loans) and acquire modern inputs like seeds, fertilizers, insecticides, pesticides etc.
  - **Climate change** affects weather and rain patterns leading to decline in agricultural productivity.
  - **Price volatility and poor agricultural marketing practices and value addition.**
  - **Subsistence farming of small landholdings** makes it impossible to meet the needs required for their living.
- **Poor risk mitigation mechanism:** Crop Insurance uptake is still low in India due to lack of awareness and delays in claim payments.
- **High cost of informal loans:** The small and marginal farmers, tenants and agricultural labourers still heavily depend upon informal sources of finance to meet their credit needs and pay very high rates of interest, which pushes them into debt cycle.
- **Ancestral/Inherited Debt:** Rural people incur debts for non-productive purposes such as to meet the family needs, perform social functions (related to marriages, birth, death), etc. This debt burden traps farmers into an intergenerational debt cycle which becomes harder to break due to uncertainty of farm income.
- **Farm loan waivers:** With more agriculture loans being waived-off, it is easier for farmers to take loans without the fear of repaying the amount if there is a loss.
- **Litigation:** Agriculturists in India are involved in various kinds of disputes related to land, property, etc., which involve heavy expenditure and time.

Impacts of indebtedness

While sustainable debt incurred to buy farm machinery or to invest in crop diversification can boost future income and enhance agriculture productivity, unsustainable debt can lead to issues such as-

- **Reduced investment** in modernisation of agriculture.
- **Distress selling to fulfil debt obligations**.
- **Marginalization of farming community** and in extreme cases farmer suicides.

- **Enhanced rural poverty and impact on overall socioeconomic growth** in agricultural households in terms of educational and health outcomes.
- **Indebtedness inhibits the provision of new loans** and creates pressure on the banking system due to increased possibility of default.
- **Loss of property rights to money lenders** can turn famers into landless labourers which limits their ability to take farming decisions.
- Mounting debt **exacerbates the unviability of agriculture as an economic activity**, threatening food security and pushing farmers into a seemingly endless spiral of debt.

Way Forward

To resolve the issue of rising debt, a holistic approach is needed that focuses on-

- **Enhancing agricultural productivity and farmers income** by initiating programmes that focus on teaching farm-related technologies to the farmers and promote climate suitable and high value agriculture.
- **Risk mitigation** by raising awareness about crop insurance schemes.
- **Enhance accessibility of institutional credit facilities**, especially for small and marginal farmers through steps such as setting-up mobile branches of banks in rural areas, reducing the transaction costs, computerisation of lands records etc.
- **Establishing Financial Literacy and credit Counselling Centres (FLCCs):** Training can be provided to banks SHG federations, agri clinics and other similar institutions to educate farmers about sustainable debt practices.
- **Setting up of a "Money Lenders Debt Redemption Fund"** as a one-time measure for providing long-term loans by banks to farmers to enable them to repay their debts to the moneylenders. Local Civil Society Organisations, NGOs or Panchayati Raj Institutions could be involved in arriving at negotiated settlements with the moneylenders.

6.5.2. PRADHAN MANTRI KISAN SAMMAN NIDHI (PM-KISAN)

Why in News?

Recently, a RTI reply from Ministry of Agriculture revealed that **PM-KISAN payments worth ₹1,364 crore have been wrongly made to more than 20 lakh undeserving beneficiaries.**

More on News

- **As per the data, two categories of undeserving beneficiaries were identified**- ineligible farmers (44.41%) and income tax payee farmers (55.58%).
- A major chunk of these ineligible beneficiaries belonged to five states — **Punjab, Assam, Maharashtra, Gujarat and Uttar Pradesh.**

About PM-KISAN Scheme

- Under the scheme **Income support of Rs.6000/- per year** is provided to **all land holding farmer families** across the country, irrespective of land size, in three equal installments of Rs.2000/- every four months.
- **Objective of the scheme is to**
  - **Provide income support to all landholding farmers' families** (irrespective of the landholdings) in the country.
  - **Supplement financial needs of farmers for procuring various inputs** related to agriculture and allied activities as well as domestic needs.

Issues identified

- **Lack of Farmer Data Base:** The scheme was hurriedly announced, and the government did not have proper database of farmers. Many states like West Bengal, have delayed or did not submit the data related to farmers.
- **Difficulty in Identifying Beneficiary Farmers:** Land holding does not determine the numbers of farmer families present in the country as there are multiple owners for a single land or a single owner for multiple landholdings.
- **Role of Banks:** There are reports that several bank branches adjusted the deposit money against past liabilities of few farmers. This kind of scenarios may lead to subversion of the objectives of the income support scheme.

- **Neglect of lessee cultivators:** Benefits accruing to lessee cultivators or share- croppers under PM-KISAN have not been explicitly mentioned. Also, identification of these lessee cultivators continues to be a huge challenge.
- **Inadequate financial support:** The amount offered by PM-KISAN, is largely insufficient for even bare minimum sustenance of vulnerable farmers.
- **Lack of grievance redressal mechanism:** Scheme does not provide a clear design of transfers and a framework for effective grievance redress. In such scenario, state governments will struggle to resolve complaints and curb corruption.

Way Forward

- **Strengthening IT backbone:** States with robust IT infrastructure will be in a better position to implement PM-KISAN.
- **Targeting updation of land records:** It will ensure that eligible cases are not deprived. Similarly, fraudulent claims will also be avoided.
- **Focus on other reforms:** Any income support scheme can't cover all the farm households and therefore, enhancing investments in rural infrastructure (roads, irrigation, marketing infrastructure, etc.) and agri R&D will be helpful.
- **More freedom to states:** A bottom-up strategy and well-planned implementation mechanism would allow weaknesses to be identified and rectified at the local level. The most effective modalities can then be scaled nationally.
- **Better timing of providing installments:** Reports highlight that farmers receiving PM-KISAN benefits in the agricultural peak season are more likely to spend it on agriculture, and those getting it in the off-season are more likely to spend it on consumption.

6.5.3. PM FASAL BIMA YOJNA

Why in news?

PM Fasal Bima Yojana (PMFBY) has completed 5 years of its operation.

Achievements of the scheme

The PMFBY was conceived as a milestone initiative to provide a comprehensive risk solution at the lowest uniform premium across the country for farmers.

- **Average sum insured per hectare** has increased from Rs 15,100 during the pre-PMFBY schemes to Rs 40,700 under PMFBY.
- **Covers** over **5.5 crore farmer** applications year on year and claims worth **Rs. 90,000 crore** paid as of Jan 2021.
- **Speedy claim settlement** directly into the farmer accounts **through Aadhar linkage.**
- During COVID-19 lock down period, **70 lakh farmers** benefitted and claims worth Rs. 8741.30 crores were transferred.
- The **scheme was made voluntary for all farmers**, (which was one of the challenges in success of the scheme) after its revamp in February 2020. Further, the **states have also been provided flexibility to rationalise the sum insured** so that adequate benefit can be availed by farmers.

Rationale for Crop Insurance in India

- **Small and marginal farmers** with less than two hectares of land account for 86.2 percent of all farmers in India but own only 47.3 percent of the crop area. Such small average holdings do not allow for surpluses that can financially sustain families.
- **70 per cent of agricultural production is vulnerable to vagaries of monsoon**. Sixty per cent fluctuation in yield is caused by weather shocks which results in fluctuating incomes and unstable livelihoods.
- Commercialization of agriculture leads to an increase in credit needs, but **most small and marginal farmers cannot avail credit** from formal institutions due to the massive defaulting caused by repeated crop failure.

Issues with the scheme

- **Structural Issues:**
  - **Discretionary powers with the State government:** It is unclear how states should choose the major crops during a season for different districts, which results in the exclusion of farmers who grow non-notified crops.
  - **No provision for farmer's revenue protection:** Being only a yield-protection insurance, this scheme fails to take into account revenue protection.

- ○ **Crop cutting experiments (CCE's) to estimate crop loss are not reliable:** There is a lack of trained professionals to handle the CCEs, and the current technology is not reliable. This has led to delays in assessment and settlement of claims.
- ○ **Lack of farmer awareness**: According to the CAG, out of 5,993 farmers surveyed, only 37% were aware of the schemes.
- ○ **Low participation of tenant farmers and sharecroppers** due to non-uniform land lease policies of state governments.
- ○ **No provision for competitive pricing:** As per the scheme guidelines, every cluster has a specific insurance company selling insurances, creating infrastructure and manpower for three years. Lack of competition serves as a disincentive for insurance companies to improve or upgrade their products and pricing, and creates a monopoly over a scheme.
- ○ **One-size fits all approach:** All the farmers in the country have been treated as similar without any option to choose an insurance that meets the specific needs of their region.

- **Financial Issues:**
  - ○ **Delays in claim settlement:** Claim settlements are not done as per 45-day norm by the insurance companies. As on November 2019, insurance claims worth ₹25.11 billion had been due from more than 1 year. This has generated trust deficit among farmers.
    - ✓ Payment of claims gets delayed due to reasons such as delayed transmission of yield data, late release of their share in premium subsidy by some States, yield-related disputes between insurance companies and States, etc.
  - ○ **Impact on state finances:** High premium as compared to claims paid by insurance firms has impacted state finance and led to exit of state governments from PMFBY. For instance, Bihar discontinued PMFBY from Kharif 2018–2019 and started Bihar Rajya Fasal Sahayata Yojana (BRFSY) crop insurance scheme.
  - ○ **Skewed pattern of benefit ratio:** It has been observed that only 50 districts have repeatedly accounted for 50 per cent of all claims under PMFBY.

Way forward to revamp the scheme

- **Strict compliance with timelines for claim settlement** to ensure adequate and timely compensation to farmers. The claim-settlement chain or the logistics behind doling out claims must be improved to process claims faster.
- **Ensuring inclusivity:** It is crucial to include women farmers, tenant farmers and sharecroppers to help formalise this economy, protecting revenue and jobs.
- **Incentivising the development and use of technology**: The use of remote-sensing, drones, satellite imagery and digitisation of land records should be urgently promoted for effective implementation of the PMFBY.
- **Competitive Pricing:** The provision of at least two insurance companies in a cluster of villages in one state will help farmers benefit from competitive pricing for insurance products.
- **Increasing penetration of crop insurance**: Mandatory awareness programmes on the benefits of crop insurance must be developed and made available to farmers. Role of village-level authorities is crucial for awareness and enrolment of farmers in crop insurance.
- **Linking crop insurance with climatic changes** and redesigning insurance products to make them not just risk transfer tools but a tool to reduce the risk and loss of crops.
- **Offering insurance as priority insurance on the lines of priority sector lending** can increase penetration of crop insurance in rural areas.

6.6. AGRICULTURE AND TECHNOLOGY

Key targets

- Fulfilling the increased **demand for quantity, quality and nutritious food,** and variety of food.
- **To build an agriculture and food system that is efficient, environmentally sustainable,** equitable, and able to link farms with consumers.
- Taking advantage of the **growing Agritech start-up ecosystem.**

Current Situation

Technological penetration is limited to experimental and pilot projects.

Affordability and accessibility new technologies such as AI, Robotics and Internet of Things (IoT) is still out of reach for an average farmer.

Information flow has increased in the past decade owing to increased smartphone availability and internet access.

Schemes/Policies/Initiatives

- Government's free app, **Kisan Suvidha.**
- **AI-Sowing App** developed in collaboration with International Crops Research Institute for the Semi-arid Tropics (ICRISAT).
- **ISRO's Geo-platform, Bhuvan,** provides valuable data on the plantation, pest surveillance and weather.
- Krishi Vigyan Kendras (KVKs) mandated with **Technology Assessment and Demonstration for its Application and Capacity Development (TADA-CD).**
- **e-sagu** to provide expert suggestions to the farmers.

AGRICULTURE AND TECHNOLOGY AT- A- GLANCE

Way Forward

- **Strengthen access to foundational data** and promote data sharing.
- **Review regulations** that may constrain the adoption of technologies.
- **Support digital entrepreneurship ecosystems**
- **Technology transfer needs effective interactive groups** like Self Help Groups and Farmers Clubs
- **Innovative financial arrangements and micro-loans** might be required to increase adoption.

Constraints

- **High transaction cost** because of small-scale farm structures, poor public infrastructure, and insufficient human capital investments.
- **Reluctance from Farmers** to invest in tech solutions.
- Public as well as private sector **investment in agri R&D is low.**
- Small and marginal farmers may lack the **skills and knowledge to reap the benefits of digital applications.**
- **Perpetuate labour market inequalities** by making agriculture less labour intensive.

6.6.1. DIGITISATION IN THE AGRICULTURAL SECTOR

Why in News?

The Department of Agriculture, Cooperation and Farmers Welfare, recently entered into a Memorandum of Understanding (MoU) with Microsoft Corporation to create a 'Unified Farmer Service Interface' through its cloud computing services.

Need of Digitization in the Agricultural sector

- **Inclusive growth**: Digitization can bring transformative growth and enhance productivity of the agricultural sector, boosting overall rural economy.
- **Strengthening agricultural ecosystem**: Over the years, agriculture's contribution to national GDP has declined from 34% in 1983-84 to just 16% in 2018-19 due to inherent inefficiencies in the agricultural ecosystem.
  - Innovations such as satellites, sensors, data analytics, and improved means of connectivity can help farmers face myriad challenges, such as access to markets, information, inputs, expert advice, etc.
- **Informed decision making**: The application of information technology can support farmers in making intelligent decisions based on concrete data. It also enables individuals to get specialized solutions, granular information of direct use rather than a general policy overview which the centre or state government publishes.
- **Digitization of land records:** can empower farmers especially tenant farmers, sharecroppers, oral lessees and landless laborers by improving transparency in accessing institutional credit and enhancing overall ease of doing business in the agri sector.
- **Provision of Digital Financial Services (DFS):** DFS includes services such as alternative credit scoring, payments, insurance and savings etc. Such services can help agricultural sector to overcome several roadblocks such as limited access to capital, climate risks etc.

Bottlenecks and Major Challenges

- **Non-availability of suitable digital products**: Digitization efforts often suffer from poor product design, inappropriate technology for a rural context and inadequate understanding of the needs of key agriculture stakeholders. For instance, most digital products operate in English or Hindi and do not offer services in other local languages.
- **Digital divide**: Smartphone penetration is very low in rural India (25% in 2018) and internet access is limited—rural broadband penetration was a mere 29% in March 2020.
  - Also, farmers may not have the resources needed for investment in digital technology, nor the outreach to learn about new and upcoming technology.
- **Information gaps**: Information asymmetry exists at every stage of the agri ecosystem such as lack of information and understanding about- the optimal use of fertilizers; the importance of quality and advantages of different varieties of seeds in the market; the true market demand of crops etc.
- **Digital technology-related risks** can cause disrupted service and loss of data, including payment instructions (for example, due to dropped messages), as well as the risk of a privacy or security breach resulting from digital transmittal and storage of data.
- **Limited funding for private AgTechs**: High risk perception among investors, long gestation period, climate risk, lack of leverage etc. make it difficult for Technological Startups involved in Agriculture (AgTech).
- **Limited availability of agri-data and access to it**: Companies working in the AgTech sector find it difficult to access reliable agri-data owned by the government. Also, only a few states have digitized land records.
- **Concerns related to sharing farmers' data with private companies:** Without proper safeguards, private entities would be able to exploit farmers' data to whatever extent they wish which can lead to commodification of agriculture and farmer data.

Government efforts towards digitization in Agriculture

- **AI-Sowing App**: Microsoft has developed this app in collaboration with International Crops Research Institute for the Semi-arid Tropics (ICRISAT). This application sends advisory to the farmers regarding the optimal date of seed-sowing.
- NITI Aayog has partnered with IBM to develop a **crop yield prediction model** backed by AI to provide real-time data and communicate the required advisory to farmers.
- **Kisan Suvidha:** It is an omnibus smartphone app that helps farmers by providing them relevant information regarding weather, dealers' market prices, plant protection, agro advisories, IPM practices etc.

- **MKisan App:** This app enables farmers and stakeholders to obtain advisories and other information being sent by experts and govt. officials through mkisan portal without registering on the portal.
- **Farm-o-pedia**: Developed by CDAC Mumbai, this is a multilingual Android app that targets the farmers of rural Gujrat. The major functionalities of this app are, it helps farmers get suitable crops as per soil and season, helps farmers get crop-wise information, weather monitoring and cattle management.
- **Crop Insurance App:** is used to calculate Insurance Premium for notified crops based on area, coverage amount and loan amount.
- **Shetkari App:** helps download Shetkari Masik an Agriculture magazine & there is no requirement of internet to read it.
- **Agri Market App:** provides information of market price of all crops at the markets located within 50 kilometre radius of the device's location.
- **Pusa Krishi App:** provides information about various types of crops.

Way Ahead

- **Hybrid 'phygital' (physical plus digital) model:** to achieve digitization outcomes in the long run. Such models can provide farmers with necessary assistance to decide which service to use.
- **Creation of an Aggregated Digital Ecosystem** (a 360-degree Solution): For example, a common platform could support getting credit, selling crops, receiving payment, etc.
- **Collaboration between fintech and banks**: Fintechs can act as the interface between farmers and large banks and provide banks with trusted information based on which credit can be extended to farmers.
    - Example- SBI's YONO App: YONO SBI Krishi.
- **Transparency and availability of data**: Creating a system for open sourcing all such government data and creating APIs for researchers/private sector players to use, perhaps for a fee, can help initiate the building of an effective agri digital ecosystem.
    - Analyzing data can lead to insights into cropping patterns, predicting shortage/surplus, mapping shortfall/abundance of artificial irrigation, weather changes, etc.
- **Setting up of a specialized fund for the upliftment of the agri-tech sector**: There are many recent agri-tech related startups with new ideas and innovative approaches, but unable to scale up due to lack of availability of significant risk-taking capital.
- **Digitization of land records**: Bhoomi database developed by the Karnataka state government and SVAMITVA Scheme are a step in the right direction.
- **More collaboration between agri-related start-ups and FPOs** can fill the information gap on both the upstream and downstream sides in remote rural areas.
    - FPOs can become the center for farmers where they get to deal directly with large consumers and independent retailers, thereby creating an end-to-end value chain.

6.6.1.1. AGRISTACK

Why in News?

Recently, many organisations that work for farmers' rights and digital rights flagged concern over government's plan of creating 'AgriStack'.

About Agristack

- AgriStack is a **collection of technologies and digital databases** proposed by the Union government that focuses on farmers and the agricultural sector.
- AgriStack may have **a Farmers' Stack, a Farm Stack and a Crop Stack** integrated on a technology platform linking existing digital land records, cadastral maps of farms and information.
    - **Farmers' Stack can consist of farmer data with Aadhaar** as unique identifier, Farm Stack can have geospatial information on each farm (with a farm identity) owned by a farmer with cadastral maps, and **Crop Stack can contain crop data linked to farms.**
- Government's schemes such **as Pradhan Mantri Fasal Bima Yojana (PMFBY), PM-KISAN and Soil Health Card will be integrated through a common database** along with land record details over a period of time.

Benefits of Agristack

- **Improved access to formal credit:** It can enable **closer study of the flow of agricultural credit to specific land parcels.** It will also enable credit flows and interest subventions to become more transparent.

- **Crop insurance products and delivery can be improved:** especially with geographic information system (GIS) and remote sensing technologies.
- **Smooth mechanism for marketing and price discovery:** It **can enable the provision of market intelligence** for de-risking commodity price fluctuations, demand-supply forecasting and weather advisory.
  - A marketplace can be created where various **entrepreneurs and suppliers of products and services can meet.**
- **Better quality of input:** Agristack **could address the asymmetry in information flow** by providing all information about farmers and their farming easily to relevant stakeholders (seed, chemical fertilizer and pesticides, machinery companies or fin-tech companies).
- **GIS and IoT (internet of things) services can be deployed to give feedback to stakeholders.** For example, at the post-harvesting stage, a trigger to harvesting equipment suppliers and buyers may be sent, who can approach the cultivator for providing services.
- **Prevent leakages of aid** with accurate targeting.

Concerns raised against Agristack

Data security

It is being implemented in the absence of a data protection legislation. Without such safeguards, private entities could exploit farmers' data to whatever extent they wish to.

Financial exploitation

Once Fintech companies are able to collect granular data about the farmers' operations, they may offer them usurious rates of interest precisely when they would be in the direst need for credit.

Exclusion error

- Proposed farmers' database will be based on the digitised land records which is full of loopholes even for land-owning farmers and "exclude entire categories of landless farmers.
- Making land records the basis for farmer database may exclude tenant farmers, sharecroppers and agricultural labourers from the centralised database

Digital access

There is a massive gap in digital access and literacy in the country, which will render any such project unviable.

Way forward

- **Ensure digital security and privacy:** Government should prepare a stronger framework to protect the interests of the farmers whose data is being used.
- **Wider consultation:** Since agriculture is a state subject, it is critical that **state governments are taken on board.** There is a need for creation of common agricultural data standards and sharing **mechanisms through inter-ministerial/centre-state consultations.**
- **Ensure asymmetric flow of information:** There is no denial that there is potential in data and technology in empowering farmers but only when the flow of information is balanced.

6.7. ALLIED SECTOR

Key targets

- **Increasing livestock productivity and production in a sustainable manner,** while protecting the environment, preserving animal bio-diversity, ensuring bio-security and farmers' livelihood.
- Enhance **horticulture production,** augment farmer's income and strengthen **nutritional security.**
- Ushering in a **rainbow revolution** to ensure balanced and holistic development in all the areas.

Current Situation

- **8.15%** has been the growth rate of Livestock sector in India in the last 5 years.
- **8.8%** of the population is employed in the Livestock sector
- **37%** of India's total exports are contributed by the Horticultural Sector.
- **2nd largest** fish producing country in the World.
- **6.3%** of the global fish production happens in India.
- **22%** of the global milk production happens in India.

Schemes/Initiatives

- Mission for Integrated Development of Horticulture (MIDH)- National Horticulture Mission (NHM), National Horticulture Board, Coconut Development Board
- Blue Revolution: Integrated Development and Management of Fisheries
- National Livestock Mission (NLM)
- National Program for Bovine Breeding and Dairy Development (NPBBDD)
- National Mission on Bovine Productivity
- Encouraging new techniques like Permaculture etc.

ALLIED SECTOR AT- A- GLANCE

Way Forward

- Encourage **diversification to High Value Crops,** regional production belts for HVCs.
- Use of **hybrid technology** in vegetables.
- **Rootstock Technology** for production of fruit.
- **Smart horticulture:** using techniques such as high-density plantation, protected cultivation and organic production.
- Strengthen **market for organic products**
- Breed **indigenous cattle with exotic breeds.**
- Encourage **Village level procurement systems** for products like milk.
- **Convergence of schemes** in fisheries sector.
- **Capacity building** for fish breeders and farmers.

Constraints

- Use of **outdated and inefficient technology** is the primary reason for low productivity of crops and livestock.
- **Absence of adequate capital** vis-à-vis technological adoption.
- **Affordability of high yielding breeds, farm equipment** becomes a significant constraint.
- A **huge gap exists between the demand for and supply of skills** in agriculture, hindering diversification.
- **Low scale** is a serious constraint on the adoption of improved practices in all the allied activities.

6.7.1. LIVESTOCK SECTOR OF INDIA

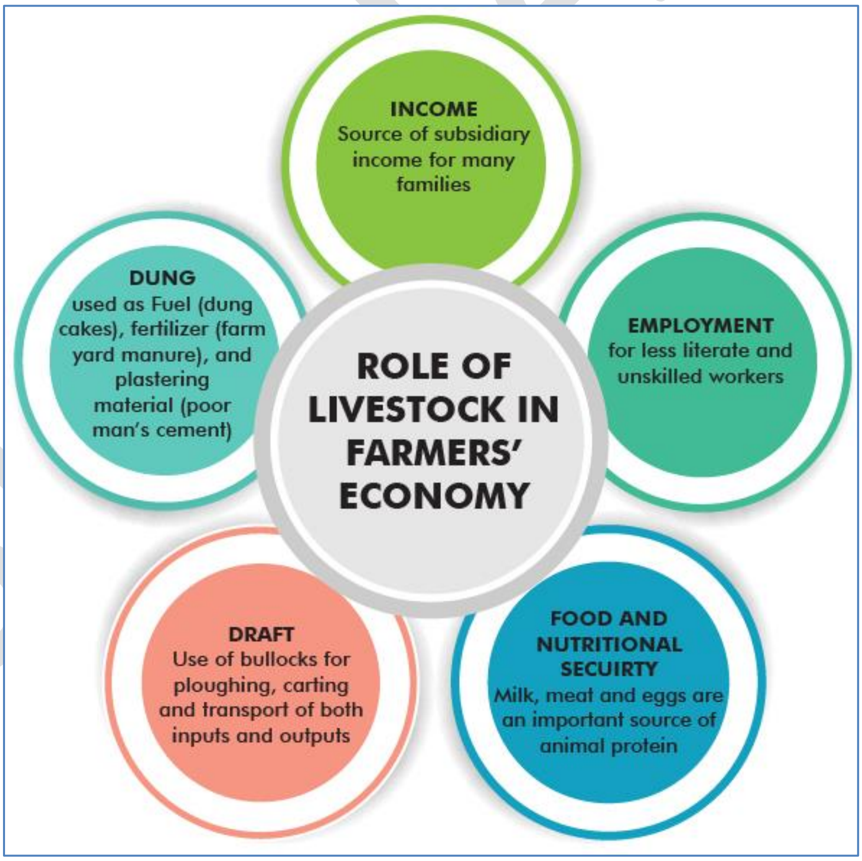
Why in News?

The parliamentary standing committee on agriculture, had submitted a report titled 'Status of veterinary services and availability of animal vaccine in the country' pointing out several impediments to growth of the livestock sector in India.

Status of Livestock Sector in India

- The Livestock Sector in India has been growing at a **Compound Annual Growth Rate (CAGR) of 8.15%** from 2014-15 to 2019-20.
- Livestock provides **employment to about 8.8 % of the population** in India.
- It provides **livelihood to two-third of rural community**.
- It **contributed 16% to the income of small farm households** as against an average of 14% for all rural households.
- Livestock sector contributes to **34% of total Agriculture GDP (2019-20)**.
- **As per the 20th Livestock Census, India is-**
  - **World's highest livestock owner, being** First in the total buffalo population, Second in the goat population and Third in the sheep population.
  - **Second largest poultry market** in the world.
  - **Second largest producer of fish** and second largest aquaculture nation in the world.

Impediments faced by Livestock Sector in India



- **Low productivity of farm animals**: This can be attributed to high incidence of animal diseases and low awareness among farmers about livestock technology related to increasing yield, vaccination, breeding etc.
- **Inadequate and poor quality of veterinary infrastructure**: Growth in numbers of Veterinary Hospitals/ Polyclinics and Dispensaries, trained Veterinarians and other personnel staff in Veterinary Services, veterinary educational institutions etc. over the years has been inadequate.
- **Deficiency of vaccines and vaccination set-up**: Shortage of vaccine and cold storage facilities, limited manufacturing capacity and poor quality of vaccine has led to huge financial losses and pertinent delay in vaccination drives.
- **Shortage of nutritional fodder**: Hardly 5 per cent of the cropped area in India is utilized to grow fodder. India is a deficit in dry fodder by 11 per cent, green fodder by 35 per cent and concentrates feed by 28 per cent.
  - Also, the common grazing lands to have been deteriorating quantitatively and qualitatively.
- **Lack of access to markets**: Except for poultry products and to some extent for milk, markets for livestock and livestock products are underdeveloped, irregular, uncertain, and lack transparency. Further, these are often dominated by informal market intermediaries who exploit the producers.
- **Adjustment pressure to the emerging market forces**: Though globalization has created avenues for increased participation in international trade, stringent food safety, and quality norms hinders potential export growth in the Indian livestock sector.

- **Weak institutional mechanisms to protect animals against risk**: Only 6 per cent of the animal heads (excluding poultry) are provided insurance cover.
- **Inadequate availability of institutional credit**: The share of livestock in the total agricultural credit has hardly ever exceeded 4% in the total (short-term, medium-term and long-term).
- **Weak extension services at field level**: This limits capability of Indian farmers to adopt the technologies developed by research institutions.

Way Forward

- **Strengthening of linkages between production and markets** through institutions such as co-operatives, producers' associations, and contract farming.
- **Promoting Livestock farm automation systems** to save time, reduce labor requirements, and improve product quality, increase production, efficiency, accuracy, and safety.
- **Explore the possibility of availing more funds** under other Schemes such as Rashtriya Krishi Vikas Yojana (RKVY), Rural Infrastructure Development Fund (RIDF) including dovetailing with MPLAD funds etc. so as to cater adequate Veterinary Health Services in States / UT.
- **Expansion of extension services:** The emergence of new technologies and practices require linkages between stakeholders and developing a wider outreach to the farmers.
- **Establishing a network of Mobile Veterinary Clinic (MVC)** to provide doorstep delivery of veterinary services specifically for remote / border and inaccessible areas.
- **Increase the present number of Veterinary colleges/ Universities** in order to reduce the shortage of trained manpower in veterinary services.
- **Promoting Public Private Partnership (PPP)**: Investments made by Private companies, Cooperative Societies etc. can be used in augmenting Veterinary Infrastructure, such as in case of Mobile Dispensaries in Gujarat.
- **'One-stop Centre'** for solutions to livestock issues and dissemination of information to the remotest areas of the country **can ensure eradication of Infectious diseases**.

Major Government Schemes aimed towards growth of Livestock Sector	
Development Programmes	• **National Livestock Mission:** It aims to enhance the level of nutrition and standard of living of livestock keepers and farmers especially small holders through sustainable, safe and equitable livestock development. It includes **Sub-Missions onFodder and Feed Development, Skill Development, Technology Transfer and Extension etc.** • **Rashtriya Gokul Mission (RGM):** for development and conservation of indigenous breeds through selective breeding in the breeding tract and genetic upgradation of nondescript bovine population. • **National Programme for Dairy Development**: It aims to enhance quality of milk and milk products and increase share of organized milk procurement.
Disease Control programme	• **Scheme on livestock health & disease control (LH&DC)**: Centrally Sponsored Scheme aimed at providing financial assistance as Central share to States / UTs for control & containment of animal diseases like Contagious Bovine Pleuropneumonia (CBPP), Classical Swine Fever (CSF) etc. • **National Animal Disease Reporting System (NADRS)**: A Sub-component of LH&DC, it is a web based platform for reporting of animal disease from the level of block veterinary institution on a real-time basis.
Infrastructure Development Funds	• **Animal Husbandry Infrastructure Development (AHIDF)** with corpus of Rs. 15000 crore for incentivizing investments by individual entrepreneurs, private companies, MSME, Farmers Producers Organizations (FPOs) etc. to establish the dairy and meat processing and value addition infrastructure and Animal Feed Plant. • **Dairy Processing & Infrastructure Development Fund** with a corpus of Rs. 8,004 crore to provide loan assistance to Eligible End Borrowers (EEBs) such as the State Dairy Federations, District Milk Unions, etc. to modernize the milk processing plants and machinery and to create additional infrastructure for processing more milk.

6.8. FOOD PROCESSING SECTOR

Key targets

- **Integrating two important pillars of the economy** i.e., economy and agriculture through Food Processing Sector.
- **Exploiting India's food processing (FP) potential due to increasing demand** in sectors like milk, pulses, ginger, bananas and mangoes.
- **Creating global food manufacturing champions.**
- **Supporting branding and marketing** of the Indian products abroad.
- Addressing the problems of currently **low processing level of food products** and **huge wastage in the supply chain.**

Current Situation

- **10%** has been the growth rate of the sector in the past 5 years.
- **9%** of the total Gross Value Added (GVA) in the manufacturing sector.
- **22 Mega Food Parks** are operational out of 37 approved across the country as on Feb 2021.
- **1.93 million** people are employed in the sector.
- **10.7%** of India's exports are contributed by the sector.

Schemes/Policies/Initiatives

- PM Kisan SAMPADA Yojana
  - Mega Food Park Scheme
  - Integrated Cold Chain and Value added Infrastructure
  - Infrastructure for Agro-processing clusters
  - Food Safety and Quality Assurance Infrastructure
- Operation Greens
- Prime Minister-Formalisation of Micro Food Processing Enterprises (PM-FME)- One District One Product (ODOP)
- Production Linked Incentive Scheme for Food Processing Industry (PLISFPI)
- Draft National Food Processing Policy 2019

FOOD PROCESSING SECTOR AT- A- GLANCE

Way Forward

- To promote farmer–producer interaction, **provide appropriate tax incentives and holidays for setting up food processing industries**, taking care of expenses on market promotion and ancillary activities.
- Policy initiatives to **plug supply side and infrastructure bottlenecks**.
- Streamlining the **regulatory structure**.
- **Change in mindset** - Orienting stakeholders towards 'demand and profit driven production'.
- **Human resource development**-to meet increasing demand for skilled manpower.

Constraints

- **Informalization** in Food Processing Industry.
- **Lack of efficient supply chain** infrastructure.
- Hurdles in getting **access to raw materials.**
- **High requirement of working capital**, low availability of new reliable and better accuracy instruments and equipment's, inadequate automation.
- **Under-developed of linkages** between R&D labs and industry.
- Significant **gap in Cold Chain capacity.**
- **Inadequate linkage** of processors, exporters and bulk purchasers with farmers.
- **Poor Credit Facility, Bureaucratic hurdles and Stringent Labour Laws.**
- **Inadequate training and skill development.**
- Limited ability to control quality and safety.

6.9. FARMER PRODUCER ORGANISATIONS (FPO)

Why in news?

Recently, Union Minister of State for Agriculture and Farmers Welfare reiterated to create ten thousand Farmers Producer Organizations (FPOs) across the country.

About 'Formation and Promotion of 10,000 new Farmer Producer Organizations (FPOs)' scheme

- It is a **Central Sector Scheme** to **form and promote 10,000 new FPOs** in the country.
- FPOs will be **developed in clusters** for **leveraging economies of scale** and improving **market access** for members. **"One District One Product"** cluster will **promote specialization** and better processing, marketing, branding & export.
- A **credit guarantee facility of INR 2 crore of project loan per FPO** has been given to ensure access to institutional credit.

Challenges faced by FPOs

- **Mobilization of farmers:** Due to manpower attrition, formation and promotion of FPOs is a challenge. Also due to less farmers, share capital of FPO become inadequate and leads to financial problems.
- **Inefficient management:** FPOs are run by farmers and CEO and Board of Directors are democratically elected from among them. Poor managerial skills and limited exposure to entrepreneurship and business development often leads to failure.
- **Inadequate access to credit:** Often FPOs don't have any other revenue source apart from farmer members' equity to leverage borrowings. Lack of access to affordable credit for want of collaterals and credit history is one of the major constraints.
- **Lack of information:** FPOs are unable to take benefits of schemes launched by SFAC and other related organizations due to lack of information.
- **Lack of risk mitigation to FPOs:** Risks related to production at farmers' level are partly covered under the existing crop / livestock / other insurance schemes, there is no provision to cover business risks of FPOs.
- **Inadequate access to infrastructure:** FPOs have inadequate access to basic infrastructure required for aggregation like transport facilities, storage, value addition (cleaning, grading, sorting, etc.) and processing, brand building and marketing.
- **Inadequate access to market:** Marketing of produce at remunerative prices is the most critical requirement for the success of FPOs. Complex market mechanisms and price-fixing of inputs by corporate producers reduce market access by cultivators.

Way forward

- **Ease of doing business:** Suitable relief to FPOs from various statutory compliances may be provided at least during initial 10 years so as to help them adjust with the regulatory business environments and stabilize business operations.
- **Capacity building of members:** Capacity building through skill development, business planning, trained management, technological platforms, market intelligence and exposure visits can strengthen backward and forward linkages of FPOs.
- **Access to credit:** Interest free loans, extension of credit guarantee schemes, private equity participation, adding value addition under priority sector lending and Bank linkage programmes (similar to NABARD's SHG Bank linkage programme, 1992) – can help FPOs become bankable entities and ensure access to credit.
- **Special courses on FPOs:** Private Institutions/ Agricultural Universities may introduce special courses on FPO promotion and agribusiness management, with focus on rural youths including women so as to create large pool of professionals in rural areas for managing FPO activities.
- **Single-window license:** The system of issuing various licenses required for undertaking business activities by FPOs, may be simplified to make it a single window state-wide license.
- **Provision for private investors:** Suitable provisions should be made for private equity participation/ refundable long-term capital infusion by the private investors to strengthen financials of FPOs.
- **Convergence of resources:** Convergence of resources for creation of farm level infrastructure at FPO level should be done for value-addition, branding & transportation of Agri-commodities.

- **Flexible policy of state governments:** State Governments may introduce appropriate flexible policy to scale up FPO promotion and to strengthen them to become a self-sustaining commercially viable business enterprise.

6.10. AGRICULTURAL EXPORT

Why in news?

Agri-exports touched $41.8 billion in FY 2020-21, registering a growth of 18 per cent over the previous year.

India's agri-export ecosystem

- India has been a **net exporter of agri products since the economic reforms began in 1991.**
- India occupies a leading position in global trade of agricultural products.
- However, its **total agricultural export basket accounts for a little over 2.5% of world agricultural trade.**
- The **major export destinations were USA, Saudi Arabia, Iran, Nepal, and Bangladesh.**
- Among the key agriculture commodities exported from India were **marine products, basmati rice, buffalo meat, spices, non-basmati rice, cotton raw, oil meals, sugar, castor oil and tea.**

Interventions that promoted recent spike in India's agricultural export

- **Policy-level interventions: Pesticide residue problems have affected exports of basmati rice** key traditional export product **to the EU** due to stringent norms imposed for chemicals such as Tricyclazole and Buprofezin, extensively used in rice cultivation in India.
  - **Testing by the Export Inspection Council** (official export –certification body of India under Ministry of Commerce and Industry) has been made mandatory for basmati exports to the EU, which led to a decrease in the number of alerts.
- **Expansion of products into new markets:** Demand for Indian cereals was robust in 2020-21, with **shipments sent to several countries for the first time,** such as rice to countries like Timor-Leste, Puerto Rico, and Brazil; wheat to Yemen, Indonesia, and Bhutan, etc.
- **Opportunities that Covid-19 offered:** The sharp rise in exports of non-basmati rice can be attributed to **lower prices compared to that of major rice exporters,** Thailand and Vietnam, and also because these countries stopped exports due to the lockdown.
- **Rise in demand of organic products:** Organic exports that include products such as cereals and millets, spices and condiments, tea, medicinal plant products, dry fruits, and sugar grew 51 per cent year on year. The growth can also be attributed to demand for such products due to the outbreak of the pandemic.

Challenges in India's agri export sector

- **Lack of Stable Trade Policy Regime:** Given the domestic price and production volatility of certain agricultural commodities, there has been a **tendency to utilize trade policy as an instrument to attain short term goals** of taming inflation.
- **Infrastructure and Logistics:** Poor connectivity of the land locked production areas (E.g. Bihar, Jharkhand, NE states and hilly regions, etc.) to the ports or terminals is a stiff challenge.
- **Low volume of horticultural commodities**: Exporting horticultural products requires significant volumes of high-quality standardized produce of the same variety. Small landholding pattern and low farmer awareness in India has often meant limited volumes of different varieties of multiple crops with little or no standardization.
- **Poor training & Skill level development**
  - **At farm:** Inadequate harvest and postharvest managements paving the way for rejection of products by the importing country through stringent application of Sanitary and Phytosanitary Measures (SPS) and the Agreement on Technical Barriers to Trade (TBT) by importing countries.
  - **At exporters level:** Exporters lack awareness on existing schemes and policies related to exports as well as about documentation and procedures to be followed for exports.
- **Less involvement of States**: Agriculture is a state subject whereas "trade and commerce" are in the Union list and States often see no formal role for themselves in the nation's agricultural exports.
- **Challenges highlighted by the15th Finance Commission**: Low yields and farm productivity; low focus on value addition; and large domestic market are hindrances to India's Agri-export potential**.**

Way ahead

The Agriculture Export Policy 2018 sets out a target of US$ 60+ Billion by 2022, for agricultural exports, and US$ 100 Billion in the next few years. It has given following recommendations to increase the agri export-

- **Stable Trade Policy Regime:** It is imperative to frame a stable and predictable policy with limited State interference to send a positive signal to the international market. One way to do this is to decide that export restrictions/bans would be resorted to only in the rarest circumstances.
- **Infrastructure and logistics:** Identify major ports where current/projected bulk and container agri traffic demands infrastructure and modernization initiatives.
  - **Sea Port** - development of dedicated perishable berths, agricultural jetties;
  - **Railway** -infrastructure at stations to handle agri products, Reefer Wagons;
  - **Airport** -Identify the challenges of operationalizing existing defunct infrastructure at ports such as the Centre for Perishable Cargo (CPC) and requirement of new CPCs, loaders, designated and sufficient quarantine areas, better Hinterland Connectivity.
- **Holistic approach to boost exports:** A holistic government approach will address issues of R & D for improved varieties, value addition and packaging, establishment of a good standards regimen, a response to Sanitary and Phyto Sanitary (SPS) and Technical Barriers to Trade (TBT) barriers faced by Indian products, identification of winning sectors and strategies for augmenting exports in those sectors.
- **Greater involvement of State Governments in Agriculture Exports:** By identification of a nodal State Department / Agency for promotion of agriculture export; Inclusion of agricultural exports in the State Export Policy; Infrastructure and logistics to facilitate agricultural exports; Institutional Mechanism at Union and State level to support exports.
- **Focus on Clusters:** Export centric clusters is likely to result in a more focused pre and post-harvest management of the production as well as in upgrading the supply chain to attain much higher levels of export from those clusters.
- **Marketing and promotion of "Brand India":** Constitute separate funds dedicated to marketing of organic, value added, ethnic, GI, Region specific and branded products.

7. INDUSTRY AND INFRASTRUCTURE

7.1. INDUSTRIAL POLICY

Key targets

- **Double the current growth rate** of the manufacturing sector by 2022.
- Promote in a planned manner the adoption of **'Industry 4.0'.**
- Increasing the number of global-Indian firms to those in the **Fortune 500 category.**
- Attract **$100 bn inward FDI** annually and support outward FDI to assert Indian presence in world markets.

Current Situation

- **16% of GDP** has been the stagnant contribution of manufacturing sector to GDP since 1991.
- **Improvement on several internationally reputed indices** such as the Global Competitiveness Index, Logistic Performance Index and the Global Innovation Index has been seen recently.
- **63rd position** in the Ease of Doing Business Index (from 142nd in 2014).
- **7 Indian companies** feature in Fortune 500 list of 2021.

Schemes/Policies/Initiatives

- The Industries (Development and Regulation) Act, 1951
- Micro, Small & Medium Enterprises (MSMED) Act, 2006
- **Competition Act, 2002**
- National Manufacturing Policy (NMP), 2011
- Foreign Technology Agreements
- **GST Reforms, IBC Code, Make in India, Start Up India, DTI Scheme**
- **Production Linked Incentive scheme (PLI), PLI Scheme for Food Processing Industry (PLISFPI)**
- SEZ, NIMZ, Technology parks, Mega Parks, National Investment and Manufacturing Zones' (NIMZs)

INDUSTRIAL POLICY AT- A- GLANCE

Way Forward

- Demand generation, augmentation of **industrial infrastructure and promotion of MSMEs.**
- Encourage further **FDI in manufacturing.**
- Setting up of **mega parks and manufacturing clusters in labour intensive sectors.**
- Launch a major initiative to **push industry to adopt Industry 4.0.**
- Introduce a **"single window" regulatory system in all states**
- **Green Industrial Policy** as part of the New Industrial Policy.
- **Tax Reforms** through multilateral and Bilateral Agreements.

Constraints

- Distortions in industrial pattern owing to **selective inflow** of investments.
- A cyclical **slowdown in fresh investment** since 2011-12.
- **Regulatory uncertainty** and restrictive labour laws.
- Challenges to **technology adoption** including Data security, reliability of data and stability in communication/transmission.
- **Lack of quality industrial infrastructure** has resulted in high logistics cost and reduces competitiveness of Indian goods in global markets.
- Lack of **export driven industrial growth.**
- **Electricity shortages** and high prices.
- **Credit constraints,** high unit labour costs and other regulatory burdens continue to remain challenges.

7.1.1. EASE OF DOING BUSINESS

Why in News?

Recently, World Bank Group announced that it has decided to discontinue publication of its 'Doing Business' rankings of country business climates.

Why is Ease of Doing business needed?

- Various experts are supportive of idea that there is an **important and robust relationship between the business regulatory environment and economic outcomes.**
  - Regulatory environment for business **affects productivity, growth, employment, trade, investment, access to finance,** and the size of the informal economy.
- **Ease of doing business points to transparent rules on the ground** to promote efficient markets, rev up enterprise and boost the development delivery mechanism, and, therefore, **help change perceptions and investor sentiments.**
- **Regulatory burden on a business has a significant impact on its performance.** To ensure compliance, regulations impose both time and cost and affect competitiveness of business.
- NITI Aayog came out with a **State-level EoDB ranking as well**. It is based on the progress of states in completing annual reform action plan.
  - State rankings will **help attract investments, foster healthy competition and increase Ease of Doing Business in each State.**

Issues with Ease of 'Doing Business' rankings

- **Irregularities in ranking:** Decision to discontinue came **after a review of data irregularities found in 2018 and 2020 reports.**
- **Libertarian bias:** It tends to reduce the complexity of economic activity to a few quantifiable metrics with a libertarian bias.
  - It **creates an incentive for countries to pursue economic policies that conform with the World Bank's vision of economic development**.
- **Ignore deeper structural, social, or political issues:** Ranking have been criticized for gaming the system (obsessing over moving up in the rankings) rather than pushing for real and lasting structural reforms.

Challenges to Ease of Doing Business in India

Lagging on critical parameters

- Though progress has been made, India still lags behind many larger nations in critical metrics such as starting a business, enforcing contracts and registering property.

High tariffs and protectionist policies

- India's tariffs and trade regulations were already non-transparent and often unpredictable, leaving many U.S. investors and exporters with limited access to the market.
- India's average applied tariff is among the highest bound tariff rates in the World Trade Organization (WTO).

Unstable Policy Environment

- A good example of the recent past is the telecom sector, which saw a huge enthusiastic entry of large MNCs when the sector was opened up for FDI, and soon enough, many exited, thanks to the ever-changing policy framework.

Infrastructure

- India's infrastructure of roads, railroads, airports, seaports, power grids, and telecommunications infrastructure present challenges to its growing economic status and ability to deliver public services.

Safeguarding intellectual property

- Although local laws are thorough and generally compatible with EU and U.S. IP laws, there is some concern about enforcement of these laws.
- Bureaucratic delays and a general lack of transparency are both areas of concern in terms of protecting sensitive intellectual assets.

- **One size fits all approach**: A one-size-fits-all approach to measuring and understanding economic growth and development, especially one based on the ideological priors of institutions and stakeholders, is always likely to contain some fatal flaws.

Some Ease of Doing Reforms implemented by India to improve its ranking

- **Make in India** led to launch of reforms like getting FDI, foster business, alleviate the business environment from outdated policies and regulations, infrastructure development etc.
- **Launch of web-based SPICe+ and AGILE-PRO form** has enabled new company incorporation in 3-steps as compared to the 14 steps process in 2014.

- **Establishment of a modern insolvency regime through Insolvency and Bankruptcy Code (IBC)** in 2016 as part of a comprehensive strategy to reform corporate law.
- Number of days required for **getting electricity connection reduced from 105 days in 2014 to 53 days** in 2019 in India.
- **Dedicated Commercial Courts with modern facilities** in Delhi and Mumbai have been established for early redressal of commercial disputes.
- **Single window for all import and export transactions,** integration of all stakeholders such as port and terminal operators at a common platform and fast-tracking clearances of consignments at ports.
- Passage of the **Taxation laws (amendment) Act, 2021** which scrapped the retrospective taxation bringing certainty in taxation laws.
- **Enforcing Contracts Portal:** Portal is envisioned to be a comprehensive **source of information pertaining to legislative and policy reforms being undertaken** on "Enforcing Contracts" parameters.

7.1.2. AMENDMENTS TO PUBLIC PROCUREMENT ORDER, 2017

Why in news?

Recently, **Public Procurement (Preference to Make in India) Order, 2017** was amended to give more preference to local suppliers.

Key highlights of the amended order

- Enables nodal Ministries/ Departments to **notify higher minimum 'local content' requirement** for Class-I & Class-II local suppliers.
- Specifying **foreign certifications/ unreasonable technical specifications/ brands/ models** in the bid document is considered restrictive and discriminatory practice against local suppliers.
  - Foreign certification shall be stipulated **only with the approval** of Secretary of the Department concerned.
- Entities of **countries which do not allow Indian companies to participate in their government procurement for any item, shall not be allowed to participate** in government procurement in India for all items related to that nodal ministry or department, **except** for the list of items published by the ministry or department permitting their participation.
- All administrative Ministries/Departments whose procurement exceeds Rs. 1000 Crore per annum shall **notify their procurement projections for the next 5 years** on their respective website.
- An **upper threshold value of procurement beyond which foreign companies shall enter** into a joint venture with an Indian company to participate in government tenders shall be notified.

About Public Procurement (Preference to Make in India), Order 2017

- It was issued under **General Financial Rules 2017** to promote domestic value addition in public procurement.
- Under this, only Class-I and Class-II local suppliers are eligible to bid in procurement of all goods, services or works, and with estimated value of **purchases less than Rs. 200 crores.**
- It was applicable on **procurement of goods, services and works (including turnkey works)**.
- For the verification of the local content, **self-certification was necessary**. Nodal Ministries may also constitute committees with internal and external members for independent verifications of the self-declarations.
- A committee in **Department for Promotion of Industry and Internal Trade** would have overseen the implementation of this order.

Issues faced by local suppliers

- Some departments and PSUs **impose mandatory eligibility clauses**, such as a minimum turnover limit and the number of purchase orders previously executed for the procurement of materials.
- The **time, cost and effort required for the tendering process**, **inadequate opportunities for buyer-seller interactions**, inadequate information, complex vendor registration processes acts as obstacles to domestic suppliers.
- Many MSMEs complain that several **traders have become vendors through GeM platform**, which is hurting the interests of genuine MSEs.

Suggestions

Public procurement from MSE has been growing **3-4% year-on-year.** Some suggestions to further improve this are:

> **Other measures for promotion of local supplies in public procurement**
> - **Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2018.**
>   - **Under this,** every Central Ministry /Department / PSUs shall set an annual target for 25% procurement from MSE Sector.
>   - 358 items are also reserved for **exclusive purchase from MSE sector**.
> - **Government eMarketplace (GeM).**
>   - GeM was launched in 2016 as an **end-to-end e-portal for procuring** common-use goods and services by Central and State Government Departments, PSUs, autonomous institutions and local bodies.
> - **Defence Acquisition Procedure (DPP) 2020**
>   - It proposes **increasing the Indigenous Content (IC)** stipulated in various categories of procurement by about 10% to support the 'Make in India' initiative.
>   - It also proposes, **New Category Buy (Global – Manufacture in India)** with minimum 50% IC on cost basis of total contract value.

- There needs to be a **digitized, easily accessible central database of MSE vendors** across the country. Authorities must also **relax the qualification criteria of MSMEs** vis-a-vis their large corporate counterparts to level the playing field.
- The major procuring ministries must undertake **measures for training MSE vendors as well as PSUs and their procurement officers** to inculcate greater knowledge of the sector and markets amongst them to encourage better cooperation and efficiency.
- **Semi-independent testing labs** should be established in every state to ensure fair and quick testing of the products.
- A **feedback and grievance redressal portal**, as well as an on-ground team, shall be set up.

7.1.3. PRODUCTION LINKED INCENTIVE (PLI) SCHEME

Why in news?

Recently, the Government had announced addition of 10 sectors to the Production Linked Incentive (PLI) Scheme.

What is Production Linked Incentive (PLI)?

Production Linked Incentive refers to a **rebate given to producers**. This rebate is calculated as a **certain percentage of sales of the producer** (sales referred in it can be total sales or incremental sales). For example, PLI scheme for Electronics Sector offered a rebate of 4-6% on the incremental sales of the producer.

With regard to nature of the scheme, following can be cited as key features of the PLI Scheme-

- The **scheme is outcome-based**, which means that incentives will be disbursed only after production has taken place.
- The calculation of incentives is **based on incremental production** at a high rate of growth.
- The scheme **focuses on size and scale** by selecting those players who can deliver on volumes.
- The **selection of sectors** covering cutting-edge technology, sectors for integration with global value chains, job-creating sectors and sectors closely linked to the rural economy**, is highly calibrated**.
- Also, the design of the earlier PLI scheme for electronics is such that it is **compatible with World Trade Organization commitments** as the quantum of support is not directly linked to exports or value-addition.

What are the potential benefits that may incur from the Scheme?

- **Increasing strategic autonomy:** Efforts have been made to become self-sufficient (or 'Atmanirbhar') in sectors which are of strategic importance. For instance-
  - **Telecom equipment** forms a critical and strategic element of building a secured telecom infrastructure and India aspires to become a major original equipment manufacturer of telecom and networking products.
- **Utilizing the Comparative advantage:** In some sectors the domestic industry has comparative advantage over other countries, focusing on these sectors could generate higher returns. For instance-

   - **The Indian pharmaceutical industry** is the third largest in the world by volume and 14th largest in terms of value. It contributes 3.5% of the total drugs and medicines exported globally.
- **Increased ability to tap the high global and domestic demand:** This will help **satisfy the growing domestic demand** in the respective sectors and also **give a fillip to exports.**
- **Developing the nascent but high-potential sectors:** These sectors may not be significant but in the present socio-economic context, present high potential.
   - The growth of the **processed food industry** leads to better price for farmers and reduces high levels of wastage.
- This step has been touted as a 'game-changer' for the manufacturing sector as it is expected to **attract foreign players, generate employment** in the country (with focus on labour intensive sectors like Textile), **increase exports** and consequently integrate the economy with the global supply chain.
- From the perspective of industry, the scheme indicates an **attitudinal shift from 'discouragement' to 'encouragement'** for large industries and simultaneously provides the much-needed fiscal space required during the Pandemic.

What are the potential issues with the scheme?

- **Gradual withdrawal of scheme critical to long-term development:** The incentives should be well-crafted and temporary so that the industries receiving support can mature and become economically viable without protection. Keeping them in place for too long may slow down, rather than accelerate growth in these sectors.
- **Designing sector specific incentives:** The implementation of PLI scheme in the Electronics sector and Pharmaceutical sector has highlighted that every sector has to have different eligibility thresholds. Given the large range of activities covered in the 10 sectors, effectively determining the thresholds for each could become a difficult task.
- **May interfere natural economic processes:** In the long run, an economy can become competitive only when sectors can die and be born. Resources get reallocated to sectors that see higher productivity growth. External interference may hinder optimized allocation of resources.
- **The sectors that don't get an incentive are at a relative disadvantage:** The limited resources of the economy in the form of Capital and human resources will be nudged towards incentivized sectors thus indirectly disincentivizing other sectors.

What can be done to ameliorate these issues and further improve the scheme?

- **Pre-defined Sunset clause on scheme:** It will not only be beneficial for the sector in the long-term, it will also encourage the individual players to see it as a one-time opportunity for capacity building.
- **Improve technological competence:** The breathing room created by these incentives could be used by the industry players to increase their technological competence and transition towards becoming globally competitive.
- **Improve business environment:** It can be done by improving transparency and predictability in the policy framework. For example, simplification of taxation regime or easing the land acquisition process etc. This becomes even more important for industries which are outside the purview PLI Scheme.
- **Managing the real exchange rate better to strengthen the export regime:** The real exchange rate (adjusted for inflation) in India has appreciated 19% in the last decade on account of both Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI). This appreciation negatively effects the overall exports.
- **Reinvigorating the National Infrastructure Pipeline (NIP):** Several industry experts have highlighted that large scale production can only be achieved if the supply side bottleneck of infrastructure is satisfied. The plan proposed by the NIP can provide a way forward.

7.2. MSME SECTOR

MSME SECTOR AT- A- GLANCE

Key targets

- India's vision of becoming a $5 trillion economy is possible when the MSME sector contributes to **50% of GDP.**
- The government is planning to increase the contribution of MSMEs to 50% of GDP by **2024 and create around 15 crore employment by then.**

Current Situation

- **6.3 crore** MSMEs are currently operational in India.
- **110 million** people are employed in MSMEs.
- **30% of the country's GDP** is contributed by MSMEs.
- **45% of manufacturing output** is contributed by MSMEs.
- **40% of overall exports** are generated by MSMEs.

Schemes/Policies/Initiatives

- **Micro, Small & Medium Enterprises Development (MSMED) Act, 2006**
- **New MSME definition and removal of artificial separation between manufacturing and service MSMEs.**
- ANIC-ARISE (Atal New India Challenges in Applied Research and Innovation for Medium and Small Enterprises).
- Production Linked Incentive (PLI) Scheme.
- **Emergency Credit Line Guarantee Scheme (ECLGS)**
- Credit Linked Capital Subsidy- Upgradation Scheme
- MSE-Cluster Development Program
- **Zero Defect and Zero Effect Scheme**
- **Honey Mission, Solar Charkha Mission**
- ASPIRE, SFURTI, MUDRA
- Udyami Mitra portal, CHAMPIONS PORTAL, SAMADHAAN, SAMPARK and SAMBANDH portals.

Way Forward

- **Larger economic package, soft loan** and assessment of losses due to pandemic
- **Simplified loan processing** and assessment
- Integration of MSME sector with **global value chains (GVC)**
- Lenders to **collaborate with FinTech companies**
- A **Central Research Institute** for enterprises and entrepreneurship
- Setting up of **mega parks and manufacturing clusters in labour intensive sectors.**

Constraints

- **Impacts of COVID-19 pandemic** as more than 50% shut down or reported drop in production.
- **Infrastructure bottlenecks** especially digital and institutional infrastructure.
- **Limited capital accessibility** and knowledge base
- **Non-availability of suitable technology** leading to slower production processes and compromised product quality
- **Labour challenges** such as extensive labour compliances and dearth of skilled labour.

7.3. SEMICONDUCTOR MANUFACTURING IN INDIA

Why in News?

Government is reportedly working on a plan to offer around $1 billion in cash to every company that sets up a Semiconductor chip manufacturing unit in India.

Why is India trying to facilitate Semiconductor manufacturing?

- **To tackle global shortage:** resulting from a surge in demand for electronic items after the outbreak of the COVID-19 pandemic last year, is pushing several countries to have their own chip-making facilities to bring down their dependency on the global supply chain.
    - Demand for semiconductors grew massively in 2020, increasing production requirements across the world. COVID-19 led to an increase in worldwide chip sales from $412.2 billion in 2019 to $439 in 2020.
- **Electronics manufacturing:** India is the second-largest smartphone manufacturer in the world after China, and chips are at the center of these devices.
- **Strategic requirement:** Semiconductor manufacturing also has strategic advantages, as countries don't want to depend on their imports for essential infrastructure like defence and power.
- **Reducing import bill:** As of now, India is dependent on imports to meet the demand for chips. India consumed around $21 billion worth of semiconductors in 2019, according to India Electronics and Semiconductor Association (IESA).
- **Fostering innovation:** production and exports of electronic goods at large scale will expose the Indian industry to foreign competition and ideas, which will help in improving its capabilities to innovate for the future.

Challenges faced by India in manufacturing semiconductor

- **Complex manufacturing:** Chip making is a highly complex process, which is why only a few countries have the expertise and skills required to gain a leadership position for this segment.
    - Although, most of the global semiconductor companies having an R&D footprint in India, but most of our chips, memory and display are imported into the country.
- **Massive investment requirement:** Setting up a semiconductor unit demands a massive investment of around INR 50,000 to INR 75,000 crore over two-to-three years.
- **Lack of skilled workforce:** A key requirement for semiconductor firms is the availability of a qualified workforce, and it is here that the India is found lacking.
- **Requirement of very specific raw materials:** Apart from Silicon, numerous types of chemicals & gases are involved in semiconductor fabrication that are not till now available in India and has to be imported.
- **Gaps in supportive infrastructure:** chip manufacturing units require a massive quantity of water and an uninterrupted power supply, which can be a problem in India.
- **Global Competition:** It is also difficult to compete with neighbouring countries which, due to better cost-efficiency and first mover advantage, have become the favoured destinations for global chip manufacturers.

Initiatives taken for boosting Semiconductor Manufacturing

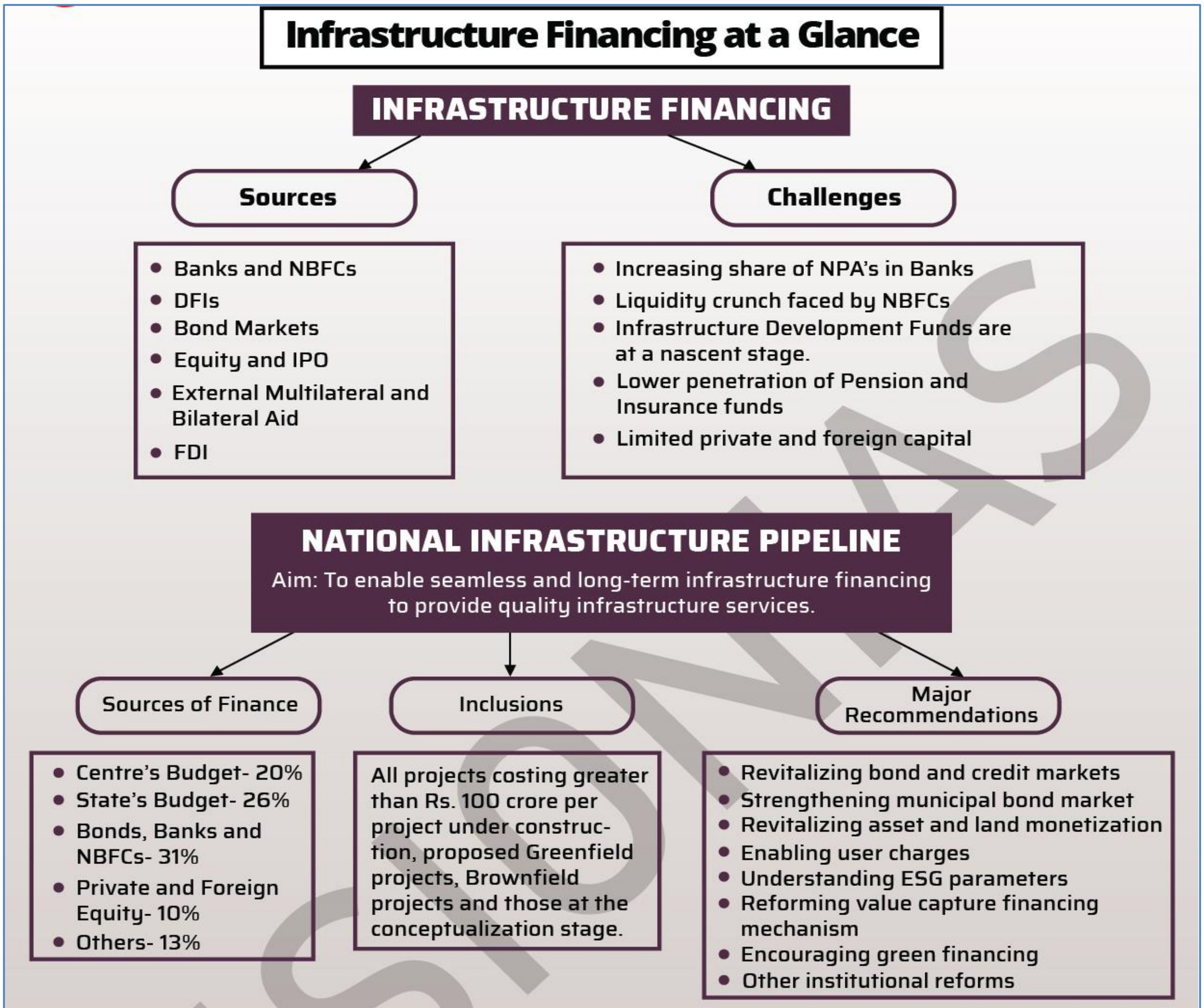
- **100 per cent Foreign Direct Investment (FDI) allowed** under the automatic route in Electronics Systems Design & Manufacturing sector.
- **National Policy on Electronics launched in 2012** to attract global and domestic companies to invest towards the growing **Electronics System Design & Manufacturing (ESDM)** sector in India.
- **Electronic Manufacturing Clusters Scheme** which provides 50% of the cost for development of infrastructure and common facilities in Greenfield clusters and 75% of the cost for Brownfield clusters
- Union Cabinet has reconstituted an **empowered committee on setting up semiconductor wafer fabrication manufacturing** facilities in the country.

Way forward

- **Supporting Infrastructure:** A world class, sustainable infrastructure needs to be provided, with swift transportation, large quantity of pure water, uninterrupted electricity, communication, pollutant free environment etc.
- **Start with assembly, testing, marking, and packaging (ATMP)**: ATMP companies generate more employment and require less investment than full-fledged fabrication plants (fabs).

* **Stable and long-term policy:** The policy (that includes all kinds of subsidies) taken up now must be valid and stable for at least 10 to 15 years. It must be supported with a solid long term plan and financial backing.
* **Industry and academia collaboration:** With a greater emphasis on research and innovation in India's higher education landscape through the newly unveiled National Education Policy, there is now the possibility of a better synergy between industry and academia.

7.4. INFRASTRUCTURE FINANCING



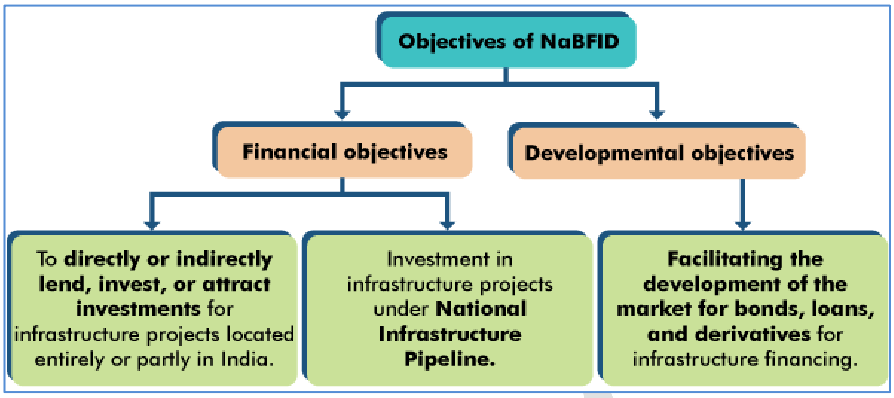
Comparison chart of business models

Model	Asset Ownership	Concession Period	Capital Investment Responsibility	Private Partner Revenue Risk	Responsibility of Private Player
EPC	Public	Not applicable	Private- High	Variable	Engineering, Procurement and Construction
Leasing Contract	Public	Typically 10-15 years	Private- Very Low	High	Operations and Management
BOT	Operationally Private	Typically 15-30 years	Private- High	High	Financing, building and operations
Management Contract	Public	Typically 3-10 years	Public or Private- Low	Nil to low	Operations and Management
JV	Public and Private	Typically 20-30 years	Private- High	Medium to High	Financing, building and operations
HAM	Operationally Private	Typically 15-30 years	Private- High	Variable	Financing, building and operations

7.4.1. NATIONAL BANK FOR FINANCING INFRASTRUCTURE AND DEVELOPMENT (NABFID)

Why in news?

Recently, the Parliament passed **National Bank for Financing Infrastructure and Development (NaBFID) Bill, 2021.**



About NaBFID Bill, 2021

- Bill **seeks to set up NaBFID, a Development Financial Institution (DFI)** to support the development of long-term non-recourse infrastructure financing.
- **Shareholding of NaBFID:** NaBFID will be **set up as a corporate body** with authorised **share capital of 1 lakh crore rupees held by central government**, multilateral institutions, sovereign wealth funds, pension funds, insurers, financial institutions, etc.

- **Source of funds:** NBFID may raise money in the **form of loans or otherwise both in Indian rupees and foreign currencies,** or the issue and sale of various financial instruments including **bonds and debentures.**
- **Management:** NBFID will be **governed by a Board of Directors** and the **Chairperson appointed by the central government in consultation with RBI.**
- **Government Support**: The central government will provide **grants worth Rs 5,000 crore to NBFID** by the end of the first financial year.
- **Investigation and prosecution**: Courts will also require prior sanction for taking cognisance of offences in matters involving employees of NBFID. No investigation can be initiated against employees of NBFID without the prior sanction of
  - the central government in case of the chairperson or other directors
  - the managing director in case of other employees.
- **Licences:** The **RBI in consultation with the government issue licences and specify conditions** for setting up of private sector DFIs and also RBI prescribe regulations for these DFIs.

About Development Financial institution (DFI)

- DFI known as a **development bank or a development finance company** are institutions that provides **long term development finance to various sectors like industry, agriculture, housing and infrastructure.**
- DFIs play a **pivotal role in extending credit and boosting economies**, especially in developing countries.
- DFIs can be **either wholly or partially owned by the government and few have majority private ownership,** determined by the nature of the activities being financed, and their associated risk-returns profile.
- There is **no specific use of the term 'DFI' in either the RBI Act, 1934 or the Companies Act, 1956** or various statutes establishing DFIs, while some financial institutions under RBI Act and Companies Act perform the role of DFIs in the broadest sense.

Need and benefits of DFIs

- **Long term finance:** DFIs emphasizes the long-term financing of a project rather than collateral based financing and support for activities to the sectors of the economy where the risks may be higher and may not be feasible for commercial banks to finance.
- **Gap filler:** DFIs act as a gap-filler which was made due to incapability of commercial banks to finance big infrastructure projects for long term to attain growth and financial steadiness.
- **To improve capital Market:** Tax benefits and tweaks to the Indian Stamp Act as mentioned under bill will have positive impact on the bond market
- **Reduces incidences of risk:** DFIs carry out feasibility study to evaluate viability of projects. When project costs were high and could not be financed by one DFI, rather they form loan consortia with commercial banks, thereby reducing the incidence of risks.
- **Technical support and expertise:** DFIs provide skills, technical and managerial expertise to projects, which makes projects to be more successful.

Challenges that DFIs may face

- **Actionable strategy:** DFIs are expected to operate at the forefront of societal and economic change and need a strategy to guide them towards meeting their objectives. This may be made more difficult due to nature of their governance, often complex and prone to political interference.
- **Credit decisions:** Avoiding a high level of Non-Performing Loans is as important for DFIs as it is for commercial banks. Moreover, making good credit decisions has other dimensions and face specific challenges like underwriting weak loans for the sake of volume targets and corruption.
- **Counter-productive competition:** There can be cases where too much money chases too few good projects, resulting in poor resource allocation and counter-productive competition.
- **Balance between private and public sectors:** A DFI with a private sector character will require the government to believe and trust the private sector and still extend such benefits to the institution as it would normally to a state-owned DFI.
- **Attracting and retaining the best staff:** DFIs are in competition with the private sector to attract talent, they are often at a disadvantage when it comes to absolute levels of remuneration. This may erode efficiency, motivation and competence.

Way forward

- **Standardised regulation:** There is need for establishment of standardized and streamlined regulatory frameworks where, despite government participation, decision-making and where executive responsibilities are not hampered.
- **Performance analysis:** Advocate performance-based remuneration to retain staff and vocational training to keep the technical competences and maintain efficiency of DFI.
- **Consultation and coordination**: Consultation among DFIs during the elaboration of the strategy, exchange information, find concrete synergies and cooperate on specific operations through co-financing to make sure that overlaps are avoided and conversely eventual markets gaps are covered.
- **Strong culture of innovation:** Cultivating strong culture of innovation helps to increase value-addition and catalyse private investment in entrepreneurship especially in uncharted sectors.

8. SERVICES SECTOR

8.1. E-COMMERCE SECTOR

E-COMMERCE SECTOR AT- A- GLANCE

Key targets

- Creating **Transparency** in price with **ease of price comparison.**
- **Access** to **Indian** and **Global markets** for small enterprises.
- Help in **promotion of Digital payments**, growth in **logistics sector** or supporting new innovations across digital space like payments, service delivery etc.
- **Better deals and offers** for customers etc.

Current Situation

- **8th largest** e-commerce market globally.
- **Only 5%** of India's retail market comprises of E-commerce.
- **$ 55.6 Billion** was generated by the industry in 2021.
- **10 million** internet users are added monthly (majorly from tier-II cities).

Schemes/Policies/Initiatives

- Consumer Protection (E-commerce) Rules, 2020.
- **Open Network for Digital Commerce (ONDC) project.**
- Government e-Marketplace (GeM) portal
- **National Retail Policy**
- Initiatives like Umang, Start Up, BHIM, etc. under **Digital India**
- **Equalisation Levy Rules**, 2016 and its amendment in 2020.
- Increasing the limit of **FDI in E-commerce marketplace model** to up to 100% (in B2B models).

Way Forward

- **Data protection** legislation and enforcement.
- **Clear definitions of what constitute Unfair Trade Practice** (including flash sale, mis-selling).
- **Corrective mechanism to discourage deceptive tactics** including manipulation of algorithms, fake product reviews, etc.
- **Appropriate Grievance redressal** for consumers.
- Increasing **internet access**, **digitizing payments**, further improving **transportation infrastructure, logistics and distributed warehousing support**.

Constraints

- **Infrastructural problems** such as availability of internet, power, devices, etc.
- **Lack of clarity** in the framework of **Cyber Laws**
- **Privacy and Security** Concerns
- **Payment and Tax Related Issues**
- **Digital Illiteracy**

8.1.1. CONSUMER PROTECTION (E-COMMERCE) RULES, 2020

Why in news?

Recently, the Government sought public comments on the proposed amendments to the **Consumer Protection (E-Commerce) Rules, 2020**.

Need for enacting E-commerce protection rules

The big e-commerce players like Amazon, Flipkart, etc., are often accused of **circumventing laws** through dishonest practices or means which are against the **interest of brick-and-mortar stores** or small sellers like:

- Use of **Hybrid model** to avoid limitations of the inventory model.
- No **platform neutrality** or supporting Preferred Sellers or Private Labels.
- Use of **Anti-competitive practices** like predatory pricing or deep discounting to gain market share
- **Misuse of market share** through exclusive product launches. E.g. exclusive mobile phone launches.

Panel for Open Network for Digital Commerce (ONDC)

DPIIT has set up a 9-member Panel (including Nandan Nilekani and RS Sharma) to advice on **roll-out of ONDC**.

- Open source means 'software whose **original source code is made freely available for others to use'**. E.g., Android by Google.
- Through **open specifications** and **open network protocols**, ONDC will standardize protocols across e-commerce companies. E.g., Same standards to onboard sellers on e-commerce platforms.
- **UPI** is an earlier example of open source, helping significantly in digital payment growth.

Key changes proposed to Consumer Protection (E-Commerce) Rules, 2020

- **Registration: Mandatory registration** of the e-tailer with **Department for Promotion of Industry and Internal Trade (DPIIT).**
- **Identification of foreign products:** Identify goods based on **'country of origin'** and create a filter mechanism to ensure fair opportunity for domestic goods,
- Appoint a **Chief Compliance Officer** (to comply with Act), **Nodal Contact Person** (for 24X7 coordination with law agencies) and **Resident Grievance Officer** (for customers complaint).
- No **unfair use of information** collected through its platform and nothing to be done by **related parties or associated enterprises** which the e-commerce entity can't do itself
- Other key pointers within the rules-
  - No **mis-selling of goods** and services or display of misleading advertisement.
  - **Adequate disclosures** if indulges in **cross-selling** of goods and services.
  - No **Flash Sales** of goods and services except conventional sales.
  - Ensure **equal treatment to sellers** by logistics service providers etc.

Issues/Concerns over the proposals

- **Decreases Ease of Doing Business:** The new proposals increase regulatory compliance and tighten the regulatory framework which will be difficult to comply with by small e-tailers.
- **Fall-back-liability clause:** The liability of e-commerce entity for sellers error takes away the **safe harbour protection** (immunity from legal or regulatory liability).
- **Overlapping rules:** Instead of focusing on Consumer interests, the rules goes into business practices and other provisions which are subject matter of Competition Commission of India (like abuse of **dominant power**) or IT intermediary guidelines on data etc. which can lead to confusion and institutional conflict
- **Best Price for Consumers:** The high sales figure on e-commerce sales day suggests its use by customers for low prices. So, limiting Flash Sales is against consumer interest of low price.

Way Forward

An **independent regulator** over e-commerce can be of help for the same and also for **protecting consumer's interests** while dealing with issues over business models, predatory pricing etc. and ensure same standards across platforms.

8.2. TELECOM SECTOR

Why in news?

The Union Cabinet approved several structural and process reforms in the **Telecom sector.**

About Telecom sector

- **Key Facts related to telecom sector in India:**
  - India is the **world's second-largest telecommunications** market. The telecom market can be **split into three segments** - wireless, wireline and internet services.
  - Telecom industry in India has a **subscriber base of 1.17 billion.**
  - Telecom penetration, also known as **tele-density** (defined as the number of **telephone connections for every 100 individuals**), has increased to **88% in FY21.**
  - India has the **second-highest number of internet subscribers** globally.
  - The Telecom sector is the **3rd largest sector in terms of FDI inflows**, contributing 7.1% of total FDI inflow.
  - The sector contributes **directly to 2.2 Mn employment and indirectly to 1.8 Mn jobs.**
- The industry has **witnessed exponential growth over the last few years** primarily driven by affordable tariffs, wider availability, roll-out of Mobile Number Portability (MNP), expanding 3G and 4G coverage, evolving consumption patterns of subscribers and a conducive regulatory environment.
  - Currently, **5G Spectrum Trials are being conducted** in India to ensure proliferation of 5G technology across the country.
  - It is also estimated that 5G technology will contribute **approximately $450 billion to the Indian Economy in the period of 2023-2040.**

Challenges faced by Telecom sector

- **Debt ridden telecom sector:** Analysts estimate industry debt at **over ₹3.6 lakh crore**. Financial pressure has been attributed to various reasons like **declining ARPU** (average revenue per user), **Over the top (OTT) services**, unsustainable revenue sharing regime etc.
- **Issues related to taxation:** The definition of adjusted gross revenue (AGR) that is used to calculate the levies payable by telecom operators has been **under litigation for 14 years**. While telecom companies argued that it should comprise revenue from telecom services, the DoT's stand was that the AGR should include **all revenue earned by an operator, including that from non-core telecom operations**.
- **Lack of uniformity in Right of Way (RoW) rules:** The non-implementation of centrally-designated rules (notified in 2016) has led to telecom carriers and infrastructure providers having to **spend substantially more on network expansion.**
  - In some cases, companies **pay up to 1,000% more than the prescribed fee** of Rs 1,000/km.
- **Pressure on Margins Due to Stiff Competition:** With competition heating up post entry of Reliance Jio, other telecom players are feeling the heat of **substantial drop-in tariff rates** both for voice and data (more significant for data subscribers).
- **Substantial investment in 5G infrastructure:** 5G rollout need to be backed up by robust and reliable infrastructure which invites **significant investments** in optical fiber cables, cellular towers, antenna, repeaters etc.
  - Being a **capital-intensive sector**, the telecom sector also needs to make huge investments for spectrum acquisition, network rollout, establishing reliable security architecture etc.
- **High Spectrum usage charges (SUC):** In countries like United States of America and Australia, the annual spectrum fee is kept at **a marginal level to cover the cost of management and regulation** of the spectrum. However, in India, the SUC charge continues in **the range of 3% to 6% of the revenue (AGR).**
- **Illegal mobile boosters**: Illegal signal boosters and repeaters are said to **cause interference with signals** from towers impacting the **overall cellular network quality and issues like call drops.**
- **Lack of Telecom Infrastructure in Semi-rural and Rural areas:** Service providers have to **incur huge initial fixed cost** to enter semi-rural and rural areas. Key reasons behind these costs are **lack of basic infrastructure** like power and roads, **resulting in delays** in rolling out the infrastructure.
  - **Lack of trained personnel** to operate and maintain the cellular infrastructure is another challenge.

How recent reforms will help telecom sector:

<table>
<tr><th>Reforms</th><th>Impact</th></tr>
<tr><td>• Four-year moratorium on AGR payments and spectrum dues purchased in past auctions. The government can exercise the option of converting debt into equity at the end of the moratorium period.
• Delayed payments of licence fee and spectrum usage charge will attract an interest rate of State Bank of Inda's MCLR (marginal cost of funds-based lending rate) plus two per cent, instead of MCLR plus four per cent.
• Rationalization of AGR by excluding non-telecom revenue from the definition of AGR prospectively.</td><td>• It will ease the immediate financial pressure on the telcos. The moratorium will help the industry in making debt repayments and undertaking capex.
• According to ICRA, the moratorium will yield an annual cash flow benefit of ₹46,000 crore for the industry.
• However, to ensure a long-term solution, government must bring down levies and taxes on telcos.
• The reserve price for spectrum also needs to be brought down to match market sentiment.</td></tr>
<tr><td>• The telcos would also not have to pay any spectrum usage charge for airwaves acquired in future auctions, could share spectrum without incurring any additional cost, and hold the airwaves acquired at an auction for 30 years instead of 20.
• Cumbersome requirement of licenses under 1953 Customs Notification for wireless equipment has been replaced with self-declaration.
• Auction calendar has been fixed i.e. spectrum auctions to be normally held in the last quarter of every financial year.</td><td>• These steps will help in reducing procedural hassles impeding the provision of quality services to consumers.
• Going forward, government needs to ensure that the sector does not become a duopoly and encourage more companies to invest in customer service and new technology.
• To prevent predatory pricing in the sector, telcos are demanding announcement of a floor price for telecom services, especially data.</td></tr>
<tr><td>• The cabinet also liberalized foreign ownership rules by allowing 100% foreign direct investment through the automatic route with safeguards.</td><td>• Earlier, automatic investment routes were limited to 49 per cent level, and approval from concerned authorities was required for foreign investment beyond 49 per cent level.
• 100% FDI through automatic route will help in creating investor friendly climate, thus encouraging investments.</td></tr>
<tr><td colspan="2">How will the reforms impact the government's finances?
• Since all the moratorium offerings are done with net present value protected, government will face some revenue loss in the next four financial years even if two of the three private players opt for it.
• For the current financial year, the government had estimated receipts of about Rs 54,000 crore from spectrum usage charges, license fee levies and other levies.
   o The bulk of this, however, will have to be forgone for four financial years once the telcos opt for the moratorium.
• At the end of the moratorium period, the government will have option to convert the extended amount into equity. But it should be noted that if the market conditions do not improve, government may not be able to sell this equity at a decent rate in the market.</td></tr>
</table>

Road ahead

Robust telecom sector can become main pillar of **Digital India** to cater to the modern needs of the digital communications sector of India. As the present world has entered the era of modern technological advancements in the Telecom Sector such as 5G, IoT etc., efforts will have to be made to make the sector more **'Customer focused' and 'application driven'.**

To affect the same, the vision propagated by the **National Digital Communications Policy (NDCP)-2018** can be adopted.

8.3. INSURANCE SECTOR

Key targets

- **Ensuring social protection** in the form of health security, financial security etc.
- **Decreasing out-of-pocket expenditure** in case of critical illnesses.
- **Improve accessibility and affordability** of insurance for every citizen in the country.

Current Situation

- **3.7% of GDP** is India's insurance penetration compared to global average of 6.3%.
- **12%** is the average annual growth rate of insurance sector in India.
- **The insurance density in India has increased** from $11.5 in 2001 to $78 in 2019.
- **83%** is the protection gap in the insurance industry indicating a huge opportunity for the sector.

Schemes/Policies/Initiatives

- The General Insurance Business (Nationalisation) Amendment Act, 2021.
- FDI limit in insurance increased from **49% to 74%** in Budget 2021.
- The Insurance Laws (Amendment) Act, 2015
- Employees' State Insurance Act, 1948
- PM-Jan Arogya Yojana
- Atal Bimit Vyakti Kalyan Yojana
- PM-Fasal Beema Yojana
- Mahatma Gandhi Bunkar Beema Yojana
- Corona Rakshak Policy and Corona Kavach Policy

INSURANCE SECTOR AT- A- GLANCE

Way Forward

- Expanding **private voluntary insurance** through commercial insurers.
- Sharing **Government data and infrastructure** as a public good to reduce operational and distribution costs.
- Ensuring standardization and improving simplicity through a **guaranteed basic minimum package** of services.
- Building **consumer confidence** by ensuring quality of services.
- Swift **grievance redressal mechanisms,** and robust auditing procedures.

Constraints

- The **multiplicity of government sponsored insurance schemes** has resulted in the fragmentation of the risk pool.
- The **'missing middle'** between the deprived poorer sections and the relatively well-off neither qualify under subsidised health insurance (for poor) nor social health insurance (for organised sector) schemes.
- **Low awareness** and the difficulty in understanding the product.

8.3.1. PANDEMIC RISK POOL

Why in news?

A working group of IRDAI has recommended setting up of an Indian Pandemic Risk Pool with public-private-government participation to provide coverage for losses resulting from pandemics like COVID-19 in future.

What is pandemic risk pool?

- A pool refers to the pract**ice of insurance companies coming together and committing funds to meet claims** arising out of any insured risk in proportion to the business they do. In this manner, claim pay-out is shared among all pool participants.
- This method is followed **when there is too much uncertainty about the risk** for any insurer to take a call, like in nuclear risks, or when the losses are high, and companies are reluctant to issue policies.
- Currently, it was suggested in the backdrop of COVID-19, which has **affected not just health but all sectors of the economy.**
- Thus, a risk pool could **offer protection for business interruption without material damage, loss of income and livelihood** and other related pandemic related losses **currently not insured in India.**

Key recommendations of the committee

- **Formation and Structure**: Risk pooling mechanism with **public-private-government participation** would be more appropriate as the quantum of loss due to an epidemic/pandemic risk event is huge and hence is **beyond the capacity of public and/ or private companies and/or government alone**.
- **Administration: General Insurance Corporation of India (GIC Re)**, which has experience of managing the **Indian Terrorism Pool and Indian Nuclear pool** shall be administrator for the proposed pandemic pool.
- **Size and Financial capacity:** Suggested setting up of a **pandemic risk pool with a Rs 75,000 crorebackstop (as security) guarantee from the government** in the initial stages, with a view to help MSME workers and migrant labourers facing loss of income.

Advantages of Pool Structure

- **Affordability of coverage**: With **pooling a large share of country's exposure** to an event like pandemic, aggregate cost of coverage would be lower than individual insurers could achieve on their own.
- **Risk diversification**: A single pool providing coverage for all the MSME's of a country on mandatory basis would create a more diversified portfolio of risks and reduce the anti-selection.
- **Reduced cost of reinsurance**: The cost of reinsurance tends to decline as the level of participation from the government increases so the cost to reinsure a single and diversified pool of risks with public participation would be lower.
- **Maximizing the role of private insurers**: The objective of pandemic pool should be to maximize the contribution of private markets to providing coverage over a period of time.
- **Anti-selection**: A compulsory cover through pandemic pool can eliminate the possibility of anti-selection. Anti-Selection occurs when an employee or group of employees purchases or select coverages with a greater than likely loss at the expense of an insurance company.

Related News

Recently, the DICGC (Amendment) Bill, 2021 was passed by both Houses of Parliament and stands to amend the DICGC Act, 1961.

- The Act seeks to **provide depositors time-bound access to their insured deposit amount**, in case they are restricted from accessing their bank deposits.
- The amendment will allow **customers of failed or stressed banks, placed under moratorium**, to get their deposits (up to INR 5 lakh) **back within 90 days** of start of moratorium.
- It will **provide immediate relief to lakhs of depositors with money parked in stressed lenders** such as the PMC Bank and other small cooperative banks.

8.4. TOURISM

Key targets

- Tourism has been included as targets in **sustainable development goals (SDGs) 8, 12 and 14** and should be looked in conjunction with overall development.
- To use tourism as a tool for **employment generation and inclusive development.**
- Develop a **Brand India** for Medical and Wellness Tourism
- To enhance India's **share in MICE** (Meetings, Incentives, Conferences, and Exhibitions) Tourism **to 2% in five years** from the current share of approximately 1%.

Current Situation

- **5%** of country's GDP was contributed by the sector.
- **13%** of the total employment was contributed by the sector.
- **Foreign tourist arrivals declining** in the country since 2017.
- **23rd** in the world in terms of international tourist arrivals.
- **12th** in terms of foreign exchange earnings.

Schemes/Policies/Initiatives

- **Swadesh Darshan** - Integrated Development of Theme-Based Tourist Circuits
- **PRASHAD**- Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive
- Iconic Tourist Sites Development Project.
- Draft National Strategy and Roadmap for **Sustainable Tourism**
- Draft National Strategy for **MICE** Tourism, **Medical and Wellness Tourism and Rural Tourism.**
- Paryatan Parv
- Adopt a Heritage
- Incredible India 2.0

TOURISM SECTOR AT- A- GLANCE

Way Forward

- Vaccination drive to make tourism COVID resilient
- Increase **e-Visa awareness** and simplify the process further
- **Infrastructure status** to a project costing more than 1 crore rupee.
- Develop **tourist circuits or segments** such as marine leisure industry, river cruise tourism, deep water marinas etc.
- Training and skill development in the vis-à-vis guides, property managers etc.
- **Promotion and marketing,** especially with respect to cultural sites

Constraints

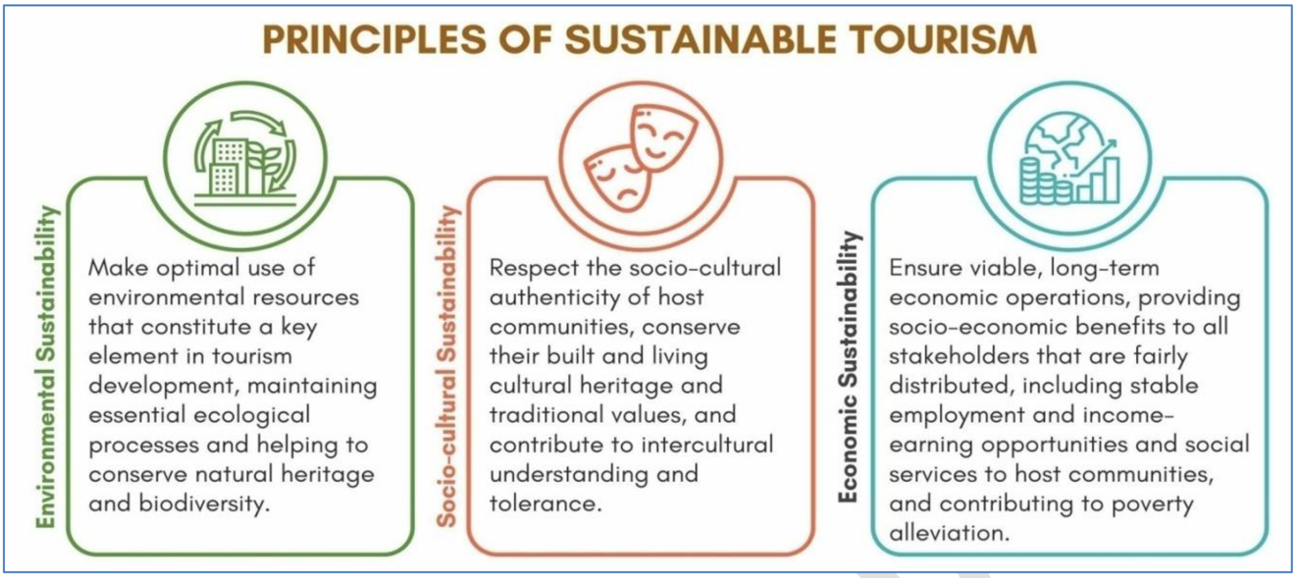
- Contact-Sensitive Sector
- Lack of reliable data and statistics.
- Heavily taxed industry
- Promotion and marketing is not up to its potential
- Poor infrastructure because of which many areas are inaccessible to women, children and elderly.
- Safety and security concerns
- Regional competition from countries like Singapore, Thailand, Malaysia, etc.

Recognising the immense potential of tourism sector, Ministry has released Draft National Strategy and Roadmap for Sustainable Tourism along with strategy and roadmap for development of niche areas of tourism (rural, Medical and Wellness, MICE (Meetings, Incentives, Conferences and Exhibitions)).

8.4.1. DRAFT NATIONAL STRATEGY AND ROADMAP FOR SUSTAINABLE TOURISM

What is Sustainable Tourism?

It is the **tourism that takes full account of its current and future economic, social and environmental impacts,** addressing the needs of visitors, the industry, the environment and host communities.



Steps taken for sustainable tourism

- Special focus on **promoting 'Incredible India' brand** to attract tourists, not only to major cities and heritage attractions, but also to rural India.
- With the institutionalization of Global Sustainable Tourism Council (GSTC) in 2010, **India adapted GSTC criteria for sustainable tourism in the Indian context.**
- Ministry of Tourism has launched the **Sustainable Tourism Criteria for India (STCI)** with an aim to promote and ensure environmentally responsible and sustainable practices in the tourism industry.
- **Guidelines for classification of hotels under various categories**, which require hotels to incorporate various eco-friendly measures like Sewage Treatment Plant (STP), Rain Water Harvesting System, waste management system etc.
- Ministry has also prescribed that the **architecture of the hotel buildings in hilly and ecologically fragile areas** should be sustainable and energy efficient.
- The tour operators approved by Ministry of Tourism have to sign a **pledge for commitment towards Safe &Honorable Tourism and Sustainable Tourism.**

Key Features of draft National strategy and roadmap for Sustainable Tourism

Aim	• To **mainstream sustainable tourism development** and to improve attractiveness and competitiveness of India as a destination for ecotourism and adventure tourism.
Strategic pillars identified	• **Certification Scheme for Sustainable Tourism** based on Sustainable Tourism Criteria of India, Certification Scheme for tour operators, guides and other service providers for ecotourism and adventure tourism, Digitalization and branding of Certification Schemes etc. • **Information, Education and Communication (IEC) campaign** to create awareness, understanding and acceptance of sustainable tourism. • **Capacity Building of field functionaries and conservation agencies**, Skill development and entrepreneurship support to local communities etc. • **Marketing and Promotion by creating a sub brand** around Adventure tourism and Ecotourism, developing state specific/destination specific campaigns etc. • **Safety Standards and Regulations have been framed** for 15 Land Based, 7 Air Based and 7 Water Based activities which cover the entire gamut of Adventure Tourism available in India. • **Each State will identify the adventure destinations by offerings** (Land, Air and Water based activities) in Soft, Hard and Other categories and create a detailed profile • **Private Sector partnership** in areas of marketing, operations, product and experience creation, quality assurance and finance etc. o State Governments should **designate areas for private sector operator** to be called ecotourism block for development and management.

	• Ministry of Tourism will prepare a detailed **National Action Plan for implementation of the Strategy** ○ **National Board on Sustainable Tourism** under Secretary (Tourism) to strengthen the ecosystem for development of sustainable tourism, adventure tourism and ecotourism

8.4.2. DRAFT NATIONAL STRATEGY AND ROADMAP FOR DEVELOPMENT OF RURAL TOURISM

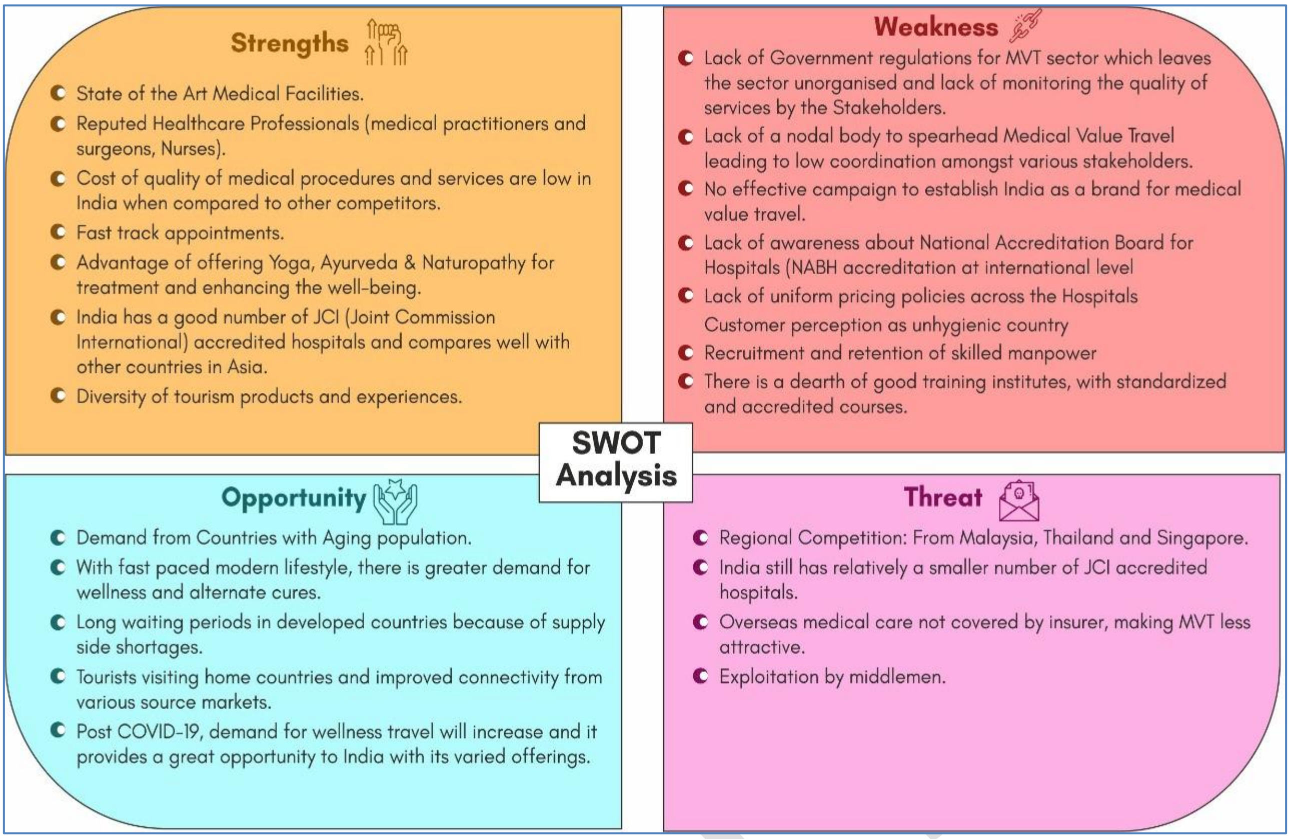
About Rural Tourism

- Any form of tourism **that showcases the rural life, art, culture, and heritage at rural locations,** thereby benefiting the local community and **enabling interaction between the tourists and the locals** for a more enriching tourism experience can be termed as rural tourism.
- **Initiatives taken in India**
    - Rural Tourism was recognized as a **focus area in National Tourism Policy 2002.**
    - In 2003, **Endogenous Tourism Project-Rural Tourism Scheme** was started by MoT in collaboration with United Nations Development Project (UNDP).
    - **Help Tourism' organization** launched a village tourism initiative in West Sikkim by **offering rural home-stays.**

8.4.3. DRAFT NATIONAL STRATEGY AND ROADMAP FOR MEDICAL AND WELLNESS TOURISM

About Medical and Wellness Tourism

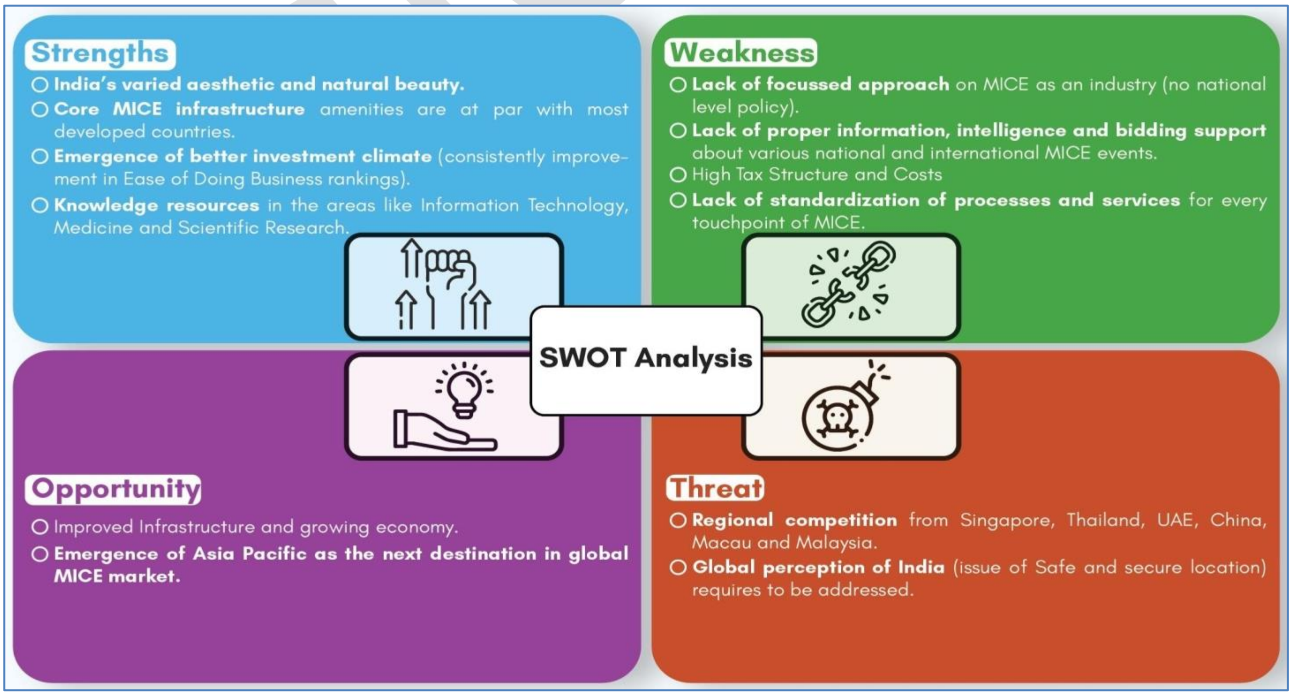
- Medical tourism may be defined as '**activities related to travel and hosting a foreign tourist who stays at least one night at the destination region for the purpose of maintaining, improving or restoring health through medical intervention.**'
- **It may be broadly classified into following three categories:**
    - **Medical Treatment:** Treatment for curative purpose that may include cardiac surgery, organ transplant etc.
    - **Wellness & Rejuvenation:** Offerings focused on rejuvenation or for aesthetic reasons such as cosmetic surgery, stress relief, spas etc.
    - **Alternative Cures:** Access to alternative systems of medicines such as India's offering of AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy).
- **Medical tourism is now often referred as Medical Value Travel (MVT)** as it captures patient's healthcare seeking behaviour as well as the wider economic impact of such travel on nations hosting them.



8.4.4. DRAFT NATIONAL STRATEGY AND ROADMAP FOR MICE

About MICE (Meetings, Incentives, Conferences and Exhibitions)

- Main purpose of MICE events is to create a networking platform for business, industry, government and Academic Community and engage in meaningful conversations.
- MICE is also known as 'Meetings industry' or 'Events industry'. Generally, they bring large groups together for a specific purpose.
    - **Four elements of MICE are Meeting, Incentives, Conferences and Exhibitions.**



9. TRANSPORT

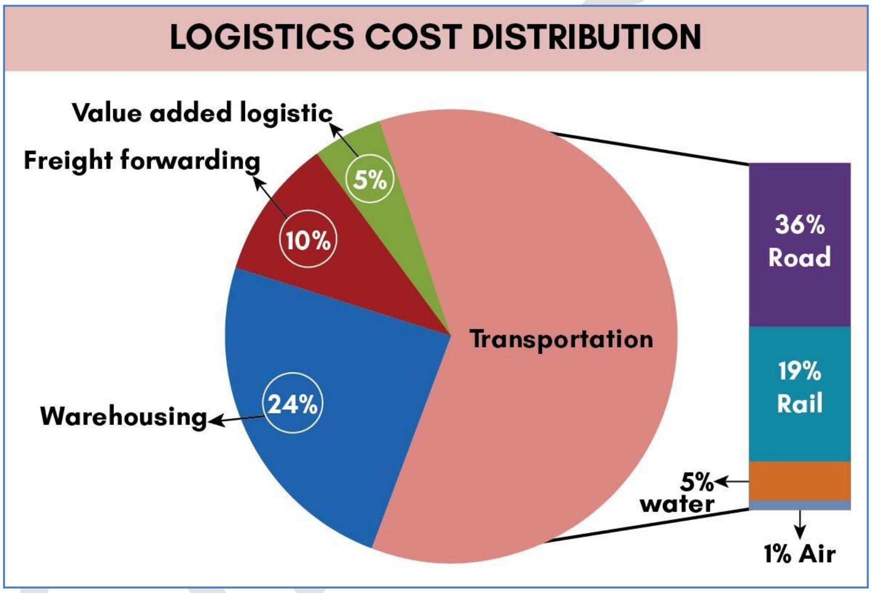
9.1. LOGISTICS SECTOR

Why in news?

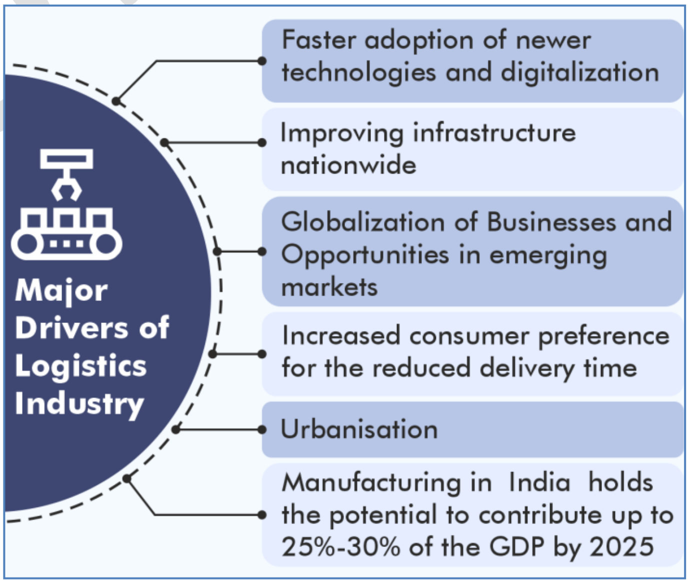
The Logistics Division of the Ministry of Commerce and Industry has unveiled plans for the **'Freight Smart Cities'.**

Logistics industry in India

- Broadly defined, logistics covers all aspects of trade, transport, and commerce, starting from the **completion of the manufacturing process all the way to delivery for consumption.**
- Currently, **transportation is considered to be most crucial logistics activity** which almost accounts for 50-60% of logistics cost followed by warehousing (Refer Fig).



- The Size of Logistics Industry in India is $215 billion.
    - It provides livelihood to **more than 22 million people** and improving the sector will facilitate 10 % decrease in indirect logistics cost**.**
    - **Port capacity** is expected to grow at a CAGR of 5% to 6% by 2022.
    - **Indian Railways** aims to increase its freight traffic from 1.1 billion tons in 2017 to 3.3 billion tons in 2030.
    - **Freight traffic on airports** in India has the potential to reach 17 million tons by FY40.



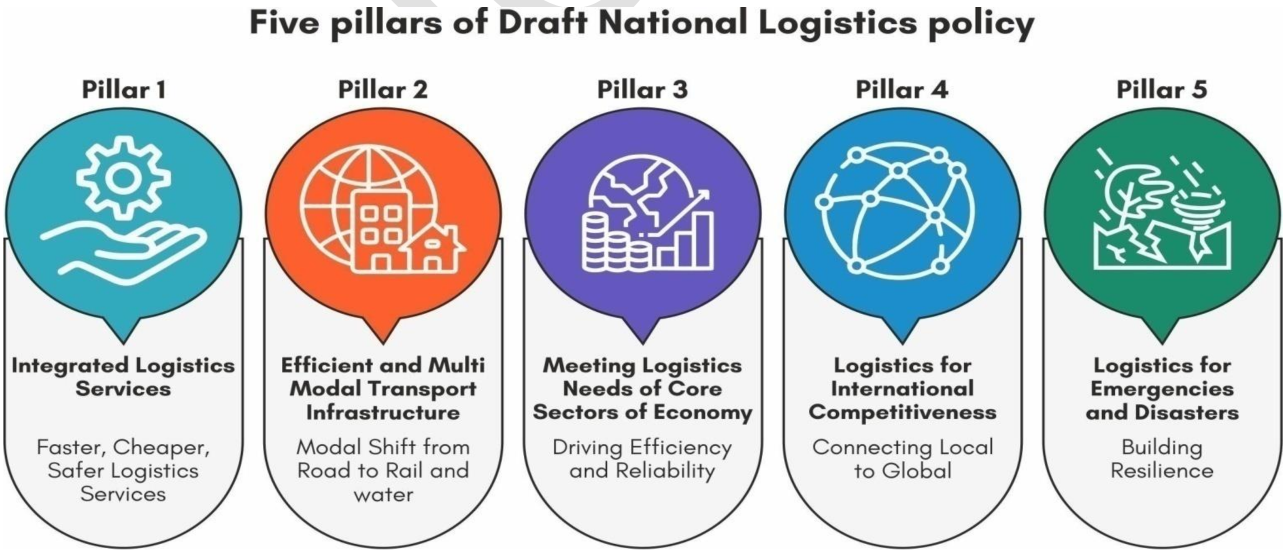
Challenges of Indian Logistics Sector

- **Infrastructure:** Infrastructural challenges are reflected in **inadequate and low-quality** modal and terminal transport infrastructure, **inefficient and ill-designed** storage facilities for cargo and containers etc.
- **Suboptimal modal mix:** In the **absence of a systematic and holistic approach,** the use of different modes of transport has remained **skewed (60% of transportation activities conducted via road) and inefficient.**
- **High Logistics Cost:** The Ministry of Commerce & Industry estimates that presently the **country spends about 14% of its GDP on logistics** which is much higher than Japan (11%) and the USA (9-10%).
- **Fragmented and unorganised sector**: The logistics industry is highly fragmented and **consists of over 1,000 active players** which include large scale domestic players, leading entities of global players, the express arm of the government postal service and emerging start-ups specialising in e-commerce deliveries.
    - Further, **only 10-15 per cent** of the $215-billion Indian logistics market is **owned by organised players.**
- **Shortage of skilled workforce:** Non availability of appropriately skilled manpower is attributed to inadequate training and proper leadership and support. There are **limited institutes for soft skills**, and

operational and technical training. Also, due to **poor working conditions and low pay scale** (unorganised nature), it is not a **preferred choice among skilled personnel.**
- **Slow adoption of new technology:** Awareness about the economic benefits of using digital technology is low and collaboration among stakeholders far from satisfactory. As a result, the logistics ecosystem is fraught with **operational inefficiencies and poor asset utilization.**

Measures taken

- **Grant of Infrastructure status to Logistics sector:** It helps in **providing credit** to the exporters at competitive rates and on a long-term basis, **reducing logistics costs.**
- **Introduction of GST:** The integration of the multilayer **goods and service tax (GST**) has turned the Indian tax system into a **unified one** and leading to **greater economies of scale** for transport operators.
    - **E-way bill** (a document generated online) **under GST regime** is helping logistics firms by **improving load planning, shipment tracking, operational transparency, and the overall quality** of their services.
- **Creation of Logistics Division**: The Logistics division in the Department of Commerce was created consequent to the amendment to Government of India (Allocation of Business) Rules, 1961, that allocated the task of "**Integrated development of Logistics sector**" to the Department of Commerce.
    - Logistics division has planned to **create an IT backbone and develop a National Logistics Information Portal** which will be also an online Logistics marketplace that will serve to bring together the various stakeholders on a single platform.
- **Integrated approach to Logistics infrastructure:** Significant initiatives in this direction include planned development of 35 **Multi Modal Logistics Parks (MMLPs) under Bharatmala Pariyojana**, a number of port connectivity projects under **Sagarmala**, renewed focus on national waterways with inland terminals, and a number of **industrial and dedicated freight corridors** being planned across key clusters in the country.
- **Logistics Ease Across Different States (LEADS) Index**: It is an attempt to establish the base line of performance in the logistics sector based on the **perception of users and stakeholders** at the state level.
- **National Logistics Excellence Awards:** Objective of awards is to catalyze **systematic transformation** of the Indian logistics sector by **shining the spotlight on best practices** in logistics by **highlighting the initiatives and achievements of top performers.**
- **Proposed National Logistics Law**: Currently **under consultation with stakeholders**, it would provide an agile regulatory environment through a unified legal framework for **"One Nation-One Contract" paradigm** (single bill of lading across modes) supporting "One **Nation-One Market" agenda.**
- **Draft National Logistics policy:** It aims to promote seamless movement of goods across the country and is at the **near-finalization stage.** There are five pillars for programmatic interventions:



9.2. ROADWAYS

Key targets

- Achieve the targets of **Bharatmala Pariyojana** such as raising freight to 80% on National Highways.
- Double the length of **National Highways (NHs) to 2 lakh km by 2022-23.**
- Widen single/intermediate lane NHs and reduce the length to less than **10% of total length by 2022-23.**
- Improve the **regulatory framework** for roads.
- **Reduce the number of road accidents** and fatalities by 50% by 2020 in accordance with the Brasilia Declaration.

Current Situation

Largest share in both passengers and freight transport.
2.2% of the country's total road network are National Highways.
11% CAGR was seen in registered vehicles in India.
40% of India's total traffic is carried by the National Highways.

Schemes/Policies/Initiatives

- **Bharatmala Pariyojana**
- **North East Road Sector Development Scheme**
- **Pradhan Mantri Gram Sadak Yojana**
- **Setu-Bharatam project**

ROADWAYS AT- A- GLANCE

Way Forward

- **Earmark funds** from the Central Road Fund (CRF) for regular maintenance activities.
- Streamline **land acquisition** to decrease development costs.
- Introduce **vocational training** courses on road construction in Industrial Training Institutes.
- Ensure **stringent testing of driving skills before granting driving licences.**
- Increase the capacity, accessibility and affordability of **public transport.**
- Increase **technology adoption and seamless movement between different modes of transport.**

Constraints

- **National and state highways** are already overstrained, carrying more than **65% of the road traffic.**
- **Annual outlay** earmarked for **maintenance and repair of national highway** is only about **40%** of the funds required.
- Road safety is a major issue in the country with nearly **400 road related deaths being recorded daily.**
- Delays in acquiring land affects project costs as the average cost of land has escalated from **Rs. 0.80 crore per hectare during 2012-13 to Rs. 3.20 crore per hectare during 2017-18.**
- In urban areas, the increasing use of personal vehicular transport leads to **road congestion, longer journey times and higher levels of air and noise pollution.**
- Expansion of the **public transport** fleets has been hampered by the short supply of vehicles.

9.2.1. ROAD SAFETY

Why in news?

World Bank released report titled 'Traffic Crash Injuries and Disabilities: The Burden on Indian Society'.

Key Highlights of the Report

- **Road accidents related Deaths in India:** Accounts for about **4.5 lakh road crashes per year,** in which 1.5 lakh people die.
- **Vulnerable Road Users (VRUs)** (i.e., male road users of working age) **bear a disproportionately large version of road crashes.**
- **Gender specific impact:** About 50% of women were severely affected by the decline in their household income after a crash.
- **Economic Cost:** Estimated crash cost adds up to 3.14% of the GDP.
- **Social Impact:** Every road accident death causes depletion of nearly seven months household income in poor families.

Causes of increasing road accidents

- **Increasing congestion of vehicles and traffic on roads:** Due to factors like increasing urbanisation, economic growth coupled with lack of proportionate increase in capacity of roads.
- **Poor enforcement of laws:** India's traffic laws are stricter than those of other countries but these laws are not enforced. Also, India has a **paucity of traffic police.**
- **Poor city planning:** On many roads there are no traffic-calming measures such as speed humps before intersections or median barriers**.**
- **Inadequate driver training:** In 2018, in 26% of all road accidents, drivers who were in an accident did not have a valid license or were driving with a learner's license.
- **Improper road engineering:** Road infrastructure in India suffers from poor design quality, poor visibility leading to higher chances of accidents.

Steps taken to improve road safety in India

- **National road safety policy 2010:** Policy outlines various measures such as, raising awareness about Road Safety; establishing a Road Safety Information Database; built in safety features at the stage of design, manufacture; strengthen the system of driver licensing and training etc.
- **National Road safety Council** constituted as apex body to take policy decisions in matters of road safety.
- India signed **Brasilia Declaration on Road Safety (2015) which commits to reduce road accident and fatality by half.**
- **Dedicated Freight Corridor Project:** The Indian Railways' quadrilateral linking Delhi, Mumbai, Chennai and Howrah, known as Golden Quadrilateral; **will decongest already saturated road network** & promote shifting of freight transport to more rail transport**.**
- Passing of **Motor Vehicle (Amendment) Act, 2019.**

Suggestions to enhance road safety include

- **National road safety plan** by Bureau of Police Research and Development suggests the following:
    - **dedicated and separate agency for strict enforcement of the traffic violations across India,** especially on National Highways.
    - Proposed **National Highways Road Safety Police**, state highway road safety police for strict enforcement on national highways.
    - **Use of Artificial Intelligence**: Use of Intelligent Transportation System (ITS) and Artificial Intelligence techniques to communicate, monitor, operate and manage the highways in a sensible and organized way etc.
- **S. Sunder committee 2007 on road safety** highlighted the need for scientific study of road infrastructure, which includes effective road engineering solutions at the design stage, rectification of accident hot spots etc.
- **Safe system approach** of World Health Organisation recognised that people' role in road safety cannot be eliminated and rather the policy approach should be shifted towards education and awareness.
- **Modernise the vehicle technology** such as collision-avoidance systems, semi-autonomous vehicles, stability control, automatic braking systems and air cushion technology and speed limiters on fleet vehicles.

9.2.2. VEHICLE SCRAPPING POLICY

Why in News?

Ministry of Road Transport and Highways (MoRTH) announced Vehicle Scrapping Policy (VSP).

Key proposals in VSP

- **De-registrations of vehicles**
  - **Commercial vehicles to be de-registered after 15 years** in case of failure to get the fitness certificate.
  - **Private Vehicles be de-registered after 20 years if found unfit** or in case of a failure to renew registration certificate.
  - **All government vehicles** may be de-registered and scrapped after 15 years from the date of registration.
- **Incentives to scrap old and unfit vehicles** through registered scrapping centres (RSC).
  - **State governments to offer road tax rebate** of up to 25% for personal vehicles and 15% for commercial vehicle.
  - **Manufacturers to provide 5% discount on purchase of a new vehicle** against the scrapping certificate.
  - **Registration fees may also be waived** for purchase of new vehicle against the scrapping certificate.
- **Setting up of highly specialized Registered Vehicle Scrapping Facilities (RVSFs**) across India by encouraging public and private participation.
  - MoRTH also announced **draft rules to promote setting up of Registered Vehicle Scrapping Facility** across India.

Objectives of the policy

- To reduce population of old and defective vehicles
- Achieve reduction in vehicular air pollutants to fulfil India's climate commitments
- Improve road and vehicular safety
- Achieve better fuel efficiency,
- Formalize the currently informal vehicle scrapping industry
- Boost availability of low-cost raw materials for automotive, steel and electronics industry

What is vehicle scrapping?

It is the **process in which End of life – vehicles (ELV) are disposed of**, typically using shredders that tear them down into tiny pieces of metal which can then be recycled. It covers activities such as **depolluting, dismantling, segregation of material, safe disposal of non-reusable parts etc.**

Challenges to such a policy

- **Lack of supporting infrastructure:** India currently has very less automated fitness test centres which is inadequate to cater to the market.
- **Complex deregistration process:** Present process for deregistering vehicles deters many owners who are interested to sell or get their old vehicles.
- **Environment challenges:** About 25% of waste material coming from an ELV poses a potential environmental threat, due to the presence of heavy metals, waste oils, coolants, ozone depleting substances, etc.
- **Lack of consensus:** In 2018, road ministry proposed to make vehicle scrapping mandatory from 2020 onwards. However, PM's Office did not agree to it and directed ministry to make scheme voluntary and consult states.
- **Uncertain Numbers:** It is difficult to arrive at definitive numbers for older and end-of-life vehicles, as the vehicle registration database in India is cumulative and not corrected for retirement and scrappage.
- **Impact on sale of used vehicles:** Scrapping old vehicles will raise the price of second-hand vehicles. This will hit all poorer car owners.

Way forward

- Policy needs to provide fiscal stimulus **package for replacement of older heavy-duty vehicles with BSVI vehicles.**
- **Notify new manufacturer/producer responsibility** so that vehicles should not contain toxic metals like lead, mercury, cadmium, or hexavalent chromium other than specified conditions.
- **Scale up environmentally sound vehicle scrappage infrastructure** nation-wide for safe disposal of waste and for material recovery for recycling like steel, aluminium, and plastics etc.
- **Integrate the informal sector** as it plays an important role in the collection, dismantling, and recycling of ELVs.
- **Cleaning up of the vehicle database** to estimate accurately the quantum of legacy vehicles across all regions. MoRTH's initiative to create an online VAHAN database for active vehicle permits and registration is an important step.

- **Better coordination** particularly between MoRTH, Ministry of Environment, Forests and Climate Change, and Central Pollution Control Board to harmonize the regulatory framework and coordinate implementation.

9.3. RAILWAYS

Key targets

- **Augment the capacity** of existing railway infrastructure.
- Achieve **100% electrification of broad gauge track by 2022-23** from the **40 per cent level in 2016-17.**
- Increase the average **speed of freight and mail/ express** trains to **50 km/hr and 80 km/hr** respectively.
- Zero fatalities in Railway transport.
- Enhance service delivery, achieving **95% on-time arrivals by 2022-23.**
- Increase the **share of non-fare revenues in total revenue to 20 per cent.**

Current Situation

- **4th Largest** Railway Network in the world (Indian Railways).
- **1st and 4th** respectively in passenger and freight transport globally.
- **22.24 million passengers** are carried by railways daily.
- **1.1 billion tonnes** of freight has been transported between 2007 and 2017.
- **USD 25 billion** was the revenue earned by Railways in 2017.

Schemes/Policies/Initiatives

- Dedicated Freight corridors
- Power Rail Koila availability through Supply Harmony
- Rail Kaushal Vikas Yojana under PMKVY.
- Rashtriya Rail Sanraksha Kosh

RAILWAYS AT- A- GLANCE

Way Forward

- Better utilization of **existing infrastructure to address congestion.**
- **Ease organizational rigidity** through structural reforms.
- Rationalize **fare structures and subsidies** and **monetize assets** to generate revenues
- **Enhance safety of trains** to reduce accidents and modernize stations
- Can set up an **independent regulator for the Indian Railways**

Constraints

- **Congested networks and overstretched infrastructure.**
- **Delays in decision-making, inadequate market orientation and long project approval durations.**
- **Internal generation of resources is low** with negligible non-fare revenues and high freight tariffs.
- **Safety and poor quality of service delivery.**
- **Poor terminal facilities** lengthen loading and unloading time.
- **The lack of scale economies** especially impact management quality and system accountability.

9.3.1. PRIVATE SECTOR PARTICIPATION IN RAILWAYS

Why in news?

Recently, **bids for public-private partnership (PPP) in Passenger Train Operations** project were opened.

Other reforms in Railways

- **National Rail Plan (NRP):** Based on the NRP, a **Vision 2024 document** has been prepared to develop infrastructure by 2024 to **enhance modal share of Railways in freight transportation to more than 40 per cent** and to cater to the traffic requirements up to 2030.
- **Improved Project execution and Organisational efficiency:** Introduction of **E-work contract management system, E-Shramik Kalyan Portal and a single Central Payment System** (in collaboration with State Bank of India) have vastly improved **transparency** in decision making.
- **Speeding Electrification of Railways and Mission Greening: 66% of track length has been electrified** by November 2020. Railways aim to complete electrification of its entire broad-gauge network by 2023.
- **High Speed Rail:** At present **Mumbai-Ahmedabad High Speed Rail (MAHSR)** project is the only sanctioned project of High Speed Rail (HSR) in the country. It is under execution with the **financial and technical assistance from Government of Japan**.
- A Special Purpose Vehicle (SPV), namely **National High Speed Rail Corporation Limited (NHSRCL)** has been formed to implement the Project.

Need of private sector participation in Railways

- **To meet the growing demand:** Increasing **urbanisation** and **rising income** is driving growth in passenger segment. India is projected to account for **40% of the total global share of rail activity** by 2050.
- **To mobilize resources: Rakesh Mohan Committee** had noted that Railways has fallen into a **vicious cycle of under investment, misallocation of scarce resources, increasing indebtedness, poor customer service and rapidly deteriorating economics.**
  - **Total investment of around Rs 30,000 crore** is envisaged into the railway system through rolling stock and other expenditure which is to be **borne by the private players.**
- **Losing Traffic to other modes:** Railways' share in the transportation of surface freight has declined from 86.2 per cent in 1950-51 to mere 18 percent in 2020.
  - Between 2013 and 2018, reserved passenger traffic on Indian Railways **grew at less than 5%,** on average compared to a **13% growth in air traffic** during the same period.
- **For economic Growth**: An analysis by the **Economic Survey** showed that a steady shift to other modes of travel was **affecting economic growth by as much as 4.5% of GDP-equivalent**.
- **Losses in passenger business:** These losses arise because of **pricing tickets at fares lower than costs** and **passenger concessions** (such as cheaper tickets for senior citizens, army veterans). The Committee on Restructuring Railways had noted that the **methods of calculating the cost** of running passenger business are **not scientific and accurate.**
- **Enhanced Safety:** The Standing Committee on Railways (2016) had noted that under-investment in Railways results in **more rail accidents.**
  - According to the High-Level Safety Review Committee (HLSRC), the **total financial implication of the safety measures over a five-year period** (2012-17) was likely to be around **Rs one lakh crore.**
- **Encourage competition:** Due to lack of competition, Railways has transformed into an **inefficient and bureaucratic monolith** with issues like Overstaffing, poor quality of services, low speed etc.

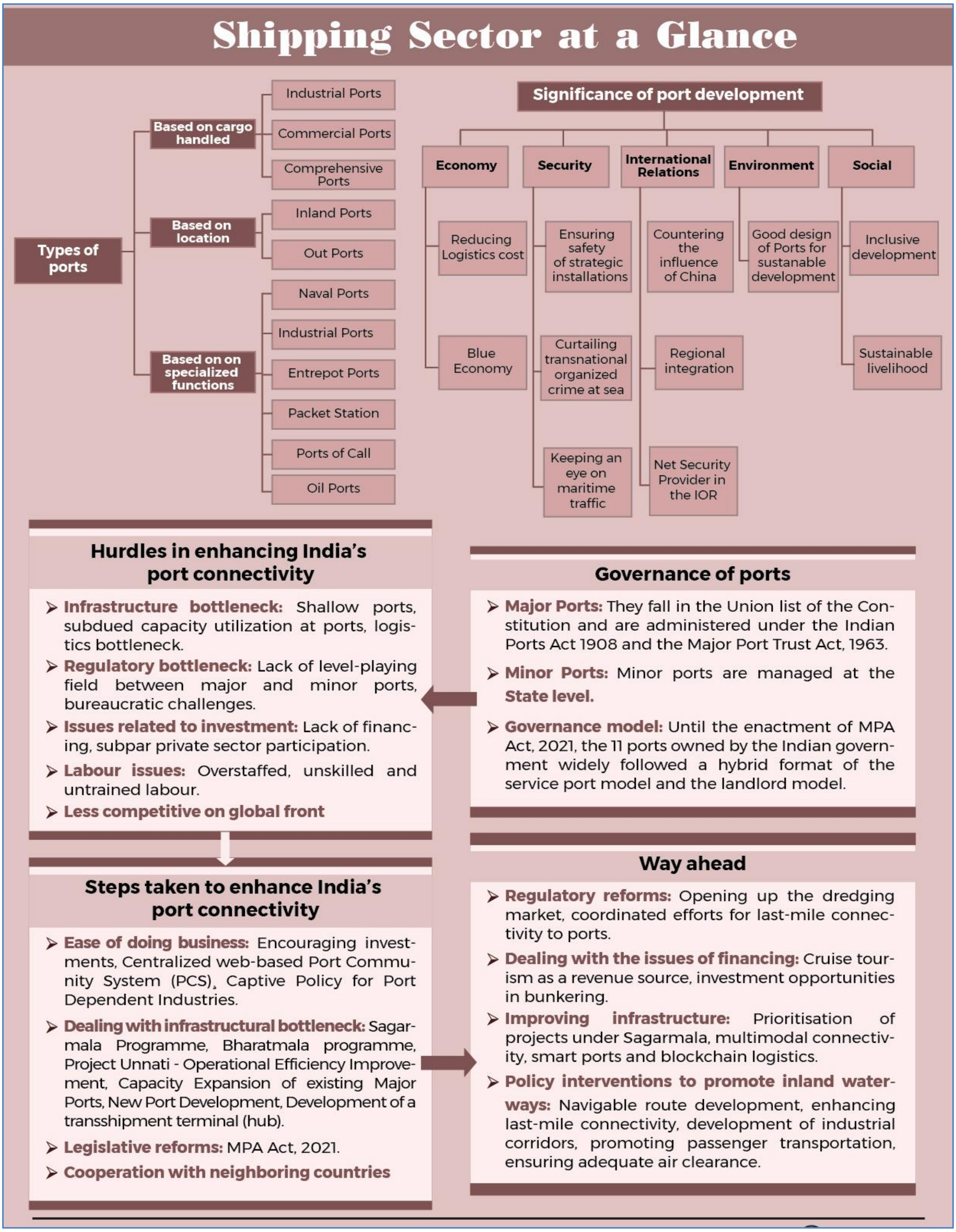
Concerns regarding private sector participation

- **Absence of independent regulator:** The Railway Board has the unique distinction of **being the rule maker, operator and the regulator** which is a clear **conflict of interest** as pointed out by Bibek Debroy committee.
- **International experience: Rakesh Mohan committee** report had pointed out that the international experience on privatising railways showed that it was "**exceedingly difficult and controversial**".
  - For instance, when Britain privatized its railways, it offloaded assets including tracks and routes which led to an **underinvestment in infrastructure.**
- **Social welfare concerns:** Since private sector is driven by profit motto, it may lead to an **increase in train fares** that have remain largely subsidised in the country.
- **Saturation and capacity constraints:** The rail network currently faces huge capacity constraints, and the high-density network (network that connects metros) has **already reached saturation.** With high levels of capacity utilisation, and the introduction of new trains, trains tend to slow down, and affect the quality of services.

Way Ahead

- **Setup an independent regulator:** An independent regulator will ensure, among other things, **fair access to tracks, stations, warehouses, terminals and other infrastructure and services**.
- **More clarity**: The **clear-cut delegation of roles and responsibilities** between entities, the allocation of deliverables within **a predefined timeline** and ensuring **transparency and accountability** in the tender monitoring process is way forward for successful participation of private players.
- **Rationalize fare structure**: The NITI Aayog has suggested to price passenger fares as per the **prevalent market rates in corresponding transport modes**.
- **Enhance passenger amenities:** The **Standing Committee on Railways** chaired by Radha Mohan Singh has made following recommendations in this regard.
    - Railways should prepare a **realistic budget** so that financial and physical **targets are optimally achieved.**
    - Need for a **robust monitoring mechanism** for ensuring maintenance and **upkeep of assets** created for passenger facilities.
    - Outsource most of the clearing activities under the **mechanised cleaning system** to professional agencies.

9.4. SHIPPING



9.4.1. DRAFT BLUE ECONOMY POLICY FOR INDIA

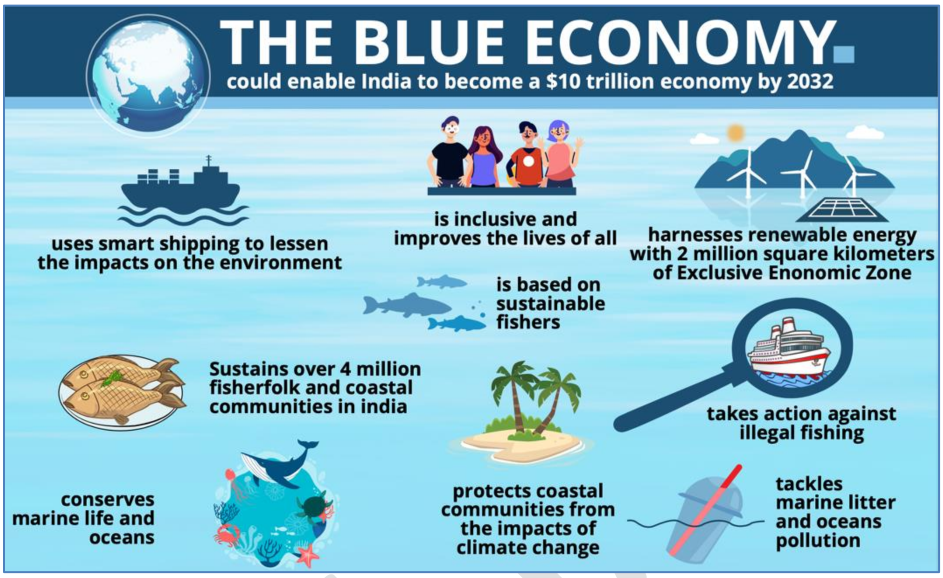
Why in news?

Ministry of Earth Sciences (MoES) has rolled out the **Draft Blue Economy policy for India** in the public domain inviting suggestions and inputs from various stakeholders including industry, NGOs, academia, and citizens.

About Blue Economy

- According to World Bank, Blue Economy refers to **sustainable use of ocean resources for economic growth,** improved livelihood and jobs, and ocean ecosystem health.
- Blue Economy seeks to promote **economic growth, social inclusion and the preservation or improvement of livelihoods as well as ensuring environmental** sustainability of the oceans and coastal areas.

Draft Blue Economy Policy:



- The draft blue economy policy document **outlines the vision and strategy that can be adopted by the Government of India to utilize the plethora of oceanic resources** available in the country.
- **The policy document aims:**
  - o to enhance contribution of the blue economy to India's GDP,
  - o improve lives of coastal communities,
  - o preserve marine biodiversity,
  - o maintain the national security of marine areas and resources.
- India's blue economy is understood as a **subset of the national economy comprising an entire ocean resources system and human-made economic infrastructure in marine**, maritime, and onshore coastal zones within the country's legal jurisdiction.
- It **highlights blue economy as one of the ten core dimensions** for national growth.
- The draft policy framework emphasizes policies **across several key sectors to achieve holistic growth of India's economy.**
- The document recognizes the following **seven thematic areas**-
  - ✓ **National accounting framework for the blue economy and ocean governance**
  - ✓ **Coastal marine spatial planning and tourism** in line with the Coastal Marine Spatial Planning (CMSP) approach of the Intergovernmental Oceanic Commission (IOC)-UNESCO guidelines.
  - ✓ **Sustainable Marine fisheries, aquaculture, and fish processing**
  - ✓ **Public-private partnership in Manufacturing, emerging industries, trade, technology, services, and skill development**
  - ✓ **Long term plan for Logistics, infrastructure, and shipping, including trans-shipments**
  - ✓ **National Placer Mission** for **deep-sea mining and** a lead **role in exploration of cobalt rich Sea Mount Ferro Manganese Crust (SFMC)** in the Indian Ocean.
  - ✓ **Integrating national geo-intelligence framework and space applications** along with international partnerships with key partner countries.

Challenges in growth of Blue Economy

- **Overfishing/unsustainable fishing practices.**
- **Pollution, loss of habitat and biodiversity, pirates, crime, and climate change.**
- **Gender inequality** as women represent no more than 1% of the maritime industry.
- **Plastic pollution.**
- **Security issues** like piracy, maritime terrorism etc.

Way Forward

- **Encourage emerging industries**: There are other emerging industries such as aquaculture, marine biotechnology, ocean energy and sea-bed mining that have the potential to create jobs and spur worldwide economic growth.

- **Inclusive Framework:** Indian Ocean region needs a sustainable and inclusive framework for international partnerships. Countries in the region need to not only coordinate and manage the growing security challenges in the region but also realize the substantial economic potential the Indian Ocean area presents.
- **Cooperation:** India's commitment to strengthen its cooperation with the regional partners and build a sustainable ocean economy aligns well with its domestic mega-modernisation projects that will enable the nation to harness the full potential of the Ocean based Blue Economy.
- **Economic incentives:** The granting of economic incentives to small fishermen to adopt sustainable practices, or the increase in protected maritime areas, to recover the habitats and productivity of the seas.

Some Other initiatives by India

- **Matasya Samapada Yojana** which aims at enhancing fish production by an additional 70 lakh tonnes and increasing fisheries export earnings to Rs 1 lakh crore by 2024-25.
- **Polymetalic Nodules:** India has received the sanction from International Seabed Authority for deep-sea mining in the Central Indian Ocean.
- **Coastal Economic Zones:** are being developed under Sagarmala initiative covering all the Maritime States.
    - CEZs are spatial economic regions comprising of a group of coastal districts or districts with a strong linkage to the ports in that region.

9.4.2. MARINE AIDS TO NAVIGATION ACT, 2021

Why in News?

Recently, the Union Cabinet approved a scheme for promotion of **Flagging in merchant ships** in India while Parliament also passed the **Marine Aids to Navigation Bill, 2021.**

What role does Shipping Industry play in the Economy?

As far as the Indian subcontinent is concerned, shipping plays an important role in the transport sector of India's economy.

- Approximately, **95 percent of the country's trade by volume** (70 percent in terms of value) is moved by sea.
- With a **coastline close to 7517 km and 12 major & 187 minor ports** India happens to be a potential destination for shipping and transhipment in the futures to come.
- The industry offers numerous benefits like- **capabilities to transport large freight**, **is cost effective**, **eco-friendly** and **creates employment in coastal regions** among others.
- Following are some of the important areas of the economy where the shipping industry plays the central role-
    - **India imports around 40 million tonnes of crude and 20 million tonnes of products** every year, chiefly from the Gulf, Malaysia, and Nigeria via the Shipping route.
    - **Iron ore exports** from India to East Asia.
    - **Coking coal imports** from Australia to Visakhapatnam, Paradip, and Haldia

What are the issues that the sector is facing?

- **Small Fleet Size:** The size of Indian Shipping Industry and its fleet is comparatively smaller to its counterparts (Ranked at 16 with 1.2% of world).
- **Lack of Competitiveness:** Due to high taxation, compliance burden and lack of skilled manpower, the operational costs of Indian vessels are high.
- **Low capacity:** Despite handling **90% of EXIM Cargo by volume** and **70% by value**, the traffic handled at ports is far less than capacity.
- Despite **100% FDI** and **10-year tax holiday to enterprises** engaged in maintenance and operation of ports, a cumulative FDI of only **US$ 1.63 billion** is received from April 2000 to March 2021.

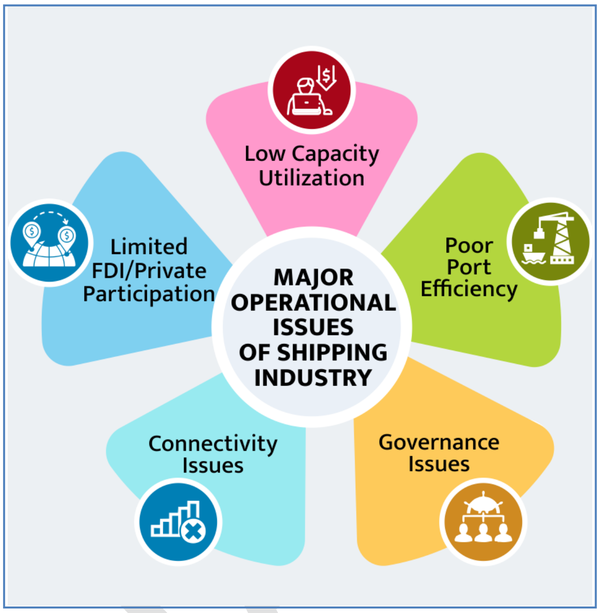
How can Marine Aids to Navigation Act, 2021 help the industry?

It seeks to **incorporating global best practices** and **comply** to India's International obligations under

- **International Convention for the Safety of Life at Sea, 1974.**
- **International Association of Marine Aids to Lighthouse Authorities Maritime Buoyage System**.

It provides a **user-friendly legal framework** for **development, maintenance, and management** of aids to navigation across India through provisions on:

- Definition on **aid to navigation** and on **vessels**, based on the modern state-of-the-art technologies of marine navigation.
- Appointment of **Director General of Aids to Navigation** and **Central Advisory Committee** to advise the central government on matters related to aids to navigation.
- Designate any aid to navigation as **Heritage Lighthouse**.
- Identifying **offences and penalties** for **intentional obstruction or damages** to any aid to navigation with fine and punishment.
- **Training and Certification** for operating any aid to navigation and vessel traffic service.



Potential Benefits

- Better Navigation **safety and efficiency** with protection of environment
- **Skill development** and strengthening of Auditing and Accreditation of Institutes at par with international standards.
- Realize tourism potential of coastal regions through Heritage lighthouses **development for educational, cultural, and tourism purposes**.

9.4.3. MAJOR PORT AUTHORITIES ACT, 2021

Why in News?

Recently, Parliament passed the Major Port Authorities Bill, 2020.

About the Act

- The Act seeks to provide for regulation, operation and planning of major ports in India and provide greater autonomy to these ports. It seeks to replace the Major Port Trusts Act, 1963.
- Application: To major ports of Chennai, Cochin, Jawaharlal Nehru Port, Kandla, Kolkata, Mumbai, New Mangalore, Mormugao, Paradip, V.O. Chidambaranar (Tuticorin), and Vishakhapatnam.
- **Key features of the Act include:**

	Major Port Authorities Act, 2021	**Major Port Trusts Act, 1963.**
Major Port Authorities Board	• A Board of Major Port Authority for each major port will be formed. • These Boards will replace the existing Port Trusts.	• All major ports were managed by the respective Board of Port Trusts.
Powers of the Board	• Act allows the **Board to use its property, assets and funds as deemed fit** for the development of the major port. • **The Board can also make rules on** o Declaring availability of port assets for port related activities and services. o Developing infrastructure facilities such as setting up new ports, jetties. o Providing exemption or remission from payment of any charges on any goods or vessels.	**It included:** • Power to raise loans. • Power to make regulations w.r.t employees. • Power to execute works and provide appliances. • Power with respect to landing places and bathing ghat. • Power of Board to order sea-going vessels to use docks, wharves, etc
Fixing of rates	• Board or committees appointed by the Board will **determine rates for assets and services available at ports.** • Such fixing of rates will not be with retrospective effect.	• Currently, the Tariff Authority for Major Ports, established under the 1963 Act, fixes the scale of rates for assets and services available at ports.
Financial powers of the Board	• **Board may raise loans** from any scheduled bank or financial institution **within India, or any financial institution outside India.**	• Board had to seek prior sanction of the central government to raise any loan.

	• However, for loans above 50% of its capital reserves, the Board will require prior sanction of the central government.	
Public Private Partnership (PPP) projects	• Act defines PPP projects as projects taken up through a concession contract by the Board. • For such projects, the Board may fix the tariff for the initial bidding purposes.	
Corporate Social Responsibility	• Board may use its funds for providing social benefits. This includes development of infrastructure in areas such as education, health, housing, and skill development.	

Significance of the Act

- Act is aimed at **reorienting the governance model in central ports to landlord port model** in line with the successful global practice.
- To promote the expansion of port infrastructure and facilitate trade and commerce, **Act aims at decentralizing decision making and to infuse professionalism** in governance of major ports.
- It will **impart faster and transparent decision making** benefiting the stakeholders and better project execution capability.
- It will also help in **bringing transparency in operations** of Major Ports.

It is **more compact in comparison to the Major Port Trusts Act, 1963** as the number of sections has been reduced to 76 from 134 by eliminating overlapping and obsolete Sections

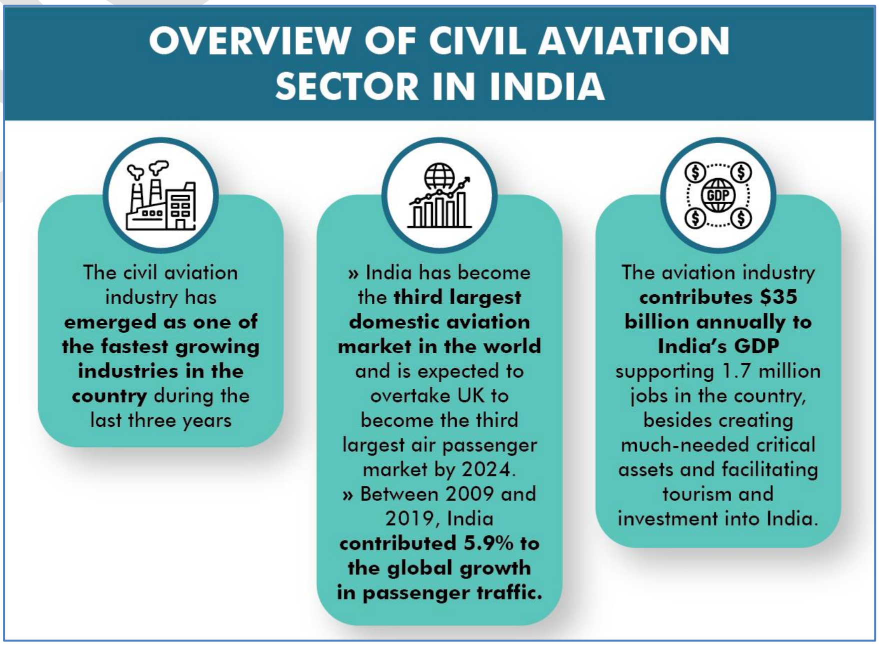
9.5. CIVIL AVIATION

Why in news?

Civil Aviation Ministry announced a 100-day development plan to boost the civil aviation sector.

More on news

- The civil aviation sector has been adversely impacted by the coronavirus pandemic as a result of ceased flight operations and drop in the number of passengers and freight. However, the sector is slowly coming on the recovery path.
- The 100- days plan aims to give the much-needed fillip to the sector and would focus on three main areas which are infrastructure, policy targets and reforms initiative.
    - Under this, **four new airports at Agartala, Kushinagar, Jewar in Greater Noida**, and a **second terminal building at Dehradun** — will be constructed in the next 100 days. **Six heliports** in Uttarakhand and



Himachal Pradesh **and commissioning of 50 new commercial routes** under the UDAN scheme too will be developed.
  - A **new policy for Maintenance, Repair and Overhaul (MRO) services** has been announced.

MRO Services saga

- Maintenance, Repair, Overhaul (MRO) in aviation is the repair, service, or inspection of an aircraft or aircraft component to ensure safety and airworthiness of all aircrafts by international standards.
- The MRO market **became a viable business in aviation because Airframe Original Equipment Manufacturers (OEMs) would mainly focus on development and production**, and not the aftermarket.
- Until recently, MRO services were taxed at 18% while the same services if done overseas attracted a tax of 5%. Additionally, no customs duties were levied on import of MRO services from overseas. This severely limited the ability of India's MROs to compete.
- Despite labour advantages, a qualified talent pool and exponential growth in airline fleets, Indian MROs continued to be unviable and **90% of India's MRO works are done outside the country that ultimately increases the operational cost.**
- **The new policy provides for:**
  - leasing of land through open tenders and abolishing royalty charged by the AAI.
  - land allotment for entities setting up MRO facilities through open tenders and for 30 years instead of the current short term period of 3 to 5 years.
  - discussions for having military and civil convergence with respect to MRO activities.
- To push MRO activities, the **ministry has identified eight airports for attracting investments to set up MRO facilities.** These are at Begumpet, Bhopal, Chennai, Chandigarh, Delhi, Juhu, Kolkata and Tirupati.
- The aircraft **MRO services market size is expected to grow in 2021 mainly due to the companies rearranging their operations and recovering from the COVID-19 impac**t and the new policy would likely favour India in becoming a global MRO hub.

Factors behind growth of the sector

- **Policy Factors:** National Civil Aviation Policy, 2016, relaxing FDI norms and focus on regional connectivity through UDAN Scheme have played an important role in creating a favorable environment for the aviation sector. As a result,
  - out of 53 Regional Connectivity Scheme (RCS) airports, **22 airports have been operationalized in the underserved and unserved areas**
  - According to International Air Transport Association (IATA) Report, the **average domestic fares in India have fell by 70%** from their 2005 levels.
  - **India's ranking in Travel and Tourism Competitiveness Index** has improved from 52nd in 2015 to 34th in 2019.
- **Economic factors:** Increasing size of India's middle class, growth in cross-border trade, development of world class airports, declining fuel prices and capacity expansion of low-cost carriers (LCCs) have been the driving factors.

Challenges looming over the sector

- **Lack of Infrastructure:** Inadequate hangar space and unavailability of land to expand airports at their current sites, particularly in major cities, are two of the major constraints that face the sector.
  - Additionally, **funding requirements for airport development under PPP models and project completion delays** owing to time taken to procure governmental approvals are also a roadblock.
- **High Fuel Cost:** Fuel cost in India, **accounts for 45% of the overall operating cost** of low-cost carriers which is well above the global average of 30%. Also, the prices of aviation fuel are approximately **60% higher than prices in ASEAN and the Middle East countries** because of high central and state taxes.
  - This makes the profitability of the civil aviation industry vulnerable to volatility in global oil prices.
- **Skill Shortage:** Shortage and gaps in the availability of industry-recognised skills – from airline pilots and crew to maintenance and ground handling personnel – constrains the growth of different segments of the sector.

Road Ahead

India's aviation industry is largely untapped with huge growth opportunities, considering that air transport is still expensive for majority of the country's population.

- There is a **need to complete the ongoing projects under the UDAN initiative** in a time-bound manner.

* **Formulation of long-term plans for advanced research in aviation technologies** will help in creating a manufacturing ecosystem in the country
* **Taxation and pricing structure of aviation turbine fuel (ATF) should be aligned to global benchmarks** by considering bringing under the ambit of GST.
* India can reap multiple benefits by **establishing itself as a transshipment hub in the region.**
* **Moving towards sustainable aviation** to ensure long-term viability and carbon neutrality of the sector. For instance, IndiGo became the first Indian carrier to publish an Environment, Social and Governance (ESG) report to showcase its efforts in sustainable aviation.

10. POWER SECTOR

10.1. POWER DISTRIBUTION

Key targets

- Providing **accessible, affordable and on-demand access to consumers** across the country.
- Adequately **meeting the growth of energy demand.**
- **Diversifying the sources of production of energy** to ensure sustainability of production without compromising level or consistency of production.
- **Increase distribution efficiency** by minimizing the Aggregate Technical & Commercial (AT & C) losses.

Current Situation

About 388 GW is the country's total generation capacity.
20,000 MW capacity is added every year.
99.93% was the electricity coverage as of March 2019.
1181 kWh is India's per capita power consumption as against the world average at 3,260 kWh.

Schemes/Policies/Initiatives

- The **UDAY scheme** envisages the financial and performance turnaround of India's DISCOMs.
- In all, 27 states and five Union Territories have signed up to participate.
- **PM Sahaj Bijli Har Ghar Yojana-Saubhagya**
- **Green Term Ahead Market**
- **PM Ujwala Yojana**
- Adoption of **Smart Meters**
- Ministry of Power released the draft **National Electricity Policy (NEP) 2021.**

POWER DISTRIBUTION AT- A- GLANCE

Way Forward

- **Improve DISCOMs' revenue recovery** through performance incentives, improving staff capacity and building revenue collection capacity.
- **Making fiscal headroom through subsidy reduction** by making them more targeted.
- **Reducing government dues** with better financial management.
- **Regular Tariff revision and addressing idle regulatory assets** through monetization.

Constraints

- In India, the installed capacity to produce electricity is not enough to support an annual economic growth of **7 to 8%.**
- The State Electricity Boards incurred **losses of more than Rs.500 million** because of improper transmission of electricity, wrong pricing, and other incompetence.
- The private sector does not play any part or there are any foreign investors. **The public sector is almost having a monopoly in the power generation sector.**
- Too many **power cuts** in various parts of the country along with extremely high **power tariffs** in some areas.
- The **thermal power plant the main source of generating power is facing a high deficit of coal and raw materials supplies.**

10.1.1. REFORMS-BASED AND RESULTS-LINKED, REVAMPED DISTRIBUTION SECTOR SCHEME

Why in News?

Recently, the Union Cabinet has approved a Reforms-based and Results-linked, Revamped Distribution Sector Scheme.

About the Scheme

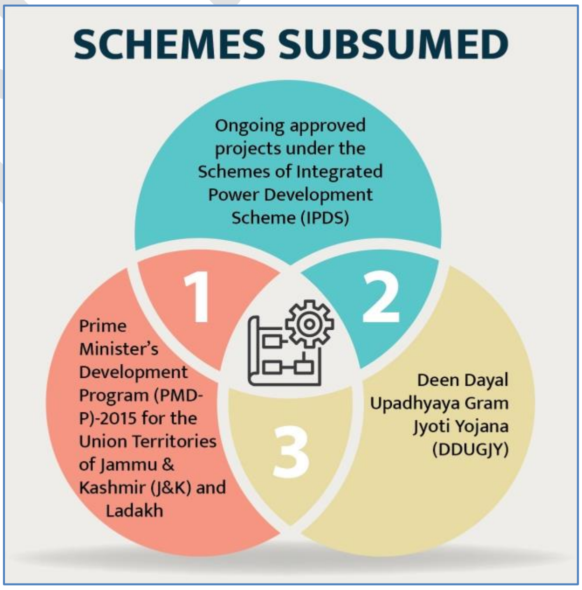
- **Aim of the scheme:** To **improve the operational efficiencies and financial sustainability** of all DISCOMs/ Power Departments **excluding Private Sector DISCOMs**.
    - The scheme will provide **conditional financial assistance to DISCOMs** for strengthening of supply infrastructure.
- **Financial assistance:**
    - **For Prepaid Smart metering:** Grant of Rs 900 or 15% (whichever is lower) of the cost per consumer meter worked out for the whole project.
    - **For works other than Smart metering:** Maximum financial assistance given to DISCOMs will be 60% of the approved cost (90% for Special Category States).

OBJECTIVES OF SCHEME

- Reduction of AT&C losses to pan-India levels of 12-15% by 2024-25.
- Reduction of ACS-ARR gap to zero by 2024-25.
- Improvement in the quality, reliability, and affordability of power supply to consumers through a financially sustainable and operationally efficient Distribution Sector.
- Developing Institutional Capabilities for Modern DISCOMs

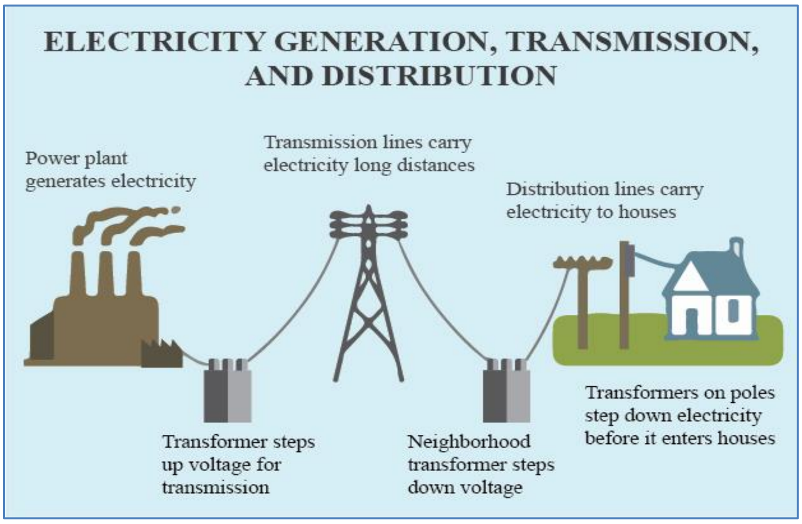
Prevalent Problems faced by the DISCOM sector in India

- **High legacy debt:** DISCOMs have not been able to clear their past debts to Generators.
- **High AT&C loss:** India's average AT&C losses are at around 21.4% compared to countries like the UK and US, where they are 6-7%.
- **Billing Issues:** DISCOMs have not been able to bill all the customers efficiently and relied more on estimated and provisional billing rather regular meter reading.
    - Power is also being siphoned off in many areas by consumers illegally.
    - DISCOMs are also lack efficiency in collecting billed amounts from the customer on time.



Issues related to tariff:

- **Lack of cost reflective tariffs:** In principle tariff design should be cost reflective. It should be designed on the basis of different cost of supply for different users, such as Industrial, commercial, etc, in proportion to the voltage use.
- **Distorted cross-subsidies:** Cross subsidy results into higher tariff for businesses and industries. Thus, industries prefer switching to "captive power generation" resulting in further decline in revenue to state utilities.
- **Absence of tariff hikes:** Inadequate tariff hikes resulted in increased regulatory assets and associated carrying costs. In Financial Year 2021, most electricity regulators refrained from hiking consumer tariffs which resulted in financial instability.



- **State Monopoly:** The state monopoly in DISCOM sector decreases the choices available to consumers. It also creates impediments in commercial makeover of DISCOMs.
- **Delays in subsidy and other payment disbursals:** States like Andhra Pradesh, Chhattisgarh, Karnataka, Punjab, Rajasthan, and Telangana have consistently defaulted on full subsidy payments. These delays have stretched the short-term working capital requirement of DISCOMs.
- **Lowered demand during the Pandemic:** Pandemic and its impact on economy has led to lowering demand of electricity by high-paying commercial and industrial (C&I) consumers and consequently added to DISCOMs' revenue losses. It also led to a reduction in cross-subsidy inflow from C&I consumers.
- **Other losses:** Expensive thermal power purchase agreements (PPAs), and a lack of modern technology and infrastructure development.

Way Forward

Following measures can be taken to improve condition of DISCOMs:

- **Improve DISCOMs' revenue recovery through-**
    - **Performance-linked incentive for DISCOM's staff** and effective monitoring systems.
    - Introduce incentives for **online and timely bill payments**.
    - **Enhancing staff capacity** for improved billing and collection.
    - **Investing in bill collection infrastructure and community engagement** to address non-payment.
- **Making fiscal headroom through subsidy reduction-**
    - Taking lessons from the existing Direct Benefit Transfer (DBT) models in Andhra Pradesh, Madhya Pradesh, Punjab, etc.
    - Developing framework for **targeting of subsidies to domestic and agriculture consumers.**
- **Reducing government dues through-**
    - Time-bound planning to clear pending dues and arrears.
    - Mandate No Dues Certificates for state departments to avoid dues build up.
- **Regular Tariff revision and addressing idle regulatory assets through-**
    - Issuing of bonds through securitization of receivables against the DISCOM's regulatory assets as has been done in Rajasthan.
    - Inflation adjusted tariff hikes.

10.1.2. ELECTRICITY (RIGHTS OF CONSUMERS) RULES, 2020

Why in news?

Recently, **Ministry of Power released Electricity (Rights of Consumers) Rules, 2020** which gives rights to consumers to get the reliable services and quality electricity.

Electricity (Rights of Consumers) Rules, 2020

- These rules are framed under the **Electricity Act, 2003,** which has a consumer charter.
- These rules empower the consumers of electricity by allowing consumers in India to **access continuous supply of quality, reliable electricity.**
- It **lay down rights that make distribution companies (DISCOMs) more accountable** to consumers.
- **These rights will:**
    - empower the consumers of electricity **and ensure improved standard of living** as it has influence on a household's use of appliances.
    - **ensure savings for the consumer.** Direct savings to consumers come from lower energy cost and reactive power tariffs. **Indirect savings are gained by avoiding circumstances** such as damage and premature aging of equipment, loss of production or loss of data and work.
    - further the **ease of doing business** across country.

Key areas are covered in the Electricity (Rights of consumers) Rules

- **Rights of consumers and Obligations of Distribution licensees**
- **Release of new connection and modification in existing connection.**
- **Metering arrangement**
- **Billing and Payment** to pay bills online or offline.
- **Disconnection and Reconnection provisions.**
- **Reliability of supply**
- **Consumer as prosumer**
- **Standards of Performance of licensee**
- **Compensation Mechanism**
- **Call Centre for Consumer Services**
- **Grievance redressal mechanism**

Challenges in ensuring consumer rights

- **No mechanism for effective monitoring:** Due to lack of effective mechanism it is difficult to hold DISCOMs accountable. This is the reason why many states despite having rules in place could not protect consumers' rights as they could not implement the provision of compensation in spirit.
- **Purported conflict of interest:** The proposed Consumer Grievance Redressal Forum which is supposed to remedy complaints against DISCOMs would be headed by a **senior officer of the DISCOMs**. This causes conflict of interest and may result in decisions which may go against the interests of consumers, thereby eroding its credibility.
- **Disparity amongst states:** Many States have not been able to provide quality supply, especially to rural and small electricity consumers.
    - Guarantee of round the clock supply is a provision that the Rules emphasise, which might be missing in State regulations.
- **Ambiguity on net metering:** Net metering is a billing mechanism that credits solar energy system owners for the electricity they add to the grid**.**
    - Rules guarantee net metering for a solar rooftop unit less than 10 kW, but there is no clarity if those above 10 kW can also avail net metering. This could lead to a change in regulations in many States based on their own interpretations. Leading to possibilities of litigation.
- **People may not raise the complaint:** In absence of public awareness, consumer complaint mechanism is, generally, adopted by only few resourceful.

Way ahead

- **Measuring the performance of DISCOMS:** This could be done through Power Quality Indices.
    - The Central Electricity Authority of India could be directed to **collect supply quality data from DISCOMs, publicly host them on online portals** and prepare analysis reports.
- **Consumer Grievance Redressal Forum:** This office has a critical role to play in protecting the consumers' rights, hence there is need to ensure their effective role during grievances.
    - **For example:** State regulations in Delhi strictly bar the DISCOM employee, who was in service in the last two years, from being appointed as a forum member.
- **Real time data reporting with smart systems:** Mandating smart systems for networks which communicate the real time information and power quality deviations existing in upstream and downstream to all stakeholders.
- **Power quality monitoring system:** Mandating installation of power quality monitoring instruments at transmission, sub-transmission and distribution substation. Monitoring frequency and responsibilities need to be additionally incorporated in existing frameworks.
    - Moreover, DISCOMs could be directed to ensure automatic metering at least at the 11 kV feeder level and making this data available online.
- **Consumer awareness programmes**: State Electricity Regulatory Commission (SERRC) should organise public processes to make consumers aware about their rights as well as to **raise their concerns.**

Conclusion

Good quality power supply is more requisite today than ever before and to fulfill the targets of SDG 7 to ensure affordable, reliable, sustainable and modern energy for all. The consumer satisfaction will be cutting edge in the competitive environment in the 21st century. Above all, without accountability, consumer compensation remains elusive. Therefore, an effective mechanism to uphold accountability must be devised.

10.2. COAL, OIL AND GAS

Key targets

- Increasing the Geologically explored area from 10% to 20%.
- Increase the growth of the mining sector from 3% to 14% by 2023.
- **Reduce imports of oil and gas** by 10 per cent by 2022-23.
- **Increase the job contribution** (direct, associated and indirect) from the current 10 million to 15 million in 2022-23.

Current Situation

- **50%** of India's overall energy mix comes from Coal.
- **28%** of India's overall energy mix comes from Oil.
- **729 million tonnes** of coal is produced by India every year.
- **80%** of India's Oil needs are fulfilled through imports.
- **70%** of India's Energy needs come from West Asia.

Schemes/Policies/Initiatives

- Pradhan Mantri **Ujjwala Yojana**
- Pratyaksh Hanstantrit Labh **(PAHAL)**
- **Pradhan Mantri Ji-Van** (Jaiv Indhan Vatavaran Anukool Fasal Awashesh Nivaran) Yojana
- **National Gas Grid**
- **Shakti** (Scheme for Harnessing and Allocating Koyala Transparently in India)

COAL, OIL AND GAS SECTOR AT- A- GLANCE

Way Forward

- **Diversifying and limiting the sources of imports** as far as possible.
- Oil, natural gas, electricity and coal can be brought under **GST to enable input tax credit.**
- Expeditiously complete **detailed exploration** through exploration-cum-mining leases based on production/revenue sharing model.
- Review and provide the required **flexibility** in contract terms to make **stranded oil and gas assets functional.**
- Provide for **shared infrastructure for evacuation** of oil and gas from small and scattered onshore and offshore fields.
- Promote **city gas distribution** to increase accessibility of piped natural gas (PNG).

Constraints

- Arranging **land for Coal Mining** remains a major issue.
- There is a **tendency to expand opencast mining** and discourage underground operation even for better quality coal reserves.
- **Limited competition and private participation** in the Coal Market.
- **High import dependence** for raw material in all three sectors.

10.2.1. COMMERCIAL COAL MINING

Why in news?

Recently, a new online single window clearance portal was launched to speed up the operationalization of coal mines alongside the signing ceremony for the **first tranche of coal blocks to be auctioned for commercial use.**

About New commercial coal mining - Key features of new regime:

- **No previous mining experience is required** for participating in bidding.
- **100% foreign direct investment (FDI) through automatic rule** is allowed for coal mining.
- **The revenue sharing will be on an ad valorem** (the value of the transaction) basis and not on the basis of a fixed amount.
- The present bidding terms also **allow other minerals to be extracted from these blocks.**
- **The Ministry of coal will help the private sector in getting statutory approvals** like environment and other approvals.

Benefits from commercial coal mining

- **Reducing India's dependence on import:** India meets a fifth of its annual requirement of coal through imports which costs about Rs 1 lakh crore. Commercial coal mining can cut the import bill by Rs 30,000 crore.
- **Modernizing the coal sector:** The expectation is that the new mining majors will set new benchmarks in terms of mechanization, automation, mining practices, etc. Thus, the new regime will spur improvements across the industry.
- **Enhancing productivity of the coal sector:** By ending the monopoly of CIL and bringing in competition. Also, earlier captive coal mining entities had no incentive to enhance their production beyond their own needs.
- **Meeting the demand:** To meet its growth requirements and become self-sufficient, India need to expand its production to 1,500 million tonnes per year.
- **Revenue for the State:** In captive coal mining companies were not required to pay royalty to states as mined coal was meant for their own end use. But mines auctioned under new norms will generate total revenues of around Rs 7,000 crore per annum.
- **Development of aspirational districts:** Most of the mines auctioned under new norms are in aspirational districts. These mines would create more than 69,000 jobs once they are operationalised. Central Government will also spend money in creating infrastructure in these regions that means additional job and economic opportunity to such districts.

Hurdles in India's new commercial coal regime

- **Opposition from state governments that may ensue legal battles:** Jharkhand government has challenged the auctions under the new regime arguing that it stands to lose vital forest cover, its tribal communities will be displaced, and yet it hasn't been consulted.
- **Purported shallow competition which may keep bid prices low:** This is due to a smaller number of bidders as the auctions are held in the middle of COVID-19 pandemic. Additionally, no foreign firm has placed a bid as there is declining trend in corporate and financial interest in coal due to rising concerns over its environmental and social fallouts.
- **Eligibility criteria are broad enough to encourage non-serious bidding:**Non serious bidders may use coal mines as assets to leverage in the market, without any intention of actually mining them as happened during the 2000s.
- **Deep pockets and risk management capabilities are needed for beginning the production:** After winning a coal auction state and mining permits are required, rehabilitation and resettlement needs to be managed. Very few firms in India today have the financial and risk management capabilities to go through all of this.

Further steps required to make the new commercial coal regime a success

- **Addressing the concerns of the state regarding their declining revenue share:** There are massive community and environmental externalities of coal mining borne by states harbouring these mines. Under new regime states would lose an estimated Rs. 48 to Rs. 115 per tonne.

- Therefore, improving the design of auction is needed to address the revenue concern of States. Efforts like National Coal Index (NCI) could be initiated for transparency in revenue.
- **Enact 'Sustainable Coal Mining Code' for removing the overlapping jurisdictions of multiple bodies:** The code should consolidate all statutory provisions governing opening/closing and environment/forest matters related to coal mines. It should also establish an independent, multi-disciplinary unified authority for ensuring compliance with various clearance and regulatory requirements.
- **Indicating the recoverable reserves instead of geological reserves would attract more bidders:** At present the offer document for coal blocks indicate Geological reserves. This is a quasi-scientific estimation of the reserves in a block which may or may not be extractable by employing usual technologies.
- **Technological upgradation for making coal mining environmentally sustainable:** Replacing blasting technology with cutting technologies for producing coal, introduction of 'in-pit' crushing, adoption of pipe belt conveyors for transportation of coal to silos or railway sidings and transition to pan-India use of only washed coal will help the sector.
    - **Incentives should be offered to bidders for adopting the state-of- the- art mining technologies.** This would ensure the infusion of new generation technology in the coal mining sector.

10.2.2. NATURAL GAS MARKETING

Why in news?

The Cabinet Committee on Economic Affairs has approved **'Natural Gas Marketing Reforms',** taking another significant step to move towards gas based economy.

Natural Gas Marketing Reforms

- **Standardized e- bidding procedure:** The Director General of Hydrocarbons (DGH) will propose a standardized e-bidding platform to promote market price discovery of natural gas.
- **Producers will be barred from participating in the bidding:** Gas producing companies themselves will not be allowed to participate in the bidding processbut affiliate companies would be allowed to bid.
- **Marketing freedom to Field Development Plans:** This would be granted for those Blocks in which Production Sharing Contracts already provide pricing freedom. This is to bring uniformity to the bidding process across various contractual regimes and policies to avoid ambiguity.

Pricing of domestically produced natural gas

- **Administered Price Mechanism (APM)**
    - Price is set by the Government of India every six months.
    - It is weighted **average of prevailing prices in US, UK, Canada and Russia.**
    - Presently, it is USD 1.79 million Btu far less than the price of imported LNG.
    - This pricing regime **covers almost 80% of the domestically produced natural gas.**
- **Non-Administered Price Mechanism (Non-APM) or Free Market gas**
    - This mechanism is applicable on **contractual agreements based gas production.**
    - These are only 20% of the total domestic production.
    - The new reform would cover beneficiaries in this regime.

Benefits expected from the reforms

- **Ease of doing business:** It would be enhanced due to the following reasons:
    - **Uniformity in the bidding process**
    - **Marketing and pricing freedom** to the new investors
    - **Freedom of choice** to the producers as there will be more than one e-bidding platform
    - **Role of regulator has been defined**
- **Step ahead towards Atmanirbhar Bharat:** These reforms will encourage investments in the domestic production of natural gas and help in reducing import dependence.
    - The domestic production will further help in increasing investment in the downstream industries such as City Gas Distribution and related industries.
- **Gas based economy:** It is expected to add 40 million standard cubic meters per day of more natural gas through domestic production.
- **Reduction in pollution:** The increased gas production consumption will help in improvement of environment.
- **Employment generation:** These reforms will also help in creating employment opportunities in the gas consuming sectors including MSMEs.

Issues in the reforms

- **Very limited impact:** Nominated fields, accounting for almost 80% of India's gas production at present, will be outside the benefit zone of the new policy.
- **Disincentive for the old players:** As only new entrants are given the benefit. The new entities will take advantage of e-bidding platform and discover the viable price. The older players would be at disadvantage.
- **Allowing only affiliates:** Principle behind this is not very clear and only time would tell how not allowing the main gas producing companies would be beneficial to the sector.

Way ahead

The recent step, in principle, is very good for enhancing domestic production of natural gas. However, this step should be complemented with following reforms to harness the expected benefits:

- **Doing away with APM:** Prices under the APM regime is half of what India pays for the import of LNG. Such pricing mechanism has **reduced incentives for domestic producers** to raise supplies**.** According to IEA this price mechanism **focuses too much on reducing the price level rather than the creation of a market-based system** to reflect the domestic supply-demand structure in India,
- **Tax reforms:** Since natural gas does not fall under the GST, **gas consumption suffers from cascading effect of tax.** According to IEA, "Bringing natural gas under the GST and introducing a postage stamp gas transport tariff would reduce these costs and create a level playing field with other fuels."
- **Gas exchange hub (IGX):** Trading through this platform is open only for imported liquefied natural gas (LNG). Allowing domestic producers to trade on this platform **would further the transparent price discovery** on the basis of buyers and sellers interacting in an open market. According to IEA this may also pave the way for removal of multiple price regimes.

10.3. RENEWABLE ENERGY

Key targets

- The government is aiming to **achieve 227 GW of renewable energy capacity** (including 114 GW of solar capacity addition and 67 GW of wind power capacity) by 2022
- Make **hybrid renewable energy parks of 500MW** capacity and more.

Current Situation

4th largest renewable energy generation capacity in the world.
1,000+ GW Renewable energy potential in India.
100 GW Installed renewable energy capacity (as of August 2021)
22 % of India's total installed power capacity is renewable in nature.
More than US$ 42 billion has been invested in India's renewable energy sector since 2014.
17.33% was the CAGR of the renewable energy sector in the period 2016-20.

Schemes/Policies/Initiatives

- National Solar Mission
- Solar PV Manufacturing scheme.
- India is setting up a 10GW solar equipment manufacturing capacity.
- Technology being used is of Solar Photovoltaics and of concentrating solar power.
- Development of hybrid renewable energy.
- National wind-solar hybrid policy.
- Establishment of Energy Modelling Forum.
- India H2 alliance.

RENEWABLE ENERGY AT- A- GLANCE

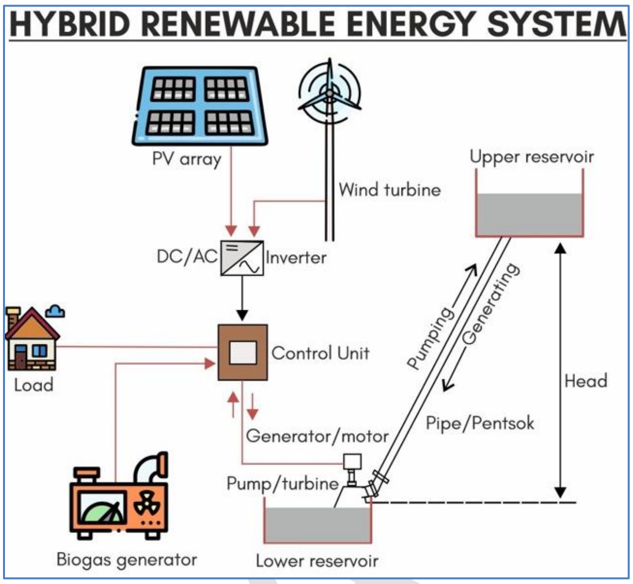
Way Forward

- Introduce **time-of-day tariff** to promote the use of renewable energy.
- Provide a mechanism for **cost-effective power grid balancing** (gas-based, hydro or storage).
- **Renewable purchase obligations** should be strictly enforced and **inter-state sale of renewable energy** should be facilitated.
- It is necessary to have **national-level markets** and regulations for **balancing of power.**
- **Decentralized renewable energy in rural areas** in conjunction with the **discoms' grid** can offer reliability.
- **Hybrid renewable energy systems** such as **solar PV + biomass** should be explored.
- **Commercial biogas** needs to be promoted by providing subsidies to consumers

Constraints

- High **energy costs result in** reneging on old **power purchase agreements (PPAs).**
- This leads to **uncertainty** regarding **power offtake** and consequently endangers further investments.
- Flexibility in generation and balance requirements for the **integration of renewable energy** are major issues.
- There are supply **chain issues in sectors like biomass power generation.**

10.3.1. HYBRID RENEWABLE ENERGY



Why in news?

Ministry of New and Renewable Energy (MNRE) recently proposed the scheme for **"Development of Wind Parks/ Wind-Solar Hybrid Park".**

What is hybrid renewable energy?

- Hybrid renewable energy usually **comprises of two or more renewable energy sources combined in such a way to provide an efficient system** with appropriate energy conversion technology connected together to feed power to local load or grid.
- Renewable Energy Hybrids are the **solution to a reliable, affordable and dispatchable integration of renewable energies**, from the combination and integration of renewable energy generation sources with one another, such as wind and solar.
- There are different types of hybrid renewable energy systems **like Biomass-wind-fuel cell, Photovoltaic-wind, Hydro-wind and Photovoltaic-Biomass** etc.

Benefits of hybrid renewable energy parks

- **Enhanced and flatter power output:** Hybrid parks make power generation profile flatter over time compared to a pure wind or solar installation to eliminate rapid voltage and power fluctuations in the electrical grid, make power dispatch more schedulable.
- **Optimised the use of the network:** Number of instruments connectable is limited and hencemaximise the use of the existing network/instruments.
- **Continuous power supply**: The hybrid solar systems provide power continuously, due to integration of multiple renewable sources like solar, wind, hydro etc.
- **Efficient use of land:** Due to common use of land for different energy resources in hybrid energy parks improves land use efficiency.
- **Lower consumer price of power:** Lower investment, running and transmission cost in hybrid renewable energy parks will reduce the cost of power.
- **Reduced losses**: They are beneficial in terms of reduced line and transformer losses, reduced environmental impacts, increased system reliability, improved power quality and increased overall efficiency.

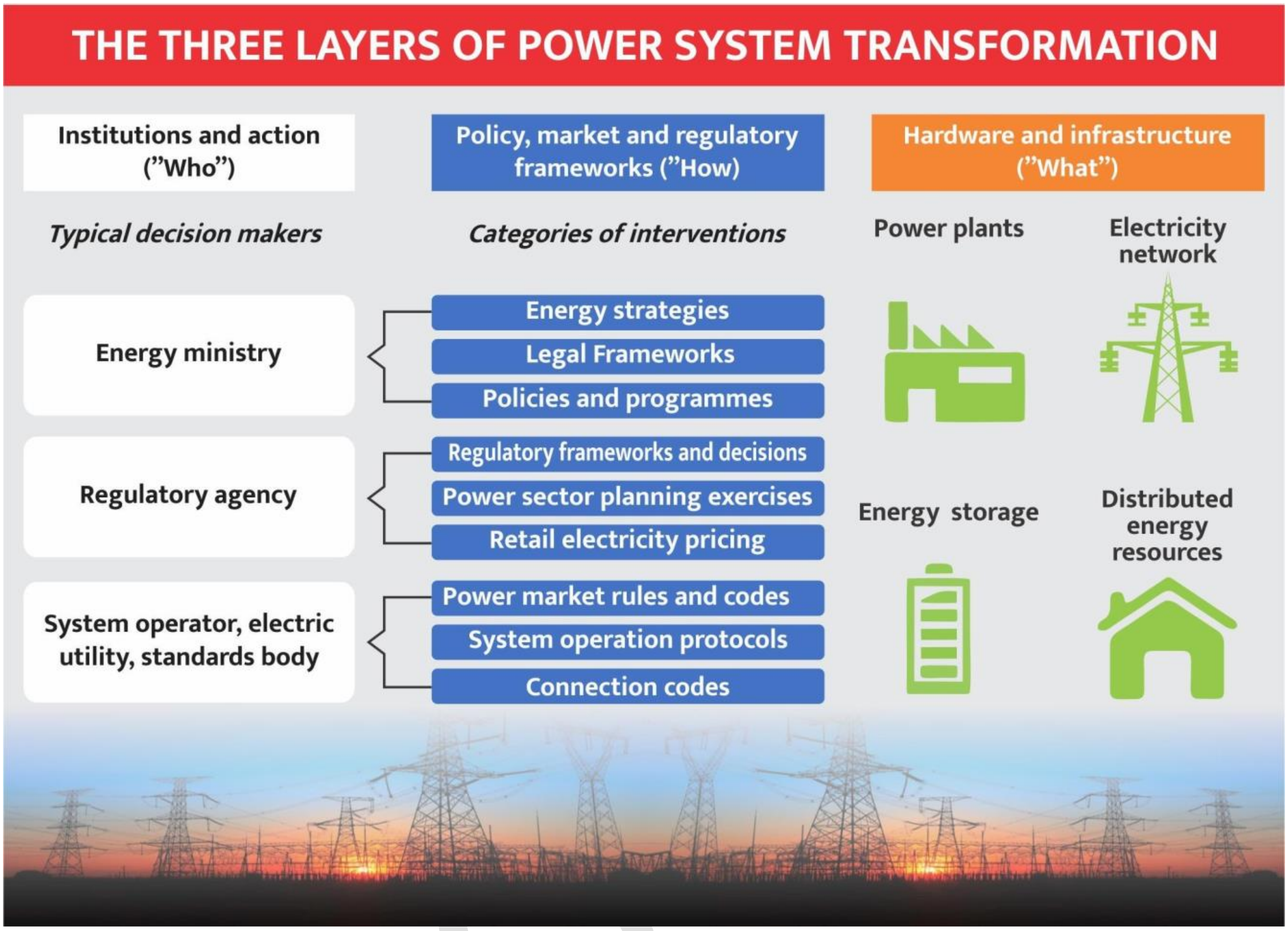
Concerns with hybrid renewable energy parks

- **High installation cost**: Initial investment for the installation of a hybrid renewable energy systems is high as compared to installation of pure wind or solar systems.
- **Grid security and stability:** These systems can be connected to a utility grid and often frequency mismatch arises between both systems leads to instability of the overall system.
- **Environmental impact:** There are concern about the impact of renewable energy parks on ecology and wildlife in the region.
- **Resource location:** Hybrid renewable energy plants require large areas of space, hence availability and acquisition of such large scale of land delaying the installation of parks.
- **Weather condition:** As energy generation from park is dependent on associated local weather and if favourable weather is not available then operating capacity of park becomes inefficient and unfeasible.

Way forward

- **Financial support:** Funds are required for R&D, conducting training and workshops, which helps to evaluate progress in technology, and the presentation of renewable energy technologies across the country.
- **Resolving intermittency issue:** The intermittency of wind and solar can be balanced by adding a fast ramping source of power; for example, an open cycle gas turbine.

- **Technical advancement:** It is equally important to have proper R&D for such systems so that they can be used effectively.
- **Encouraging systemic transformation:** Integrating renewable energy in the complete energy ecosystem.



10.3.2. SOLAR MANUFACTURING IN INDIA

Why in news?

Recently, India has received proposals for setting up **10 GW of solar equipment manufacturing capacity.**

Present capacity of solar manufacturing

- India's **renewable energy generation capacity is the fourth largest in the world** (currently 136 GW which is 36% of total capacity). It is growing at the fastest speed among all major countries.
- The current capacity of solar cell manufacturing in India is about 2,500 MW. In case of solar modules as well, 7,000 MW of capacity is being added in addition to existing capacity.
- The nation has around **9 GW of annual solar module manufacturing capacity and around 3 GW of annual solar cell production** capacity.
  - **A solar cell is the basic building block** of a solar module.

Potential of Solar Manufacturing in India

- **Employment generation:** It has a potential to create 50,000 direct jobs and at least 125,000 indirect jobs in the next 5 years.
- **Expanding overseas market:** India has taken a lead in the International Solar Alliance (ISA), which will help in the transfer of solar technologies across members.

Why there is need to develop solar manufacturing capacity?

- **Harvest potential and Self-reliant:** India need to fully use its solar power potential, this is not possible unless making India self-sufficient in the manufacture of solar cells and modules, batteries and ancillary equipment.
- **To curb import dependency:** Currently, 80% of solar cells and modules used in India are imported from China and comprise $2.16 billion of imports in 2018-19.
- **Meet domestic demand:** India's solar manufacturing capacity is insufficient, under-utilised and unviable, as out of 2.5 GW demand in 2020 only 15% was met through domestic manufacturing.

- **To achieve INDC targets:** India's current solar power installed capacity is 35.73 GW. Hence, domestic manufacturing is needed to achieve set target of 175 GW of renewable energy by 2022, which includes 100 GW from solar power generation.

Main technologies utilized for harnessing solar energy

- **Solar Photovoltaic's (PV):** It is based on the photovoltaic effect, by which a photon (the basic unit of light) impacting a surface made of a special material generates the release of an electron.
- **Concentrating Solar Power (CSP):** It uses sunlight to heat a fluid (depending on the particular application, it can be water or other fluid).

Challenges faced by solar manufacturing in India

- **Investment crunch:** Firstly, to achieve the 100 GW target, India needs to invest $65 billion in the next four years, but major part investment is raised within the country and there is less investment from foreign direct investment (FDI).
- **Technology and R&D:** India in comparison to China does not bring latest (next generation) technology at a competitive price, which hampers development of solar manufacturing in India.
- **Uncompetitive cost:** Indian solar cells are, on average, 20-30% more expensive than cells manufactured in China. Hence, manufacturers tend to choose affordable equipment through import from China.
- **Quality control issues:** Some companies have voiced their concerns about the quality of Indian made cells and reported some manufacturers falsely label their 380 Wp (capacity of a solar in watt peak) cells as 400 Wp because there are no government entities to ensure the quality of these cells.
- **Policy issues:** Only those models and manufacturers that are included in the approved list of models and manufacturers (ALMM) for solar PV cells and modules will be eligible to participate in projects under government programs.
- **Challenge at the World Trade Organisation (WTO):** US has challenged India's solar energy policy before the World Trade Organisation (WTO), on the line of domestic sourcing of solar panels, which was upheld by WTO.

Steps taken for solar manufacturing sector in India

- **Performance linked incentive (PLI)** to solar panel manufacturers is to give a boost to the domestic companies.
- **National Solar Mission:** It is an initiative under National Action Plan on Climate Change (NAPCC).
- **Tariff and non-tariff barriers**: To promote domestic manufacturing and check Chinese solar cells, modules and inverter imports India has imposed tariff and non-tariff barriers.
- **Solar PV Manufacturing Scheme:** To create end to end solar PV manufacturing capacity in India by way of building up manufacturing capacity of solar PV modules.
- **Domestic content requirement (DCR):** It mandates use of both solar photovoltaics calls and modules manufactured domestically.
- **Foreign direct investment:** FDI up to 100% is permitted in the renewable energy sector (includes solar energy) under the automatic route, and no prior government approval is required in India.

Way forward

- **Developing an Ecosystem:** Indian government must focus on creating manufacturing clusters throughout the country similar to solar parks, with the availability of the entire supply chain, research and development (R&D) centres, equipment manufacturing, universities, and laboratories.
- **Comprehensive solar manufacturing policy:** It is needed which clearly mention about robust supply networks, lower cost supply agreements, subsidies on cost of power, financing and capex, incentives for R&D etc.
- **Costs competitiveness:** Solar manufacturing has to deal with significant costs related to setting up assembly lines, land acquisition, labour needs, taxes, power costs and other working capital requirements. Hence, government needs to incentivize companies to boost or set up new solar component manufacturing capacity.
- **Manufacturing excellence**: India should deal with manufacturing excellence to build and continuously innovate the cutting-edge manufacturing mindset as opposed to build and forget approach.

11. BUSINESS AND INNOVATION

11.1. BUSINESS POLICY

Key targets

- Promoting pro-business policy that unleashes the power of **competitive markets** to generate wealth.
- **Weaning away from pro-crony policy** that may favour specific private interests, especially powerful incumbents, on the other hand.
- **Integrating the Environment, Social and Governance (ESG)** parameters in the business processes and climate.

Current Situation

New firms, new ideas, new technologies and new operating processes have grown in India post-liberalization.

Number of procedures required to set up a business in India, has reduced from 13 to 10 over last decade.

18 days are needed to set up a business in India now, down from 30 days in 2009.

Schemes/Policies/Initiatives

- Multiplicity of legislation and **statutory compliance requirements**
- Delays in **dispute resolution** and enforcing contracts
- **Infrastructure deficiencies** in the overall business environment
- **Market failures** when the macroeconomic climate is poor.
- **Excessive intervention in the market dynamics** makes the market sticky and inefficient.
- Crony capitalism, Bureaucratic hurdles, Corruption

BUSINESS POLICY AT- A- GLANCE

Way Forward

- Can subscribe to the disruptive ideology of **creative destruction**
- Creating **level playing field** for all market participants
- **Optimized allocation of resources** via tools like auction
- Structural changes to enhance **Ease of Doing Business**
- Streamlining logistics processes

Constraints

- Multiplicity of legislation and **statutory compliance requirements**
- Delays in **dispute resolution** and enforcing contracts
- **Infrastructure deficiencies** in the overall business environment
- **Market failures** when the macroeconomic climate is poor.
- **Excessive intervention in the market dynamics** makes the market sticky and inefficient.
- Crony capitalism, Bureaucratic hurdles, Corruption

11.1.1. COMPANIES (CORPORATE SOCIAL RESPONSIBILITY (CSR) POLICY) AMENDMENT RULES, 2021

Why in news?

Recently, Ministry of Corporate Affairs brought into effect the **Companies (CSR Policy) Amendment Rules, 2021** by amending amend the Companies (CSR Policy) Rules, 2014.

About Corporate Social Responsibility (CSR)

- It is a management concept whereby companies **integrate social and environmental concerns in their business operations** and interactions with their stakeholders.
- In 2013, **Companies Act 2013 introduced changes** with respect to company formation, administration, and governance, and incorporated an **additional section i.e. Section 135 on CSR obligations** for companies listed in India.
    - With this, **India became the first country to legislate CSR activities** under Companies Act 2013.
- Every qualifying company requires **spending of at least 2% of its average net profit (Profit before taxes) for the immediately preceding 3 financial years** on CSR activities in India.
- CSR is also **applicable to branch and project offices of a foreign company in India.**
- In 2019, amendments introduced, which require companies to **deposit the unspent CSR funds into a fund prescribed under the Act** within the end of the fiscal year.

Newly amended rules

- **Exclusion from CSR activities:**
    - Activities undertaken in **pursuance of normal course of business of the company.**
        - ✓ **Exception: A company engaged in R&D of a new vaccine, drugs and medical devices in their normal course of business** may undertake such activities related to Covid 19 for the financial year 2021, 2021-22 & 2022-23 as CSR.
    - **Activities undertaken outside India**, except training of National or International level Indian sportspersons.
    - Contribution of any amount **to any political party;**
    - **Activities benefitting employees of the company**, as under Code on Wages, 2019.
    - **Activities supported by the company on sponsorship basis**, for deriving marketing benefits for its products/services.
    - **Activities carried out for fulfilment of any other statutory obligations** under any law in force in India.
- **Mandatory registration:** Entities have to **register itself with the Central Government** and **fill the CSR-1 Form electronically** with the Registrar of Companies from April 1, 2021.
- **Engagement of external organizations** for design, evaluation, capacity building and monitoring of CSR projects has also been **permitted.**
- **Annual Action plan:** CSR committees of Companies shall be required to **formulate an annual action plan** and recommend the same to the board of the company.
- **Administrative overheads:** Board of company needs to ensure administrative overheads do not exceed 5% of the total CSR expenditure for a financial year.
    - Administrative overheads mean the **expenses incurred for general management and administration of CSR functions in the company** and explicitly exclude any expenses incurred for the designing, implementation, monitoring, and evaluation of a particular CSR project.

- **Surplus cannot be utilised for other purposes:** Surplus from any project cannot be utilized for any business profits and must be reinvested into the same CSR project or may be transferred into fund.
- **Impact assessment:** Any corporation with a CSR obligation of Rs 10 Cr or more for the 3 preceding financial years would be **required to hire an independent agency to conduct impact assessment** of all of their projects with outlays of Rs 1 Cr. or more.
- **Mandatory disclosure of CSR projects:** It would be placed on the website of the companyto ensure accountability of companies and a closer check on the compliance of rules.

Challenges and criticism of Corporate Social Responsibility (CSR)

- **Tool to tax:** CSR is also criticized as a tool to tax corporates which already face high taxation in the country, which makes India unattractive for business.
- **Skewed pattern of spending**: About 65% of CSR spending was incurred on education and healthcare while eradication of hunger, rural development and environmental protection are at lower side of expenditure.
- **Regional disparity**: Companies usually undertake CSR activities in areas where work can be done without any hardship. This may be the reason that aspirational districts and North-east region with their poor infrastructure and development level, are not in the focus of companies
- **Non-compliance**: It is found that 50% of the companies were unable to spend the mandated amount on CSR and in the past five years after the act was enforced, 70% of the companies still do not have a strategy to implement CSR activities.

CSR SPENDING

CAUSES ESPOUSED

Corporates felt strongly about education, health and rural development

CAUSE	Total CSR Spends (₹ cr)	% Share
Education	30,710	39
Health	20,945	26
Rural Development	8,750	11
Environment	6,566	8
Total FY15-FY20	79,293	

STATE-WISE CSR SPENDING

STATE	Total CSR Spends (₹ cr)	% Share
Maharashtra	12,700	16
Karnataka	4,919	6.2
Gujarat	3,925	4.9
Tamil Nadhu	3,415	4.3
Odisha	2,565	
Total FY15-FY20	79,293	

- **Cheating and favoured donations:** It is found out that companies made donations to charitable trusts, which are well known and then received them back after deduction of minor commissions.

Way forward

- **Community and employee participation:** Improving community relations, involving employees in CSR can help motivate them and encourage their personal and professional development by inculcating social and ethical values.
- **Collaboration for efficiency:** Facilitating collaboration between NGOs, agencies involved in environmental and social work will enable better utilization of CSR funds.
- **Evaluation and monitoring:** CSR activities and projects needs to be monitored periodically to prevent fraudulent activities and complete project within stipulated time.
- **Fair and balanced expenditure:** Encouraging corporates to spend in neglected areas such as aspirational districts and North east region to have regional parity in socio-economic development.
- **Relaxation and incentives**: Government should further provide relaxation and incentives in corporate tax to corporates complying with CSR regulations.

11.2. INNOVATION AND ENTREPRENEURSHIP

Key targets

- To develop **new programmes and policies** for fostering innovation in different sectors of the economy.
- **Provide platforms and collaboration opportunities** for different stakeholders.
- Create an **umbrella structure** to oversee the innovation & entrepreneurship ecosystem of the country.

Current Situation

- **46th rank** amongst 131 countries in Global Innovation Index (GII) 2021.
- **India is underperforming in innovation** with respect to the size of its GDP.
- **Only 0.69% of GDP** is invested in Research and Innovation as compared to 2.8% in the United States of America, 4.3% in Israel and 4.2% in South Korea.
- **95% of the entrepreneurial establishments** in India are small enterprises.
- **3rd largest start-up ecosystem** in the world.

Schemes/Policies/Initiatives

- Make in India and Start-up India Initiatives such as Start-up Accelerators of MeitY for product Innovation, Development and growth (SAMRIDH), Start-up Village Entrepreneurship Program, Start-up India Seed Fund Scheme, Ubharte Sitaare fund, etc.
- Accelerating Growth of New India's Innovations (AGNIi)
- Uchchatar Avishkaar Yojana
- Atal Innovation Mission (AIM)
- AIM-PRIME (Program for Researchers on Innovations, Market-Readiness & Entrepreneurship), an initiative to promote and support science-based deep-tech start-ups.
- Atal Ranking of Institutions on Innovation Achievements (ARIIA)
- National Science, Technology and Innovation Policy (STIP), 2020.
- Women Entrepreneurship Platform

INNOVATION AND ENTREPRENEURSHIP AT- A- GLANCE

Way Forward

- Building innovation capacity through **institutional as well as human resource development**
- **Enabling environment** such as supportive policies, ICT infrastructure, research ecosystem etc.
- Support for R&D and Human Capital Development through **skilling, training, investment in higher education, etc.**
- Providing **handholding to entrepreneurs** and innovators in the form of incubators etc.
- **Encourage economic risk-taking and culture of entrepreneurship** by celebrating budding innovators.

Constraints

- **Risk aversion** in middle class, talent export or Brain-drain.
- **Financial constraints** such as access to finance, lack of credit facilities, etc.
- **Fluctuation in policies** making entrepreneurship an even riskier affair.
- Non-financial constraints such as **lack of proficient team, wrong forecasting, social constraints, etc.**
- Bulk of Indian innovations are **incremental and not disruptive** in nature
- Weak university research and **poor industry-academia linkage.**

11.2.1. INNOVATION ECOSYSTEM: WHAT, WHY AND HOW?

Why in News?

Recently, India's rank improved in the **Global Innovation Index (GII)** by four places to 48thplace in 2020 from 52nd position last year.

Key Findings of the document

- **COVID-19 crisis will impact innovation,** leaders need to act as they move from containment to recovery.
  - The **pharmaceuticals and biotechnology** sector are likely to **experience R&D growth**. Other key sectors, such as transport, will have to adapt faster as the quest for clean energy is receiving renewed interest.
- The financial system is sound so far but **money to fund innovative ventures is drying up.** Venture Capital deals are in sharp decline across North America, Asia, and Europe.
- **Geography of innovation is continuing to shift,** as evidenced by the GII rankings. Over the years, **China, Vietnam, India, and the Philippines are the economies with the most significant progress** in their GII innovation ranking over time. All four are now in the top 50.
- Despite some innovation catch-up, **regional divides exist with respect to national innovation performance:** Northern America and Europe lead, followed by South East Asia, East Asia and Oceania, and more distantly by Northern Africa and Western Asia, Latin America and the Caribbean, Central and Southern Asia, and Sub-Saharan Africa, respectively.

What is an Innovation Ecosystem?

- An innovation ecosystem refers to a loosely **interconnected network of companies and other entities** that co-evolve capabilities **around a shared set of technologies, knowledge, or skills**, and work cooperatively and competitively to develop new products and services.
  - It is **made up of different actors, relationships and resources** who all play a role in taking a great idea to transformative impact at scale.
  - The effectiveness of **each part is moderated by other parts of the system** (e.g. entrepreneurs depend on being able to access financing).
  - **A change to one part leads to changes in other parts** of the innovation ecosystem (e.g. an increase in internet connectivity will accelerate the design and testing of new technologies).
- **The three defining characteristics of an innovation ecosystem** are the dependencies established among the members, a common set of goals and objectives and a shared set of knowledge and skills.

Why innovation ecosystems are important?

- Innovation ecosystems create an **active flow of information and resources for ideas to transform into reality.** It can develop and launch solutions to solve real-world problems, faster.
- Technological innovation is considered as **a major source of economic growth.** It increases productivity and generate greater output with the same input.
- Countries depend on innovation as new digital technologies and innovative solutions create huge **opportunities to fight sickness, poverty and hunger.**
- An effective innovation ecosystem enables entrepreneurs, companies, universities, research organisations, investors and government agencies to interact effectively to **maximise the economic impact and potential of their research and innovation.**
- Innovation is a **key driver for sustenance and prosperity** of start-ups, conglomerates, governments by helping them improve their service delivery and performance.

What are the challenges faced by innovation ecosystems in India?

- Indian innovations are **invariably incremental and not disruptive**- They are often 'first to India' and not 'first to the world'.
- **Lack of Scalability**- to create **competitive marketable products** with speed, scale and sustainability.
- **Slower progress-** Even though India is within touching distance of breaking into the top-50 innovator countries in the world, it is still quite far from a China, which filed, for instance, 53,345 patent applications with the WIPO in 2018 versus India's 2,013.
- **Weak university research:** India is an odd juxtaposition of stellar successes like the Chandrayaan and digital payments and a large number of unemployable engineering graduates and institutes that have very limited autonomy. Moreover, while our top-rung universities and institutes (IITs Delhi & Mumbai, IISc) do well regionally, they have consistently remained out of the global 100.
- **Quality of the STEM talent pool-** the gross enrollment ratio at the tertiary education level in India is a low 26% meaning, a vast reserve of potential research talent is lost.

Steps taken to improve the innovation ecosystem

- **The India Innovation Growth Programme (IIGP) 2.0** is a unique tripartite initiative of the Department of Science and Technology (DST), Government of India, Lockheed Martin and Tata Trusts which enables innovators and entrepreneurs through the stages of ideation, innovation and acceleration, to develop technology-based solutions for tomorrow.

- **Fiscal incentives by Government's Department of Scientific and Industrial Research (DSIR)** for R&D activities performed by institutions, academia, and industry for supporting, nurturing, and leading their innovations towards fruition.
- **SIDBI manages the India Innovation Fund**—a registered venture capital fund that invests in innovation-led, early-stage Indian firms.
- **Innovate India:** Itis a unique platform to display, promote and recognize innovations happening across the nation. It has been launched in collaboration with AIM-NITI Aayog and MyGov. Citizens from all parts of the country are eligible to share the innovation on the platform.
- **Technology Development Board (TDB)** provides soft loans and promotes the equity of Indian industry through the development and commercialization of indigenous technology and by adapting imported technology for domestic applications.
- **Accelerating Growth of New India's Innovations** (**AGNIi**): It aims to support the ongoing efforts to boost the **innovation** ecosystem in the country by connecting innovators across industry, individuals and the grassroots to the market and helping commercialize their innovative solutions.
- **Various schemes** such as Ramanujan Fellowship Scheme, the Innovation in Science Pursuit for Inspired Research (**INSPIRE**) Faculty scheme and the Ramalingaswami Re-entry Fellowship, Visiting Advanced Joint Research Faculty Scheme (**VAJRA**), Knowledge Involvement in Research Advancement through Nurturing (**KIRAN**), ATAL Innovation Mission **(AIM),** Self-Employment and Talent Utilization (**SETU)** etc.

Conclusion

India has the potential to boost its innovation ecosystem if it can **tap all its ecosystem stakeholders simultaneously** i.e. sectors like the government, industry, academia and society will have to work in tandem. The synergy created by simultaneous action will automatically provide the **much-desired link between industry, academia and the research institutions.** This link will also increase investments and encourage private sector participation in the ecosystem.

11.2.2. STARTUP ECOSYSTEM IN INDIA

Why in news?

Recently, Prime Minister inaugurated the '**Prarambh: Startup India International Summit'**. This is the largest Startup India International Summit organized by the Government of India since **the launch of the Startup India Initiative in 2016.**

What is a Start-up?

The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry has defined a start-up as an entity **that is** incorporated as a **private limited company** (as defined in the Companies Act, 2013) or Registered as a **partnership firm** (under the Partnership Act, 1932) or Registered as a **limited liability partnership** (under the Limited Liability Partnership Act, 2008) in India**.**

Furthermore, the department has stated that, an entity will be considered a start-up:

- **Up to a period of ten years from the date of incorporation/registration,**
- Provided it has an **annual turnover not exceeding Rs 100 crore** in any preceding financial year,
- If it works towards **innovation, development or improvement of products or processes or services**, or if it's a scalable business model with a high potential of employment generation or wealth creation.

Socio-economic impact created by startups

Startups have showcased positive **disruptive impact** in the economic sphere with **encouraging employment**, **accelerating adoption of technology** and **filling the prevalent economic gaps.** Alongside, the startups are also **changing the demographic characteristics** of today's business-

- **44 per cent** recognized **startups have women directors** and number of women working in these start up is very high.
- **45 per cent startups are in tier 2 and tier 3 cities,** working as the brand ambassadors of the local products.
- **Every state is supporting and incubating startups as per local possibilities** and 80 percent of districts of the country are now part of the Startup India mission.
- **Youth from all types of background are able to realize their potential in this ecosystem** resulting in a mindset change from aspiring for a job to being a job creator.

Significance of Startups in India

- **Boosts employment**: The startup ecosystem, tangibly adds to job creation in the nation. On an average 12 jobs created per startup totaling up to more than 3.5 Lakh jobs.

- **High potential for growth**: It is estimated that the number of unicorns in India will increase by three times, to 95 in 2025 with a cumulative valuation of approximately $390 billion.
- **Fulfilling societal needs**: Startups hold the key to address the critical needs of the country in areas like affordable healthcare, education, financial inclusion, etc.
- **Fostering a culture of Innovation and technology**: Startups work in an environment of changing technology and try to maximize profits by innovation. This also induces backward and forward linkages which stimulate the process of economic development in the country.
- **Attracting foreign Investment and stimulating domestic investment**: Indigenous startups have the potential to grow into large multinational firms and enterprises and thus can initiate an attractive and flourishing investment environment.

What is current status of Start-up Ecosystem in India?

- India is currently the **third-largest startup ecosystem in the world** with close to **38 unicorns** (as of 2019) and with a collective valuation at around **$130 billion.**
- **Growth of the Start-up** has increased at an **average rate 15% year on year**. Also, this growth in not limited to one or two sectors but is **spread across sectors.**
    - **Enormous growth** has been experienced in **technology centric startups** in health sector, education sector, agriculture etc. employing latest technologies like Internet of Things, Blockchain, Artificial Intelligence among others.

What are the challenges Startup face in the current ecosystem?

- **Raising funds:** A recent report indicated that **85% of the new companies are underfunded** in the Indian startup parlance. Primary reason for this can be cited as weak Venture Capitalist and Angel investor framework alongside low risk appetite of the Indian market.
- **Revenue generation:** Startups generally require a certain amount of incubation time before they are able to generate revenue. This support remains inconsistent and also, difficulty in finding orders further compounds the revenue problem.
- **Inadequate supporting infrastructure:** The supporting infrastructure in the form of technology parks, logistical availability, business development centres still remains sporadic.
- **Bureaucratic hurdles:** Hurdles like poor Ease of Doing business in the form large number of regulatory compliances, complex labour laws etc. and inconsistent stance on emerging technologies like cryptocurrency, 5G among other further complicate the growth process.
- **Lack of mentorship and support:** Most of startups have brilliant ideas and/or products, but have little or no industry, business and market experience to get the products to the market. In this context, absence of this institutional ecosystem could bring a potentially good idea to an end.

How Startup India initiative aims to help address these challenges and encourage startups?

Launched in 2016, Startup India is a flagship initiative of the Government of India, intended to catalyse startup culture and build a strong and inclusive ecosystem for innovation and entrepreneurship in India.

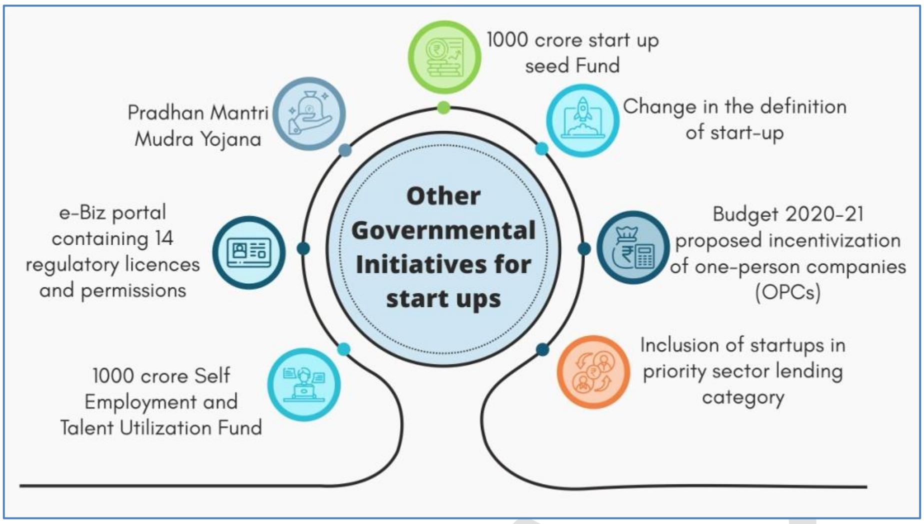
Startup India Initiative has rolled out several programs. These programs are managed by a dedicated Startup India Team, which reports to DPIIT.

Startup India aims at resolution of problems via a 3-pronged strategy. ***(Refer infographic)***

With the completion of 5 years of Startup India, its contribution to Startup ecosystem can be seen on following lines-

- Between 2016 and August 2020, Startup India programme has **recognised over 34,800 startups.**
- **Over $1 Mn worth benefits were given to 5,500 startups as part of over 150 startup innovation** programmes and challenges organised by Startup India. Also, Incubators and accelerators have grown by 11%reaching close to a number of 5,000.
- **Over INR 3000 Cr has been committed by the government to 47 venture capital firms** and similar amount has already been invested in 323 startups from the **fund of funds corpus managed by Startup India through Invest India.**
- **Startup India enabled global market access and knowledge for Indian startups** through bilateral government collaborations with Russia, South Korea, Portugal, Japan, Netherlands, United Kingdom, Sweden, Finland, Israel, and Singapore.
    - **Also known as a Startup Bridge**, these collaborations enable startups, investors, incubators, accelerators and aspiring entrepreneurs of both countries to connect with one another by providing them with resources to expand and become global entities.

- More **than 8,000 startups have been registered** on **Government e-Marketplace (GeM portal),** with whom government has **done business worth 2300 crore.**
- The base created by Startup India enabled growth of startups even in COVID times. **For instance, 11 start-ups entered the 'unicorn club' in 2020.**



Despite these initiatives the startup ecosystem is still hindered by systemic challenges like poor ease of doing business in the form of bureaucratic hurdles, limited capital availability in the market, absence of culture of innovation in higher education institutions and most importantly the disproportionate level of risk that the entrepreneurs have to take.

Way forward

In the light of these challenges, initiatives for startups should be complemented with structural changes such as creation of large scale infrastructure, encouraging innovation in education, strengthening industry-academia linkage and making entrepreneurship inclusive vis-à-vis region, gender, caste or socio-economic status. Providing these linkages to the Startup ecosystem will be essential in ensuring the idea of a- '**Of the Youth, By the Youth, For the Youth' startup ecosystem.**

12. MISCELLENEOUS

12.1. ONE NATION ONE STANDARD

Why in News?

Recently, Research Design and Standards Organisation (RDSO) of Indian Railways has become the **first Institution to be declared Standard Developing Organization (SDO)** under "One Nation One Standard" mission of BIS (Bureau of Indian Standards).

More on News

- Partnership will help RDSO, the sole R&D wing of the railway ministry, **to realign its standard formulation procedures as per the code of good practices mentioned under the WTO-Technical Barriers to Trade (WTO-TBT).**
- RDSO took the initiative to seek recognition as a SDO **under the BIS SDO Recognition Scheme.**
    - Under the scheme, BIS envisages the recognition of the other SDOs **for attaining the vision of "One Nation One Standard".**

What is product standardization?

- It refers to the **process of maintaining uniformity and consistency** among the different iterations of a particular good or service that is available in different markets.
- It ensures that **goods or services produced in a specific industry come with consistent quality** and are equivalent to other comparable products or services in the same industry.
- Standardization helps in **ensuring the safety, interoperability, and compatibility of goods** produced.
- It also **facilitates trade and commerce,** makes processes more efficient, conserve resources and **simplify comparison of goods and services.**

Related News

Mandatory Hallmarking of Gold Jewellery

- It **will come into force from June 16** in a phased manner and **jewellers will be allowed to sell only 14, 18 and 22 carats of gold jewellery.**
- Gold hallmarking is **a purity certification and has been voluntary in nature** so far.
    - Bureau of India Standards has been running a hallmarking scheme for gold jewellery since 2000. **Around 40% of gold jewellery is being hallmarked currently.**
- **Benefits of hallmarking:** will enhance the credibility of jewellery, protect the public against lower caratage (purity of gold) etc.

About One Nation, One Standard (ONOS)

- Aim is to synergize standards adopted by various SDOs in the country. The idea is **to develop one template of standard for one given product instead of having multiple agencies set it.**
- Currently, **BIS is the only national body that frames standards.** But different Institutions and PSUs also develop standards in their specific domains.
    - For example, the Food Safety and Standards Authority (FSSAI) set standards on food, while Automobile Research Organisation of India makes standards for the automobile sector.

Benefits of ONOS

- **International recognition:** Integration of multiple standard formulating bodies will bring uniformity in the quality of goods & services produced in the country and will boost the 'Brand India' image.
- **Access to global Market:** It will allow recognition on International Standards Making Bodies and integration with Global Supply Chain and will help in larger participation of Industry in these supply chains.
    - It will also **ensure market relevance for the Indian standards.**
- **Benefit to the consumer:** It will help in increasing competitiveness amongst Industry / Vendors, Reduction in Cost, Quantum improvement in Quality of Product & Services for Indian consumers.
- **Product innovation:** Availability of a basic template to work with will allow smooth induction of evolving & emerging technologies and will also reduce dependence on imports by providing thrust to "Make-in-India".
- **Promotion to domestic standards:** It will help in having maximum industrial products under Indian Standards thereby removing the need to go abroad to get quality certification.
- **Access to Finance:** Banks are willing to advance loans since the prices of standardised commodities can be easily established.

Issues in standardization in India

- **Lack of regulations:** In sectors like machinery safety and chemicals, India is in the process of developing regulations. Therefore, imports and even domestic manufacturers have a free run in the Indian market.

* **Slow pace of adoption of international standards:** for example, the adoption of Hazard analysis and critical control points (HACCP) system in the food industry is resisted due to the unorganised nature of industry.
* **Poor testing facilities:** The testing facilities are quite inadequate and manufacturers face problems in getting the products tested.
* **Misuse of Standards:** Many producers use standards in an unauthorized manner. There is lack of feeling of responsibility and national character among our producers and it is a big hindrance in the development of standardization.
* **Poor awareness:** The general awareness about standards and grades is very low among masses, especially in rural areas.

Initiatives taken for standardisation in India

* **Indian National Strategy for Standardization:** It considers the current state of development across sectors, the existing quality infrastructure and the policy directions in relation to domestic economic developments and for trade in goods and services.
* **Formulation of Indian Standards is one of the core activities of BIS.** The activity is done through 17 Division Councils representing diverse areas of economy and technology such as Civil engineering, Electrotechnical, chemical, services etc.
* **Pahchan Initiative:** To organize and standardize the Indian Handicrafts, Government has registered approximately 22.85 lakhs artisans under Pahchan initiative.
* **Quality Control Orders (QCOs)**: For ensuring availability of quality products to consumers, QCOs are issued by various Ministries/Departments.

Way forward

* **Convergence of all standards development activities in India** by enhancing capability of SDOs for dynamic and faster development of standards, encouraging setting up of new SDOs in emerging technology areas etc.
    * BIS SDO recognition scheme is a right step in this direction.
* **Setting up a dynamic mechanism for new standards identification, development** and their revision by creating forums and processes to articulate and prioritize needs for standards development in different sectors.
* **Inclusive participation of all stakeholders** in standards development including States and MSMEs.
* **Harmonizing Indian standards with international standards** for reducing technical barriers to trade and improving market access for Indian products and services.
* **Identify sectors where India could pioneer standardization work** to not only unleash their commercial potential but also enhance India's contribution to global standardization efforts.
* **Participation in international standards setting projects** to enable voicing, consideration and possible inclusion of national priorities and concerns.

12.2. NOBEL PRIZE IN ECONOMICS

Why in news?

This year's Nobel Economics Prize has been awarded to U.S. economists Paul Milgrom and Robert Wilson for their **works on auction theory.**

More in news

* They won the Nobel Economics Prize for improvements to auction theory and **invention of new auction formats that could also be applied to selling of goods and services** (such as radio frequencies) that are difficult to sell through traditional auction formats.
* The discoveries have benefitted sellers, buyers and taxpayers around the world.

What is auction theory?

* It is a **concept of transparent allocation of resources or items of business in a free market** to the best bidder for optimum utilization.
* It is a branch of applied economics and prescribes different sets of rules or designs for transactions.
* Essentially, it is about how auctions lead to the discovery of the price of a commodity. **Auction theory studies:**
    * How auctions are designed?
    * What rules govern the auctions?
    * How bidders behave in auction?

- What outcomes are achieved through auction?

- **Benefits of the auction theory:**
  - It helps to **understand the bidders' behaviours**
  - It helps in **choosing the best design/forma**t of the auction for various goods and services.
  - It also helps **understand the evolving nature of auction** and pricing of items and resources in a country or globally.
  - It helps to **understand the outcomes of different rules for auction** and consequent final prices.
  - It also helps to **understand why governments across the world should not put too much emphasis on maximizing revenues**
    - ✓ For instance, in India the spectrum is allocated to the highest bidder; this is also one of the reasons why telecom sector is under heavy debt.
    - ✓ To avoid such problems in auction **India should chose the 'second-price' auction theory** that **allows the winning bidder** (or the highest bidder) **to pay what the second-highest bidder offered.**

What is an auction?

- An auction is a **price discovery mechanism of various goods and services**.
- In any auction, **potential buyers place competitive bids** on the goods and services (put for bidding) either in an open or closed format.
- Generally, in any auction, the private entities want to maximize their revenue, whereas **government may give priority to the factors other than maximizing revenue.**
- For instance, instead of allocating the spectrum to the highest bidder government may choose a bidder who would make the telecom accessible to the poor.
  - In fact in India, **before auctions became the norm for limited resources** such as radio waves, governments used to allocate them through licensing mechanism to the **private entity best suited for ensuring social benefits like accessibility to the poor.**
  - This approach, however, led to a proliferation of lobbying.
- **Key variables that determine the outcome of an auction:**
  - Rules of the auction
  - Value (personal or professional) attached to the good put to vote
  - The uncertainty involved in bidding

Individuals contributions

- **Winner's curse:** Wilson worked on common value principle and opined that the rational bidders tend to place bids below their own best estimate of the common value to evade the **winner's curse.**
  - It is possible to overbid ($50 when the real value is closer to $25) due to various reasons, in such cases one wins the auction but loses out in reality.
- **Multistage bidding:** Milgrom opined that private values differ from bidder to bidder. He demonstrated that **an auction format will give the seller higher expected revenue when bidders learn more about each other's estimated values** (which depends on both private as well as common value) during bidding.
  - Therefore, **allowing multi-stage bidding is a good way to get more value** as every participant gets more time to match/outbid the previous highest bid.
  - He analysed the bidding strategies in a number of well-known auction formats, and demonstrated that an **auction format will give the seller higher expected revenue when bidders learn more about each other's estimated values** during bidding.

Common value and Private value

- These terms refer to the benefits that a person may derive from a particular good or service**.**
- **Common value**: Common value is the real monetary value (realized as well as unrealized) of the goods/ services. It is same for everyone.
  - Examples include **the future value of radio frequencies or the volume of minerals in a particular area** or cost involved in a making a painting.
- **Private value:** It is the personal value attached to the goods/ services by an individual. **It differs from person to person.**
  - An art loving person will value a painting more than a philistine; someone may attach his/her status to winning the auction at any cost.

10 IN TOP 10 SELECTIONS IN CSE 2020

from various programs of Vision Ias

1 AIR

SHUBHAM KUMAR
(GS FOUNDATION BATCH CLASSROOM STUDENT)

2 AIR

JAGRATI AWASTHI
(ALL INDIA TEST SERIES)

3 AIR

ANKITA JAIN
(ALL INDIA TEST SERIES)

4 AIR

YASH JALUKA
(ABHYAAS TEST SERIES)

5 AIR

MAMTA YADAV
(ALL INDIA TEST SERIES)

6 AIR

MEERA K
(ALL INDIA TEST SERIES)

7 AIR

PRAVEEN KUMAR
(ALL INDIA TEST SERIES, ESSAY TEST, ABHYAAS, PDP)

8 AIR

JIVANI KARTIK NAGJIBHAI
(GS FOUNDATION BATCH CLASSROOM STUDENT)

9 AIR

APALA MISHRA
(ABHYAAS TEST SERIES)

10 AIR

SATYAM GANDHI
(ALL INDIA TEST SERIES, EASSY TEST)

YOU CAN BE NEXT

DELHI

HEAD OFFICE Apsara Arcade, 1/8-B, 1st Floor, Near Gate 6, Karol Bagh Metro Station
+91 8468022022, +91 9019066066
Mukherjee Nagar Centre
635, Opp. Signature View Apartments, Banda Bahadur Marg, Mukherjee Nagar

JAIPUR	HYDERABAD	PUNE	AHMEDABAD	LUCKNOW	CHANDIGARH	GUWAHATI
9001949244	9000104133	8007500096	9909447040	8468022022	8468022022	8468022022

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