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NOTE:

Dear Students,

Memorisation and recollection of information in Current Affairs is as important as understanding the articles. In order to enhance the learning outcomes from the Monthly Current Affairs Magazine, we are introducing following additions:

A thematic based colors has been used in the document in the boxes, tables etc to enable easy identification and recollection of various concepts and topics.

Questions are an important tool to assess and retain information. To enable this we are adding a Smart Quiz at the end of each section in the document for practicing the questions.

A wide variety of infographics have been added to ensure smoother learning experience and enhanced retention of the information. This will also help in effective presentation of information in the answer writing as well.

Places and persons in news are being presented in an objective manner through Maps, Tables & Pictures. This will help in easier recollection of factual information.

1. POLITY AND GOVERNANCE

1.1. COOPERATIVES

Why in news?

The Union Home and Cooperation Minister attended the celebrations organized on the occasion of 100th International Day of Cooperatives in New Delhi.

More on news

- The celebrations were organized by the **Ministry of Cooperation and the National Cooperative Union of India (NCUI).**
  - NCUI is the **apex organisation representing the entire cooperative movement in the country.** It was established in 1929 as All India Cooperative Institutes Association and was **reorganized in 1961.**
- The main theme of the event was **"Building a Self-Reliant India and a Better World through Co-operatives".**

About cooperatives

- **Definition:** A co-operative society is a **voluntary association of individuals having common needs** who join hands for the achievement of **common economic interest.**
- **Aim:** Aim of any cooperative is to provide support to its members, with focus on **the interest of the poorer sections of society,** through the principle of self-help and mutual help.
- **Modus operandi:** Through formation of cooperatives, **people come forward as a group, pool their individual resources, utilise them** in the best possible manner, and derive some common benefit out of it.
  - In a cooperative society, **people can enter it as per their wish,** and also, they are free to leave a cooperative society, but they **cannot transfer their share.**
- **Relevance: More than 12 percent of the world's population** is associated with cooperatives through more than 30 lakh cooperatives. The **joint cooperative economy** of the world is the **fifth largest economic unit.**
- **Different types of cooperatives working in India:** Consumers' cooperative societies; Producers' cooperative societies; Cooperative credit societies; Co-operative Farming Societies; Housing Cooperative Society; Marketing Cooperative Society
  - Among the **300 largest cooperative societies of the world,** three societies of India namely Amul, IFFCO and KRIBHCO are also included.

Cooperative principles

- Autonomy and Independence
- Members' Economic Participation
- Voluntary and Open Membership
- Democratic Member Control
- Concern for the Community
- Education, Training & Information
- Co-operation among the Co-operatives

Constitutional and legal provisions on Cooperatives

- Cooperatives fall in the state list of the 7th schedule
- Forming cooperatives is a fundamental right under the Article 19(1)(c)
- Promotion of cooperatives is also a Constitutional directive to the State mentioned under the DPSP (Article 43-B) of the Constitution
- Multi-State Cooperative Societies Act, 2002 provides for registration of societies with operations in more than one state

Challenges faced by cooperatives in India

- **Lack of democratic spirit**
  - **Government Interference:** Government is the major source of finances for the cooperatives and has the power to regulate the functioning of the cooperatives though various rules.
  - **Politicisation:** Many cooperative societies are dominated by locally powerful members of the society, with strong political affiliations. This results in internal quarrel and rivalries and lack of interest by common members.

- **Regional imbalance in growth:** The cooperatives in northeastern areas and in areas like West Bengal, Bihar, Odisha are not as well developed as the ones in Maharashtra and Gujarat.
- **Absence of Economics of Scale:** Most of the cooperatives are confined to a few members and their operations extend to only one or two villages. As a result, their resources remain limited.
- **Inadequate human resource:** Shortage of skilled workforce and inability of cooperative institutions to attract efficient personnel is one of the biggest challenges. As a result of this, Cooperatives are also suffering from lack of professionalism.
- **Cooperative banks' specific challenges**
  - **Dual regulation**: Regulation by state registrar of societies and the Reserve Bank of India have resulted in lack of accountability.
  - **Sinking balance sheet**: Many of the cooperative banks have higher Non-Performing Assets (NPA) than commercial banks.
    - ✓ For example, **NPA of Co-operative banks in Kerala crossed 38%** whereas commercial banks reported NPAs of just 3.99% of their total advances **as of December 2021.**
  - **Governance issue:** Lack of modern banking practices, Lax corporate governance standards, political influence, etc.
    - ✓ Example, poor governance resulted in failure of the Punjab and Maharashtra Co-operative Bank (PMC).
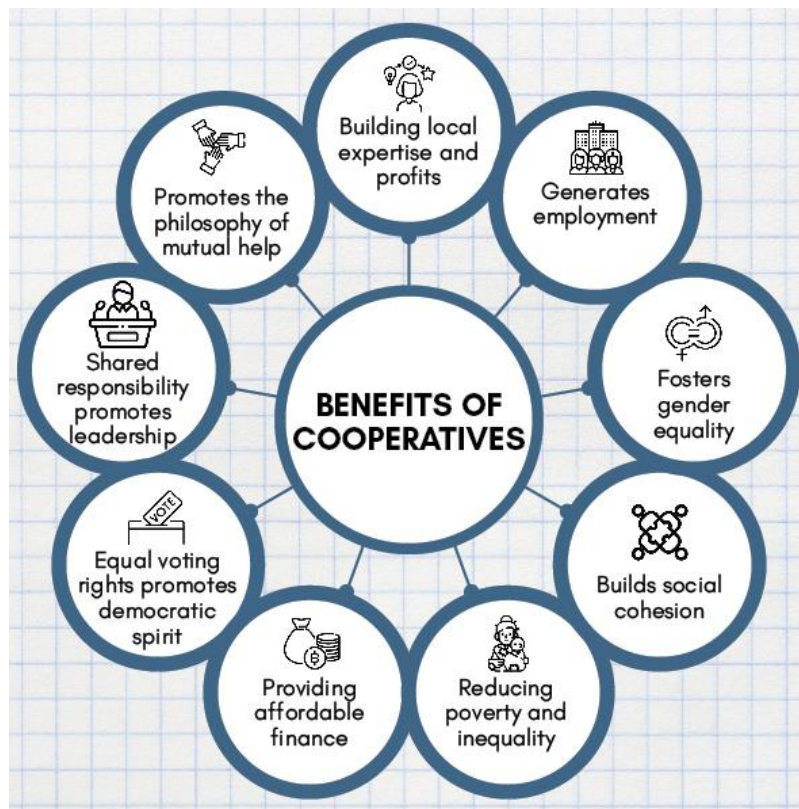
Way ahead to strengthen cooperative movement a success story

- **Promote democratic spirit:** Democratic spirit is the core value of cooperatives. Also, it is needed to reduce the political influence and enhance inclusivity of the cooperatives. This can be ensured by promoting objectivity and transparency through:
  - Bringing Cooperative societies under the purview of the Right to Information Act, 2005.
  - Mandating the director of the cooperatives to declare their assets every year.
  - Creating awareness among members about their rights as well as the purpose of Cooperatives.
  - Imparting value-based education that ensures ethical behavior & spirit of cooperation among members of the society from a tender age.

BENEFITS OF COOPERATIVES: Building local expertise and profits; Generates employment; Fosters gender equality; Builds social cohesion; Reducing poverty and inequality; Providing affordable finance; Equal voting rights promotes democratic spirit; Shared responsibility promotes leadership; Promotes the philosophy of mutual help

Steps taken to strengthen the cooperative movement in India
- **Ministry of Cooperation:** The ministry has been established to "provide a separate administrative, legal and policy framework for strengthening the cooperative movement".
- **The Banking Regulation (Amendment) Act, 2020:** It gives the RBI powers to supersede boards of the Cooperative banks and allows Cooperative banks to raise money via public issue and private placement, of equity or preference shares.
- **The National Agricultural Co-operative Marketing Federation (NAFED)** to assist the Marketing Co-operatives in the States to develop their marketing business and to help them render better services to their members.
- **The National Co-operative Development Corporation (NCDC):** It was set up in 1963. It provides assistance to schemes of marketing, processing, storage, and practicing in a share capital of cooperative sugar, cooperative spinning & weaving mills, in the form of loans and subsidies.
- **Annulment of 97th Constitutional Amendment Act, 2011 by the Supreme Court:** The Act amended **Article 19(1)(c)** to give protection to the cooperatives and **inserted Article 43 B and Part IX B,** relating to them. The Court declared that **Part IXB of the Constitution is operative only insofar as it concerns Multi-State cooperative societies** both within the various States and in the Union Territories.
  - **Part IXB of the Constitution** dictated the terms for running co-operative societies.

- **Promoting Multipurpose societies**: Multipurpose societies can have a balanced and integrated view about the needs of its members and can meet them accordingly. To do this, weaker and inefficient societies should be winded and merged with strong and efficient societies.
- **Infrastructure development:** Digitisation especially in governance, banking and businesses can ensure a transparent, accountable, and efficient system.
- **Skilled employees:** Impart cooperative training to employees of cooperatives, children in schools, colleges, universities, technical and professional institutions. Also, training to those who want to form cooperatives, but who are not aware of the various modalities, and requirements.

1.2. RIGHT TO BE FORGOTTEN

Why in news?

Recently, Supreme Court directed its registry to **remove details of a couple** from search engines and Internet.

More on news

- Petitioner contented that her name in the public domain **causes embarrassment, social stigma and infringes her privacy.**
- Petitioner had raised the **'right to be forgotten (RTBF)' and 'right of eraser' being rights of privacy**.
- This direction **expands the ambit of right to privacy and RTBF.**

> **Right to Privacy vis a viz RTBF**
> The Right to Privacy (under Article 21) includes information that is not public whereas, the Right to be Forgotten involves removing information that was publicly known at a certain time and not allowing third parties to access the information anymore.

About Right to be Forgotten

- RTBF is the **right to have publicly available personal information removed from the internet**, search, databases, websites, or any other public platforms, once the personal information in question is no longer necessary.
  - RTBF traces its origin to the **'right to oblivion'** in the French jurisprudence.
    - ✓ It was utilized by former offenders, who had served their sentence, to object to publication of materials regarding their offense and consequent conviction.
    - ✓ It was a right seen necessary to provide for easier social integration of erstwhile offenders.
  - However, RTBF cannot be an absolute right and would be objected to reasonable restrictions.
- It has been recognised **as a statutory right in the European Union** under the General Data Protection Regulation (GDPR), and has been upheld by a number of courts in the United Kingdom, and in Europe.
  - It was **implicitly recognized as a right for the first time by EU Directive on Data Protection** in 1995.
  - Article 17 of GDPR, 2016 provides Right to Erasure (or the right to be forgotten), which permits a data subject to request a controller to delete personal data concerning him or her without undue delay.
  - In 2015, **Russia enacted a law that allows users to force a search engine to remove links** to personal information on grounds of irrelevancy, inaccuracy and violation of law.
  - **In USA**, there is wide support for RTBF, but **it is not supported by law**.

Right to be forgotten (RTF) in India

- In India, there is no law that specifically provides for RTBF. However, the now withdrawn Personal Data Protection Bill (PDPB), 2019 contained provisions related to doctrine of RTBF.
  - Unlike the GDPR, the Personal Data Protection Bill only provides for prevention of continuing disclosure of personal data and not the deletion of personal data.
- **Information Technology Rules, 2011** — which is the current regime governing digital data — also does **not have any provisions** relating to the RTBF.

> **Supreme Court on Right to be Forgotten (RTBF)**
> - In the landmark case of K.S. Puttaswamy v. Union of India, **SC recognised RTBF as part of the right to life under Article 21**.
> - SC had stated that the RTBF was **subject to certain restrictions,** and that it could not be used if the material in question was required for the:
>   - exercise of right to freedom of expression and information.
>   - fulfilment of legal responsibilities.

- o execution of a duty in the public interest or public health.
- o protection of information in public interest.
- o for purpose of scientific or historical study, or for statistical purposes;
- o establishment, executing, or defending of legal claims.

Issues with Right to be Forgotten

- **Scattered data**: Data of an individual is scattered across multiple platforms, cloud etc. which makes it **cumbersome to completely delete all the data** as requested by a person.
- **Implementation:** The success rate of government in curbing and removing pornographic material has been **abysmally low** and thus success **rate of implementing RTBF is debatable**.
- **Re-emergence:** RTBF cannot ensure complete removal of personal data as there is a **probability of data being uploaded again** and practically no mechanism, or process is available to address this issue.
- **Freedom of speech and expression**: An overly broad RTBF would **necessitate Internet monitoring and force web search tools or sites to remove specific material,** potentially rewriting history and curbing Freedom of speech and expression.
- **Public interest**: There can be an **inherent conflict between RTBF and public interest**. For instance, availability of data with respect to offences committed by individual takes precedence over his/her RTBF.

Way forward

- **Balancing rights**: The Parliament and Supreme Court should conduct a thorough examination of the RTBF and devise a method for **balancing the competing rights to privacy and the freedom of speech and expression.**
- **Data Protection**: The government should devise a strong Data Protection Policy to prevent misuse and leakage of data.
- **Discard data**: Online search tools can modify their principles and destroy information after a specific time frame **thus balancing RTBF and Right to Privacy**.
- **Framework**: A framework should be developed highlighting conditions such as protect life of an individual, protection from assault, infamy etc. under which RTBF can be enforced.
- **Balance between RTBF and public interest**: If the information is of public interest, the right to information of the public should prevails over RTBF.

1.3. FOREIGN CONTRIBUTION REGULATION ACT (FCRA)

Why in News?

Recently, the Central Government notified the **Foreign Contribution (Regulation) Amendment Rules, 2022** to reduce compliance burden on citizens.

More on News

- Amending the **Foreign Contribution (Regulation) Rules, 2011,** now individuals can send up to ₹10 lakh without informing the government.
  - o If the amount exceeds ₹10 lakh, the individuals will have three months to inform the government against 30 days earlier.
  - o The entities that can receive this includes political parties, legislature members, election candidates, government servants, judges, journalists, and media houses- who were all barred earlier from receiving foreign contribution.

EVOLUTION OF FCRA

1969 Parliament expressed concerns over Foreign Power Interference

1976 Foreign Contribution (Regulation) Act (FCRA) 1976 was enacted during Emergency

2010 FCRA 2010 to consolidate the law on utilization of foreign funds and prohibit their use for activities detrimental to national interest

2020 Amended FCRA, 2010 for tighter control and scrunity over the receipt and utilization of foreign funds by NGOs

- The **time limit prescribed for intimation to Central Government** for application of obtaining 'registration' or 'prior permission' under the FCRA to receive funds has been **increased from 15 days to 45 days.**
- Also, in a separate notification, the **list of compoundable offences under FCRA was increased to 12 from 7.**
  - **Compoundable offences** are those where the **complainant can agree to take back the charges** levied against the accused.

FCRA: Purpose and Provisions

- Foreign contribution means the donation, delivery or transfer made by any foreign source of any article, currency, or security.
  - FCRA is implemented by the **Ministry of Home Affairs (MHA)**, supported by Intelligence Bureau in approvals and rejections through investigation on antecedents. The government orders can be challenged in the **High Court**.

Major Provisions (post 2020 amendment): Applicable across India, on Indian citizens outside India, all associations, groups, and NGOs, it:

- **Prohibits the receipt of foreign funds by** candidates for elections; journalists or newspaper and media broadcast companies; public servant, Judge, Government servants or employee, members of legislature and political parties etc. **(amended by the Foreign Contribution (Regulation) Amendment Rules, 2022)**
- **Prior Permission to receive foreign funds** though registration with mandatory Aadhaar submission of every office-bearer of the NGOs.
- **Designated FCRA Account** in such branches of the **State Bank of India, New Delhi** to receive funds. **No funds** other than the **foreign contribution** can be received or deposited in it and it can't be transferred to any other person or NGO.
- **Validity of FCRA registration** is five years and NGOs are expected to apply for renewal **within six months of the date of expiry** of registration.
- **Use of funds is limited** to the purpose for which it was received with a maximum limit of 20% (earlier 50%) to meet **administrative expenses**.
- **Compulsory filing of annual returns** and in case of contraventions, government can restrict usage of unutilized foreign contribution after an inquiry.

Importance of FCRA

FCRA aims to protect **national interests** so that it functions in a manner consistent with the values of a **sovereign democratic republic**.

- **Maintaining Economic Growth and Development:** There have been allegations that some foreign-funded NGOs deliberately protest developmental projects (mining, power projects etc.) which hurt India's growth.
- **Protection of Indian Society and Culture:** Foreign contributions are often used for socio-cultural activities which creates threat to Indian diversity and internal security.
  - E.g. Government barred **Compassion International** in 2016 from funding NGOs in India over allegations of religious conversion.
- **Political Independence:** Global ideological organisations use foreign contributions to impose their own political ideology. Some NGOs also misuse it for political purposes.
  - E.g. Ford Foundation funding was placed under the "**prior approval category**" in 2015.

IMPACT OF STRONGER COMPLIANCE REGIME

DECREASE IN FCRA REGISTERED NGOs
From over 40,000 in 2011 to just over 16,000 NGOs in 2022

MORE CANCELLATIONS
1811 registration certificates cancelled from 2019-2021

MORE RENEWAL REJECTIONS
783 renewal applications cancelled from 2019-2021

- **Sovereignty and Friendly-foreign Relations:** FCRA helps in avoiding foreign influence over government decision-making and its relations with other countries.
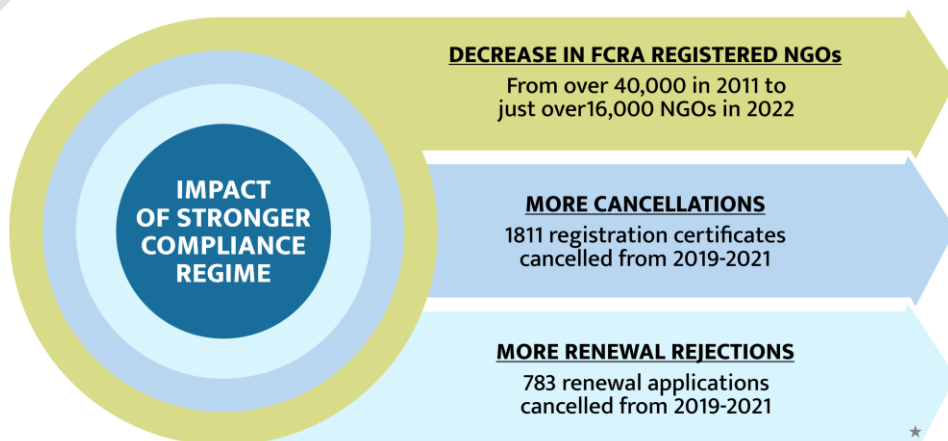
- E.g. Foreign-funded NGOs protest against the Kudankulam Nuclear Power Plant Project (KKNPP) of India and Russia.
- **Transparency and Accountability in NGOs:** Regulations and necessary compliances under FCRA help in making NGOs transparent and accountable in their functioning by:
  - **Identifying financial irregularities** among foreign-funded NGOs.
  - **Ensure intended utilization of funds**.

Concerns over FCRA

In the last few years, due to financial irregularities or other reasons, a number of NGO registrations have either been cancelled or not renewed (see **image**). This includes many global NGOs leading to various concerns such as:

- **Targeting of NGOs** due to political or ideological differences through misuse of FCRA as a tool for licensing or rejecting activities.
- **Hurt NGOs Functioning** due to limitations on administrative expenses and increased compliance burden.
- **Violation of Right to Equality**, **Right to Privacy**, **Freedom of Association** and **independent functioning** through limitations on bank account, mandatory Aadhaar submission of every office-bearer, prohibitions on transfer etc.
  - E.g., No transfer of funds to other NGOs limit collaboration among NGOs.
- **Against Democratic values and Ethos of India** which has multiple interest groups with the vital role of NGOs to create awareness among them and protection of their rights.

Way Forward

The Supreme Court has upheld the **constitutional validity** of FCRA as receiving of foreign donations **cannot be an absolute right** and parliament can **regulate it**. Also, it is a **moral obligation** on NGOs to follow regulations for accountability. But these regulations should always be used in the context of **larger public interest while protecting individual** rights through-

- An **objective and fully transparent process** with searchable database on NGOs.
- **Use of technology** for easy compliance.
- **Reasonable opportunities** for individuals or NGOs of being heard.
- **Decentralization or Delegation of responsibilities** to have participation from State/Local Government as recommended by the Second Administrative Reforms Commission (2nd ARC).

1.4. MODEL TENANCY ACT, 2021

Why in news?

Recently, **four States (Andhra Pradesh, Tamil Nadu, Uttar Pradesh and Assam) revised their tenancy laws** to be in line with the Model Tenancy Act (MTA).

About Model Tenancy Act (MTA), 2021

- **Ministry of Housing and Urban Affairs (MoHUA) has approved MTA, 2021** to streamline the process of renting property in all State and Union Territory (UTs) and aid rent economy in estate sector.
  - **In 2021, Jammu and Kashmir** has become the **first Union Territory to adopt** the MTA.
  - Since **housing** is a part of the **State List** under the **7th Schedule** of the Constitution, Model Act is only a **suggestive framework** (not binding) **for states** to follow while regulating rental housing and agreements.
  - It replaces existing tenancy provisions of more than 70 years old East Punjab Urban Rent Restriction Act, 1949.
  - As per Census 2011, nearly **1.1 crore houses were lying vacant** in country and making these **houses available on rent** will complement the **vision of 'Housing for All' by 2022**.
- **Key highlights of MTA, 2021**:

Specifications	Detail
Applicability	• It'll cover premises let out for **residential, commercial or educational use**, but **not for industrial use**. It also won't cover hotels, lodging houses, inns, etc.
Tenancy agreement	• All premises (residential or commercial) shall be **rented only after a written agreement** on mutually agreed terms and **informed to proposed Rent Authority within two months** from date of tenancy agreement.

Tenancy period	• Tenant may **request the landlord for renewal or extension** of tenancy period.
	• If **tenant fails to vacate premises** at the end of tenancy, or on termination of tenancy by an order, he will be liable to pay
	o **Twice the monthly rent** for first two months and,
	o **Four times monthly rent** subsequently till he occupies premises.
Security Deposit	• It has been capped to a **maximum of two month's rent for residential properties** and, **minimum of six month's rent** for non-residential property.
Digital platform	• It'll be set up in **local vernacular language of the State** for submitting tenancy agreement and other documents.
Sub-letting	• It can only be done with **prior consent of landlord**, and **no structural change can be done** by tenant **without written consent** of landlord.
Three-tier redressal system	• The Model Act establishes a three-tier quasi-judicial dispute adjudication mechanism **comprising Rent Authority, Rent Court and Rent Tribunal** to provide fast-track resolution of disputes and **reduce burden of tenancy disputes** from civil courts.
	o Disposal of complaint by Rent Court and Rent Tribunal should be **within 60 days.**
	• **Rent Authorities and Rent Courts** will be appointed by **District Collector** with approval of state government.
	• State may establish **Rent Tribunal** in **each district after consulting with jurisdictional High Court.**
	• No civil court will have jurisdiction over matters pertaining to provisions under Model Act.
Eviction	• To evict a tenant, **landlord must apply to the Rent Authority** seeking such eviction. **Conditions for eviction of tenant** include
	o refusal to pay agreed upon rent;
	o failure to pay rent for more than two months;
	o occupation of part or whole of premises without written consent; and
	o misuse of premises despite a written notice.
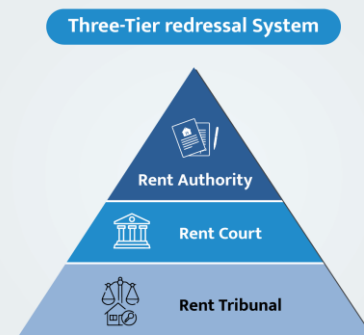
Issues with Model Tenancy Act

- **Specific details:** It goes into **minute details of a rental agreement** like landlord carry out whitewashing of walls and door, tenants responsible for drain cleaning, geyser repairs etc.
  - **Such details restrict changes** that contracting parties may want to make in a contract based on their specific situation.
- **No single institutional framework:** It does not establish a clear institutional framework, bypasses informal renter and is beset with **overlapping and confusing processes**.
  - It is unclear why the MTA creates a new process and separate rent authority instead of amending the existing one.
- **Government control:** Appointment and oversight of rent authority, court, tribunal is left to the **district administration instead of concerned urban local body**, violating the devolution envisaged under the 74th Amendment to the Constitution.
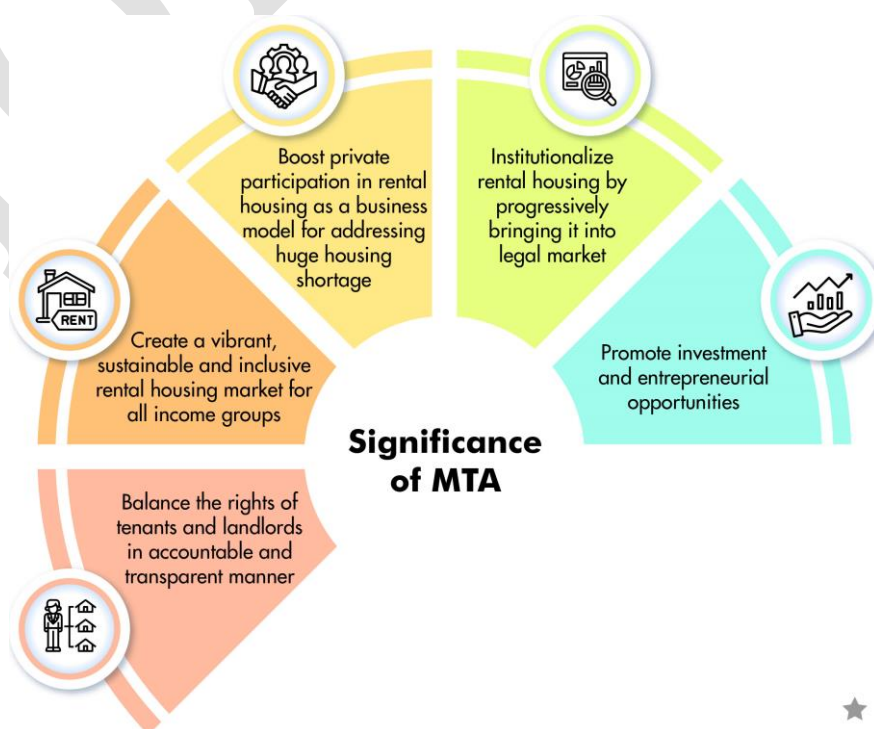
- **Lack of equal access**: Introduction of a mandatory "digital platform in the local vernacular language" may facilitate registration, but is not able to overcome gaps in digital literacy, equitable access to the market for tenants especially in the informal sector.
- **Rental Discrimination**: It **fails to protect tenants from rental discrimination**, commonly experienced by various groups including **bachelors, unmarried couples, non-vegetarians, Dalits, religious minorities, transgender persons** and sexual minorities.
- **Non- binding nature:** It is not binding on the states **as land and urban development remain state subjects**. It is still a matter of choice for states and UTs to repeal or amend their existing acts.
  - Like in the case with **RERA (Real Estate (Regulation and Development Act),** the fear is that **states may choose not to follow guidelines**, diluting the essence of the Model Act.

> **Other Initiatives taken for affordable housing**
> - **Affordable Rental Housing Complexes (ARHCs):** MoHUA has initiated an ARHCs **for urban migrants/poor as a sub-scheme** under Pradhan Mantri Awas Yojana (PMAY- Urban).
>   - It seeks to **fulfill the vision of 'AtmaNirbhar Bharat'.**
> - **PMAY-U**: Implemented by MoHUA, it **addresses urban housing shortage among the EWS/LIG** (Low Income Group**) and MIG** (Middle income group) **categories including slum dwellers** by ensuring a pucca house to all eligible urban households by 2022.
> - **Global Housing Technology Challenge - India (GHTC-India)**: Initiated by MoHUA to identify and mainstream a basket of **innovative construction technologies from across the globe for housing construction sector** that are sustainable, eco-friendly and disaster-resilient.

Way forward

- **Balance approach**: Government must formulate a way to balance social welfare of tenants and the economic interests of landlords for an inclusive approach.
- **Private participation**: Engaging private sectors into affordable renting housing through models like "**Build to Rent" and "Rent to Own".**
- **Ensure quality**: There is need for a separate mechanism beyond the Model Tenancy Act that ensures the provision of **safe and good quality rental units for tenants**, while ensuring a fair economic return for homeowners.
- **Uniformity**: Bringing within its ambit the state laws, to bring uniformity in the market and keep a check on rising rental prices.
- **Cooperative federalism**: Land and provision of housing being state subjects, there is need to foster cooperative federalism and bring in all the stakeholders i.e. tenants, owner, and state together.

1.5. NATIONAL STANDARDS FOR CIVIL SERVICE TRAINING INSTITUTIONS (NSCSTI)

Why in news?

Recently, **Ministry of Personnel, Public Grievances & Pensions** has launched the National standards for civil service training institutions (NSCSTI).

About NSCSTI

- NSCSTI is developed at **Capacity Building Commission (CBC) headquarters.**
  - Web-portal and approach paper for the National standards also inaugurated.
- India became the **first country in the world** to come out with a

> **Capacity Building Commission**
> - It was constituted through Gazette of India in 2021.
> - Core purpose of the Commission is to **build credibility and shape a uniform approach** to capacity building on a collaborative and co-sharing basis.
> - It was established as an **independent body with complete executive and financial autonomy**.
> - CBC comprises **three Members and is supported by an internal Secretariat**. Secretariat is headed by an officer in the grade of Joint Secretary to GoI (designated as the Secretary to CBC).
> - **Functions of CBC**
>   - **Facilitate preparation of Annual Capacity Building Plans** of departments, ministries, and agencies.
>   - Preparing an Annual State of Civil Services Report.
>   - **Approving Knowledge Partners** for the Mission.
>   - Evolving a harmonious, de-siloed approach to capacity building initiatives.

unique model to create standards for civil service training institutions at national level.

- o India already has standards and accreditation in higher education, healthcare and environment.
- Standards will **equip Central Training Institutions (CTIs)** to help civil servants tackle emerging challenges of 21st century.
- **Objectives of NSCSTI:**
  - o NSCSTI creates a baseline for **Central Training Institutions (CTIs)** on their current capacity for **elevating their quality and capacity of training delivery** and to **harmonise standards for training**.
  - o It will set aspirations for training institutions to **strive towards excellence**.

Significance of standard Central Training Institutions

- Adjust outlook of civil servants methods to the changing needs of new times.
- Provide a mechanism to continuously build capacity and update the talent pool
- Improve Efficiency

National Standards for Civil Services Training Institutions (NSCSTI)

Eight pillars of excellence

Training needs Assessment | Faculty Development | Resource targets | Digitalisation | Trainee support | Collaboration | Training Evaluation | Operations and Governance

Current Issues associated with Central Training Institutions

- **Lack of training**: Too much emphasis is laid on **entry-point and in-service training** of the higher civil service like All-India Services and Central and State Class I Services. The **training needs of the middle and lower- level personnel are neglected**.
  - o Thus, a majority of civil servants (80 to 90%) have no opportunity of training.
- **Lack of coordination**: Contents of the training programmes are **not always relevant and meaningful** for the trainees. There is **no relationship between the training contents and actual placement** of the trainees. Many training agencies do not have co-ordination between the training programmes and needs of systematic career development.
- **Curriculum**: In most cases the training institutes follow **traditional lecture method of training**. Up-to-date and modern methods of training are not easily adopted. Lecture method occupies almost 80% of the training in most institutions.
- **Poor evaluation**: Training system is **not linked with the education and research** and systematic evaluation of the training results and follow-up of the effects of training on the efficiency in administration is not attempted.

Way forward

Along with the National standards for civil service training institutions, following areas can also be prioritised:

- **Focus on 4Es:** Civil service learning through **Empowered learning, Effective Learning, Exploratory Learning and Electronic Learning** in CTIs and develop a process of self-assessment of civil servants.
- **Remove the non-performers:** Civil servants who are found to be non-performing should be **dismissed or given pre-mature retirement**. This will help **curb complacency, harness competitive spirit** and develop efficient and result oriented outlook in the civil servants.
- **Mid-career training**: The mid-career training to develop **domain knowledge and competence required.**
- **Monitoring:** A monitoring mechanism should be set up for overseeing the implementation of the National Training Policy.

Initiatives taken to improve functioning of civil servants
- **Mission Karamyogi**: It is an **Integrated Government Online Training (iGOT) Platform** which allow all government servants irrespective of their rank to undergo continuous training, depending on their domain areas.
  - It aims at building a **future-ready civil service with the right attitude, skills and knowledge**, aligned to the vision of New India.
- **Aarambh**: Launched by Government of India, it is first ever common foundation course for civil servants training.
- **National Training Policy**: It was adopted in 1996 and reviewed in 2012 to **develop a professional, impartial and efficient civil servants** that is responsible to needs of citizens and ensuring that they possess requisite knowledge, skills and attitude to make them able to perform the functions they are entrusted with.
- **Lateral entry**: **Direct induction of domain experts at the middle or senior levels** of administrative hierarchy, rather than only appointing regular civil servants through promotion.

1.6. REGISTRATION OF PRESS AND PERIODICALS BILL

Why in news?

Recently, the Government decided to introduce a bill aimed at revising the **Press and registration of book act 1867**.

More on News

- **The 1867** act helped governments control the press, regulate book publishing, and inadvertently **curb the freedom of speech and expression.**
- The printer of every newspaper had to **deliver two copies of each issue of such newspaper free of expense to the Government and one copy of each issue to Press Registrar.**
- Under the act, the **Central Government may appoint a Registrar of newspapers for India**. The Press Registrar shall maintain in the prescribed manner a Register of newspapers.
- **Every book or paper printed** shall have printed legibly on it the name of the printer and the **place of printing, name of the publisher, and the place of publication.**

A brief history of the act
- The legacy begins with the **Censorship of Press Act, 1799** which was imposed by Lord Wellesley to gag the press ahead of a French invasion of India.
- This was **retracted in 1818** by **Lord Hastings.**
- Acting governor-general John Adams enacted the **Licensing Regulations (ordinance), 1823.**
- Governor General Metcalfe abolished the ordinance to replace it with the **Press Act of 1835.**
- The **Licensing Act of 1857** brought newspapers, printed matter, and all books under the purview of the law.
- The current **Press and Registration of Books (PRB) Act 1867** was aimed at curbing what the British Government thought was the role of the press in the "revolt of 1857".

Salient features of the Draft Bill

- **Objective**: The objective is to bring digital media under the scanner of the Ministry of Information and Broadcasting and overcoming the colonial overhang of the previous law.
- **Registration**: Once the Bill is passed the Digital News media Publication will have to **r**egister with the **Press Registrar General within 90 days.**
- **Power of The Entity**: The government Entity will have the power to act against **digital Publications for violations a**nd can suspend or cancel a registration and impose penalties.
- **Simplification**: It lays down a "Simple System" of registration of E-papers and aims to remove certain existing **provisions concerning the registration of books and connected matters.**

> **Issues with the bill**
> - The provision declares that rules of registration of **"news on Digital Media"** may be prescribed leaving it **vague and unclear.**
> - It prohibits people from bringing out publications if they have been convicted under **the Unlawful Activities (Prevention) Act, 1967**.
> - There is a lack of **institutional autonomy for the appointed Press General.**
> - Requiring the **mandatory registration of all news on digital mediums** undermines the ability of the internet to democratize information by erecting barriers to the **freedom of publication.**

- **Rule-making Authority:** The Bill enables the **Central government** and the **State government** to frame **appropriate rules/regulations to regulate** the criteria/conditions for issuing Government advertisements in newspapers, accreditation of newspapers, and such other facilities for newspapers.
- **Appellate Board:** There shall be an **Appellate Board to be called the Press and Registration Appellate Board** consisting of the Chairman, Press Council of India and one member to be nominated by the Press Council of India, from amongst its members.
  - After fulfilling the conditions laid down in the proposed act. The board can make a decision that will **be binding and final.**

Conclusion

The need is to balance the constitutional values guaranteeing the **freedom of speech and expression** including **Freedom of the Press** and **protecting the collective well-being of people** from issues such disturbance of law and order, hate speech etc.

1.7. NEWS IN SHORTS

1.7.1. INCREASING TENURE OF HOUSE COMMITTEES

- In a **first ever comprehensive study of the Rajya Sabha (RS) Secretariat**, a panel has presented its recommendations to the RS Chairman.

- **Key recommendations**:
  - **Increase in tenure of Parliamentary Standing Committees** (PSCs) from **1 year to 2 years** to ensure stability and continuity.
  - **'Committee Hour' can be introduced in Parliament** to discuss major reports for wider amplification of the content of the reports.

- o **Merging existing committees** on Industry and Commerce into one and setting up a new committee on tourism and culture.
- o **Examine the issue of enabling virtual meetings of Departmental related Standing Committees** (DRSCs), given the technological advances and legislatures in other countries provisioning for the same.
- o **For RS Secretariat**: fill up all vacancies; streamlining of secretarial work, including disposing of 75% of the issues by lower and middle level; etc.
- RS secretariat was **set up pursuant to provisions contained in Article 98,** which provide for separate secretarial staff for each House of Parliament.
  - o It **functions under the guidance and control of the RS Chairman**.
  - o **Main activities**:
    - ✓ providing secretarial assistance and support to RS.
    - ✓ servicing Parliamentary Committees.
    - ✓ publishing records of day-to-day proceedings of RS etc.

About Parliamentary Committees (PCs)
- PC means a **committee which is appointed or elected by the House or nominated by the Speaker/ Chairman** and which works under their direction; has a secretariat provided by the Lok Sabha/Rajya Sabha secretariat.
  - o PCs draw **their authority from Article 105** and **Article 118**.
  - o **Parliament is not bound by the recommendations** of committees.
- **Types**:
  - o **Standing Committees**: Financial Committees, DRSCs and other Committees (permanent and regular committees).
  - o **Ad hoc Committees**: Select and Joint Committees on Bills (appointed for a specific purpose and cease to exist when assigned task is finished and report is submitted).

1.7.2. ELECTION OF THE PRESIDENT

- **Under Article 62(1) of the Constitution**, an election to **fill a vacancy caused** by the **expiration of the** term of office of **the President** shall be **completed before** the **expiration of the term (**5 years).
- **Election Process**
  - o The President is elected by an **electoral college consisting of MPs** of **both Houses** of **Parliament** and **MLAs** of the **states** and **Delhi** and **Puducherry.**
  - o **Nominated members** of **Rajya Sabha**, **Lok Sabha** and the **Assemblies**, and **members of state Legislative Councils**, **are not part of the Electoral College.**

- o The election is held as **per the system of proportional representation** by **means of a single transferable vote.**
- o The **winning candidate** has **to secure the required quota** of **votes to be declared elected,** i.e., **50% of valid votes polled +1.**
- **Anti-defection law** is **not applicable** in the presidential election; thus, **electors are not bound** to **vote along party lines**.
- **Under Article 324** of the constitution, the **Election Commission of India** has the authority to conduct the presidential elections.

How the value of the vote of a lawmaker is calculated?

GENERAL ELECTION	PRESIDENTIAL ELECTION
People elect Legislators (MPs/MLAs)	Legislators (MPs/MLAs) elect the President

$$1 \text{ person} = 1 \text{ Vote}$$

$$1 \text{ MP} = \frac{\text{Total no. of Votes assigned to MPs}}{\text{Total no. of MPs}}$$

$$1 \text{ MLA} = \left(\frac{\frac{\text{Total population of the state}}{\text{No. of MLAs}}}{1000} \right)$$
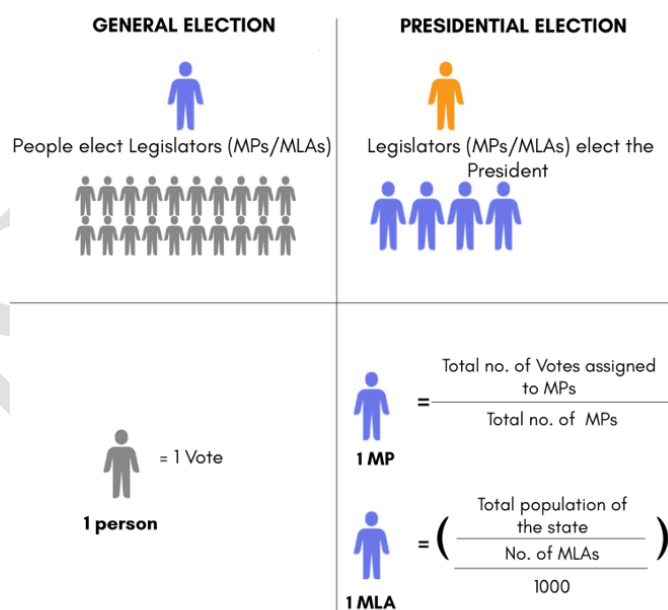
- The value of **the vote of each elector (MP/MLA) is predetermined**. For each MP, the value is fixed at 70.
- This time **the value of the vote of a Member of Parliament reduced to 700 from 708** due to the absence of a legislative assembly in Jammu and Kashmir.

1.7.3. REGISTRATION OF ELECTORS

- **Election Commission (EC)** in pursuance of **legal amendments in RP Act 1950 and modifications in Registration of Electors Rules, 1960,** has initiated following changes
  - o **Those above 17 years of age can apply in advance** for getting enrolled in voters' list**.**
  - o **Electoral roll will be updated every quarter** and eligible youngster can be registered in next quarter of year in which they have attained qualifying age of 18 years.
  - o Optional provision to link Aadhaar details with the form has been added.

1.7.4. DISTRICT LEGAL SERVICES AUTHORITIES (DLSAS)

- PM recently addressed inaugural session of First All India District Legal Services Authorities (DLSAs) Meet.
- DLSAs are **established under Legal Services Authorities Act (LSA), 1987 to:**
  - **Provide free legal aid, organize Lok Adalats,** Legal literacy camps etc,
  - Secure that opportunities **for securing justice and fundamental rights** are not denied to any citizens by reasons of poor economic conditions.
- There are a total of **676 DLSAs in the country.** They are **headed by District Judge** who acts as Chairman of DLSA.
- DLSAs **also contribute towards reducing burden on courts by regulating Lok Adalats** conducted by National Legal Services Authority (NALSA).
  - Lok Adalat is an **Alternative Disputes Resolution Mechanisms.** It has been given **statutory status under LSA.**
- **About LSA, 1987**
  - It was enacted **to establish a nationwide uniform network for providing free and competent legal services** to the weaker sections.
    - ✓ Article 39A provides for free legal aid to the poor and weaker sections of the society and ensures justice for all.
  - **NALSA has been constituted under LSA** to monitor and evaluate implementation of legal aid programmes and to lay down policies and principles for making legal services available under Act.
  - Based upon **territorial and subject matter jurisdiction**, **Free Legal Services/Aid Authorities are as given in image.**

Free Legal Services/ Aid Authorities

- Supreme Court Legal Services Committee
- High Court Legal Services Committee
- State Legal Services Committee
- District Legal Services Committee
- Taluk Legal Services Committee

1.7.5. TELE-LAW SERVICE TO BE MADE FREE OF COST FOR CITIZENS FROM 2022

- A Memorandum of Understanding has been signed between **Department of Justice and National Legal Services Authority (NALSA) on Integrated Delivery of Legal Services.**
  - As per the agreement, **NALSA will provide services of 700 lawyers**, **in each district exclusively for Tele-Law program.**
  - These empanelled lawyers would also act **as referral lawyers and assist in strengthening the mechanism for dispute avoidance and dispute resolution** at the pre-litigation stage.
- **Launched** in 2017 by the **Department of Justice** (Ministry of Law & Justice), Tele-Law initiative is a **reliable and efficient e-interface and pre-litigation tool.**
- **Tele–Law mainstreams legal aid to the marginalized seeking legal help by connecting them with the Panel Lawyers** through the tele/video-conferencing infrastructure available at Common Service Centres (CSCs) across 1 lakh Gram Panchayats.

1.7.6. PLACES OF WORSHIP ACT

- SC has **refused a petition by a sect of Jain community filed under Article 32 of Constitution** to enforce **Places of Worship (Special Provisions) Act 1991** against alleged conversion of its religious places by another sect.
- **Act 1991 prohibits conversion of any place of worship** and to provide for maintenance of religious character of any place of worship as it existed on 15th day of August, 1947.
- **Key provisions of Act**
  - **Section 3: Bars conversion**, in full or part, **of a place of worship of any religious denomination into a place of worship of a different religious denomination** — or even a different segment of same the religious denomination.
  - **Section 4(2)**: **Any suit or legal proceeding** with respect to conversion of religious character of any place of worship **existing on August 15, 1947**, pending before any court, **shall abate** — and **no fresh suit or legal proceedings** shall be instituted.
- **Significance**
  - Through it, **the state has enforced a constitutional commitment and operationalised its constitutional obligations** to uphold equality of all religions and secularism.
  - **Preserves non-retrogression** as an essential feature of India's secular values i.e, there **must not be any regression of rights.**

1.7.7. THE FAMILY COURTS (AMENDMENT) ACT, 2022

- The Act **to grant statutory cover to already established family courts in Himachal Pradesh and Nagaland has come to force.**
- The Act amends the **Family Courts Act, 1984 which provided an establishment of family courts by States to deal with disputes related to family and marriage.**
  - o The **central government is empowered to notify dates for the Act** to come into force in different states.
  - o The governments of Himachal Pradesh and Nagaland have set up Family Courts in their states under the Act. However, the **central government has not extended the application of the Act to these states.**

1.7.8. CENTRAL CONSUMER PROTECTION AUTHORITY (CCPA)

- Central Consumer Protection Authority (CCPA) completed two years of establishment.
- The CCPA was constituted to **promote, protect and enforce the rights of consumers** under the **Consumer Protection Act (CPA), 2019.**
  - o **CPA 2019** replaced the CPA 1986, and **widen its scope in addressing consumer concerns**.
- **About CCPA**
  - o It aims to protect the **rights of the consumer by cracking down on unfair trade practices,** and false and **misleading advertisements** that are **detrimental to the interests** of the public.
  - o It is empowered to:

- ✓ **conduct investigations into violation of consumer rights**
- ✓ **order recalls** of unsafe goods and services,
- ✓ **order discontinuation of unfair trade practices** and **misleading advertisements**,
- ✓ **impose penalties** on manufacturers/endorsers/publishers of misleading advertisements.
  - o It can **initiate class action to protect the rights** of even those consumers who are unaware of their rights.
- **Appeal** against any order of the CCPA may be filed before the **National Consumer Disputes Redressal Commission** within a period of 30 days from the date of receipt of such order.
- In the related development, Supreme Court directed the states to **start process to fill vacancies in State Consumer Disputes Redressal Commission (SCDRC) 6 months before vacancy arises** as mandated by the Consumer Protection Rules, 2020.
- SCDRCs are the **state level appellate body under the CPA 2019.**

Achievements of CCPA

- Issued **advisory to e-commerce entities on sale of AYUSH drugs.**
- **Issued Guidelines on** Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022.
- Working to develop a **framework to check fake reviews on E-Commerce websites.**

SMART QUIZ

You can scan this QR code to practice the Smart Quiz of Polity at our open test online platform for testing your understanding and recalling of the concepts.

2. INTERNATIONAL RELATIONS

2.1. INDIA- ISRAEL- UNITED ARAB EMIRATES - USA (I2U2)

Why in news?

Recently, the first Leaders' Summit of I2U2 (India, Israel, United Arab Emirates, and United States) was held virtually.

Key Highlights of Summit

Specifications	Detail
Food security	• UAE will invest **$2 billion to develop a series of integrated food parks** across India which would **deploy climate smart technologies** to reduce food wastage and spoilage, conserve fresh water.
Renewable energy	• Establishment of a **hybrid renewable energy project in Gujarat** consisting of **300 megawatts (MW) of wind and solar capacity** complemented by a battery energy storage system. • This contributes to India's goal of achieving **500 GW of non-fossil fuel capacity by 2030.**
AIM for Climate	• Leaders welcomed India's interest in joining US, UAE, and Israel in **Agriculture Innovation Mission for Climate initiative** (AIM for Climate). • It aims to help the agriculture industry meet the target set out in the Paris Agreement to **limit global warming** to **1.5°C above pre-industrial levels.**

About I2U2

* I2U2 was **first mentioned in October 2021**, following the **Abraham Accords between Israel and UAE,** to deal with issues concerning **maritime security, infrastructure, and transport** in region.
  * It was established as an **international forum** to discuss common areas of mutual interest, strengthen economic partnership in trade and investment in respective regions and beyond.
  * The I2U2, **referred to as the 'West Asian QUAD'.**
  * I2U2 **lacks a military angle and focuses on the economy**.
* It has identified **six areas of cooperation** in **water, energy, transportation, space, health, and food security.**
  * It intends to **mobilize private sector capital and expertise** to help modernize infrastructure, low carbon development pathways for industries, improve public health, and promote development of critical emerging and green technologies.

> **Abraham Accords**
> * Abraham Accords is a series of **peace agreements between Israel and several Arab countries, UAE being the first**.
>   * In 2020, it was **mediated by USA** between **UAE, Bahrain and Israel.**
> * The name **"Abraham" refers to the great father of the faith of the three Abrahamic religions:** Judaism, Christianity, and Islam.
> * It's a symbolic title that **promotes unity between Arabic and Jewish people** by recognizing the shared patriarch.

Significance of I2U2 for India

* **Indian Ocean**: It will facilitate greater engagement across western Indian ocean which lies between India, Suez Canal and South Africa.
  * **At least 12 percent of world trade passes through the Suez Canal** that links the Indian Ocean to the Mediterranean via the Red Sea.
* **Access to market**: It will help to enhance bilateral trade, **facilitate access to strategic markets in West Asia**, starting with the UAE, and could lead to significant job creation in India,
* **Ties with Middle East**: It will help India to **deepen its ties with the Middle East,** which serves India's energy and economic interests and has a large diaspora presence. Additionally, it will enhance **opportunity to expand ties with the US** beyond Asia.
  * India would help Israel to bridge the difference between Israel and Arab countries.
* **Strengthen global position:** After QUAD, **India's inclusion in I2U2 strengthens its global position.** Such developments align India with other major powers like Russia, Europe, and China to address its national and regional concerns strategically.
* **Security:** It would help to **minimise threats** like maritime piracy, illegal smuggling of drugs and weapons, and terrorism.

Issues associated with I2U2

- **Lack of clarity:** Strategic goals are not clear as many scholars see I2U2 as an organisation created to contain Iran, which could further **disrupt relation between India and Iran**.
- **Asymmetry among members:** The member nations have **asymmetric power as USA and Israel are militarily stronger** as compared to India and UAE.
- **Cooperation:** Countries in the I2U2 group have conflicting positions on how to deal with China, Russia and that may affect the future of the group and its prospects of success.
  - **For instance**, India abstains from voting on Russia- Ukraine war.
- **Security:** I2U2 may pose challenge for India i.e. **US-sponsored and backed Israel-Arab security deal would complicate India's 'strategic autonomy'** in the Middle East as a state that chooses not to take sides.
- **Internal conflict in west Asia:** The internal conflicts in the Arab world may lead to the significant partners of India like Iran splitting from the former into another group.
  - Developing situation might **lead to the creation of two groups**: China, Pakistan, Russia, Iran, and Turkey, while India, Israel, the USA, and UAE are likely to be on the other side.

Way forward

- **Addressing bilateral concerns:** Cooperation among the four countries is **necessary as there are difficulties in managing the complexities** of the West Asian region.
  - Balancing the rival countries diplomatically and strategically to maintain friendly relations can be done through cooperation among the four countries.
- **Cooperation**: I2U2 can expand by **advancing cooperation in new areas in the future** or by pursuing cooperation with other partners in both the Middle East and South Asia.
- **Development**: Concentrated efforts to strengthen infrastructure, climate change mitigation, public health, can help in development of west Asia.
- **Maintain peace**: I2U2 should aim to address growing concerns like energy, food security and economic growth in the west Asia region and South Asia along with steps towards maintaining peace in the region.

Related News

India, UAE and **France to hold their maiden Trilateral meeting**

- Objective of the meet is to **explore potential cooperation in the Indo-Pacific region** including in **Maritime Security, Humanitarian Assistance and Disaster Relief (HADR), Blue Economy**, Regional Connectivity, Cooperation in Multilateral Fora, Energy and Food Security, Startups etc.
- **India-UAE-France Trilateral and its Significance**
  - **Boost the cooperation in the Indo-Pacific under the trilateral framework,** comes amid increasing international concern over China's increasing military presence in the region.
  - **Advance strategic autonomy** in the Western Indian Ocean Region or Arabian Sea to ensure energy and regional security.
    - ✓ The **United Arab Emirates (UAE) and India are both countries of the Western Indian Ocean region while France is a resident power of the region** owing to the presence of two of its overseas departments—Mayotte and Reunion—and its inter services bases in the UAE and Djibouti.
  - It is critical for **India's global footprint** as well as the success of India's **Act East Policy**, **Look West Policy, Security and Growth for All in the Region (SAGAR)** etc.
  - **Opportunity to work towards shared goals** of 'free and open Indo-Pacific'.
- **Other initiatives for Indo Pacific** - BRICS, Quad, India-Japan-Australia, India-Australia-France (that would be revived under the new government in Australia) and prospective India-Indonesia-Australia.

2.2. CHINA PAKISTAN ECONOMIC CORRIDOR (CPEC)

Why in news?

China and Pakistan have decided to invite interested third country to join the CPEC project and are also planning to expand CPEC projects to Afghanistan.

About CPEC Project

- CPEC is a **3,000-km long route of infrastructure projects** connecting Pakistan's Gwadar port in Balochistan to China's northwestern Xinjiang region.

- CPEC is a **part of China's most ambitious project 'Belt and Road Initiative (BRI).**
  - The BRI, launched in 2013, aims to link Southeast Asia, Central Asia, the Gulf region, Africa and Europe with a network of land and sea routes.
- It will pave the way for China **to access the Middle East and Africa** from Gwadar Port, enabling China **to access the Indian Ocean** and in return China will **support development projects in Pakistan** to overcome the latter's energy crises and stabilising its faltering economy.
- India has repeatedly registered its protests over CPEC.

India's objections and apprehensions over CPEC

- **Violation of India's Sovereignty and Territorial Integrity:** CPEC is **unilaterally devised** by China and passes through parts of the Union Territories of Jammu & Kashmir and Ladakh which are under illegal occupation of Pakistan.
- **Perception regarding China's motives of strategically encircling India:** Experts believe that the CPEC will evolve China-Pakistan strategic cooperation into a bilateral military alliance against India.
- **Apprehensions about lack of transparency and financial viability:** There is also the apprehension that inability to repay loans will pave the way for Chinese intrusion in the internal affairs of defaulting countries particularly in light of recent Sri Lankan crisis.
- **Possible security implications:** That parts of the road built within the project can potentially act as a transit point for Islamic insurgents such as the East Turkestan Islamic Movement (ETIM).

India's overall approach to China's BRI

- **Active cooperation with its other international partners** to reap the economic benefits of regional connectivity and yet maintain its strategic dominance distinct from China.
  - For example, with Asia-Africa Growth Corridor (AAGC), India and Japan offers a benevolent and rules based alternative to the BRI.
- **Countering China's military rise:** India has strengthened its cooperation with US, Japan, Australia for the Quadrilateral Security Dialogue (Quad) to counter China's rise in the region.
- **Regional and sub-regional cooperation** such as the Bangladesh, Bhutan, India, Nepal (BBIN), and promoting its Neighbourhood First Policy through SAGAR initiative and Project Mausam. Through these, India seeks **to further its strategic aspirations and respond to the growing influence of the BRI.**

Why India's stance on BRI projects matters to China?

- India as an **immediate neighbour and an important player in the region** remains very relevant to Chinese neighbourhood policy.
- **Strengthening BRI's legitimacy**: Despite being unilaterally proposed, the BRI is/shall be bilaterally/multilaterally pursued. Taking India on board in discussion is much needed for supporting BRI's legitimacy.
- **Effective achievement of BRI's policy objectives:** The five priority areas of BRI namely, policy coordination, facilitating connectivity, unimpeded trade, financial integration and people-to-people bonds can be better achieved at various levels with Indian cooperation.
- **Global Peace:** An active Indian engagement would promote sustainable relationship which would go a long way in promoting international peace and prosperity.
- **Indian markets are a fertile ground for Chinese investment**: Involving India in the BRI negotiation would help dispel any mistrust that both countries may have against each other thereby paving way for increased investment and enhanced cooperation in other areas of international importance.

Conclusion

Indian Government is of the firm belief that connectivity initiatives must be based on universally recognized international norms. They must follow principles of openness, transparency and financial responsibility and must be pursued in a manner that respects sovereignty, equality and territorial integrity of other nations.

2.3. NEWS IN SHORTS

2.3.1. FORMER JAPAN PRIME MINISTER (PM) SHINZO ABE ASSASSINATED

- Shinzo Abe was Japan's longest-serving PM who pushed for more **assertive policies** to revitalise Japan economically and rebuild its role on the global stage.
  - India finds a special mention in his book **Utsukushii Kuni E** (Toward a Beautiful Country).
- **Major Contributions of Shinzo Abe**

Economics	• Also known as '**Abenomics**', it was started in 2013 to overcome the over **two decades of deflation** through **monetary easing**, **fiscal stimulus** and **structural reforms**.
Foreign Policy	• Under his **Arc of Freedom and Prosperity**, the Indo-Pacific region has emerged as a contemporary political, strategic and economic reality. • In 2007, he put forth the idea of **Quadrilateral Security Dialogue (QUAD)** for free flow of people, goods, capital and knowledge.
Defence	• Reinterpreted the Constitution to **allow Japanese troops to fight abroad** for the first time since World War II, as well as **revoked a ban on exercising the right to defend a friendly country under attack.**
Social	• **Womenics** which pushed companies to **increase their hiring of women** with the help of specially **tailored government policies** such as **preferential government contracting** to reward companies that hired women and government-funded day-care centres.

- **His contributions to India-Japan Relationship**
  - **Special Strategic and Global Partnership** between India-Japan for Peace and Security in the region,
  - Under Abe, **Japan made for a tenth of India's FDI with support for major projects** including the Mumbai-Ahmedabad High-speed rail corridor.
  - He **supported India's entry into four international export control regimes** (the Nuclear Suppliers Group (NSG); the Australia Group (AG); the Missile Technology Control Regime (MTCR); and the Wassenaar Arrangement (WA)) with increased cooperation in defence equipment and technology.
  - For his contributions, **Indian Government gave the prestigious Padma Vibhushan to him in 2021.**

2.3.2. ONE COUNTRY, TWO SYSTEMS

- China marked the 25th anniversary of Hong Kong's return and emphasized Beijing's control over Hong Kong under **One country, two systems (OCTS)**.
- **Background of OCTS**
  - It was originally proposed to unify China and Taiwan but rejected by Taiwan.
  - The idea resurfaced when **China started talks with Britain and Portugal,** who were governing Hong Kong and Macau, respectively, as colonies.
- **About OCTS**
  - Under this, **China proposed that, Hong Kong, and Macau**, can **have different economic and political systems** from that of **mainland China**, **while being part of China.**
  - Both regions **became Special Administrative Regions** of China with their **own currencies, economic** and **legal systems**,
    - ✓ However, **defence and foreign affairs** would be **decided by China.**
  - Also, Hong Kong has freedom of assembly and speech, and some democratic rights, which **are not available in mainland China.**
    - ✓ These freedoms are protected by the Basic Law, a mini constitution that guides relationship between Hong Kong and China.
    - ✓ Ba**sic law is valid for 50 years, till 2047 for Hong Kong** and **2049 for Macau.** But it is **unclear** what **will happen after this term.**

> **Hongkong and Macau**
> - British had taken control of **Hong Kong in 1842** after the **First Opium War**. In 1898, Britain and China signed Convention, which allowed the British to take **control of the islands surrounding Hong Kong on lease for 99 years**.
> - Macau, on the other side, had been ruled by the **Portuguese from 1557**.
> - In the 1980s, China initiated talks with both **Britain and Portugal for the transfer of two territories**.
> - Hong Kong returned to Chinese control **in 1997**, and Macau's sovereignty was transferred **in 1999.**

2.3.3. RUSSIA-UKRAINE DEAL TO RESUME GRAIN EXPORTS

- Recently, Russia and Ukraine **agreed to resume grain exports from Black Sea ports** (Odessa, Chernomorsk and Yuzhny) as part of a deal negotiated by United Nations and Turkiye (new name of Turkey).
  - The deal **makes provisions for the safe passage of ships**.

- **Significance of deal**:
  - **Ease global food insecurity**: It will **enable Ukraine to export 22 million tonnes of grain and essential goods such as sunflower oil**, stuck in Black Sea ports due to Russia's invasion.
  - **Ease Russia's export of fertilisers** essential for ensuring future high yields on crops and bring down food prices.
    - ✓ Russia accounts for **13% of world output** of fertilisers.
- **Importance of Russia and Ukraine for global food security**:
  - Both countries **account for more than a quarter of the world's wheat supplies** (Russia- 20%; Ukraine-8%).
  - **Ukraine** is the **world's fourth largest exporter of corn**, accounting for 16% of global exports.
  - **Ukraine** is the **world's largest exporter of sunflower oil**.

BLACK SEA PORTS

2.3.4. SANCTIONS WAIVER FOR S-400 MISSILE SYSTEM

- The US House of Representatives passed a legislative amendment that **exempts India from economic sanctions under the Countering America's Adversaries Through Sanctions Act (CAATSA) for purchasing the S-400** missile defence system from Russia in 2018 **to help deter aggressors like China**.
  - The US sees India as an important ally in its fight against China. **If sanctioned, the Quad collective, of which India is part, could be significantly impacted.**

- CAATSA is a law that came into effect in the US in 2017, and was **meant to punish countries having deep engagements with Russia, North Korea, and Iran using economic sanctions.**
  - However, the application of CAATSA is **not limited to the S-400, and may include other joint ventures for manufacturing or developing weapons in the future**, or any other kinds of major deals with Russia.
  - The US has already **imposed sanctions on Turkey under CAATSA for purchase of S-400 missile systems** from Russia.
- S-400 is a **mobile long-range surface-to-air missile (LR-SAM) system.**
  - S-400 Triumf has the capability to protect against almost all sorts of aerial attacks, including drones, missiles, rockets and even fighter jets.

2.3.5. 2022 SUPPLY CHAIN MINISTERIAL FORUM

- India recently adopted US' joint statement of the 2022 Supply Chain Ministerial Forum on cooperation of global supply chains.
- A partnership of 18 economies, **including India, US and European Union** has unveiled a four-point roadmap for building collective, long-term resilient supply chains (RSC) to counter risks arising from supply dependencies and vulnerabilities.
  - Roadmap was formulated in the backdrop of **supply chain summit that was held in US, in 2021.**
- Statement recognises **shocks to global supply chains from pandemics, wars and conflicts, extreme climate impacts**, and natural disasters.
- Building RSC roadmap is based on global principles of **transparency, diversification, security and sustainability.**
  - Currently, the global supply chain is **dominated by China.**
  - Measures are aimed at **reducing the dependence of 17 partners on Chinese supply chains** against the backdrop of its assertive actions, including on economic and trade issues.
  - India, Japan and Australia have also launched **Supply Chain Resilience Initiative (SCRI)** to counter China's dominance of supply chain in the Indo-Pacific region.
- **Significance of RSC**
  - **Risk reduction** by allowing visibility into all operations across the network.
  - **More efficient operations** leading to more investment in innovation and growth.
  - **Improved productivity.**

How does supply chain resilience work?

- Create a plan to synchronize all components
- Understand and leverage data
- Diversify suppliers and manufacturing partners
- Implement capacity and inventory buffers

2.3.6. ASIA ENERGY TRANSITION INITIATIVE
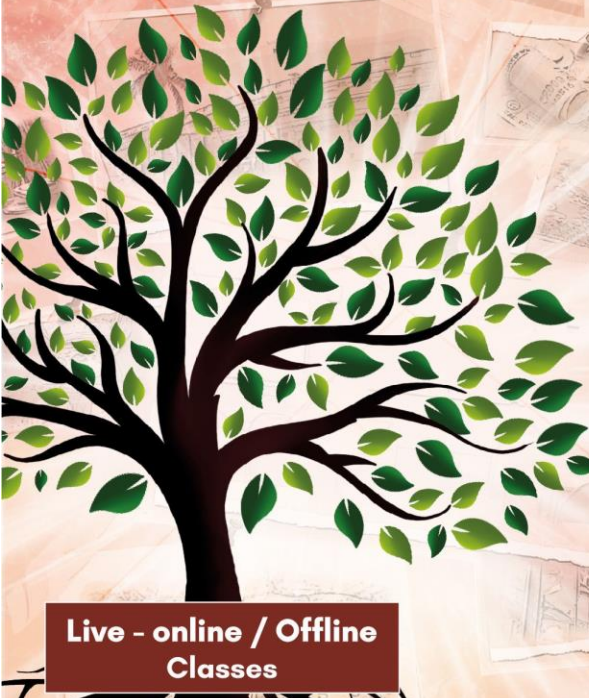
- **Japan plans to provide support to India to drive the transition** to clean energy under this initiative.
- It aims to **achieve sustainable growth and carbon neutrality in Asia** through energy transitions.
- It **includes a $10 billion in finance for renewable energy, energy efficiency and liquefied natural gas (LNG) projects.**

SMART QUIZ

You can scan this QR code to practice the Smart Quiz of International Relations at our open test online platform for testing your understanding and recalling of the concepts.

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3. ECONOMY

3.1. FIVE YEARS OF GOODS AND SERVICES TAX (GST)

Why in News?

01 July 2022, marked the fifth anniversary of the Goods and Services Tax (GST).

About Goods and Services Tax (GST)

- GST is a **comprehensive, multi-stage, destination based single domestic tax** on the consumption of goods and services.
- It was introduced through the Constitution (One Hundred and First Amendment) Act, 2016 for the '**One Nation, One Tax, One Market**' regime.
- **Levied** at **every value addition point**, it has subsumed several **indirect Central and State/UT level taxes** on goods and services (see **image**).
  - **Some taxes are still out of its ambit** such as- Excise Duty on **Alcohol**, Property Tax; Stamp Duty, **Petroleum crude, Diesel, Petrol, Aviation Turbine Fuel**, Natural Gas, Electricity Duty, **Basic Custom Duty**, etc.

- **Components of GST:** Based on inter-state and intra-state, it has four components- Central GST (CGST), State GST (SGST), Union Territory GST (UTGST), and Integrated GST (IGST).
  - **IGST** is applicable on **inter-state** supply of goods and services while others are intra-state. It is governed by the Centre and divided between respective states.
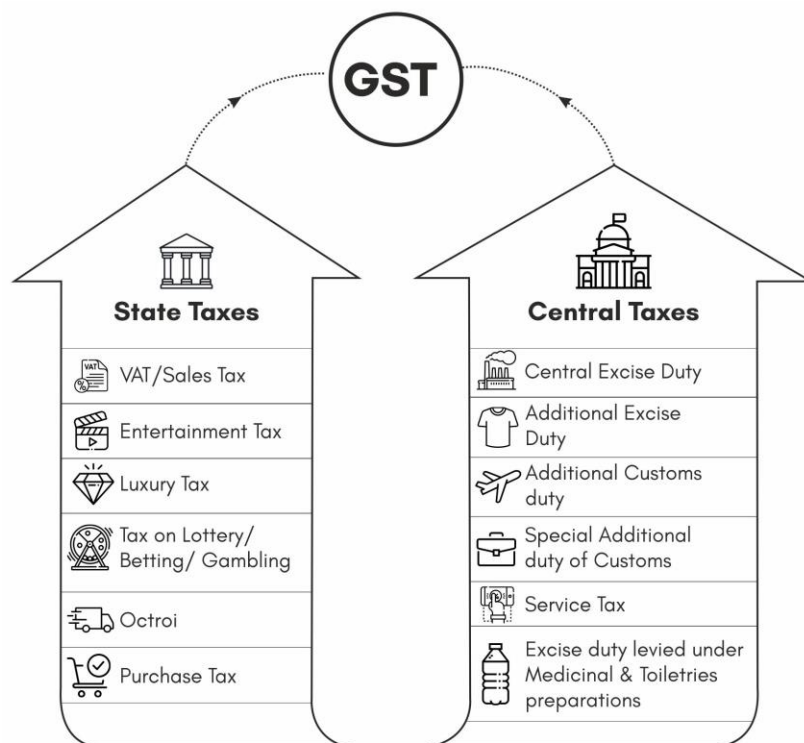
GST Significance and Achievements

A long-pending **indirect tax reform**, first discussed by the **Kelkar Task Force** report on **indirect taxes** in **2003**, GST offers several advantages over the previous regime (see **image**).

- **Other Advantages:**
  - Promotion of **economic federalism** through **GST Council**;
  - **Ease of Doing Business** through simplification of business processes and electronic tax fillings.
  - **Real-time data reporting**, allowing tax administrators to monitor tax compliances and potential revenue leakages.
  - **Help exploring the unexplored areas** of data analytics and audit through easy integration with other departments, regulators etc.

- **Achievements of GST:**
  - **Increase in tax base** from **63.9 lakh taxpayers** in **2017** to **1.38 crore** in **2022.**
  - **Increased collection with GST as top contributor** in central government revenues (₹5.9 lakh crore), followed by **Excise Collection** (₹3.90 lakh crore) and **Customs duty** (₹1.99 lakh crore).

- o **Overall, increase in monthly average collections** from ₹1.04 lakh crore in **2020-21** to ₹1.24 lakh crore in **2021-22**.

Challenges

- **Limited impact on GDP:** Against earlier estimates of 2-3% jump in GDP growth, its impact is limited due to economic issues such as trade wars, pandemic, Russia-Ukraine war etc.
- **Multiple Tax Slabs:** Against its proposed three-rate GST structure it has five slabs with some items (mainly sin goods and services) having an additional cess. Also, tax slabs of items are changed frequently.
- **Centre-State Tussle:** In the GST Council, the centre-state often argue over GST rates, GST Compensation cess payments etc.
  - o Lack of clarity on future of GST Compensation regime to states is another pain point as there has been severe strain on state revenues since the pandemic.
- **Unequal Representation: GST Council** has an unequal voting structure with central government vote having **one-third** of the total weightage while that of all states (together) have remaining **two-thirds** of the total weight.
  - o For voting-based decisions, it requires **a majority of not less than three-fourths** of the **weighted votes of the members present and voting.**
- **Exclusion of products and sectors** from the GST regime such as (petroleum products and power) resulting in cascading taxes.
- **Cumbersome Filling Structure:** It requires **technical** as well as **tax domain knowledge** to accurately fill GST.
- **Other issues** such as issues of **fake invoicing, technical glitches on tax portal** and apprehensions over impact of recent SC judgement of **GST Council decisions** being only **persuasive (non-binding)**.

Way Forward

- **Further simplification of tax structure** by reduction of number of tax slabs.
- **Optimising digital resources** to accelerate the process of claiming input tax credit. Also increase the capacity of the portal to handle larger numbers via faster data processing.
- **Robust compliance regime and technology driven intelligent systems** to catch the tax evaders and unethical practices through validation of invoices.
- **GST Council reforms** to promote **Cooperative federalism** and **consensus-based** decisions, helping to overcome anxiety over issues like GST compensation.
- **Constitute GST Appellate Tribunal** to fast-track adjudication process.
- **Bring other products including petroleum products under the purview of GST** to streamline the input tax credit with reduced product cost.

3.2. INFLATION TARGETING

Why in News?

If average **headline consumer price inflation (CPI)** in India stays **above 6%** in this quarter as well, for the first time RBI will have to explain why the Inflation Target was not maintained.

More on News

- Driven by a series of supply shocks such as **pandemic lockdowns, supply chain disruptions, elevated commodity prices** and **Ukraine war**, inflation is at peak globally.
  - o World Bank has pegged global median inflation at its highest level since 2008.
  - o For advanced economies like the USA, it is at its 41-year high.

CPI INFLATION

Ministry of Statistics and programme Implementation (MOSPI)
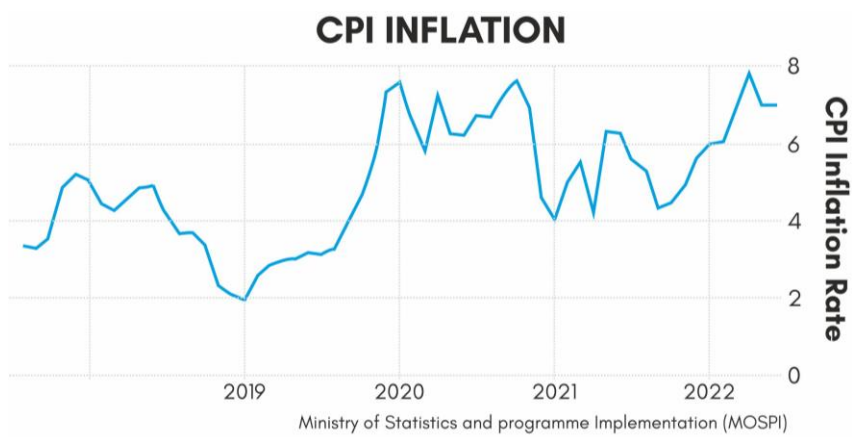
- Even in India, the CPI inflation has remained above the **upper limit** of its **tolerance band** (over **6%**) since January and projected to remain at **6.7%** for the current fiscal year by RBI (see **image**).

About Inflation Targeting Framework

- **Price stability** is a necessary precondition for **macroeconomic** and **financial stability**. Thus, price stability remains the **dominant objective** of the **monetary policy**.
- Under **Inflation Targeting Framework**, the central bank specifies an inflation rate as a goal and adjusts its monetary policy to achieve the specified annual inflation rate.

Flexible Inflation Targeting Framework in India

- **Inflation targeting** or **disinflationary policies** are part of many Central Banks policy since late 1970's and early 1980's as inflation has **plunged countries into instability** for a long time.
- In **1990**, **New Zealand** became the first nation to adopt an inflation targeting framework.
- Based on the **Urjit Patel committee** recommendation (**2014**), Government of India and RBI also signed the **Monetary Policy Framework Agreement** in **2015**.
- The **RBI Act, 1934** was amended in 2016 to:
  - Make **inflation targeting** the **nominal anchor** of RBI's monetary policy (**Section 45ZA of RBI Act)**,
  - Have a statutory and institutionalized framework for **Monetary Policy Committee (MPC)** (**Section 45ZB**).
- MPC is a **six-member body** to set the **policy rate** (repo rate) to achieve the **inflation target** while keeping in mind growth objectives.
  - The Inflation target is set by the Government of India, in consultation with the Reserve Bank, once in every **five years**.
  - Currently, it is **4% CPI inflation target** with **+/- 2%** as **upper** and **lower tolerance limit**.
- **Failure to Maintain Inflation Target:** If average inflation remains above upper tolerance or lower tolerance level for any three consecutive quarters, RBI shall set out in a report to the Central Government:
  - **Reasons for failure** to achieve the inflation target;
  - **Remedial actions proposed** to be taken by the Bank;
  - **Estimate of the time-period** within which the inflation target shall be achieved pursuant to timely implementation of proposed remedial actions.

Negatives of High Inflation
- High and Persistent Inflation decreases savings due to negative returns
- it undermines macroeconomic stability and erodes external competitiveness
- It can widen Current Account Deficit due to increased demand for gold as hedge
- Increased financial instability risk on foreign currency borrowers due to weakening of exchange rate
- It impedes economic growth by impacting allocative efficiency of economy
- It worsens income distribution as poor keeps higher cash in-hand

BENEFITS OF INFLATION TARGETING

Transparency
Inflation as an anchor provides greater operational independence and it is well understood by the public at large, making it simple and easy to communicate

Credibility of Objectives
Single objective of monetary policy promotes rule-based medium-to-long-term path with more likelihood of success

Predictable Policy Framework
With price stability as an unambiguous and sustainable goal, the policy becomes predictable

Other Benefits
Reduced inflation volatility, reduced impact of shocks and anchoring of future inflation expectations from private sector

Monetary Policy Committee (MPC)
- **Composition:** 3 internal members of RBI (including RBI Governor as Chairman) and 3 external members appointed by government.
- **Decision-making: One vote** of **each member** with RBI Governor having a **second or casting vote** in case of equality of votes.
- **Meeting:** MPC is required to meet **at least four times** in a year.
- **Quorum:** At least four members present for the meeting of the MPC.

Limitations of Inflation Targeting

Though the MPC has kept inflation within tolerance band since its adoption the framework has shown certain limitations such as:

- **Accuracy:** It is inherently a **medium-term framework** due to long and variable lags in monetary policy transmission, leading to ambiguous perceptions of the policy stance.
  - It becomes even more challenging due to **limited data on limited indicators**.
- **Effectiveness:** It can't **control all parts of inflation** with same effectiveness as it is designed to control inflation due to **demand factors** rather than supply factors.
  - E.g. RBI has hiked **policy rate** by **90 basis points** this year but inflation is still above the upper band due to a series of **global supply shocks**, especially in food and fuel.
- **Risk of Hurting Poor:** It carries risk of **hurting poor more** as in low-income societies with high inequities, an inflation rate of **4% (+/- 2%)** seem callous.
  - E.g. **8%** food inflation and **2%** in rest would yield **5% CPI inflation**. It is well within limit but it can **push** many people into **distress or poverty** as they spend over 50% income on food.
- **Issues in fixing and maintenance** of target inflation rate as:
  - **Persistent low inflation** increases the risk of **deflation**, i.e. fall in prices of goods and services due to **lower growth rate** and **higher unemployment**. It has a **negative impact** on the **Financial System** due to reduced savings and in turn lower profitability of the financial sector.
  - **Higher inflation** increases the risk of **stagflation**, i.e. rising prices with high unemployment and slow economic growth.

Way Forward

Though the surging global food and fuel costs have eased a lot recently, the larger and repeated supply shocks carry the risk of **disrupting inflation expectations** if not addressed or in case monsoon behaves adversely. Therefore, to meet the multiple challenges the situation warrants:

- **Pre-emptive monetary policy action** to reinforce credibility of monetary policy intent and action to fight supply-side inflation and contain the negative impact on growth.
- **Improving quality and frequency** of data collection and analysis through online data collection, Artificial Intelligence based data processing systems etc.
- **Coordinated monetary and fiscal policy responses** to tackle the global supply shocks. E.g. helping kharif harvest can help ease supply side woes, particularly of oilseeds, cotton, pulses and cereals to combat inflation.
- **Use of different inflation targets** to serve different classes. E.g. lower inflation (3-4%) tolerance on food items or staples consumed by the poor to kick start policy action can make it more beneficial for all classes.

3.3. INDIAN RUPEE (INR) DEPRECIATION

Why in News?

To **stem Indian rupee (INR) slide** and **boost forex inflows**, RBI has relaxed norms for **foreign investment** in **debt**, **external commercial borrowing (ECB)**, and **Non-Resident Indian (NRI) deposits**.

More on News

- Amid intense inflation on account of high food and fuel price, risk of recession in USA and record portfolio outflows, the INR is facing its worst plunge in last four years-
  - Touching **historic low of 80 per dollar mark** in **July**- over 7% depreciation since the start of 2022.
  - Currently, it is lower than over 20% fall during Recession of 2008 and over 11% during Taper Tantrum of 2013.
- In fact, the other currencies including strong currencies like Euro and British pound have also been affected. E.g. For the first time in 20 years the euro-dollar exchange rate became equal in July 2022.

About Exchange Rate and its Influencing Factors

Exchange rate is the **price of one currency in terms of another currency.**

- It can be **fixed** (exchange rate decided by central banks) or **floating** (decided by demand and supply) exchange rate.
- Floating (flexible) exchange rate is determined by the **foreign exchange market or forex** based on various factors (see **image**).
- In India, the exchange rate management has evolved from the **fixed exchange rate regime** (in line with prevalent **Bretton Woods System**) to **market-determined exchange rate** since March 1993.
  - The role of RBI and central government is limited to just interventions necessary to ensure orderly conditions in the forex ecosystem.

FACTORS INFLUENCING EXCHANGE RATE

Rate of Interest. E.g. High interest can attract foreign investors

Inflation Rate. E.g. High inflation reduces foreign investor interest

Political Stability, as it increases investment protection

Government Debt, as high debt leads to fiscal consolidation

Export-Import, as higher export increases demand for its currency and vice-versa

Speculation, i.e. investors projections for future influencing demand

Economic Outlook as events like recession reduces foreign investors interest

Special considerations such as high stability which increases demand as safe-haven

Reasons for recent fall of INR

- **Rising crude oil prices and of other commodities** like edible oils due to the Russia-Ukraine War, demand-supply and other geopolitical reasons.
  - It widens India's trade deficit as it imports around 85% of its crude oil demand.
- **Global Monetary Policy Tightening**, especially from US Federal Reserves to tame its highest inflation since 1980's (9.1% in June 2022).
- **Sustained capital outflows** from Foreign Portfolio Investors (FPIs) by selling off assets and fleeing to safe haven due to high valuations, rising US bond yields and its recession risk.
  - By mid-July, FPIs had pulled out around $29.6 billion from the Indian equity and debt market, increasing demand for US dollar while increasing supply of INR.
- **Domestic factors** such as high inflation, widening Current Account Deficit (CAD) due to rising trade deficit etc.

Impact of Rupee Depreciation

While a higher exchange rate boost exports through increased competitiveness of Indian exports it can have significant negative impacts such as:

- **Widening of Current Account Deficit** and **Balance of Payments** as India **is a net importer**.
- **Increased Import Bill** for raw materials, equipment or other supplies procured from overseas.
- **Higher Inflation** because of supply shocks in key import commodities such as coal, crude oil, edible oil, etc.
- **Decline in Import Cover** due to increased import price. E.g. the import cover of India is now at 10 months of import, down from 15 months of import cover in September 2021.
- **A continuously sliding exchange rate discourages foreign investors** from making fresh investments, causing further loss of value in dollar terms.

Government and RBI measures to arrest Rupee slide

To reduce imports, control inflation, boost government revenues for reduced deficit and improve FPIs sentiment, the Government and RBI has taken various steps such as:

By Government	• **Increase of customs duty** on gold (from 10.75% to 15%). India is the **2nd highest consumer** of gold with imports worth $46 billion in FY22. • **Imposition of cess** and special additional excise duty on **export of petrol, diesel, and aviation turbine fuel.**

By RBI	• **Policy rate hike** from RBI to curb domestic inflation.
	• **Forex market interventions** (selling dollars) to curb excess volatility and smoothen the rupee's fall.
	• **Additional arrangement** for invoicing, payment and trade settlements between India and other countries in **rupee terms**. Under this-
	   o Indian importers could make payment in INR to the **Special Vostro account** of the correspondent bank of the partner country.
	     ✓ **Vostro** (Latin: Yours) Account is an account a correspondent bank holds on behalf of another bank.
	     ✓ **Nostro** (Latin: Ours) Account is another set of account between two banks for international trading.
	   o The exporters will be paid in INR from the balances in the designated vostro account of the correspondent bank of the partner country.
	• **Higher interest rates** on fresh Foreign Currency Non-Resident (Bank) [FCNR (B) and Non-Resident External (NRE) deposits.
	• **Relaxation** of the interest rate and amount ceiling for **External Commercial Borrowing loans**.
	
	NOSTO VOSTRO Accounts
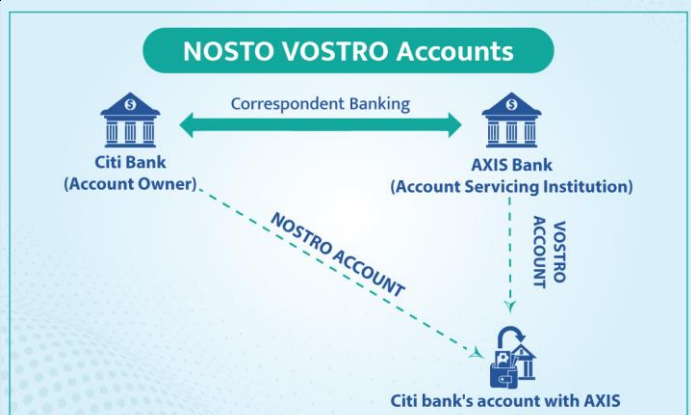
Way Forward

Strong fundamentals and **positive economic outlook** are the strengths of INR. But a **free fall** in the exchange rate can damage macroeconomic stability. Therefore, it is vital that the rupee finds its level in line with its fundamentals in a least volatile manner. This can be achieved by:

* **Boosting FPIs confidence** into the Indian market by arresting the continuous slide in the exchange rate through inflation control and enhancing government revenues.
* **Curtailing Imported Inflation** through collective action of fiscal and monetary policy.
* **Judicious Use of Forex Reserves** to ensure that no undue pressure comes on rupee from slowdown in exports and imports.
* **Encouraging Big Companies** to become part of major global indices such as MSCI and FTSE, increasing weight of Indian equities in these indices and compensate for FPIs outflow.
* **Expediting India's entry into Global Bond Indices** to increase forex inflows, boosting forex reserves among others.

3.4. FINANCIAL SERVICES INSTITUTION BUREAU (FSIB)

Why in News?

Appointments Committee of the Cabinet (ACC) has approved a **government resolution for establishing the Financial Services Institutions Bureau (FSIB) in place of the Banks Board Bureau (BBB).**

About Financial Services Institutions Bureau (FSIB)

* FSIB is set up**, under the Department of Financial Services (DFS), Ministry of Finance, to:**
  * **Recommend persons for appointment as whole-time directors and non-executive chairpersons** on the Boards of financial services institutions (including public sector banks (PSBs), public sector insurers (PSIs) and financial institutions (FIs)).
  * **Advise on** certain other **matters relating to personnel management** in these institutions.

- o **Promote excellence in Corporate Governance** in Public Sector Financial Institutions.
- After the formation of FSIB, **all assets, interests, and liabilities of BBB stand transferred to FSIB.**
- **Other major functions of FSIB include:**
  - o To advise the Government on **matters relating to appointments, transfer or extension of term of office** and termination of services of the said directors.
  - o To **advise the Government on the desired management structure** at the Board level for PSBs, FIs and PSIs.
  - o To build a **databank containing data related to the performance** of PSBs, FIs and PSIs.
  - o To advise the Government on **formulation and enforcement of a code of conduct and ethics** for whole-time directors in PSBs, FIs and PSIs.
  - o To **help PSBs, FIs and PSIs in terms of developing business strategies** and capital raising plan etc.
- **Composition of FSIB**
  - o **Chairperson of FSIB**, to be nominated by the Central Government who shall be:
    - ✓ a retired official from the banking sector or a regulatory institution, or
    - ✓ a business person of repute with sufficient knowledge of the financial sector, or
    - ✓ a person with at least 25 years of experience in public administration with experience in banking and the financial sector.

> **About BBB**
> - **BBB was formed in 2016 as an autonomous recommendatory body** with the Centre notifying **amendment to the Nationalised Banks (Management and Miscellaneous Provisions) Scheme, 1980,** that provided a legal framework for the composition and functions of the BBB.
>   - o It was **recommended by P.J. Nayak committee** set up to prescribe ways to resolve the issues plaguing India's public banking sector.
> - It was **established with a view to improve the Governance of Public Sector Banks (PSBs)** by recommending for selection of heads of PSBs and help Banks in developing strategies and capital raising plans.
> - BBB was a **part of the 7-point strategy of the Indradhanush Mission** aimed at revamping PSBs.

> **Why there was need for replacing Banks Board Bureau (BBB)?**
> - **Slow appointment process:** The weighted average time taken for recommending the positions in PSBs was 76 days, in insurers (36 days) and in FIs (189 days).
> - **Legal hurdles over its power and jurisdiction:** Delhi High Court last year ruled that the BBB couldn't select the general managers and directors of state-run general insurers, as it was not a competent body.
> - **Lack of autonomy:** Government continued to exercise its authority over PSBs as credit, expansion and even appointments of chairmen have to go through ACC.

  - o **Ex officio members:** Secretary in charge of DFS, Department of Public Enterprises, Chairperson of the Insurance Regulatory and Development Authority of India (IRDAI), Deputy Governor of RBI.
  - o **3 persons with subject matter knowledge relating to PSBs and FIs** and **3 persons with subject matter knowledge relating to PSIs** (to be nominated by the Central Government) as part time members.

Significance of FSIB

- **Reduction in time taken for appointments:** Due to improvement in processes for scrutiny and leveraging on technology there will be a significant reduction in time taken for appointments in PSBs, FIs and PSIs.
- **Better Human Resource (HR) Management:** FSIB will help to develop a robust leadership succession plan for critical positions that would arise in future through appropriate HR processes, including performance management systems.
- **Improved corporate governance:** With mandate like advising the government on formulation and enforcement of a code of conduct and ethics for whole-time directors in PSBs, FIs and PSIs the overall governance will improve.
- **Transparency in selection process:** Promotions and recruitments happened at the will and mercy of the government. The BBB, and now the FSIB, aims to prevent such red-tape and promote people based on merit.

3.5. EASE OF DOING BUSINESS (EODB)

Why in News?

The Union Minister of Finance released the **5th assessment report** of States and UTs under **Business Reforms Action Plan (BRAP) 2020**.

More on News

- BRAP is prepared by the **Department for Promotion of Industry and Internal Trade (DPIIT)**, since **2014**, to steer **Ease of Doing Business reforms** across the country.
- It has categorized States/UTs into **Top Achievers, Achievers, Aspirers** and **Emerging Business Ecosystems** based on **301 reform points** covering **15 business regulatory areas**.
  - This includes areas such as **access to information**, **single-window system**, **labour, sectoral reforms**, **reforms spanning across the lifecycle of a business** etc.
- **Objective of BRAP: Boost investor confidence**, **foster business friendly climate** and **augment Ease of Doing Business** across the country by introducing an element of **healthy competition** among states.

About Ease of Doing Business (EoDB)

- It is an indication of the **business climate** of a nation. It is based on belief that there is a **positive correlation** between the business regulatory environment and economic outcomes.
  - **World Bank** started its promotion in **2002** through EoDB rankings; discontinued in **2021** due to **data irregularities**.
  - **India** ranked 63rd in EoDB Rankings 2020.
- It seeks to **streamline existing regulations** by simplifying the life cycle of a business and create an **investor-friendly ecosystem** by:
  - Replacing redundant regulations/procedures with **simple and transparent rules**.
  - **Protection of property rights** of business etc.

BRAP Rankings

TOP ACHIEVERS	Andhra Pradesh, Gujarat, Telangana, Haryana, Karnataka, Punjab and Tamil Nadu
ACHIEVERS	Himachal Pradesh, Madhya Pradesh, Maharashtra, Odisha, Uttarakhand and Uttar Pradesh
ASPIRERS	Assam, Kerala, Goa, Chhattisgarh, Jharkhand, Kerala, Rajasthan and West Bengal
EMERGING BUSINESS ECOSYSTEMS	Andaman & Nicobar, Bihar, Chandigarh, Daman & Diu, Dadra & Nagar Haveli, Jammu & Kashmir, Manipur, Meghalaya, Nagaland, and Tripura

Sikkim, Mizoram, Arunachal Pradesh, Lakshadweep and Ladakh are not included due to insufficient user data

Life cycle of a business

Starting a business → Dealing with construction permits → Getting electricity → Registering property → Getting credit → Protecting minority investors → Paying taxes → Trading across borders → Enforcing contracts → Resolving insolvency

Significance of EoDB

- **Boost entrepreneurship and economic growth** through improved market efficiency and reduced regulatory burden**.**
- **Attract Foreign Investment** by changing investor sentiments.
- **Encourage exports** by lowering the cost of business and improving competitiveness.
- **Streamlining the regulatory framework.** Low regulatory burden helps entrepreneurs to devote time on productive activities.
- **Employment Generation** through increased economic activities along with formalization of the economy.

Government Initiatives to improve EoDB
- **Launch of web-based SPICe+ and AGILE-PRO form** to save time and effort in company incorporation.
- **Online Building Permission System (OBPS)** with defined timelines, online certifications etc.
- **Dedicated Commercial Courts** in Delhi and Mumbai and a modern insolvency regime through **Insolvency and Bankruptcy Code (IBC)** to improve insolvency resolution.
- **India Customs Electronic Gateway (ICEGATE)** to reduce time and cost of export and import and fast-tracking clearances of consignments at ports.
- **Co-operative Federalism** by engaging States and UTs through BRAP, taxation reforms like **GST,** elimination of incorporation fees for small businesses etc.

- **Reducing number of days** required for getting electricity connection (from 105 days in 2014 to 53 days in 2019).
- Passage of the **Taxation laws (amendment) Act, 2021** which scrapped the retrospective taxation bringing certainty in taxation laws etc.

Issues/Challenges in EoDB Reforms

- **Operational challenges:**
  - **India is still lagging in critical parameters** of business cycle like enforcing contracts with **increasing delays at IBC** due to vacancies and other reasons.
  - **Uncertain Policy Environment** leading to frequent policy changes including use of tariffs and other measures.
  - **Infrastructure bottlenecks** due to persistently low capital expenditure and developmental backlog.
  - **Other concerns like power shortages, corruption, governance issues** etc.
- **Ideological and procedural issues:**
  - **Libertarian bias** as the idea of EoDB is largely based on capitalist view of **eliminating regulations and barriers to investment**, **push for market-friendly reforms**, **reduced labour protections**, etc.
  - **Excessive focus on EoDB ignores deeper structural, social, or political issues** which carries risk of overlooking real and lasting structural reforms.
  - **A one-size-fits-all approach for all parameters, businesses and regions of India** can be fatal as the impact on surroundings can and overall context is variable.

Way Forward

- **Improve Governance** through:
  - **Clear Timelines** on construction permits, environmental clearances etc. mandated through the **Public Service Delivery Guarantee Act** (or equivalent) in all states/UTs.
  - **Establishment** of more dedicated **commercial courts** and a dedicated division/bench in all High Courts to **hear and resolve the commercial disputes**.
  - **Encouraging States** to enact **Comprehensive Uniform Building Code/building by-law** applicable to the entire State.
  - **Digitization of all land records** with unique ID and publicly available Records of Rights.
- **Improve Policy Environment** through:
  - **A Comprehensive Policy**, incorporating EoDB requirements as well as a clear vision for a stable policy environment.
  - **Ensure proper implementation** of laws and follow-ups to remove bureaucratic hurdles, resolve power issues etc.
- **Improve Developmental Climate** through:
  - **Understanding the dynamics of each business** and balancing the different socio-economic needs**. E.g., balancing business interests and labour interests.
  - **Infuse a culture of learning** among states/UTs from each other's best practices through further reforms in BRAP- recording feedback of states/UTs on each other's policies.

3.6. DIGITAL INDIA

Why in news?

While addressing the **Digital India Week**, Prime Minister (PM) said that **digital technologies and Direct Benefit Transfer** into the accounts of beneficiaries have **helped India save Rs. 2.23 lakh crore** from middlemen.

About Digital India

- It is a flagship programme launched (2015) by **Ministry of Electronics and Information Technology (MeitY)** with a **vision to transform India into a digitally empowered society and knowledge economy.**

NINE PILLARS OF DIGITAL INDIA

Broadband highways

Universal access to phone

Public internet access programme

E-Governance- reforming government through technology

eKranti- electronic delivery of services

Information for all

Electronics manufacturing- target NET ZERO imports

IT for jobs

Early harvest programmes
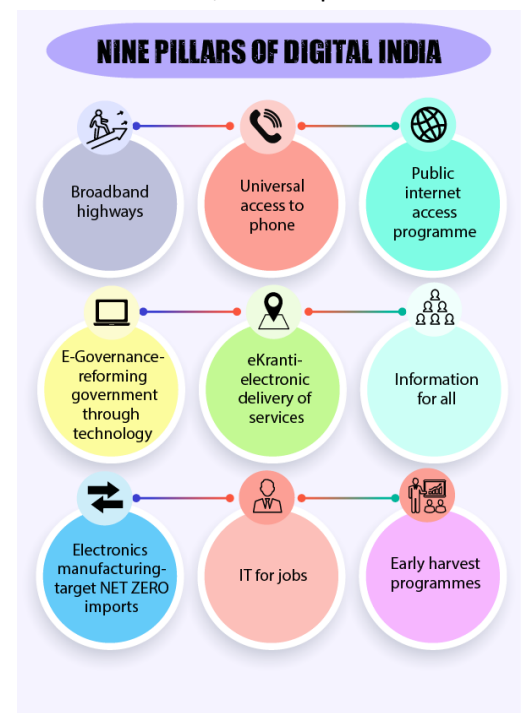
- o It will **ensure digital access, digital inclusion, digital empowerment** and bridge the digital divide.
- It is an **umbrella programme that covers multiple projects** of various Central Ministries/Departments and States/UTs.
- **Vision:**
  - o Digital infrastructure as a utility to every citizen.
  - o Governance and Services on demand.
  - o Digital empowerment of citizens.

Initiatives launched during the event
- **Digital India Bhashini-** It will **enable easy access to internet and digital services** in Indian languages.
- **Digital India GENESIS (Gen-next Support for Innovative Startups)-** It is a **National Deep-tech Startup Platform**, to discover, support, grow and make successful **startups** in Tier-II and Tier-III cities of India.
- **Indiastack.global-** It is a **global repository of key projects implemented under India Stack** like Aadhaar, UPI, Digilocker, Cowin Vaccination Platform etc.
  - o India Stack is the **name for a set of open APIs and digital public goods**.
- **myScheme-**It is a **service discovery platform** facilitating access to Government Schemes.
- **C2S (Chips to Startup) Programme-** It **aims to train specialized manpower in the area of design of semiconductor chips** at Bachelors, Masters and Research levels, and act as a catalyst for growth of Startups involved in semiconductor design in India.
  - o It is **part of the India Semiconductor Mission**.
  - o The **first cohort of 30 Institutions** to be supported under C2S Programme was announced.
- **Meri Pehchaan- National Single Sign-On (NSSO) for One Citizen Login-** It is a **user authentication service** in which a single set of credentials provide access to multiple online applications or services.

Key initiatives under Digital India and their significance:

Key area	Initiatives	Significance
e-Governance	Common Service Centre	**Ensure socially, financially and digitally inclusive society**.
	Direct Benefit Transfer (DBT)	**Faster flow of funds, accurate targeting of beneficiaries**, de-duplication and reduction of fraud.
Agriculture	eNAM (National Agriculture Market)	Ensure **remunerative prices to farmers**, reduce wastage of crops etc.
Health	eSanjeevani	**Plugs the digital health divide** existing between urban and rural areas.
	CoWIN (Covid Vaccine Intelligent Network)	India crossed **200 crore vaccine doses** within 18 months.
Education	SWAYAM	**Bridge digital divide for students** who remained untouched by digital revolution and have not joined the mainstream knowledge economy.
Finance	PM Jan-Dhan Yojana	Ensure **universal access to banking facilities**, financial literacy, access to credit, insurance and pension facility.
Skills	PMGDISHA	**Bridge digital divide**, specifically targeting the rural population.
Digital Infrastructure	CERT-IN	**Securing Indian cyber space** through forecasting, information dissemination etc. on cyber incidents.
Internal Security	Crime and Criminal Tracking Network & Systems	Creation **of IT-enabled-state-of- the-art tracking system** around 'Investigation of crime and detection of criminals'.

Issues and challenges:

- **Rural-Urban Digital divide**: Due to **unreliable electricity, unaffordability, topographical challenges, and high cost of infrastructure**, rural India faces challenges in securing access to functional internet.
  - o Digital divide has ramifications on education, health, mobility, safety, financial inclusion etc.
- **Digital illiteracy**: It is **prevalent in most of the towns and villages** in India, especially among the older generation. According to government data, only **20% of Indians know how to use digital services.**
  - o **Lack of sufficient content in the local language** is another barrier for a very large population that is not well-versed in English.
- **Digital Gender inequality**: **National Family Health Survey Report-5** (2019–21) suggests that **33.3% of the female population had ever used the internet,** as compared to 57.1% of male population.

o During Covid-19 pandemic when education compulsorily shifted online, **female students had lower access to digital networks** than male students, due to varying family attitudes and biases.
- **Slow and delayed infrastructure development**: According to a study, India's digital infrastructure is inadequate to tackle the growing increase in digital transactions.
- **Cyber security**: **Extent of digital connectivity** to remotest villages and digitisation across sectors has necessitated focus on cyber-security.
  o Also there is a **lack of trained cyber security professionals** in India.
- **Data Protection and Privacy**: India is **yet to have a comprehensive data protection law regime** to safeguard the data and privacy of citizens.
- **Absent of net neutrality policy** in India: Protecting net neutrality is critical for the success of Digital India as any sort of **prioritisation, throttling or blocking of web can strifle digital ecosystem** in India.
- **Private participation: Their participation in government digital projects is poor** because of long and complex regulatory processes.

Way forward

- **Awareness programme to educate and inform the citizens**, especially in rural and remote areas about the benefits of digital and internet services.
- **Addressing the digital divide is needed for inclusion and equity**. Initiatives like National Digital Literacy Mission and PMGDISHA need to be ramp up to increase digital literacy.
- **Private sector should be encouraged** to develop last mile digital infrastructure in rural and remote areas. To encourage them, there must be favourable taxation policies, quicker project clearance etc.
- Government should bring out a **'comprehensive legal framework' to regulate the online space, including bringing separate laws on data privacy, cybersecurity**, telecom regulations, and harnessing non-personal data to boost innovation in the country.
- **Roll out digital programmes** for skilling, re-skilling and up-skilling as per needs of emerging technologies (AI, big data, blockchain etc.) and develop expertise in the cybersecurity domain.

3.7. ENERGY POVERTY

Why in News?

At the **G-7 Summit** in **Germany**, the Indian Prime Minister highlighted the issue of **energy poverty** and the need for **equal energy access** for the impoverished global south and the rich global north.

About Energy Poverty and its reasons

Energy poverty, also referred as **fuel poverty**, is usually defined in **two ways** as- **Energy Accessibility**, i.e., lack of access to electricity, and **Energy Affordability**, I.e., household dependence on inefficient and polluting energy sources such as burning of solid biomass.

Other Reasons for Energy Poverty

Economic Reasons
- Low income or Poverty in a country, limited nation or people buying ability.
- Perceived investment risks etc.

Technological Reasons
- Lack of Technology to tap available energy resources, especially renewable energy such as Solar energy.
- Inefficient homes and equipment etc.

Natural Reasons
- Unequal Distribution of Energy Resources such as coal, fossil fuels etc.
- Locations. E.g. Hilly or Island natons.

Governance Reasons
- Poor planning in the power sector.
- Inefficient Utilities leading to waste of energy. E.g. High transmission and distribution loses.

Other Reasons
- Rise in Energy prices due to War or Geopolitical reasons. E.g. Russia Ukrane war.
- Recessionary impact on National and Regional Economies. E.g Sri Lanka.

- Nearly **three billion** people are energy-poor people in **Latin America, Asia,** and **Africa** alone.
- The risk of energy poverty in Europe and other parts have also increased due to rising energy prices.

Impact of Energy Poverty

- **Economic Impact:** Reduced **standard of living** and **productivity of people** due to lack of access to energy. It also traps poor people in a **vicious cycle of poverty** due to increased spending of money and time on energy resources, especially in rural and remote areas.
  - E.g. in Africa nearly **30%** of the population lack access to electricity.
- **Health Impact:** Energy Poverty has a **negative impact** on years of life, increases **Infant Mortality Rate** etc. due to indoor pollution, lack of access to clean water etc.
  - According to WHO, indoor pollution causes an estimated **1.3 million deaths per annum in low-income countries** due to use of biomass.
  - Similarly, in cold countries it leads to **winter deaths and other health concerns.**
- **Environmental Impact:** Energy poverty often acts as a barrier to introducing measures to **reduce energy use** and **carbon emissions** due to affordability concerns.
- **Political Impact:** In the long-term, it has serious consequences on **autonomous development** of a nation due to unemployment, poverty etc. with risk of social unrest.
  - E.g., **Yellow vest movement in France** was primarily motivated by rising fuel prices.

These impacts are universally felt across the globe. But the severity is more prominent in developing countries like India. Energy Poverty combined with **lower purchasing power** and **prevalent developmental gap** compounds the issue.

Challenges in addressing Energy Poverty

While India has taken number of initiatives to make **energy accessible and affordable**- **domestically and globally**- it faces certain challenges such as:

- **Dominance of Atlantic countries** in global energy governance via institutions like **International Energy Agency**.
- **Geostrategic issues:** Individual interests like OPEC's interest in high fuel prices or NATO's sanctions on Russia have increased the energy deficit.
  - Russia with 12.6% of the world's oil production.
- **Under-investments in Fossil Fuels:** Climate Change has also led to significant decline in global exploration and production activities, leading to energy poverty.
- **Tightened Environmental Regulations:** It deepens household energy poverty due to affordability issues for households using non-clean energy.
- **Absence of Distributive Justice:** Due to Climate Change, both developed and developing countries must limit their carbon footprint, which puts developing countries at a disadvantage.
  - Developing countries have had a negligible part in the **historical emissions** and require more energy to **bridge the developmental gap**.

India's initiatives to address domestic and Global Energy Poverty

Pradhan Mantri Sahaj Bijli Har Ghar Yojana-Saubhagya for energy access to all remaining unelecrified households in rural and urban area.

Bachat Lamp Yojana to promote energy-effcient lighting, distribution of **solar study lamps** etc. to people

One Sun One World One Grid Declaration (OSOWOG) to aid in developing a worldwide clean energy grid

PM-KUSUM (Praddhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan) Scheme for farmers energy security and increase share of non-fossil-fuel sources

International Solar Alliance for increased solar energy technologies deployment for energy access, energy security, and driving energy transition in its members

- **Domestic Challenges:** Nations have their own domestic challenges. E.g. India faces domestic challenges like-
  - **High import dependence** in fulfilling national demand for energy;
  - **High debt, slow pace of reforms and investment issues** in power sector;
  - **Remote locations** where it is difficult to connect to the grid supply;
  - **Conflict between energy poverty and mitigating climate change** which limits use of available resources like coal, hydropower etc.

Way Forward

- **Reforms in Global Energy Governance** by utilizing platforms like the **G-20** and **BRICS** to focus more on energy access, poverty and security.
  - E.g. establishing a global intergovernmental organisation to provide **financial, technical and knowledge assistance** towards just energy transition, energy access and justice, and energy and climate.
- **Addressing Economic Inequalities** as energy poverty is directly linked to purchasing power, influencing our choices of energy.
- **Governance Reforms** in the power sector for innovative policies, better planning and improved efficiency from local to national level.
- **Innovation and Research** to develop new and cheaper energy resources and technologies, for **cost-effective** and **reliable electricity** access to all. E.g.
  - **Use of smart appliances** that adjust their consumption based on time of use tariffs. Increasing pace of Thorium-based nuclear reactors development.
  - **Use of Geospatial mapping** to plan electricity distribution and identify best-suited technologies.
- **Comprehensive approach**, i.e. using off-grid, mini-grid, national and global grid solutions to overcome barriers of topography and resource scarcity.
- **Protecting Vulnerable Sections** in society against price rise with access to clean energy sources, helping to alleviate the adverse effect of **environmental regulations** as well.
  - Assistance measures such as improved cooking stoves or biogas can help in giving access to clean cooking fuel.
- **Increase awareness and social partnership on clean fuels** for a sustainable solution to energy poverty while contributing to employment generation, household income growth and improved health outcomes.

3.8. DISTRICT MINERAL FOUNDATION (DMF)

Why in news?

Centre has released the guidelines to tighten the criteria for use of DMF fund to ensure they are used for the specified purpose, that is redevelopment of areas and people affected by mining activities.

Key guidelines

- DMFs will have to **prepare a five-year perspective plan to ensure systematic development of the area** affected by mining-related activities using the fund accrued from miners' contribution as a percentage of royalty.
- **DMFs will conduct a baseline survey** through universities or renowned organisations or agencies to formulate a perspective plan.

Recent amendments to the DMF
- In March 2020, government issued guidelines suggesting that **up to 30% of the funds could be used towards expenditure related to COVID-19.**
- According to **MMDR Amendment Act 2021, central government may also give direction regarding the composition and utilization of the fund** while state governments continue to prescribe the constitution and functions of the DMF.
- In 2021 government issued order that **no sanction or approval of any expenditure out of the DMF fund shall be done at the state level by the state government or any state-level agency.**

- **Gram sabha or local bodies may aid in preparation** of needs assessment reports.
- Based on the findings and gaps as identified through the baseline surveys, the DMF shall **prepare a strategy for five years and the same shall be included in the perspective plan**.
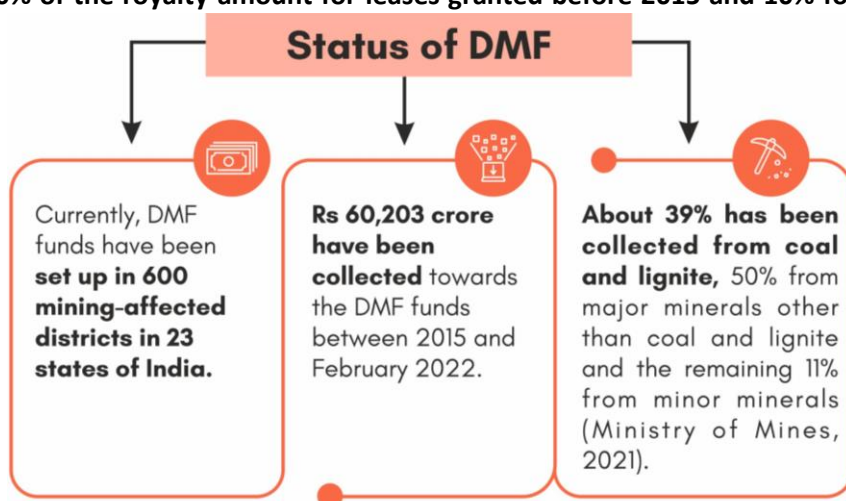
About DMF

- Under the **Mines and Minerals (Development and Regulation) Amendment Act 2015**, the Central Government instituted the DMF in 2015.

- o Under this, **DMF is created in each district that has mining**.
- o The mining companies shall pay **DMF 30% of the royalty amount for leases granted before 2015 and 10% for leases granted through the auction mechanism post-2015.**
- The funds so collected are to be **managed by non-profit trusts** and are to be **used for welfare of mining-affected population,** including tribal and forest-dwelling communities.
  - o Each **district has a separate trust**.
- It is a **special fund that is not tied to any particular scheme or area of work**, and it **does not lapse at the end of each financial year**.
  - o The unused funds **get accumulated over the years.**

Status of DMF

Currently, DMF funds have been **set up in 600 mining-affected districts in 23 states of India**.

Rs 60,203 crore have been collected towards the DMF funds between 2015 and February 2022.

About 39% has been collected from coal and lignite, 50% from major minerals other than coal and lignite and the remaining 11% from minor minerals (Ministry of Mines, 2021).

Issues with DMF

- **Inter-state differences:** Until September 2021, **Odisha, Chhattisgarh, Jharkhand, Rajasthan, Madhya Pradesh and Telangana, accounted for 80% of the total DMF collections** in the country.
  - o Some states have allocated spending amounts higher than their corresponding collections (Karnataka, Gujarat), while **other states spent less than 50% of their collections (Goa)**
- **Lack of record maintenance:** PMKKKY guidelines mention that each DMF trust fund has to maintain a website that provides data related to affected areas and people and sector-wise details on funds' collection, allocation, and expenditure.
  - o However, **only few states websites have provided updated district-level data** on their DMF funds, though not fully.
- **Power tussle:** While the DMF administration comes under the purview of the districts and states, **the new 2021 MMDR amendments have given greater power to the central government regarding the composition and utilisation of the funds.**
- **Lack of ground level participation:** The state DMF Rules and PMKKY clearly mentions power and role of Gram Sabha in mining-affected areas for identification of beneficiaries, DMF planning, and review of works and schemes. This has been particularly emphasized for Scheduled Areas.

> **The Mines and Minerals (Development and Regulation) Amendment Act, 2015**
> - It amends the **Mines and Minerals (Development and Regulation) Act, 1957** as it regulates the mining sector in India and **specifies the requirement for obtaining and granting mining leases for mining operations.**
> - It provides for the creation of a **District Mineral Foundation (DMF by the state government) and a National Mineral Exploration Trust (NMET by the central government).**
> - It **creates a new category of mining license i.e. the prospecting license-cum-mining lease,** which is a two stage-concession for the purpose of undertaking prospecting operations, followed by mining operations.

> **Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)**
> - It is meant to **provide for the welfare of areas and people affected by mining related operations**, using the funds generated by DMF.
> - The scheme ensures **mitigating the adverse impacts, during and after mining, on the environment, health and socio-economics of people in mining districts**; and to ensure long-term sustainable livelihoods for the affected people in mining areas.
> - As per this scheme, **High priority areas** like drinking water, health care, sanitation, education, skill development, welfare measures, skill development and environment conservation **will get at least 60%** share of the funds.
> - It was launched by **Ministry of mines**.

- o However, there is practically **no scope of representation of Gram Sabha members in the DMF body of any state.**
- o Moreover, DMF body, members of the Governing Council and Managing Committee is dominated by government officials (MPs, MLAs etc.)
- **Poorly planned or ad-hoc investments:** This is a categorical problem in most mining-affected districts and is particularly worse in areas with high tribal population.

o   For example, not even a **single district has made the required investments for improving child nutrition and under five mortality rates (U5MR).**

Way Forward

- **Identification and notification of DMF beneficiaries** since beneficiaries constitute a primary 'object' of the Trust, it is imperative for the DMF Trust to identify and notify its beneficiaries.
- **Inclusion of people from mining-affected areas in DMF body** so that more effective usage of fund accruals can be made.
- **DMF planning and optimizing investments** by developing short-term (one-three years) and medium-term plans (three-five years) considering an 'output and outcome' oriented approach.
- **Transparency and public accountability** by sharing all DMF related information in public domain through a DMF website.
- **Ensuring Decentralization** by promoting community participation.

3.9. REVAMPED DISTRIBUTION SECTOR SCHEME (RDSS) FOR DISCOMS

Why in news?

Recently, **Ministry of Power launched RDSS.**

About RDSS

- It aims to **improve the operational efficiencies and financial sustainability of all DISCOMs/** Power Departments **excluding Private Sector DISCOMs.**
- It **provides result-linked financial assistance to DISCOMs** for strengthening of supply infrastructure based on meeting pre-qualifying criteria and achieving basic minimum benchmarks.
- **Its objectives include:**
  o   Reduction of **Aggregate Technical & Commercial (AT&C) losses to pan-India levels of 12-15% by 2024-25**.
  o   Reduction of **Average Cost of supply (ACS)-Average Revenue Realised (ARR) gap to zero by 2024-25.**
  o   Developing **Institutional Capabilities for Modern DISCOMs**.
  o   Improvement in **the quality, reliability, and affordability of power supply to consumers** through a financially sustainable and operationally efficient Distribution Sector.
- **Existing schemes will be subsumed** including Integrated Power Development Scheme (IPDS), Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) along with Prime Minister's Development Program (PMDP)- 2015 for the Union Territories of Jammu & Kashmir (J&K) and Ladakh.
- **Rural Electrification Corporation (REC) and Power Finance Corporation (PFC)** have been nominated as **nodal agencies.**
- **Other Features of the scheme**
  o   **Result-linked financial assistance** for strengthening of supply infrastructure.
  o   **State specific action plan** rather than a "one-size-fits-all" approach.
  o   **Solarization of agricultural feeders** to improve electricity supply to farmers and **converges with the Pradhan Mantri Kisan Urja Suraksha Evem Utthan Mahabhiyan (PM-KUSUM) Scheme.**
  o   **Prepaid Smart metering to be implemented** in Public-Private-Partnership (PPP) mode
  o   **System metering** at Feeder and Distribution Transformer (DT) level in PPP mode.
  o   **Leveraging Artificial Intelligence** and **consumer empowerment by way of prepaid Smart metering.**
  o   **Provision for Special Category States** in terms of extra grant for smart metering projects.

Major Components of the scheme
- **Consumer Meters and System Meters**
  o   Prepaid Smart Meters for all consumers except Agricultural consumers
  o   Special prioritization to urban areas i.e. approx. 10 crore prepaid Smart meter installation by 2023, the balance to be taken up in phases.
- **Feeder Segregation**
  o   Scheme focuses on funding for feeder segregation for unsegregated feeders, which would enable solarization under KUSUM
  o   Solarization will lead to cheap/ free day time power for irrigation and additional income for the farmers.
- **Modernization of Distribution system in urban areas**
  o   Supervisory Control and Data Acquisition (SCADA) in all urban areas.
- **Rural and Urban area System strengthening.**

About DISCOMS Sector in India

- There are **three primary segments in the electricity sector: generation, transmission and distribution.**
  - **Generation** is the process of producing power using different fuels and is carried out in generating stations (generation plants).
  - **Transmission** utilities carry bulk power from the generation plants to the distribution substations through a grid and at high voltages.
  - **Distribution** utilities supply electricity from the substations to individual consumers through a distribution network.
- The third stage which involves the **distribution of power to all the consumers across the country** is where the DISCOMs come into the picture.
  - DISCOMs in UTs are administered directly by the central government while the **respective state governments govern those in the states**.
  - **Private DISCOMs are also operational in India** but are limited to a few cities.
- Under the Indian Constitution, **power is a Concurrent subject** and the responsibility for distribution and supply of power to rural and urban consumers rests with the states.
- One of the key issues with the power sector **currently is the poor financial situation of state DISCOMS**.
  - This has been **affecting their ability to buy power for supply**, and the ability to invest in improving the distribution infrastructure.
  - Consequently, this **impacts the quality of electricity that consumers receive.**
- **Present status of DISCOMS**
  - State-owned discoms across the country are **financially and operationally beleaguered despite four reform schemes in the past 15 years.**
  - According to Niti Aayog's report of August 2021, **most power DISCOMs incur losses every year the total loss was estimated to be ₹90,000 crore in the financial year 2021.**
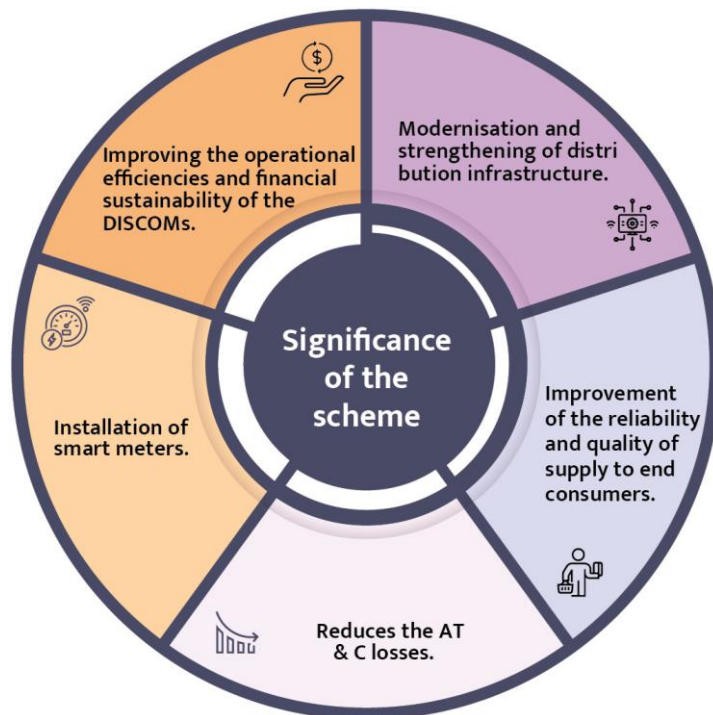
Challenges faced by DISCOMS

- **High level of aggregate technical and commercial (AT&C) losses:** These losses stem from poor or inadequate infrastructure or on account of theft or bills not being generated or honoured.
  - As per Ujwal Discom Assurance Yojana(UDAY) dashboard data, **AT&C losses currently stand at 21.7% at the all-India level. In UK and US, it is about 6-7%.**
- **Impact of Covid-19:** The Covid-19 pandemic further distressed discoms where **sharp downturn in demand from high-paying Corporates & Industries customers** during the lockdown negatively impacted the discoms' finances.
- **Delays in tariff determination:** Despite the Centre's prescription for annual or periodical revision of retail power tariff, there has been delay in tariff determination by the states.
- **Power Procurement Cost Optimisation:** Discoms have **oversubscribed to expensive and long-term thermal Power Purchase Agreements (PPAs)** based on incorrect estimates of power demand.
  - This has led to a **high cost of power, insufficient investment in infrastructure, and payment delays to generators**.
- **Upgrading Distribution Infrastructure:** Many loss-making discoms are unable to invest in the upgradation and maintenance of their equipment due to lack of resources.
- **Lack of progress in earlier initiatives:** The government, under various regimes, has tried to improve the condition of DISCOMs in India through relief packages. For eg- under UDAY programme, state governments took over 75% of DISCOMS' debt, issuing low-interest bonds to service the rest of the debt.

Way forward

- **DISCOM Restructuring**
  - Insulating regulatory functions from political pressures by **creating regional electricity regulatory commissions with participation of central government.**
  - **Higher private participation for greater efficiency.** For ex: Franchise models implemented in Odisha and Maharashtra.
  - **PPP model can be useful in loss-making areas,** where commercial operation might not be feasible without government support.
- **Renewable Energy (RE) Integration Reforms:** Discoms may need to **deploy large-scale energy storage** by providing battery systems or pumped hydro-storage systems.
  - **Mini-grids** with decentralised small-scale generation from locally available RE sources **for remote and sparsely populated areas.**
- **Strengthen the RDSS scheme:** This can be done by:
  - **Addressing states' concerns about insufficient resources**.
  - **Centre can help states prioritise power dispatch from more efficient** (and less-polluting) thermal power plants.
  - **Central and state-level committees and agencies need to work together** to scrutinise the feasibility of discoms' action plans and project reports.
  - **Adopt a systemic deployment strategy for smart metering infrastructure**.

3.10. INDIA'S BIOECONOMY REPORT 2022

Why in news?

The Biotechnology Industry Research Assistance Council (BIRAC) recently released **India's Bioeconomy Report 2022.**

More about the news

- The **Special Biotech Ignition Grant Call for Northeast Region** (BIG-NER) under BIRAC was also launched and

About BIRAC
- **BIRAC** is a not-for-profit section 8, Schedule B, Public Sector Enterprise.
- It was set up by the **Department of Biotechnology (DBT)**
- It acts as an Interface Agency to strengthen and empower the emerging Biotech enterprise to undertake strategic research and innovation, addressing nationally relevant product development needs.

financial support of Rs 50 lakhs each to 25 start-ups and entrepreneurs from Northeast Region to develop biotech solutions was announced.

What is Bio-Economics?

According to United Nations Food and Agriculture Organisation (FAO), bioeconomy is the production, utilization, conservation, and regeneration of **biological resources, including related knowledge, S&T, and innovation, to provide sustainable solutions** (information, products, processes, and services) within and across all relevant sectors and enable a transformation to a sustainable economy.

Some of the major areas of Bio-economics include-

- **Food systems** occupy the largest niche in the bioeconomy which includes sustainable agriculture, sustainable fishing, forestry, and aquaculture.
- **Bio-based products** include **bioplastics, biodegradable clothing,** and other products with eco-design.
- **Bioenergy** improves the security of **energy supply and reduces energy** dependence like biomass.

BIOECONOMY
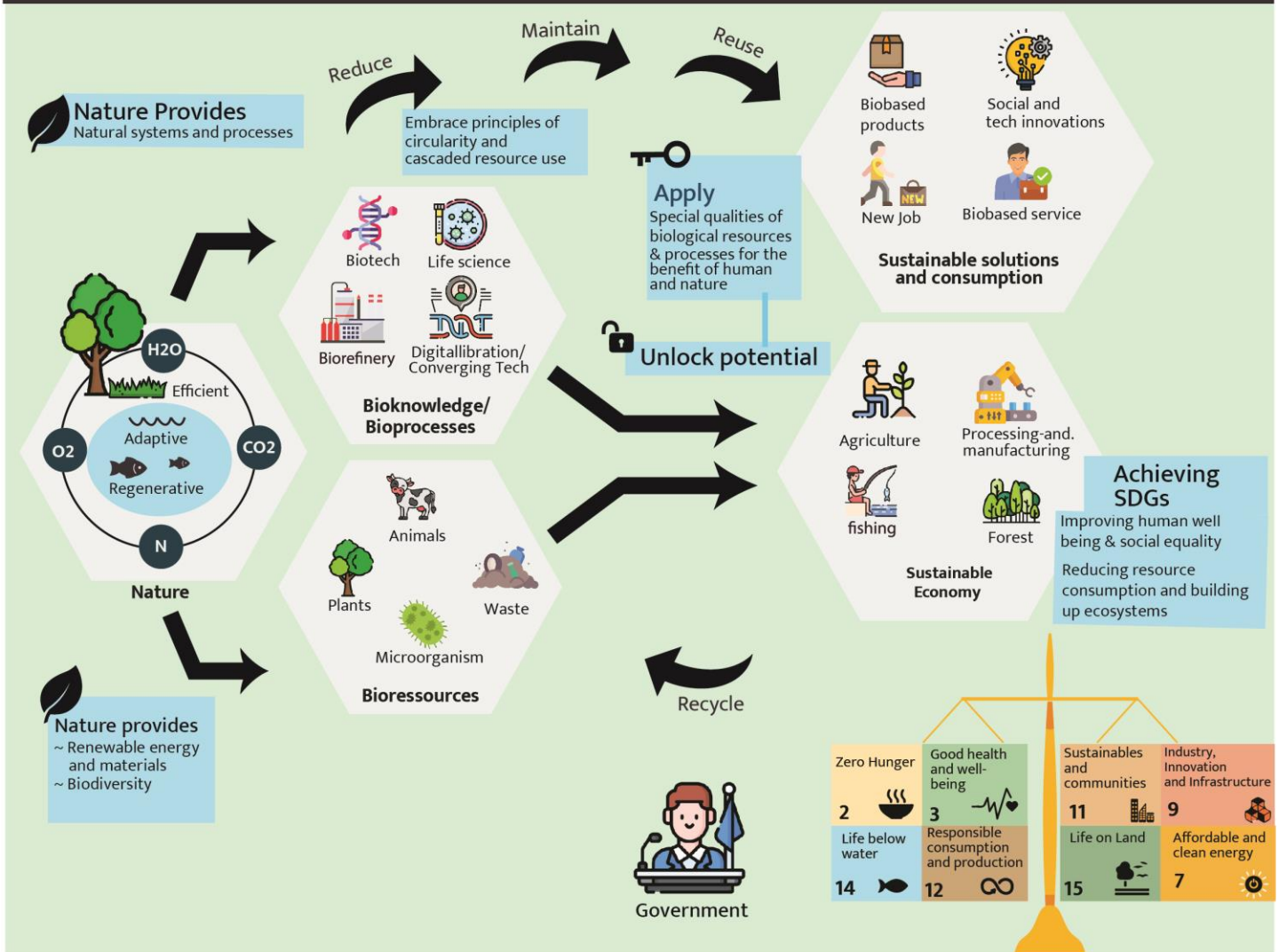
Status of India's Bioeconomy

- **Bioeconomy Market**: It continued to nearly account for a **2.6 percent share of India's GDP in 2021.** The sector registered **14% growth over 2020.**
  - **Nearly a fifth of BioEconomy has been due to the Covid-19 vaccination and testing drive**.
- **Sectoral Distribution: BioPharma accounts for the largest share of the Bioeconomy** (49 percent).
  - **The Bio-industrial segment's** contribution to the Bioeconomy **witnessed 202 percent growth in 2021.**

INDIAN BIOECONOMY AT GLANCE

$12 Billion	1 Million	2500+	15,500+
India's Biotech Industry Revenue	India's Biotech Workforce	Biotech Companies in India	Biotech Graduates Every Year

- **Innovation:** At least **three biotech startups** were incorporated every day in 2021.
- **Foreign direct investment (FDI)** in biotech is estimated to have touched **$830 million in 2021**.
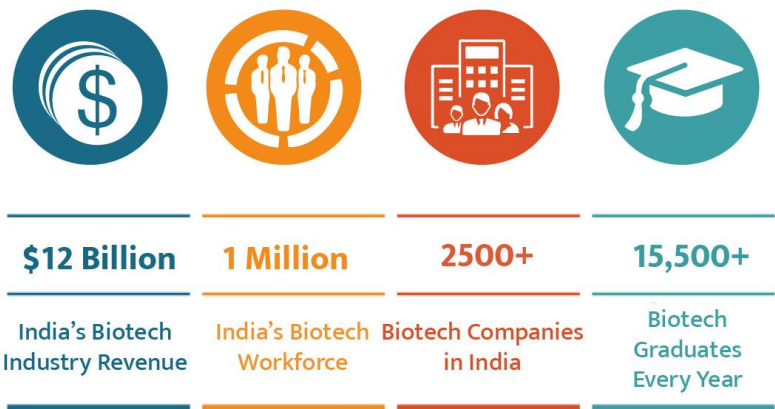
Challenges associated

- **Food vs fuel:** A bioeconomy implemented on a large scale could create competition for limited agricultural land and water resources.
- **Higher cost:** Bioeconomy would require significant investment to transform production processes and products. For example, developing infrastructure capacity to exploit the bioenergy ecosystem.
- **Carbon dioxide emission:** A shift towards a bioeconomy could release additional carbon emissions in several cases, such as direct and indirect land-use change (for instance deforestation).
- **Regulatory Authority**: The Biotechnology Regulatory Authority of India Bill which envisions creating a **Regulatory body for the uses of biotechnology products** including genetically modified organisms is still pending.
- **Intellectual Property Right regime:** There are two main areas of contention for the industry in India's approach to intellectual property in the biotech sector:
  - **Section 3(d) of the Patents (Amendment) Act, 2005**: It sets a **higher standard for patentability** than **mandated by TRIPS (Trade Related Intellectual Property Rights).** The industry argues that India's stricter standards for patents discourage innovation and dampen foreign investment.
  - **Compulsory licensing**: It gives the government **power to suspend a patent** in times of health emergencies. Although India has used this option only once, the industry feels that such regulations keep investors clear of Indian markets.
- **Lack of Marketization**: Most of the early research funding, often provided by universities or the government, **runs out before the marketization phase**, the funding for which is mostly provided by venture capitalists. This gap has a huge impact on the commercialization of innovative ideas.

> **Government initiatives to promote bioeconomy:**
> - **National mission on Bioeconomics** was launched by the Institute of Bio-resources and Sustainable Development (IBSD) under the Ministry of Science and Technology. The aim of the mission was to boost rural economy by utilizing bio resources.
> - **National mission on biofuels (2009)** by Ministry of New and Renewable Energy in order to promote biofuels in the country.
> - **Production linked incentives**: The PLI scheme for biopharma has introduced various incentives to promote self-reliance in local manufacturing of bulk drugs, while also encouraging the biopharma industry to move up the value chain through innovation.
> - **National Biotechnology Development Strategy 2015-2020 (NBDS):** NBDS was launched in 2015 (as a successor to National Biotechnology Development strategy (2007)) with an aim of **establishing India as a world class bio manufacturing hub.**
> - **Promotion of Biotechnology in Northeastern Region of India:** In 2009-10 DBT had also set up a Northeastern Region – Biotechnology Program Management Cell (NER-BPMC) for coordinating and promoting the biotechnological activities in the NER with annual investment of 180 crores.

Way forward

An appropriate bioeconomic strategy requires developing an action plan **involving local government, state governments, national governments** as well as **other market players**.

- **Increased investment in research, innovation, and training:** Research on bioeconomy issues and their application tends to be disconnected. To avoid this, public-private partnerships should be promoted.
- **Strengthening policy coordination and engagement:** Increasing synergies and coherence between bioeconomy-related policies, initiatives, and economic sectors is essential.
- **Building human capital:** There is a need for the development of specialized human resources along with increasing the number and quality of jobs offered by this sector.
- **Ecosystem of innovation:** With the growing convergence of disciplines it is important for the Universities to evolve an ecosystem in which scientists, innovators, and future entrepreneurs could be nurtured.
- **Swifter implementation of coordinated** policies for the regulation of the sector.
- **Improving markets and competitiveness** by providing the knowledge base needed to make the different sectors of the bioeconomy more sustainable, as well as boosting the development of clean energy.

3.11. PRADHAN MANTRI FORMALISATION OF MICRO FOOD PROCESSING ENTERPRISES (PMFME) SCHEME

Why in news?

PMFME Scheme of **Ministry of Food Processing Industries**, **under Aatmanirbhar Bharat Abhiyan** completed two years.

About PMFME

- It is a **centrally sponsored scheme** to provide **financial, technical and business support for upgradation of existing micro food processing enterprises.**
- **Objective of the scheme:**
  - **Capacity building of entrepreneurs through technical knowledge**, skill training and hand holding support services;
  - **Increased access to credit to existing micro food processing entrepreneurs** for technology upgradation;
  - **Support to Farmer Producer Organizations (FPOs), Self Help Groups (SHGs), Producers Cooperatives & Cooperative Societies** along their entire value chain to enable microenterprises to avail common services.
  - **Support for transition of existing enterprises into formal framework** for registration under regulatory framework and compliance;
  - **Integration with organized supply chain** by strengthening branding & marketing
- It is being implemented over a **period of five years from 2020-21 to 2024-25** with an **outlay of Rs 10,000 crore.**
- Expenditure is to be shared in **60:40 ratio between Central and State Governments**, **in 90:10 ratio with North Eastern and Himalayan States,** 60:40 ratio with UTs with legislature and 100% by Centre for other UTs.
- **Key features of the scheme**
  - About 2 lakh FME will be given direct financial assistance in the form of **credit linked subsidy.**
  - Existing Individual micro food processing units desirous of upgradation of their unit can avail **credit-linked capital subsidy @35% of the eligible project cost with a maximum ceiling of Rs.10 lakh per unit.**
  - **Seed capital @ Rs. 40,000/- per SHG member** would be provided for working capital and purchase of small tools.
  - **FPOs/ SHGs/ producer cooperatives** would be provided **credit linked grant of 35% for capital investment** along the value chain.
  - Scheme also places thrust on **waste to wealth products, minor forest products and Aspirational Districts.**
  - **Union Bank of India** is the nodal bank for its implementation.
  - **Micro food processing units in the informal sector** are also eligible for support under the scheme.

Components of PMFME Scheme

- One District One Product (ODOP).
- Upgradation of Individual Micro Food Processing Units.
- Support to FPOs/SHGs/ Producer Cooperatives.
- Seed Capital to SHG.
- Common Infrastructure.
- Branding & Marketing Support.
- Capacity Building & Training.

Significance of the scheme

- Generate **total investment of Rs 35,000 crore**
- Provide employment to 9 lakh skilled and semi-skilled workers
- **Benefit 8 lakh units** through access to information, training, better exposure and formalization.
- Over 1 lakh SHG members have been given the seed capital amount of Rs. 203 Cr.

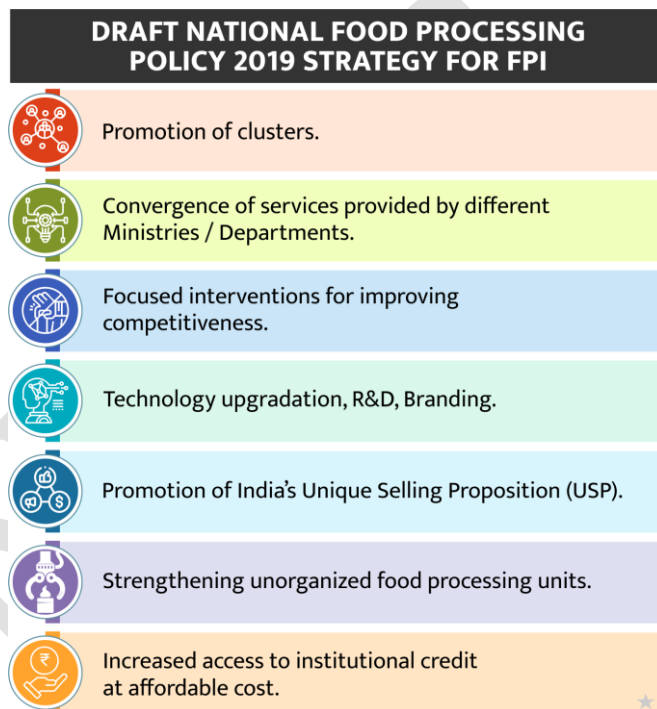- o **Envisages training for Entrepreneurship Development Skilling (EDP+) program** modified to meet the requirement of food processing industry and product specific skilling.

About Food Processing Sector in India

- Food processing is defined as **transforming agricultural products into food that are in consumable form or transforming one food item into another by adding value to it.**
- It has **two sub-categories**, viz,
  - o **manufactured processes**, where physical properties of product are transformed into edible products with commercial value
  - o **value-added processes** like increased shelf life, shelled and ready for consumption, etc.
- **Status in India**
  - o India's food processing sector is **one of the largest in the world and its output is expected to reach $535 bn by 2025-26.**
  - o During the last five years ending 2019-20, food processing sector has **grown at an average annual growth rate of around 11.18% and may touch $470 bn by 2025.**
  - o India is ranked **1st Producer & Exporter of spices in the world.**
  - o India is **ranked first in the production of milk, pulses and jute, second in fruits and vegetables and third in cereals** (Government of India, 2019)
  - o The total FDI received in the food processing sector since April 2000 till March 2022 **was $11.08 Bn.**

DRAFT NATIONAL FOOD PROCESSING POLICY 2019 STRATEGY FOR FPI

- Promotion of clusters.
- Convergence of services provided by different Ministries / Departments.
- Focused interventions for improving competitiveness.
- Technology upgradation, R&D, Branding.
- Promotion of India's Unique Selling Proposition (USP).
- Strengthening unorganized food processing units.
- Increased access to institutional credit at affordable cost.

Significance of the sector

- **Enhance farmer's income** by better utilization and value addition of agricultural produce.
- **Minimize wastage at all stages** in the food processing chain by the development of infrastructure for storage, transportation and processing of agro-food produce.
- **Introduce of modern technology** into the food processing industries from both domestic and external sources;
- **Provide policy support for creation of Infrastructure**, capacity expansion/ Upgradation and other supportive measures form the growth of this sectors;
- **Promote export of processed food products.**
- **Recognising the immense potential of FPI** in promoting inclusive growth, it has been identified as one of the key thrust areas under the 'Make in India' Programme.

Other Steps taken by the Government

- **Pradhan Mantri Kisan SAMPADA Yojana (PMKSY):** It is a comprehensive scheme for creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet.
- **Production Linked Incentive Scheme for Food Processing Industry (PLISFPI):** It aims to support creation of global food manufacturing champions commensurate with India's natural resource endowment and support Indian brands of food products in the international markets.

Challenges prevailing in the food processing sector

- **Formalisation of the section:** Unorganized food processing sector **comprises nearly 25 lakh units** which contribute to 74% of employment in food processing sector.
  - o **Nearly 66% of these units are located in rural areas and about 80% of them are family-based enterprises**.
- **Lack of credit support and technology:** It includes lack of access to modern technology & equipment, training, access institutional credit, lack of basic awareness on quality control of products; and lack of branding & marketing skills etc.
- **Infrastructure inadequacies**: Lack of efficient supply chain infrastructure and **inadequate cold chain capacity** have been identified as main reasons for higher wastages, higher cost of production, lower value addition in food processing sector.

- **Bureaucratic hurdles:** Presently, multiple clearances are required like availing permission for **Change in Land Use (CLU), environmental clearance etc are time consuming and costly.**
- **Demand Supply Mismatch:** Inadequate linkage of processors, exporters and bulk purchasers with farmers **result in mismatch between requirements of industry and supply of agri-produce by farmers.** The problem is further compounded by **restrictions on commodity storage and movement.**
- **Competition:** There is huge competition from global leaders. Also, frequently changing nature of global laws on food production compounds the problem.

Way forward

- **Infrastructure Development:** Incentivize **creation of supply chain infrastructure for food processing sector and strengthen Farm-Gate Infrastructure** which would help in augmenting raw materials to the processors and realization of higher income by the farmers**.**
- **More development of Food parks:** where state governments would allot land, to promote agri & food processing industry as well as extend incentives.
- **Creation of food safety infrastructure:** by **setting up of new and modernization of existing laboratories.**
- **Fiscal Incentives:** Like incentives for supporting creation of infrastructure, and **capital investment subsidy** for setting up new food processing units and technology up gradation of existing units etc.

3.12. DRAFT COFFEE (PROMOTION AND DEVELOPMENT) BILL, 2022

Why in news?

Ministry of Commerce and Industry is **planning to replace the Coffee Act, 1942 with the new Coffee (Promotion and Development Bill), 2022**, which has been listed for the current Monsoon Session of Parliament.

About Coffee Act 1942

- It was **introduced during World War II**, in order to **protect the struggling Indian coffee industry from the economic downturn** caused by the war.
- Through the Act, the **Coffee Board was established** under the administrative control of the Ministry of Commerce and Industry.

Need for new law:

- **To facilitate growth and ease of doing business**: The new law would **remove the "restrictive and redundant" provisions and introduce a simplified version** of the Coffee Act, 1942 to suit the present needs of the industry.
- **Facilitate coffee growers**: Though the new law **would not close the Coffee Board**, it will be **shifted from the Ministry of Commerce to the Ministry of Agriculture**, to ensure the benefits of all agricultural schemes are extended to coffee growers.

> **Coffee Board of India (HQ: Bengaluru)**
> - It **comprises of 33 members** including the Chairman.
> - **Activities of the Board:**
>   - **Enhancement of production**, productivity and quality.
>   - **Export promotion** for achieving higher value returns for Indian Coffee.
>   - **Supporting development of Domestic market.**
> - Before India liberalised its economy in 1991, the **Coffee Board controlled the marketing of the commodity in its entirety**, both in India and abroad.
>   - Coffee Act **introduced a pooling system**, where each planter was required to distribute their entire crop to a surplus pool managed by the Board.
>   - Board then marketed 70% of the total pool for export and 30% for domestic markets through auctions and the Pool Fund was created.
> - Later, the **Board's authority was reduced** through a series of amendments and the coffee market was deregulated.
>   - In **1996, the pooling system was abolished** and growers were allowed to directly sell to processing firms.
>   - Though the **Coffee Board plays more of an advisory role now, exporters still require a certificate** from it.

- **Address several new areas of functions to the Board**: These include **support for production, quality improvement, skill development of coffee growers, scientific and technical research** in order to align the Indian coffee industry with "global best practices."
- **Holistic promotion and development of the coffee industry** through expansion of the cash crop in new areas, sustainable cultivation, raising production as well as productivity, exports, and marketing of coffee.
  - It will not just **create more employment opportunities but also benefit the entire coffee value chain.**

- **Promote the sale and consumption of Indian coffee**, including through e-commerce platforms, with fewer government restrictions.

Coffee in India:

- Indian Coffee began during **1600 AD when holy saint Baba Budan planted coffee beans from Yemen in the Chandragiri hills** of Karnataka.
    - o **British started commercial plantations** of coffee during the 18th century.
- India produces **two types of coffee: Arabica and Robusta.**
    - o **Arabica has high market value** while **Robusta is the majorly manufactured coffee** with a share of 72% of the total production.
- Coffee industry provides **direct employment to more than 2 million people** in India.
- **Growing conditions**:
    - o India is the **only country in the world where the entire coffee cultivation is grown under shade, handpicked and sun dried.**
        - ✓ Shade trees **prevent soil erosion on sloping terrain, enrich soil** by recycling nutrients from deeper layers, protect coffee from seasonal fluctuations in temperature, and play host to diverse flora and fauna.

Factors	Arabica	Robusta
Soils	Deep, fertile, rich in organic matter, well drained and slightly acidic	Deep, fertile, rich in organic matter, well drained and slightly acidic
Slopes	Gentle to moderate slopes	Gentle slopes to fairly level fields
Elevation	1000-1500 m	500-1000 m
Temperature	15^0 C – 25^0C; cool, equable	20^0 C – 30^0 C; hot, humid
Relative Humidity	70-80%	80-90%
Annual Rainfall	1600-2500 mm	1000-2000 mm

INDIAN COFFEE VARIETIES WITH GEOGRAPHICAL INDICATION (GI) TAG

KARNATAKA
- Coorg Arabica
- Bababudangiris Arabica
- Chikmagalur Arabica

ANDHRA PRADESH
- Araku Valley Arabica

KERALA
- Wayanad Robusta
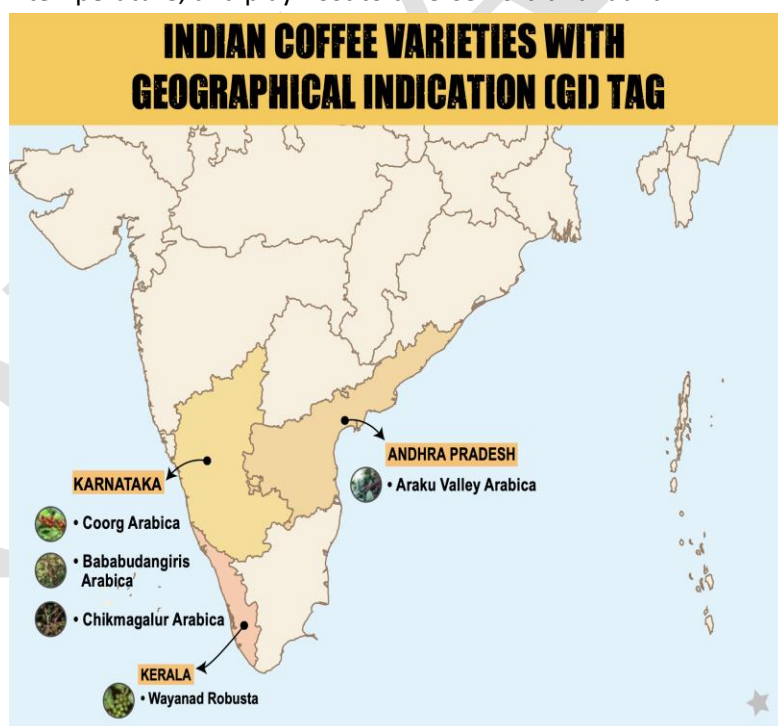
- **India's coffee production and exports**:
    - o **Karnataka is the largest coffee producer** (70%), followed by Kerala (23%) and Tamil Nadu (6%).
    - o India's **coffee production is estimated to rise 15% in 2022-23** from a year before to **393,400 tonnes.**
    - o **Coffee exports** reversed a Covid-induced slide to **record a 42% jump in 2021-22** over the previous year, to **exceed the $1-billion mark for the first time.**

3.13. NEWS IN SHORTS

3.13.1. TREND ON FOREIGN DIRECT INVESTMENT (FDI) IN INDIA

- According to data by Ministry of Commerce, **India received the highest annual FDI inflows of USD 84.835 billion in FY 21-22** overtaking last year's FDI by USD 2.87 billion.
- **Other key trends**
    - o **Top sourcing nations for FDI** - Singapore followed by USA and Mauritius.

- o **Top FDI receiving states** – Karnataka followed by Maharashtra and Delhi.
- o **Top sectors receiving FDI** - Computer Software & Hardware followed by Services Sector and Automobile Industry.
- o **FDI in Manufacturing:** Increased by 76% in FY22 (USD 21.34 billion) in comparison to FY21.
- o FDI is a **purchase of an interest in a company by a company or an investor located outside** its borders.

- **Significance of FDI**
  - Major **non-debt and stable financial resource** for economic development.
  - **Development of Human Resources** through transfer of skills and management techniques.
  - **Source of Technology Transfer** for advanced and efficient production systems.
  - **Promote global economic integration** through increased exports.
  - **Other benefits:** Quality job creation; Promotion of innovation and competition; Exchange rate stability because of capital inflow and exports.

Disadvantages of FDI: Negative Influence on Exchange Rate; Shift of Polluting Industries; Threat to Small Businesses; Erosion of Local Culture; Hindrance to Domestic Investment; Promote Political Corruption or Lobbying; Modern-day Economic colonialism
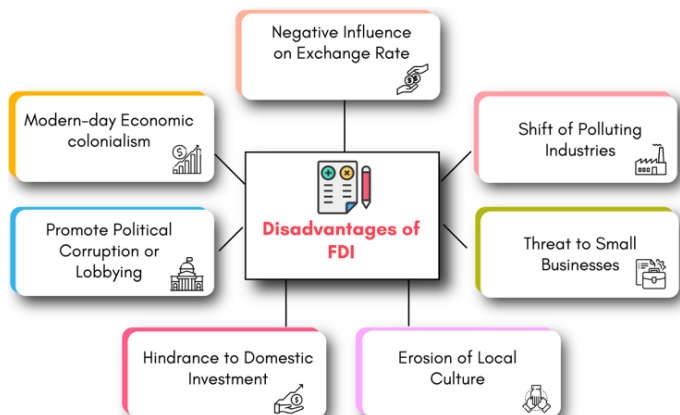
3.13.2. OFF-BUDGET BORROWINGS (O-BBS)

- Centre eased norms for adjusting states' off-Budget borrowings (O-BBs).
- Under the new norms, **O-BBs done by states up to 2020-21 may not be adjusted and only those done in 2021-22 can be adjusted** over up to 4 years till March 2026.
  - Earlier this year, **Centre has informed states that O-BBs are to be equated with states' own debt** and incremental O-BBs raised (2020-21 & 2021-22) would be adjusted out of the borrowing ceiling this year.
- **O-BBs** by a state government refer to loans taken by its entities, special purpose vehicles, etc**., which are expected to eventually be serviced through the state government's own budget**, instead of the cash flows or revenues generated by the borrowing entity.
  - Such borrowings **bypass the states' net borrowing ceiling fixed in a FY** by routing loans outside state budget.
  - Such borrowings have an **impact on the revenue deficit and fiscal deficit** and thus **surpassed the targets set for fiscal indicators** under the state FRBM Act.
  - For 2022-23, **ceiling has been set at 3.5% of GSDP**, along with an additional 0.5% linked to reforms in power sector.

- Under **Article 293 (3)**, state governments are required to take the Centre's permission for fresh borrowing, if they are indebted to the Government of India.

> **Reasons for increasing O-BBs by states:**
> - **Constrained revenue growth** due to the pandemic-induced slowdown and increasing revenue expenditure.
> - **Erosion of autonomous fiscal space** due to GST.

3.13.3. SCHEMES TO STRENGTHEN MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES)

- PM **participated in the 'Udyami Bharat' programme** and launched several key initiatives for MSMEs.
  - MSME sector **contributes around 30% of India's GDP, over 48% exports, 45% of manufacturing output** and creates 11.1 crore jobs through 6.34 crore enterprises.
- Also, 3 initiatives were rolled out by Ministry of Chemicals and Fertilizers under the **Scheme of 'Strengthening Pharmaceuticals Industry (SPI).**
  - **Initiatives are aimed at making Indian pharma MSMEs a part of Global supply chain** by incentivizing them to **acquire Schedule M or Good Manufacturing Practice (GMP) certification** by WHO.
    - ✓ GMP certification is a **standard defined by WHO for ensuring products are produced and controlled as per the quality standards.**

Initiative/Scheme	About
Raising and Accelerating MSME Performance (RAMP) scheme	- To **scale up implementation capacity and coverage** of MSMEs, with **impact enhancement of existing MSME schemes.** - It will complement the Aatmanirbhar Bharat Abhiyan by **fostering innovation, encouraging ideation, incubating new business** and entrepreneurship.
Capacity Building of First-Time MSME Exporters (CBFTE) scheme	- To **encourage MSMEs to offer products and services** of international standards. - This will **enhance participation of Indian MSMEs in the global value chain** and help them realise their export potential.
New features of the Prime Minister's Employment Generation Programme (PMEGP)	**New Features:** - Increase in the maximum project cost to Rs 50 lakhs (from Rs 25 lakhs) for manufacturing sector and Rs 20 lakhs (from Rs 10 lakhs) in service sector. - Inclusion of applicants from **Aspirational districts & Transgenders** in Special

	Category applicants for availing higher subsidies. • PMEGP (KVIC is the nodal agency) provides **employment opportunities to unemployed youth** by assisting setting up of **micro-enterprises in non-farm sector.**

Schemes To Strengthen MSMEs In Pharmaceutical Sector

Schemes	Features
Pharmaceutical Technology Upgradation Assistance Scheme (PTUAS)	• It would facilitate pharmaceutical MSMEs with proven track records to **upgrade their technology**. • It provides for a **capital subsidy of 10 % on loans up to a maximum limit of Rs 10 crore** with a **minimum repayment period of three years** or interest subvention of up to 5 % (6% in case of units owned by SC/ST) on reducing balance basis.
Assistance to Pharma Industries for Common Facilities Scheme (API-CF)	• It would **strengthen the existing pharmaceutical clusters' capacity** for sustained growth. • It provides for an **assistance of up to 70% of the approved project cost** (90% for Himalayan and north-east region) **or Rs 20 crore,** whichever is less.
Pharmaceutical and Medical Devices Promotion and Development Scheme (PMPDS	• The scheme is aimed at **creating a database of pharma and medical device sectors.** • It would involve **preparation of study reports on topics of importance** for the Indian pharma and medical device industry.

Related News

- Around 140 Tribal youth turned village engineers were conferred Skill Certificates under **Rural Tribal Technical Training or Grameen Udyami** (Pilot Project for Skilling Tribal Youth).
- **Pilot project,** under Sansadiya Sankul Pariyojana, **was launched in several states** including MP, Chhattisgarh, Odisha etc.

3.13.4. NATIONAL APPRENTICESHIP PROMOTION SCHEME (NAPS)

- **Ministry of Skill Development and Entrepreneurship (MSDE)** announced that NAPS will be part of **Direct Beneficiary Transfer (DBT) scheme**.
  - o **Now, government will directly transfer its contribution to bank accounts of apprentices** through National Skill Development Corporation (NSDC), **25% of the stipend payable up to Rs. 1500/- per month**.
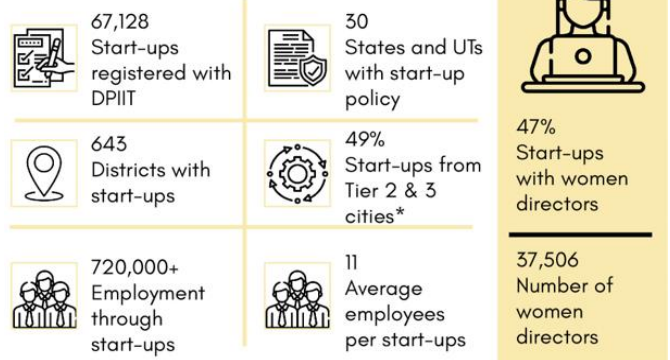- NAPS, launched in 2016, to **promote apprenticeship training in country** and **provide financial support to establishments** undertaking apprenticeship.
  - o It aims to **motivate employers to hire apprentices** and aid them in discovering right job roles while maximising their potential through in-depth skill development.
  - o NAPS has **replaced Apprentice Protsahan Yojna (APY) from 2016.**

3.13.5. RANKING OF STATES' EXERCISE 2021 ON SUPPORT TO START-UP ECOSYSTEMS DECLARED

- Ranking Exercise aims **to support states and UTs in developing their start-up ecosystem** and learn from the best practices in each state and UT.
  - o It was launched in 2018 **by Department for Promotion of Industry and Internal Trade (DPIIT).**
- 24 States and 7 UTs were **ranked based on their performance across 7 broad reform areas** including Institutional Support; Fostering Innovation and Entrepreneurship; Access to Market; Funding Support; Mentorship Support etc.
- **Participants are graded as** best performers, top performers, leaders, aspiring leaders, and emerging start-up ecosystems.
  - o **Gujarat, Karnataka, and Meghalaya** emerged as **Best Performers** in their respective categories.
- India is home to the **world's third largest startup ecosystem** after US and China.

Start-up Ecosystem

Key statistic
- 67,128 Start-ups registered with DPIIT
- 30 States and UTs with start-up policy
- 643 Districts with start-ups
- 49% Start-ups from Tier 2 & 3 cities*
- 720,000+ Employment through start-ups
- 11 Average employees per start-ups
- 47% Start-ups with women directors
- 37,506 Number of women directors

- **Initiatives taken**
  - o **Startup India Initiative** along with Startup India Seed Fund.
  - o **Start-up Accelerators of MeitY for product Innovation, Development and growth (SAMRIDH)** programme.

- o **Fund of Funds for Startups** with a total corpus of Rs 10,000 crore.
- o **IPR benefits and Tax exemptions** tailored for Startups.
- o **National Startup Awards** to recognize and reward outstanding Startups and ecosystem enablers.

3.13.6. GLOBAL FINDEX DATABASE 2021

- **World Bank** recently released Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19.
- Global Findex database surveyed how **people in 123 economies use formal and informal financial services** including **use of cards, mobile phones, and internet** to make and receive digital payment throughout 2021.
- **India's Specific Findings**
  - o India is **among seven countries home to half the world's 1.4 billion adults** without access to formal banking.
  - o **Aadhar system** contributed **to significant increase in financial inclusion,** driving account ownership up to 80% of adults in 2017 from 35% in 2011.
  - o **Internal fraud and leakage** from pension payments **dropped by 47%** when the country transitioned from cash to sending payments to biometric smart cards.
  - o **Distance to financial institutions, lack of trust, and lack of need**, are the factors for bank account inactivity.
- **Recommendations**
  - o **Gender gap in mobile access must be addressed** to ensure equitable progress on financial inclusion.
  - o Financial regulators and supervisory agencies **should develop better supervisory monitoring systems** to identify types of financial risks in the market.
  - o **Establish clear guidelines for financial institutions** about disclosures and transparency, as well as sound enforcement practices to ensure compliance.

About Financial Inclusion
- It that individuals and businesses have **access** to **useful** and **affordable financial products & services** that meet their **needs – transactions, payments, savings, credit, and insurance –** delivered in a responsible and sustainable way.
- It helps in achieving **ending extreme poverty** and **promoting shared prosperity,** and it is linked to various United Nations' 17 Sustainable Development Goals.

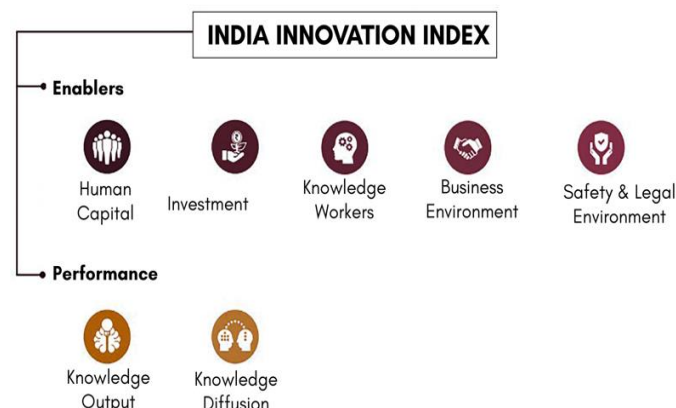## 3.13.7. RESERVE BANK OF INDIA – DIGITAL PAYMENTS INDEX (RBI-DPI)

- **RBI-DPI has demonstrated significant growth** (between March 2021- March 2022) **indicating rapid**

adoption and deepening of digital payments across the country.
- RBI-DPI was launched on 01 January, 2021 **with March 2018 as the base period.**
- **RBI-DPI comprises 5 broad parameters** that enable measurement of deepening and penetration of digital payments in the country:
  - o Payment Enablers (weight 25%),
  - o Payment Infrastructure – Demand-side factors (10%),
  - o Payment Infrastructure–Supply-side factors (15%),
  - o Payment Performance (45%) and
  - o Consumer Centricity (5%).

3.13.8. 3RD EDITION OF INDIA INNOVATION INDEX (III) 2021

- **Prepared by NITI Aayog and the Institute for Competitiveness**, the III is a comprehensive tool that ranks states and the union territories on their innovation performance to build healthy competition amongst them.
- **Key highlights from the index**
  - o **Karnataka** (Major States); **Manipur** (North-Eastern and Hilly states); and **Chandigarh** (UTs and City-States) **topped in their respective categories**
  - o **R&D investment in the country has declined** from 0.8% of the GDP in 2008–09 to 0.7% in 2017-18.
  - o **Low private participation** in R&D.
- **Current edition adopts the framework of Global Innovation Index** (GII) **across 7 pillars (see infographics).**
  - o **7 pillars in the index**—five 'Enabler' pillars measure the inputs (features that are crucial for promoting innovation) **and two 'Performance' pillars** measure the output (represent a nation's benefits in knowledge creation and competitiveness.).
  - o **India ranked 46th in GII 2021**, released by World Intellectual Property Organisation (WIPO).

INDIA INNOVATION INDEX

Enablers: Human Capital, Investment, Knowledge Workers, Business Environment, Safety & Legal Environment

Performance: Knowledge Output, Knowledge Diffusion

- **Significance**
  - Provide policymakers and other key stakeholders with **a comprehensive assessment of the spatial dynamics of the innovation ecosystem of India**.
  - **Identify the challenges** that persist across regional economies in maximizing their innovative capacities **and provide solutions to address them**.

3.13.9. TECHNICAL RECESSION

- **US is expected to avoid** a technical recession.
- A technical recession is a term used to **describe two consecutive quarters of decline in output.**
  - In case of a nation's economy, it usually refers to **back-to-back contractions in real GDP.**
  - It is **most often caused by a one-off event** (say COVID-19 pandemic and lockdowns imposed) and **is generally shorter in duration.**
- It is **mainly used to capture trend in GDP** while a **'recession' encompasses more broad-based decline in economic activity** that covers several economic variables including employment, household and corporate incomes etc.

3.13.10. WINDFALL TAX

- Centre has cut windfall tax on crude producers, scraps petrol exports levy.
- Windfall tax is a **one-off tax imposed by a government on a company**.
  - It is levied on an **unforeseen or unexpectedly large profit**, especially unfairly obtained.
  - It is only **levied in public interest**.
  - It was announced to **control rising domestic oil price and to meet domestic need for petrol.**

3.13.11. LANDLORD PORT MODEL

- Jawaharlal Nehru Port (JNP) became the first 100% Landlord Major Port of India.
- Landlord port model is characterized by its **mixed public-private orientation**.
  - Under this, the **port authority acts as regulatory body and as landlord**, while **port operations (especially cargo handling) are carried out by private companies.**
  - It aims at **decentralizing decision making and to infuse professionalism in governance** of major ports.
- **About JNP**
  - JNP is at Navi Mumbai (Maharashtra), **commissioned in 1989.**
  - It is a **container handling port** accounting **for around 50% of the total containerized cargo volume**.

- Ports in India are classified as **Major (under Union govt) and Minor Ports (under state govt)** as per the Indian Ports Act, 1908.
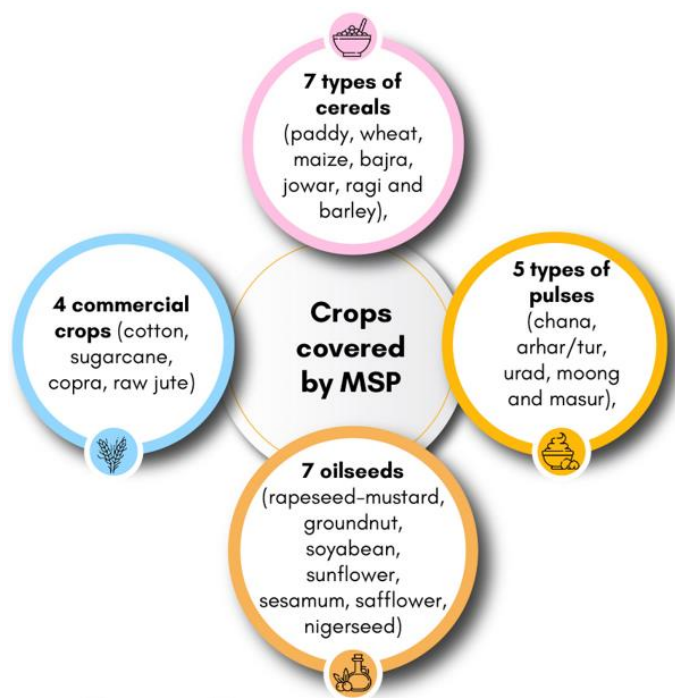- **Other PPP models for Port**

Service port model	The port authority **owns the land** and **all available assets—fixed and mobile**—and **performs all regulatory and port functions.** Here, the port trust is both the landlord and the cargo terminal operator.
Tool port model	The port authority **owns, develops**, and **maintains the port infrastructure** as well as the **superstructure**, **including cargo handling equipment** such as quay cranes and forklift trucks.
Corporatized ports	Ports are **entirely being privatized**, **except that ownership remains** public and often assumed as a majority shareholder.

MAJOR PORTS OF INDIA

3.13.12. PANEL FOR MINIMUM SUPPORT PRICE (MSP), NATURAL FARMING AND CROP DIVERSIFICATION

- The committee has been set up under **former Union Agriculture Secretary Sanjay Agrawal** to fulfil government's commitment **during the repeal of farm laws eight months ago.**
- **Objective of the committee is to**
  - Make **MSP more effective and transparent**.
  - Suggest measures to promote **zero-budget natural farming** (method of farming where the cost of growing and harvesting plants is zero) and **crop diversification to fulfil the changing food security requirement.**

- **About the MSP regime**
  - During each cropping season, **Union government on recommendations of Commission for Agricultural Costs and Prices (CACP) announces MSP for 23 crops**.
  - MSP for a crop is the price at which **government is supposed to procure/buy that crop from farmers if the market price falls below it.**
- **Present challenges under MSP regime**
  - **Highly skewed** toward **paddy and wheat,** thus leading to overproduction of these crops.
  - Benefits to a **limited number of farmers**, only about 2.2% farmers benefit from the MSP system.
  - Benefit is **spread unevenly across** the country highly towards Haryana and Punjab.
  - **Delay in the setting up of procurement centres.**
  - The current MSP regime **has no relation to prices in the domestic market**.

Crops covered by MSP

- **7 types of cereals** (paddy, wheat, maize, bajra, jowar, ragi and barley),
- **4 commercial crops** (cotton, sugarcane, copra, raw jute)
- **5 types of pulses** (chana, arhar/tur, urad, moong and masur),
- **7 oilseeds** (rapeseed-mustard, groundnut, soyabean, sunflower, sesamum, safflower, nigerseed)

3.13.13. 11TH AGRICULTURE CENSUS (2021-2022)

- Union Minister of Agriculture and Farmers Welfare recently launched 11th Agriculture Census (2021-2022).
- India's agricultural Census has been conducted since 1970-71 in collaboration with the States and Union Territories as **part of a programme of World Census of Agriculture of FAO.**
  - It is **conducted every 5 years.**
- **It** is the **main source of information on a variety of indicators,** including the **nature of operational land holdings,** their **size, distribution by class**, **land-use statistics, tenancy** and **Cropping patterns**
  - Census provides the **basis for development of a comprehensive integrated national system of agricultural statistics** and has links with various components of the national statistical system.
- During the 11th census, for the first time, **data collec**tion will be conducted on **smartphones and tablets.**
  - This will help **in faster and accurate enumeration**.
  - Most states have **digitized land records and surveys,** which will further accelerate the collection of agricultural census data.
- According to the 10th agricultural census (2015-16):
  - **small and marginal farmers** (less than two hectares of land) accounted for **86.2% of all farmers** but owned just **47.3% of the crop area.**
  - **Land holdings** continued to be **inequitably distributed.**

World Census of Agriculture (WCA)

- The first WCA was carried out in 1930 by the International Institute of Agriculture. Beginning with 1950, the **Food and Agriculture Organization (FAO)** of the United Nations has been preparing and advocating the **decennial** WCA.
- **The concept of agricultural operational holdings adopted in India differs** to some extent with that of FAO, as it **does not include** those holdings which **are not operating any agricultural land and are engaged exclusively in livestock, poultry and fishing etc.**

3.13.14. MANURE MANAGEMENT

- Ministry of Fisheries, Animal Husbandry and Dairying recently launched NDDB's subsidiary for manure management.
- National Dairy Development Board (NDDB)'s **MRIDA Limited**, **wholly owned subsidiary company of NDDB will work in manure management initiatives** across the country.
  - It was **established as an Unlisted Public Limited Company under Companies Act, 2013** on July 1, 2022.
  - It'll **set up manure value chain, biogas based CNG and energy generation** for dairy plants.
- Manure management (MM) is the **process in which animal excretion is captured, stored, treated, and used.**
  - Manure is a **cost-efficient and valuable fertilizer** containing varying amounts of nutrients, such as nitrogen and phosphorus, micronutrients, and organic matter.

- o Efficient MM **contributes to increasing productive economic life cycle of milch animals** beyond milking thereby help in l**owering of GHG emissions**.
- o MM initiatives have potential to **generate biogas equivalent to 50 percent of India's present LPG consumption** and produce bio slurry equivalent to **44 percent of India's NPK (nitrogen, phosphorous and potash) requirement.**
  - ✓ India also runs a **GobarDhan scheme to generate energy from cattle waste**.
- o It also contributes to enhancing the **livelihoods of dairy farmers by giving them extra source of income**.
- **About NDDB**
  - o NDDB **initially registered as a society under Societies Act 1860**.
  - o It was merged with erstwhile Indian Dairy Corporation **by Act of Parliament -NDDB Act 1987**.
  - o NDDB has **registered a trademark named "SuDhan"** to provide common identity to dung based organic fertilisers.

3.13.15. MILLETS

- NITI Aayog and the World Food Programme (WFP), India, have launched the **'Mapping and Exchange of Good Practices' initiative** for mainstreaming millets in Asia and Africa
- **About Millets**
  - o Millets are **coarse grains and a repository of protein, fibre, vitamins and minerals.**
  - o **Three major millet crops** currently growing in India are jowar (sorghum), bajra (pearl millet) and ragi (finger millet).
  - o **Major producers** include Rajasthan, Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Maharashtra, Gujarat and Haryana.
  - o Food and Agriculture Organisation (FAO) has endorsed India's call for declaring **2023 as the "International Year of Millets".**

3.13.16. OPIUM MARKET

- For the first time, **central government has allowed a private company, Bajaj Healthcare**, to manufacture **concentrated poppy straw (CPS) alkaloids** and **active pharmaceutical ingredients (APIs)** from unlanced poppy capsules.
  - o CPS is a mechanised system under which **entire harvest is cut by machine, transferred to factories for alkaloid extraction** and **eliminates diversion** of legally produced opium.
- **Significance of private players involvement**
  - o Boost domestic production of various alkaloids such as morphine and codeine.

- o Bring in modern technology to extract alkaloids.
- o Reduce imports of opium.
- o Offsetting the declining area under cultivation of poppy in India.
- Opium is a **natural substance obtained from poppy seeds and its derivatives.**
  - o Alkaloids obtained from opium are used to **make cough syrups, cancer medicines and pain-management medicines.**
  - o Only **12 countries including India allow its cultivation legally** for medicinal use.
  - o It is used **illicitly for smoking, drinking, or eating as pills**.
- Due to potential for illicit trade and risk of addiction, opium poppy cultivation is strictly regulated.
  - o At present, cultivation and processing of poppy and opium is controlled by provisions of **Narcotic Drugs and Psychotropic Substances (NDPS) Act** and Rules.

3.13.17. GRAND CHALLENGE ON ONION STORAGE

- **Department of Consumer Affairs** (Ministry of Consumer Affairs, Food and Public distribution) launched **'Technologies for Primary Processing, Storage and Valorisation of Onions'** via 'Grand Challenge on Onion Storage'.
  - o Challenge is open to students, startups, and corporates to **find solutions that reduce damage and bring down prices of onion.**
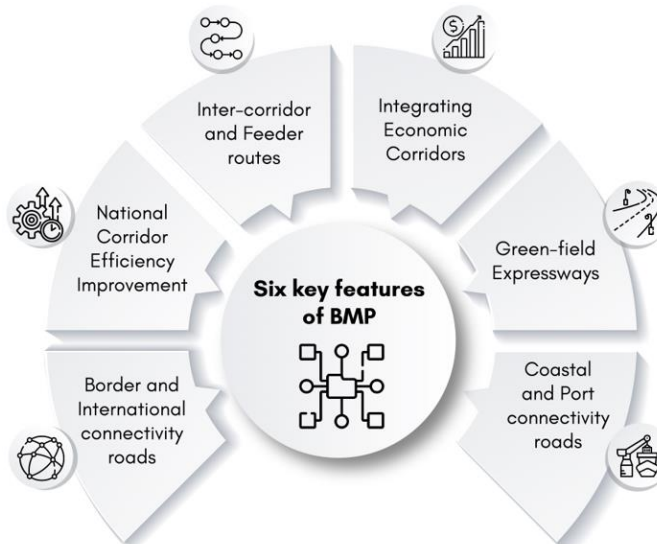 - o **30-40% onion is reportedly lost during storage.**

3.13.18. BHARATMALA PARIYOJANA PROGRAMME (BMP)

- As per rating agency ICRA, government's ambitious **road connectivity project under BMP** is expected to be completed in FY2028 with a **delay of nearly 6 years**.
  - o Initially, **it was envisaged to be complete by FY2022**.
  - o Presently, **only 60% of the total highway project has been awarded** and only 23% of the project was complete, as on March 2022.
- **Major reasons for delay highlighted are:**
  - o delays in land acquisition,
  - o significant rise in land acquisition,
  - o Covid-19 pandemic.
  - o Funding is a roadblock with costs almost doubling since 2015.
- BMP, announced in 2015, was launched under **Ministry of Road Transport and Highways.**
  - o Its primary focus is **optimizing the efficiency of movement of goods and people** across the country.

- o Under phase-1, it involves **development of 34,800-km highway** by FY2022.
- o Phase 2 envisages around **48,000 km of road network across India by 2024**.
- **Need for BMP**
  - o **To improve efficiency of existing corridors** through development of Multimodal Logistics Parks and **elimination of choke point**
  - o **Enhance focus on improving connectivity in North East** and leveraging synergies with Inland Waterways.
  - o **Lack of accident response infrastructure**.
  - o To emphasis on **use of technology and scientific planning for Project Preparation** and Asset Monitoring.

Six key features of BMP:
- Inter-corridor and Feeder routes
- Integrating Economic Corridors
- National Corridor Efficiency Improvement
- Green-field Expressways
- Border and International connectivity roads
- Coastal and Port connectivity roads

4. SECURITY

4.1. TRANS-BORDER LINKAGES TO NORTH-EAST INSURGENCY

Why in news?

Recently various experts have pointed out that stability in Myanmar has a co-relation with curbing North-East insurgency.

Background

- Myanmar is one of India's strategic neighbours and shares its **border with 4 north-eastern states: Arunachal Pradesh, Nagaland, Manipur and Mizoram.**
- Insurgent activities in **NE slowed down as both Bangladesh and Myanmar started taking strong action against the Indian armed** groups.
- However, **deteriorating situation in the Myanmar following February 2021 coup,** has once again helped these groups to re-arm and re-organize.

Insurgency in Northeast India and its cross-border linkages

- The Northeast region's shares a **4,500 km-long international border** (99% of its boundary) with China, Myanmar, Bangladesh and Bhutan.
  - As a result, these countries **have a major influence on the socio-economic fabric of the region.**
- The **trans-border linkages that these groups have, and strategic alliances** among them, have **acted as force multipliers** and have made the conflict dynamics more intricate. The following factors explains the reasons behind this:
  - **Illegal migration:** There was a major influx of Bangladeshis into Assam and Tripura after the massacre in East Pakistan. This led to change in the socio-economic and political landscape giving rise to insurgent groups. For example, United Liberation Front of Assam (ULFA) in Assam.
  - **Porous borders:** It provides easy ingress and egress facilities to the insurgents who transport weapons into the state. For example, drug-routing from the golden triangle through the northeastern region.
  - **Ethnicity issue:** Political boundaries in NE states do not coincide with the existing social boundaries. The **identity crisis faced by them turns into political assertion** by insurgent groups. For example, demand of the Greater Nagalim by Naga tribes.
  - **Assistance from neighbours:** Support and encouragement of the militant activities through moral and material help has created disaffection amongst the local populace and necessitated the deployment of security forces in counter-insurgency operations.
    - ✓ For example, Pakistan intelligence agencies entering from Nepal helped unite various insurgent groups. China has also provided assistance to groups such as the N.S.C.N.
  - **Cross border safe havens:** The majority of the insurgents belonging to the major outfits like the ULFA, National Socialist Council of Nagaland-Khaplang (NSCN-K), and National Democratic Front of Bodoland (NDFB) group have their bases in Myanmar and Bangladesh. These bases provide safe hiding places for insurgents.
  - **Perception of people in border areas:** The tribal people of the border area of Arunachal Pradesh still feel that their counterparts across the border in China are much better off in terms of both economic and social developments.

- **Other reasons responsible for NE insurgency** include threat to local tribal identities and sense of alienation from mainstream; poor connectivity and limited infrastructure; Informal governance and economy, and Limited FDI inflows.

Diplomatic initiatives taken to tackle NE insurgency

- **Security Cooperation with Neighbouring Countries:**
  - **Operation All Clear** by Royal Bhutan Army to flush out camps set up on its soil by north-eastern armed groups, including the ULFA at the Indian government's request.
  - **Operation Sunrise and Operation Golden Bird** by the armies of India and Myanmar for targeting camps of insurgent groups operating in North East and inside Myanmar territory respectively.
  - **Bangladesh government – between 2009 and 2015 – had handed over the top leaders of ULFA** and the National Democratic Front of Bodoland (NDFB), forcing them to come to the table for peace talks.
- **Other steps:**
  - **Fencing of borders to remove safe havens:** For eg- Around 24 kms of Indo-Bangladesh border in Tripura is fenced.
  - **Inner Line Permit (ILP):** Restrictions are imposed on the entry of outsiders to maintain the original identity of indigenous people of Mizoram, Nagaland and Arunachal Pradesh.

> **Other initiatives taken by the government to restore peace in the region:**
> - **Special powers under AFSPA (Armed Forces Special Powers Act)** were bestowed on armed forces to deal with emergency conditions in some areas of Assam, Nagaland, Manipur, and Arunachal Pradesh.
> - **Peace deals or Settlement agreements** such as National Liberation Front of Tripura (NLFT), Bru Refugee Rehabilitation Agreement, Bodo and Karbi Anglong peace accord.
> - **Local and Regional connectivity initiatives** such as Priority to NE routed under UDAN 4.0 scheme, Maitri Setu bridge over Feni River, and efforts to bring all NE capitals under Indian Railway network.
> - **Development of NE as economic hub** by mandatory earmarking of at least 10% gross budgetary support for NE region, initiatives like Swadesh Darpan scheme, Agri Exports zone, National Bamboo Mission.
> - **Constitutional Provisions** under articles Article 244(1), Article 244(2), to protect the rights of scheduled and tribal areas in the region.
> - **Preserving cultural richness** by celebration of festivals like Hornbill Festival

  - **Act East Policy** to promote economic, strategic and cultural relations with the vast Asia-Pacific region at different levels.
  - **Connectivity initiatives** to boost regional development such as India-Myanmar-Thailand (IMT), Kaladan Multimodal Transit Transport Project, Sittwe Port in Myanmar etc.

Way forward

- **Harnessing opportunities:** Geographical proximity to the prosperous East and Southeast Asian economies offers immense opportunities to NE region such as developing cross-border markets for tea, spices, fruit & vegetables, flowers and herbs; tourism; hydropower production etc.
- **Develop infrastructure** including connectivity (road, rail, air, inland waterways) for an overall development of the region as an economic hub to further India's 'Look East Policy' objectives.
- **Sorting out un-demarcated border issues** to overcome porous border issues.
- **Joint efforts with neighbouring countries** against insurgent groups and organised crime syndicates operating across borders.
- P**rotection of international border** either through erecting border fencing or through stationing additional border security force.
- **Fast economic development and opening of trade and communications links** with Myanmar and countries beyond will give a boost to peace in the region, apart from bringing economic prosperity.

4.2. THEATRE COMMANDS

Why in News?

Minister of Defence announced the setting up of '**Joint Theatre Commands' (JTC) of the tri-services**.

About Theatre Commands

- Theaterisation or Theatre Command means **putting specific number of personnel from the three services** —army, navy and air force— **under a common commander in a specified geographical territory**.

- o **At present, the Indian Army, navy and air force each has multiple commands** that are vertically split in terms of their command structure.
- o The army and air force have seven commands each while the navy has three commands.
- Idea of Theatre commands has been **proposed by both the Kargil review committee as well as D B Shekatkar committee.**

4 Proposed Geographical Commands

- Western theatre command
  - To resolve procedural issues in anti-doping disputes
- Northern theatre command
  - For the border with China.
- Maritime command
  - For Indian Ocean Region (IOR).
- Island command
  - Already functional, called the Andaman & Nicobar Command (ANC).

- While the details are not immediately clear, reports say that **single-service commands that currently exist would be combined into just 4 geographical commands.**
- Also, **Air space and cyber war would be the 5th and 6th theatre commands.**
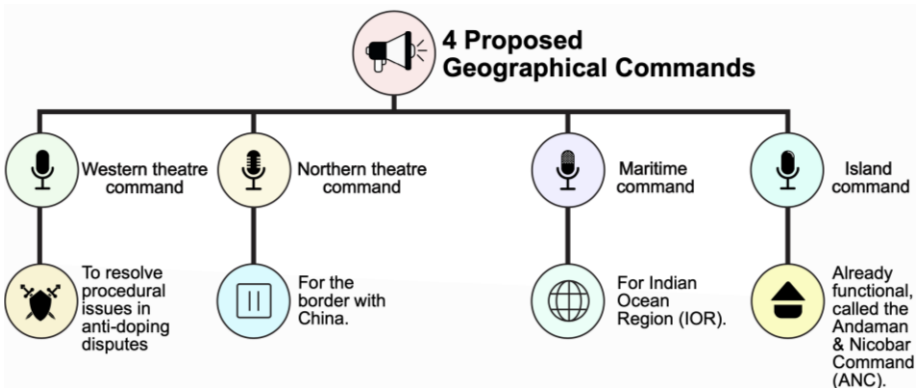
Other such steps in Defence Modernisation
- Creation of Chief of Defence Staff (CDS)
- Proposal for Integrated Battle Groups (IBG)
- Launching Agnipath Scheme

Advantages of Theatre Commands

Achieving Jointness
It will **boost overall fighting capabilities and will also create capacities along with seamless command** centres to meet future challenges.

Better Synergy
Military Assets will be **fused into one single command** under one operational head who will be responsible for directing and controlling their activities.

To meet Hybrid Warfare Requirements
As a potential conflict with a major military power like China will extend beyond the typical theatres into the **domains of cyber, space, nuclear and covert capabilities.**

Greater Efficiency
Major military powers like the US and China, operate via theatre commands as it is seen to be a better means of pooling resources, **providing coordinated logistics planning and improving efficiency.**

Systematic planning in acquisition of resources
Integrated approach toward procurement will **end piecemeal approach to purchases done by individual services** and the requirements of the military as a whole would be formulated.

Reducing Redundancies
By integrating manpower within theatre commands has the potential of redirecting a sizeable portion toward maintenance and **modernization of equipment and capabilities.**

Challenges in creation of Theatre Commands

- **Structure of command:** Confusion on the structure that who will report to who within the tri-services and joint theatre command configurations, and who will have operational command over personnel and machinery, service chiefs or theatre commanders.

- **Inter-services competition**: Wherein each service zealously oversees its own assets and strives for a greater share of the defence budget and influence might prove to be an obstacle in creating synergy among the services.
- **Existing mismatch between assets of armed forces:** For example, Air Force has only 31 operational squadrons against a sanctioned strength of 42 and that would make it difficult to permanently station assets in a particular command.
- **Perception of army's dominance:** As among the three services, the Army has always been the most visible there are concerns that integration might perpetuate the dominance of the army and give it greater operational control.
- **India's limited experience:** With integrated command structures may require a fair bit of mid-course corrections and would require problems to be timely identified and remedied, slowing down the integration process.

Conclusion

Move toward JTCs is a much-needed move, and it appears that it will be the driving force going forward. At the same time, there still exist multiple hurdles ranging from operational to conceptual that need to be taken into account, in order for this to fully bear fruit and transform the Indian military.

4.3. PREVENTION OF MONEY LAUNDERING ACT (PMLA)

Why in news?

Recently, Supreme Court upheld the **core amendments made to the Prevention of Money Laundering Act (PMLA), 2002.**

More on news

- SC verdict came on challenge raised against amendments introduced to PMLA, 2002 by way of Finance Act in 2019.
  - Amendments to PMLA **provided Enforcement Directorate (ED) extensive powers of summons, arrest and raids, and makes bail provisions difficult** while shifting the burden of proof of innocence onto the accused rather than prosecution.
- **Other Key observations made by SC** in **Vijay Madanlal Choudhary Vs Union of India case**

Specifications	Detail
Money Laundering is not a standalone offence	• Money-laundering is one of the heinous crimes, which not only affects the social and economic fabric of nation, but also tends to **promote other heinous offences, such as terrorism, offences related to NDPS Act, etc.**
Twin bail	• Stringent conditions for bail under PMLA Act are legal and not arbitrary. ○ The 'twin conditions' laid down in Section 45 of PMLA for grant of bail: that the **court must be satisfied that there are reasonable grounds for believing that the accused is not guilty of an offence; and that he is not likely to commit any offence while on bail.** • Court ignored **the earlier judgement** of SC that had declared **twin conditions for bail to be unconstitutional,** being violative of Articles 14 and 21 of Constitution.
ED officials are not police officials	• Authorities of ED who are **investigating into money laundering cases as per PMLA Act are not "police officers"**. Hence, statements recorded by ED authorities under Section 50 of the PMLA Act while inquiring into proceeds of crime are not hit by Article 20(3) (right against self-incrimination).
Enforcement Case Information Report (ECIR)	• No need to formally register an ECIR before initiating penal action or prosecution against person involved with process or activity connected with proceeds of crime under PMLA, 2002. • **ECIR cannot be equated with First Information Report (FIR)** as it is an internal document of ED.
Provisional attachment of property	• SC upheld section 5 of PMLA, which concerns with provisional attachment of property.
PMLA amendment as Money Bill	• The court did not examine arguments based on the fact that some of the amendments were introduced in the form of Money Bills, **as the issue concerning the scope of Money Bills is being separately considered by a seven-judge Bench.**

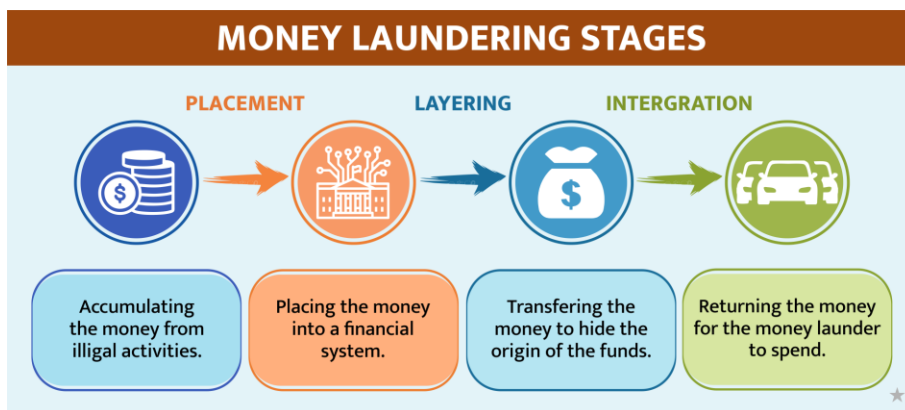**About Prevention of Money Laundering Act (PMLA), 2002**

- It was **introduced in 2002 and enacted in 2005** to tackle the problem of money laundering.
  - Through the process of money laundering a person converts illegal money into a legal entity.
- It was enacted in **response to India's global commitment (including Vienna Convention) to combat the menace of money laundering**, stemming from the trade of drugs and narcotics and organised crime that goes with it.

- **Objectives of PML Act**
  - To prevent and control money laundering
  - To confiscate and seize the property obtained from the laundered money; and
  - To deal with any other issue connected with money laundering in India.
- Under the Act, **ED is empowered to conduct money laundering investigation.**

Key features of PMLA, 2002

- **Defines offence of money laundering**: According to the act, whosoever attempts to indulge in any process or activity **connected with the proceeds of crime including its concealment, possession, acquisition or use and projecting or claiming it as untainted property** shall be guilty of offence of money-laundering.
- **Set ups Adjudicating Authority:** It prescribes for formation of three-member Adjudicating Authority for dealing with matters relating to attachment and confiscation of property under the Act.
- **Set ups Appellate Tribunal:** It is the body appointed by Centre empowered to hear appeals against the decisions of the adjudicating authority or any other authority under the act.
- **Set ups Special Courts:** They have been set-up in a number of States / UTs by Central Government to conduct the trial of the offences of money laundering.
- **Financial Intelligence Unit-India (FIU-IND):** It was established in 2004 as the **central national agency primarily responsible for obtaining, processing, analyzing and imparting information** related to suspect financial transactions.
  - It is an **independent body** that directly **reports to the Economic Intelligence Council (EIC)** governed by the finance minister.
- **Burden of proof:** A person has to prove that alleged proceeds of the offence are in fact lawful property where he is found accused of having committed the offence of money laundering.

Issues in implementation of PMLA

- **Dilution of laws:** PMLA was a comprehensive penal statute to counter the threat of money laundering, specifically stemming from trade in narcotics. Currently, the offences in schedule of Act are extremely overbroad, and in several cases, have absolutely no relation to either narcotics or organised crime.
- **Procedural issues**: Lack of clarity over process of selection of cases by ED.
- **Burden to prove innocence:** The accused must prima facie prove that he/she is not guilty and satisfy the Court that they will not commit any further offense in order to get bail.

MONEY LAUNDERING STAGES

PLACEMENT — Accumulating the money from illigal activities.

LAYERING — Placing the money into a financial system.

INTERGRATION — Transfering the money to hide the origin of the funds.

Returning the money for the money launder to spend.

About Enforcement Directorate (ED)
- It is a **financial investigation agency** under **Department of Revenue, Ministry of Finance**.
- **It was established in 1956** with its Headquarters at **New Delhi.**
- It is responsible for enforcement of **Foreign Exchange Management Act, 1999 (FEMA)** and certain provisions under **PMLA, 2002.**
- FEMA is a civil law while **PMLA is criminal law**.
- In 2021, Parliament has passed a bill to extend the tenure of director of ED to a maximum of five years.

Recent amendments in PMLA
- **Introduced the concept of 'corresponding law'** to link the provisions of Indian law with the laws of foreign countries.
- **Adds the concept of 'reporting entity'** which would include a banking company, financial institution, intermediary or a person carrying on a designated business or profession.
- **Confers powers upon the Director to call for records** of transactions or any additional information that may be required for the purposes of investigation.
- **Term proceeds of crime includes not only the property derived from scheduled offence** but would also include any other property derived or obtained indulging into any criminal activity relate-able or similar to the scheduled offence.

- **Low conviction rate**: There have been over 3,010 ED raids between 2014 and only 23 persons have been convicted by the agency, leading to a reported conviction rate of just 0.5 percent.
- **Ambiguity**: It is not clear that the insertion of the "Explanation" to clarify the definition of "proceeds of crime" shall have retrospective effect and also article 20(1) of constitution prohibits ex post facto application of criminal law.

Way forward

- **Procedural:** ECIR report should be laid down once the offences are finalised and should be provided to the accused to inform one of his crimes.
- **Operational efficiency**: PMLA use should be limited and should not act as a tool of harassment and focus should be on increasing the conviction rate which is nearly 0.5% at present.
- **Clarification on terms**: Clarification is needed on the legal position for some aspects, such as the scope of the amended definition of "proceeds of crime", and the safeguards to be followed when statements are recorded by investigating officers.
- **Review Scheduled offences**: The inclusion of "scheduled offences" from 30 different legislations has made the ambit of the law too wide thus diluting the focus of the ED from investigating serious offences. The list of "scheduled offences" needs to be reviewed and pruned for ensuring targeted focus on serious crimes.
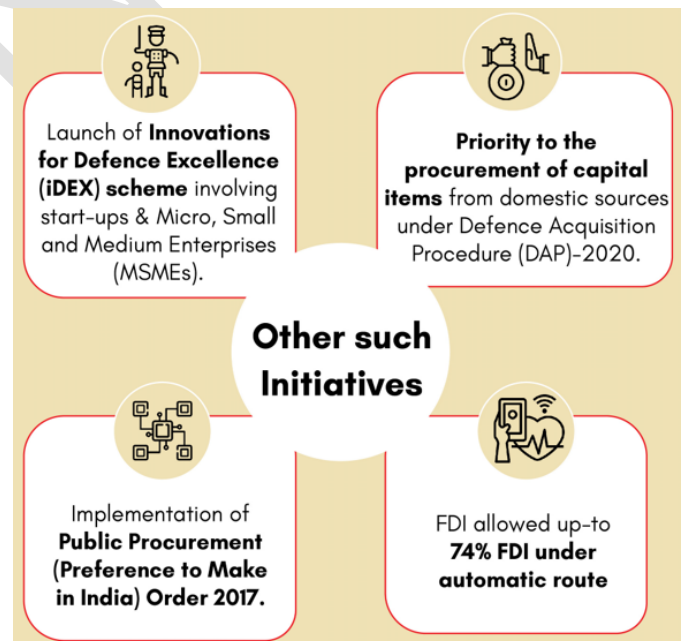
DID YOU KNOW?
- The **Financial Action Task Force (FATF)** is an inter-governmental body which **sets standards, and develops and promotes policies** to combat money laundering and terrorist financing.
- India became a member of the FATF in 2010.

4.4. NEWS IN SHORTS

4.4.1. SPRINT CHALLENGES

- Prime Minister unveiled 'Sprint Challenges' for Indian Navy.
- Prime Minister unveiled this initiative at a **naval seminar 'Swavlamban' organized** to **engage stakeholders** towards **self-reliance (Indigenisation)** in the defence sector.
  - This collaborative project is named **SPRINT, i.e., Supporting Pole-Vaulting in R&D through iDEX (Innovations for Defence Excellence), Naval Innovation and Indigenisation Organisation (NIIO), and TDAC (Technology Development Acceleration Cell).**
  - It is aimed at giving a **boost to the usage of indigenous technology in Indian Navy**.
- **Indigenisation of Defence** means the capability to design, develop and produce defence equipment within the country using its skills and resources to achieve self-reliance and reduce the burden of imports, i.e., self-sufficiency.
  - With the various initiatives of the Government, the **expenditure on defence procurement from foreign sources has reduced from 46% to 36%,** thereby reduced import burden, in the **last 3 (three) years i.e., from 2018-19 to 2020-21.**
- **Need for Defence Indigenisation**
  - Paramount to act as a **net security provider** in the **Indian Ocean region**.
  - Achieve India's vision of **Security and Growth for all in the Region' (SAGAR).**

  - Maintain **stable foreign exchange** and thus reduce **current account deficit.**

Launch of **Innovations for Defence Excellence (iDEX) scheme** involving start-ups & Micro, Small and Medium Enterprises (MSMEs).

Priority to the procurement of capital items from domestic sources under Defence Acquisition Procedure (DAP)-2020.

Other such Initiatives

Implementation of **Public Procurement (Preference to Make in India) Order 2017.**

FDI allowed up-to **74% FDI under automatic route**

4.4.2. FIRST INDIGENOUS AIRCRAFT CARRIER (IAC) VIKRANT

- It is **currently codenamed IAC-1** and will be called INS Vikrant once it enters service in the Indian Navy.
- An aircraft carrier **generally leads as the capital ship of a carrier strike/battle group.** Only five or six nations currently have the capability of manufacturing an aircraft carrier.

- IAC-1 has been **designed by the Indian Navy's Directorate of Naval Design**, and built at Cochin Shipyard Limited (CSL), a public sector shipyard under the Ministry of Shipping.
- **India's has had aircraft carriers earlier too** — but those were built either by the British or the Russians.
  - **INS Vikramaditya** (Soviet-Russian warship 'Admiral Gorshkov') is currently the Navy's only aircraft carrier.
  - **INS Vikrant and the INS Viraat,** were originally the British-built.
- **Importance of an aircraft carrier**
  - **Enhances Navy's capability to travel far** from its home shores.
  - **Essential to be considered a 'blue water' navy** — one that has the capacity to project a nation's strength and power across the high seas.
  - **Important amid India's bid to be a net security provider in the Indian Ocean region** where it faces China.
  - **Support in a conventional war against Pakistan,** which would involve strikes against Pakistan naval assets and land bases.

4.4.3. INDIGENOUS STEALTH DRONE

- Indigenous stealth drone took maiden flight from test range in Karnataka.
- The stealth drone, **also referred to as an Unmanned Combat Airborne Vehicle (UCAV).**
  - The **UCAV is a precursor to the Ghatak armed stealth drone programme called** AURA (Autonomous Unmanned Research Aircraft).
  - AURA is described as a **self-defending, high-speed, reconnaissance UAV** with a weapon firing capability.
- It has been **designed and developed by the Aeronautical Development Establishment (ADE)**.
  - It is powered by a **small turbofan engine**.

4.4.4. INDIA-JAPAN MARITIME PARTNERSHIP EXERCISE (MPX)

- A Maritime Partnership Exercise (MPX) was **conducted between Japan Maritime Self Defense Force and Indian Navy in Andaman Sea.**
  - It aimed at **enhancing interoperability and streamlining seamanship** and communication procedures.

5. ENVIRONMENT

5.1. IPBES ASSESSMENT REPORT: SUSTAINABLE USE OF WILD SPECIES

Why in news?

Recently, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) released report on the **'Sustainable use of Wild Species'**.

More on news

- IPBES Assessment Report **offers insights, analysis and tools to establish more sustainable use of wild species** of plants, animals, fungi and algae around the world.
- It is the **first of its kind** and has been conceived after a period of four years.
- It identifies **five broad categories of 'practices'** in the use of wild species i.e. f**ishing, gathering, logging, terrestrial animal harvesting (including hunting), and non-extractive practices** such as observing.

> **Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)**
> - Established in 2012, it is an **independent intergovernmental body** committed to **strengthen science-policy interface for conservation and sustainable use of biodiversity,** long-term human well-being and sustainable development.
> - Secretariat located in **Bonn, Germany**.
> - It is **not a United Nations body**. However, United Nations Environment Programme (UNEP) provides secretariat services to IPBES.
> - It now has **137 member countries** including India.
> - All States Members of the United Nations are eligible for IPBES membership.

Challenges to sustainable use of wild species

- **Climate change**: It can diminish the ability of mammals to successfully exploit natural resources, especially those species that are **less able to adapt to changing ecological conditions**.
- **Technology advance**: Due to increasing demand and technological advances, **ecological habitats of wild species get destroyed**, and depletion of natural resources.
- **Overexploitation:** Overexploitation (unsustainable harvest of species from the wild) is putting more **species on an extinction pathway** than any other threat.
  - 72% species are threatened by overexploitation (hunting, fishing or logging of forests)
- **Agriculture:** Expansion and **intensification of agriculture** (production of food, fodder, fibre and fuel crops; livestock; aquaculture; and cultivation of trees) has led to loss of wild species.
  - About 20% of the world's tropical forests are currently subject to selective logging.
- **Tourism:** Unsustainable tourism can **lead to soil erosion, increased pollution, natural habitat loss**, and more pressure on endangered species, thus **impact the free movement** of animals.
- **Illegal Trade:** Global trade in wild species has **expanded substantially in volume, value** and **trade networks** over the past four decades.
  - Illegal trade in wild species is regarded as the **third largest class of illegal trade**, with estimated **annual values of US$69-199 billion**.

SIGNIFICANCE OF SUSTAINABLE USE OF WILD SPECIES

Human Dependence on wild species for food, energy, medicine, material and other purposes.

Contributes to the livelihoods of indigenous people and local communities through subsistence, as well as trade in informal and formal markets.

Critical to reversing the global trend in biodiversity decline.

Key elements for Sustainable use of wild species
- **Fairness, rights and equitable distribution** of benefits are essential.
- **Effectiveness of market-based incentives**, such as certification and labelling, is mixed and mostly limited to high value markets.
- **Robust governance systems tend to be adaptive** to changes in social and ecological conditions and include participatory mechanisms.
- **Aligning and coordinating policies** across sectors and scales of governance.
- **Effective monitoring** of ecological and social, including economic aspects of uses of wild species.
- Policies that **support secure tenure rights and equitable access to land, fisheries and forests** as well as poverty alleviation.

Policy Conditions Affecting the Sustainable use of Wild Species

✅ **Enabling**

More Sustainable
- Is adaptive and democratic
- Ensures robust institutions
- Is tailored to context
- Aligns broader policies
- Is inclusive and participatory
- Recognizes plural knowledge & values
- Shares benefits equitably

Constraining

Less Sustainable
- Ignores history
- Ignores rights
- Overlooks social context
- Mismatches scale
- Criminalizes marginalised
- Creates power imbalances
  Over-relies on laws and rules

Recommendations of report

- **Regulation:** Effective regulation **across supply chain from local to global required** as global trade of wild species generally increases pressures on wild species, leading to unsustainable use and sometimes to wild population collapses (e.g., shark fin trade).
- **Promote sustainable use of wild species**: For this, key elements are presented which act as driving force to promote sustainable use. These are
  - **Inclusive and participatory decision making**.
  - **Robust institutions** from customary to statutory.
  - **Ensure fair & equitable distribution** of costs & benefits.
  - **Monitoring of wild species**, social- ecological conditions and practices.
  - Recognise and support multiple forms of knowledge.
- **Cooperation**: Bringing scientists and indigenous peoples together to learn from each other will strengthen the sustainable use of wild species.
- **Transformative changes**: They are needed to ensure sustainable use and enhance the sustainability of the use of wild species.
  - In case of fishing, sustainable use requires **fixing current inefficiencies, reducing illegal, unreported, and unregulated fishing** and suppressing harmful financial subsidies that contribute to overcapacity and overfishing in marine systems, **adapting to changes in oceanic productivity** due to climate change and proactively creating effective transboundary institutions.
- **Innovation:** Technological innovations **enhance efficiency and reduce waste may help sustainable use of wild species**, support sustainable use of natural forests through multiple routes.

5.2. PROJECT TIGER

Why in news?

Project Tiger will complete 50 years in the year 2023.

What is Project tiger?

- Launched in 1973, it is a **Centrally Sponsored Scheme** of the Ministry of Environment, Forests and Climate Change.
- It **provides central assistance to tiger range States for in-situ conservation** of tigers in designated tiger reserves.
- It was initially launched **in 9 Tiger reserves (TRs)** in different states of India.

- **Implementing Agency: National Tiger Conservation Authority (NTCA)** was established through Wild Life (Protection) Amendment Act, 2006 to provide statutory authority to Project Tiger.
- **Funding pattern:** Centre provides financial assistance to States of **60% and 50% for expenditure on all non-recurring items and expenditure on recurring items respectively.**
  - North Eastern and Himalayan States are provided 90% central assistance in both cases.

What role has the project played in restoring the population and strengthening conservation efforts for tigers?

- **Establishment and development of new TRs**: There are 52 tiger reserves covering over 75,000 sq. km.
  - Further, Guru Ghasidas National Park (Chhattisgarh) and Tamor Pingla Wildlife Sanctuary (Chhattisgarh) was recently approved for declaration as the 53rd TR in India.
- **Adopting core buffer strategy to manage TRs:** Core areas are kept free of all human activities while a **co-existence agenda** is adopted in buffer and fringe areas with landscape approach
  - **NTCA recently banned new construction in tiger reserves' core areas.**
- **Regular assessment of Tigers, Co-predators, prey and their habitats:** NTCA is conducting 5th cycle of assessment using application **M-STrIPES** (Monitoring System for Tigers Intensive-Protection & Ecological Status), which records primary field data digitally using GPS to geotag photo-evidence.

> **International cooperation for Tiger conservation**
> - **Global Tiger Initiative (GTI):** It is a global alliance led by the 13 tiger range countries (TRC), including India, and other organization like the **World Bank, the Global Environment Facility (GEF),** etc.
> - **Global Tiger Forum:** India is one of the Founding members of the intergovernmental platform working exclusively for the conservation of Tigers in the wild.
> - **Bilateral instruments:**
>   - **Protocol on conservation of tigers with China.**
>   - **Memorandum of Understanding (MoU) with Bangladesh** on conservation of the Sundarbans
>   - **MoU with Myanmar** to combat timber trafficking and conservation of tigers and other wildlife.

> **Achievements of Tiger conservation in India**
> - **Increase in Estimated Tiger population** from 1,411 in 2006 to **2,967 in 2018**.
> - **India achieved the targets set under TX2 initiative in 2018** (4 years in advance).
>   - **Tx2 is the global goal to double the number of wild tigers by the year 2022.** It was adopted in 2010 at the St. Petersburg Tiger Summit by 13 tiger range countries.
> - **14 Tiger Reserves in India** have been awarded with **international Conservation Assured | Tiger Standards (CA|TS) accreditation**.
>   - CA|TS are **globally accepted conservation tool** that **sets best practices and standards to manage tigers and** encourages assessments to benchmark progress.

> **Related news: Failure of India's first inter-state tiger relocation project**
> - Sundari — a tigress shifted as part of India's first inter-state translocation project in 2018 from Madhya Pradesh to Odisha — recently returned home.
> - **About the tiger relocation project:** It was initiated in 2018 wherein two big cats, a male (Mahavir) from Kanha Tiger Reserve and a female (Sundari) from Bandhavgarh from Madhya Pradesh were relocated to Satkosia Tiger Reserve in Odisha, to shore up the tiger population in the state.
> - **Reasons for the failure of project-**
>   - **Field staff and tiger reserve management were not adequately prepared.**
>   - **Capacity for tiger monitoring and protection was poor (**Mahavir's death took place due to poaching).
>   - **Local communities were not taken into confidence** nor conveyed the benefits from the project leading to severe protests.
>   - **Competition from existing female tigress** in the core area.

- **Independent monitoring and the evaluation of tiger reserve** by developing **Management Effectiveness Evaluation (MEE) Framework** as per international standards.
- **Anti-poaching initiatives:** Special Tiger Protection Force (STPF) are deployed in several TRs for focused anti-poaching operations.
- **Fostering awareness for eliciting local public support** enabled by branding and marketing of project tiger.
- **Promoting sustainable tourism** through National Tiger Conservation Authority (Normative Standards for Tourism Activities and Project Tiger) Guidelines 2012.
- **Technological advancements such as use of Unmanned Aerial Vehicles (UAV)** for Surveillance and Monitoring tool for Protection of Tiger under E-Bird project.

- **Other significant activities:**
  - Capacity building of frontline personnel posted in TRs.
  - Use of information technology in wildlife crime prevention.
  - Addressing human-wildlife conflicts.
  - Addressing the issue of resource dependency of local people through sustainable livelihood options.
  - Providing assistance to States for fostering ecotourism, etc.

What are the challenges that persist in India's tiger conservation efforts?

- **Structural and implementation issues with Project tiger:**
  - **Lack of confidence and trust building between the forest department and the local communities** leading to absence of their proactive participation in conservation efforts.
  - **Low capacity among local forest officials** to effectively conduct surveillance and monitoring of tiger population.
  - **Lack of adequate protection in outside areas**: As per the latest cycle of the All India Tiger Estimation, 2018 nearly 35% of tigers in India are found outside tiger reserves.
  - **Issues related to rehabilitation and relocation of population from critical tiger habitats.**
  - **Financial constraints** in some TRs to undertake activities like restoration of habitats.
  - **Human wildlife conflicts and Retaliatory killings:** Human-tiger conflict has increased in recent years due to factors like- habitat **loss/fragmentation/degradation**, saturation of tiger populations in certain regions, increase in human settlements and agricultural lands around protected areas etc.
    - ✓ For instance, **density of tigers in the Sunderbans may have reached the carrying capacity**, leading to frequent dispersals and a surge in human-wildlife conflict.
- **Pockets of isolated and small populations in certain areas,** which leads to increase in the frequency of detrimental genetic variants due to inbreeding.
  - For example, pseudo-melanistic or **black tigers are found in Similipal tiger reserve** in Odisha due to genetic effects of isolation.
- **Other prominent threats**: Illegal poaching and wildlife trade, severe loss of natural prey populations, etc.

Way Forward

- **Expanding and improving the quality of occupied habitat and recovery of prey species** through restoration of forests and its ecosystem services.
  - **Recently NTCA has decided that** core areas of tiger reserves **will be for thriving and breeding of tigers** and other wildlife alone and there will be no new construction in tiger reserves' core areas.
- **Management and minimisation of human-tiger conflict to promote acceptance of wildlife and prevent retaliatory killings**: through practices like-
  - **Creating outreach systems** to help communities better understand the risks, and ways of reducing exposure to tiger predation.
  - **Providing adequate incentives** like generous compensation policies to cover the financial cost of losing livestock or crops.
  - **Establishing a national response system for human-tiger conflict** – including rapid response teams in hotspot areas.
- **Generating local support for tiger conservation** by creating forums for formal dialogue between Indigenous Peoples and local communities and conservation agencies.
- **Create safe connectivity among habitats** through structural measures like crossing bridges etc. to allow tigers to disperse safely to new areas.

About Indian Tiger or Royal Bengal Tiger (Panthera Tigris)

- It is the **tiger species native to India.**
- **It is a flagship species of India** and has been declared as the **National Animal of India.**
  - Flagship species are selected to act as an ambassador, icon or symbol for a defined habitat, issue, campaign or environmental cause.
- **Tiger Conservation Status-**
  - International Union for Conservation of Nature (IUCN)**: Endangered**
  - Wildlife (Protection) Act, 1972**: Schedule I**
  - Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): **Appendix I**
- **Habitat**: The largest population is in India, but there are some smaller groups in **Bangladesh, Nepal, and Bhutan**. It may also be present in areas of **China and Burma.**
  - India is home to more than **70% of global tiger population.**
- **Distribution of Tiger population in India:**
  - In India, tigers inhabit a wide variety of habitats ranging from the high mountains, mangrove swamps, tall grasslands, to dry and moist deciduous forests, as well as evergreen and shola forest systems.
  - **Madhya Pradesh has the maximum number of tigers** followed by Karnataka and Uttarakhand.
- **Significance of tiger conservation**: It is both an **Umbrella species** (its conservation ensures conservation of other species of wild animals and forests) and a **Keystone species** (has a disproportionately large effect on its natural environment relative to its abundance).
- **Characteristics**:
  - Tiger is **solitary and territorial**, and the territory of an adult male may encompass territories of two to seven females.
  - **Tiger stripes are individually as unique** as human fingerprints.

DID YOU KNOW?

While Tigers are generally solitary animals but Moher tigers stay with their cubs for about two years and teach them to hunt.

5.3. IMPACT OF CLIMATE CHANGE ON CHILDREN

Why in news?

The **United Nations Children's Fund (UNICEF),** the International Organization for Migration (IOM), Georgetown University, and the United Nations University have launched '**Guiding Principles for Children on the Move in the Context of Climate Change'.**

More on the news

- The new guidelines to provide the **first-ever global policy framework** that will help protect, include, and empower children on the move in the context of climate change.
- It provides a set of **9 principles** that address the unique and layered vulnerabilities of children on the move **both internally and across borders** as a result of the adverse impacts of climate change.
- The principles are derived from the **Convention on the Rights of the Child**, and **do not create new international legal obligations**.

IOM UN MIGRATION

International Organization for Migration (IOM)

- It is the leading **intergovernmental organization in the field of migration** and works closely with governmental, intergovernmental and non-governmental partners.
- **Genesis**: Originally known as the Provisional Intergovernmental Committee for the Movement of Migrants from Europe (PICMME), it was **formed in 1951** out of the chaos and displacement of Western Europe following the Second World War.
- **Objective**: To support migrants across the world, develop effective responses to the shifting dynamics of migration and act as a key source of advice on migration policy and practice.
- **Headquarter:** Geneva, Switzerland
- **Members**: 174 member states, including **India**, and 8 observer states.
- **Other Key information**:
  - It is **part of the United Nations System**, as a related organization.
  - It works in the four broad areas of migration management: Migration and development, facilitating migration, regulating migration and forced migration.

Guiding Principles for the children on the move

Rights-based approach
Guarantee the rights of the children as enshrined in the **Convention on the Rights of the Child.**

Best interests of the child
Prioritise the best interests of the children in all decisions and actions affecting them.

Accountability
Governments and other actors are accountable for their decisions/actions that contribute to children's mobility

Awareness and participation in decision-making
Children have the **right to be informed, consulted and to participate** in making decisions.

Family unity
Children have the **right to be cared for by their parents or caregivers** and to not be separated from them.

Protection, safety and security
Protect children from harm throughout their journey

Access to education, health care and social services
Children have the right to access these services, at all stages of their journeys.

Non-discrimination
Enable children to exercise their rights, **irrespective of their or their parents' migratory status.**

Nationality
States have an obligation to ensure that **migrant children are granted a nationality.**

How does Climate Change disproportionately impact children?

- **Problems faced by Children displaced due to climate change:**
  - **Greater risk of maltreatment** in the form of abuse, trafficking, exploitation, discrimination, etc.
  - **More likely to lose access to essential services**, such as health, nutrition, education etc. and **social protections** against child labour, child marriage etc.
  - **Other issues-** Statelessness, separation from family, detention, poor living conditions, xenophobia etc.

CHILDREN'S ELEVATED VULNERABILITY TO CLIMATE CHANGE

Physical vulnerability
- Children are less able to physically protect themselves from shocks of severe weather such as floods and heatwaves.

Physiological vulnerability
- More at risk of death compared to adults from diseases likely to be exacerbated by climate change, such as malaria and dengue.
- Toxic substances, such as lead, affect children more than adults, even at lower doses of exposure.

Emotional vulnerability
- Children exposed to extreme weather event such as cyclones and wildfires have increased risk of PTSD, anxiety, depression etc.

- **Policy Inadequacy: Climate policies often does not address the specific risks** that children face because of climate change and its impacts including displacement**.**
- **Extreme Weather events**: Climate change induced extreme weather events will **expand the number of emergencies and humanitarian crises, current and future generations of children will face within their lifetime**.
- **Any deprivation at a young age can result in a lifetime of lost opportunity:** For example, disruptions to education as a result of climate impacts will negatively affect a child's ability to learn – affecting their future careers, and potential.
- **Trapped in a vicious cycle:** Children's lack of access to key essential services also reduces their resiliency and adaptive capacity, further increasing their vulnerability to climate and environmental hazards.

Way Forward

- **Policy Support**: Local and national governments and civil society groups can use the Guiding Principles to **formulate and implement child-related migration policies**.
  - **Understand children's exposure and vulnerability** to climate change through ground level assessments.
- **Provide appropriate guidance to children in exercising their rights** through-
  - **Imparting awareness** through climate education and developing greens skills.
  - **Encouraging their participation** in national, regional and international level decision-making.
- **Improve the climate-responsiveness of social protection systems** by investing heavily in adaptation and resilience of essential services such as health, education, nutrition etc.
- **Establishing child friendly justice systems** can help ensure that the specific needs and circumstances of migrant children are considered.
- **Rapid reduction in emissions** to mitigate drastic impacts of climate change.

> **Key Statistics**
> - In **2020, nearly 10 million children were displaced** due to weather-related events.
> - **Nearly 90% of the global burden of disease** associated with climate change is borne by children under the age of five.
> - **India is among 4 South Asian countries where children are most at risk** of the impacts of climate change as per UNICEF's Children's Climate Risk Index' (CCRI).

5.4. OFFSHORE WIND ENERGY

Why in news?

Recently, Ministry of New & Renewable Energy (MNRE) released **Strategy Paper for Establishment of Offshore Wind Energy Projects.**

About Strategy Paper for Establishment of Offshore Wind Energy Projects

- Paper identifies **16 zones in total, off the coasts of Gujarat and Tamil Nadu** for harnessing offshore wind energy.
- It suggests **incentives to companies in the offshore wind energy space, including the waiver of transmission charges, renewable energy credits, carbon credits benefits and viability-gap funding**.
- Also, it **proposes three models** for the holistic development of offshore wind farms in the country.

About Offshore Wind Energy

- According to the MNRE, **India can generate 127 GW of offshore wind energy** with its 7,600 km of coastline.

> **Wind energy**
> - Wind power is one of the **fastest-growing renewable energy technologies.**
> - Out of the total renewable energy installation capacity of 78 GW, **wind energy contributes to more than 35 GW as on March 2019 and the national target is to achieve 60 GW of wind energy installations by 2022.**
> - There are **two ways in which energy can be harnessed:**
>   - **Onshore wind energy,** is the power that's generated by wind turbines located on land driven by the natural movement of the air.
>   - **Offshore wind energy,** on the other hand is the energy generated from farms that are located over shallow open water, usually in the ocean, where there are higher wind speeds.

> **Steps taken by Government for promotion of Offshore Wind Energy**
> - **"National Offshore Wind Energy Policy – 2015":** The policy provides for offshore wind power development up to a seaward distance of 200 nautical miles from the baseline, i.e., up to the country's EEZ.
>   - **Ministry of New & Renewable Energy (MNRE)** is the Nodal Ministry, and the **National Institute of Wind Energy (NIWE)** is the Nodal Agency for the development of Offshore Wind Energy in India.
> - Government had also announced **installing of 5 GW of offshore wind installations by 2022 and 30 GW by 2030.**

- Out of the total estimated potential, more than 95% of commercially exploitable resources are located in seven states: **Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Tamil Nadu**
- Also, the **National Institute of Wind Energy (NIWE)** estimated **36 GW of offshore wind energy potential exists off the coast of Gujarat and 35 GW off the Tamil Nadu coast only.**
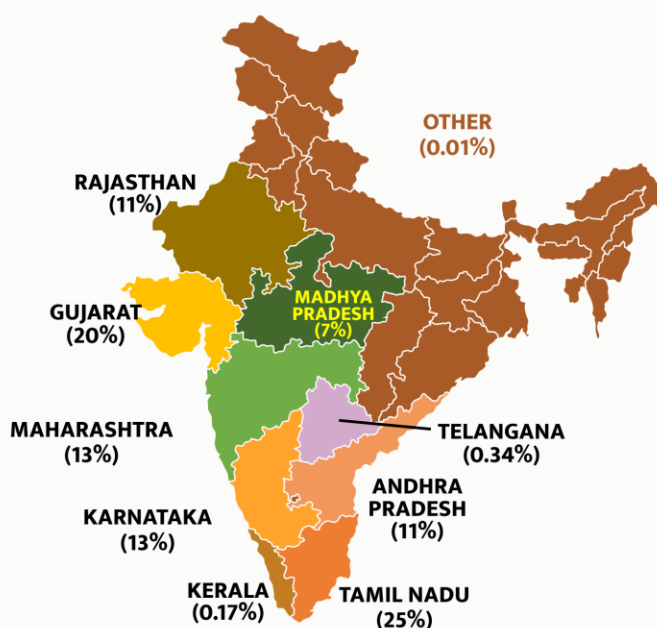
Benefits and Challenges of Offshore wind Energy

	Benefits	Challenges
Offshore	- **More energy generation:** Offshore wind speeds are typically faster than on land, and even small increases in speed can produce large increases in energy generation. - **More wind consistency:** Wind speeds offshore don't vary as much and the wind direction doesn't change as often, so offshore turbines are more consistent in power generation - **No interference with land usage:** Offshore turbines don't interfere with land usage, and there are no physical obstacles that can interrupt the wind flow. - **More energy:** Offshore turbines can also be built taller which means they can produce more electricity.	- **Higher cost:** Creating the infrastructure for offshore wind farms is expensive and complex, especially over deeper waters. - **Maintenance & repairs:** Sea waves and very high winds can damage turbines, so they need more maintenance. Also, Offshore wind farms are difficult to access, which means longer wait times for repairs. - **Impact marine life:** The underwater noises from turbines can impact fauna and other marine life.
Onshore	- **Less expensive:** Infrastructure required for onshore wind power is half the cost of offshore and can provide investment payback as quickly as two years. - **Shorter cables:** With less distance between the turbines and the consumer, there's less voltage drop-off in the cabling. - **Low impact on surroundings:** As toxins aren't released, the site can be farmed around, and there's very little impact to wildlife. - **Quick installation:** Onshore wind turbines are quick to install and can be constructed within a few months.	- **Varying wind speed:** Because wind speed and direction vary on land, achieving consistent power generation can be challenging. - **Potential wind blockages:** Physical blockages from buildings and surrounding landscape like hills or mountains can also cause production inconsistencies. - **Intermittent energy:** Because onshore turbines don't run year-round, they require fossil-fuel backups when the wind speed is slow

Way Forward

- **Consider for Renewable purchase obligation (RPOs)**: Currently, there are only two types of RPOs: solar and non-solar.
  - MNRE can set specific wind RPO targets for each state just like it does for solar.
- **Lower taxes:** Wind power generation companies cannot claim input tax credits when they pay GST to purchase goods and/or services for setting up the project.
  - The majority of wind farm components **need to be imported**.
  - If excise duties and GST could be waived, **early project development will be more affordable.**

INDIA-CUMULATIVE WIND POWER INSTALLATIONS BY STATES (%)

OTHER (0.01%)
RAJASTHAN (11%)
GUJARAT (20%)
MADHYA PRADESH (7%)
MAHARASHTRA (13%)
TELANGANA (0.34%)
ANDHRA PRADESH (11%)
KARNATAKA (13%)
KERALA (0.17%)
TAMIL NADU (25%)

- **Feed-in tariff (FiT):** FiT is a price-driven policy for promoting RE expansion where the government offers a guaranteed purchasing price for electricity produced from RE sources for fixed periods of time**.**
  - o Discoms can adopt FiT regulations and **make offshore wind power procurement mandatory.**
  - o FiT can be used to **promote offshore wind power in the early stages of development until it becomes economically viable.**

5.5. GROUNDWATER CONTAMINATION

Why in news?

World Bank recently launched a report titled '**Seeing the Invisible: A Strategic Report on Groundwater Quality'.**

Key findings of the report

- Globally, about 150 million people have been exposed to dangerous levels of arsenic in drinking water since the 1970s.
- Long-term exposure to fluoride in drinking water puts an estimated 200 million people worldwide at risk of developing crippling skeletal fluorosis.

Sources of Groundwater contamination

- **Geogenic (naturally occurring) contaminants** due to geochemical characteristics of the aquifer or environmental conditions: These include arsenic, fluoride, uranium, selenium, manganese etc.
- **Anthropogenic contaminants:**
  - o **Faecal pathogens** from improper sanitation practices.
  - o **Agricultural pollutants** like nitrate fertilizers and pesticides.
  - o **Industrial chemicals** like- petroleum hydrocarbons, chlorinated solvents, hexavalent chromium, per- and poly- fluoroalkyl substances (PFAS).
- **Salinity** due to sea water intrusion, overexploitation of groundwater etc.
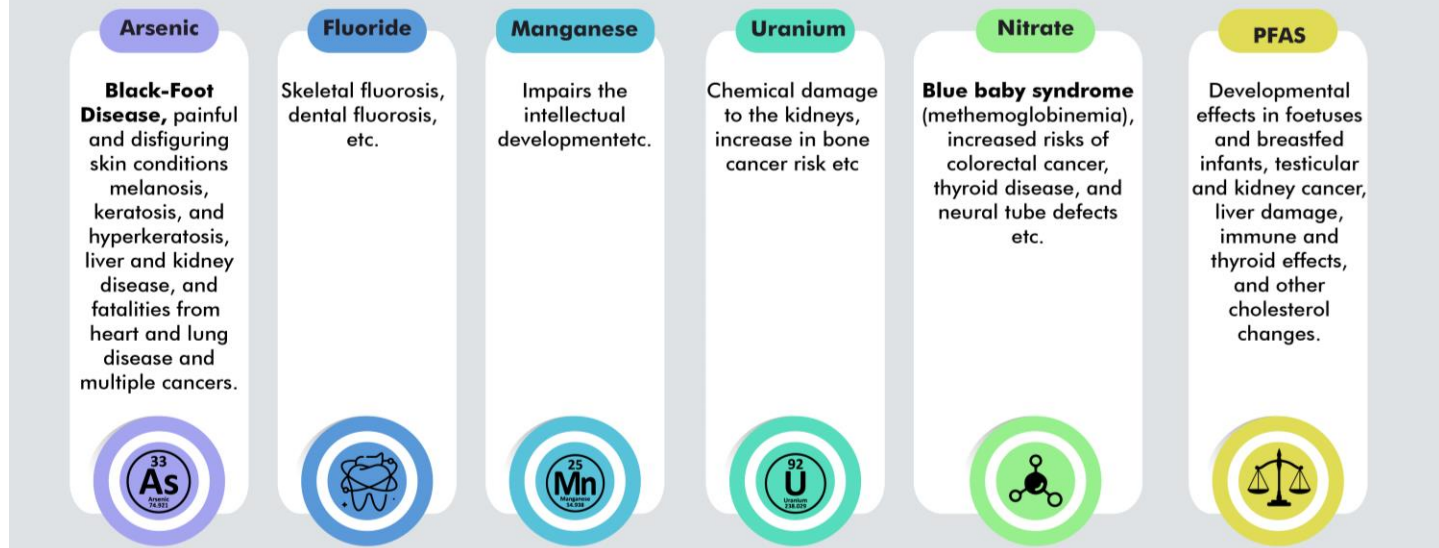
> **Extent of Groundwater pollution in India**
> - In India, the states of **West Bengal, Jharkhand, Bihar, Uttar Pradesh, Assam, Manipur, and Chhattisgarh** are reported to be **most affected by arsenic contamination of groundwater.**
> - **Fluoride contamination is widely prevalent in different parts of India,** particularly in the state of **Andhra Pradesh, Tamil Nadu, Uttar Pradesh, Gujarat, and Rajasthan**, where 50-100% of the districts have drinking water sources containing excess level of fluoride.
> - Across **India aquifers from 16 states have reported Uranium contamination** in groundwater.
> - **High Nitrate concentration in ground water in India has** been found in almost all hydrogeological formations.

Significance of preventing ground water Contamination

- **Groundwater meets large share of human's freshwater needs**: It supplies drinking water for more than one-third of the world's population, around 40 percent of irrigation water and 25 percent of industrial water.
- **Critical to develop resilience to climate change**: As water availability becomes more variable with climate change, groundwater is expected to provide a critical buffer in times of water shortage.
- **High Maintenance: High cost and time of cleaning up polluted groundwater** which are far greater than protecting it.
- **Impact on Health: Adverse health impacts on people** dependent on groundwater for drinking purposes.
- **Threatens the productivity and sustainability of agriculture:** Contaminants like salinity, selenium and cadmium are phytotoxic i.e., they have adverse effects on plant growth, physiology, or metabolism.
- **Accumulation in food chain**: For instance, irrigation from groundwater contaminated with Arsenic can lead to its accumulation in crops like rice.
- **Contaminants can become persistence** by diffusing into low-permeability layers during the early stages of a pollution event and slowly diffuse back out later.

COMMON GROUNDWATER CONTAMINANTS AND THEIR IMPACT ON HUMAN HEALTH

Arsenic

Black-Foot Disease, painful and disfiguring skin conditions melanosis, keratosis, and hyperkeratosis, liver and kidney disease, and fatalities from heart and lung disease and multiple cancers.

Fluoride

Skeletal fluorosis, dental fluorosis, etc.

Manganese

Impairs the intellectual developmentetc.

Uranium

Chemical damage to the kidneys, increase in bone cancer risk etc

Nitrate

Blue baby syndrome (methemoglobinemia), increased risks of colorectal cancer, thyroid disease, and neural tube defects etc.

PFAS

Developmental effects in foetuses and breastfed infants, testicular and kidney cancer, liver damage, immune and thyroid effects, and other cholesterol changes.

Constraints in prevention of groundwater contamination in India

- **Lack of access to safe and clean water**: Large sections of people in India, especially in rural areas, are dependent on groundwater, which exposes them to geogenic contaminants.
- **Inefficient enforcement of pollution control norms** leading to industrial chemical mismanagement and improper waste disposal in groundwater aquifers.
- **Technological and financial challenges** in collecting, analyzing and managing data related to groundwater quality monitoring.
- **Poor monitoring of "non-point" sources of pollution** such as nitrate pollution from agriculture sector.

Way forward

- **Undertaking institutional strengthening measures** like a well-formulated legislative framework, an adequate budget, recruitment of relevant expertise, accountability framework with public reporting and information sharing etc.
- **Use of conceptual hydrogeological model** for understanding of the processes that control the movement of pollutants through an aquifer.
- **Groundwater Quality Monitoring** along the chain from identifying suitable wells through sampling to laboratory analysis and data processing.
- **Mitigating natural contamination** through rapid surveys and emergency water supply interventions.
- **Technological interventions** such as filtration systems, Bio remediation etc.
- **Remediating anthropogenic pollution** through techniques such as- **in-situ treatment**, **permeable reactive barriers, etc.**
- **Adopting groundwater management best practices like**-
  o mandatory groundwater monitoring (allows early detection),
  o participatory management of groundwater,
  o maintenance of an active register of new chemicals (to enable an adaptive response),
  o regulatory regime that encourages voluntary remediation etc.

> **Steps taken in India to ensure groundwater quality**
> - **Central Ground Water Board (CGWB)** regularly monitors ground water quality of shallow aquifers on a regional scale, once every year through a network of about 15000 observation wells.
> - **Atal Bhujal Yojana**, a Central Sector Scheme, with focus on community participation, demand side interventions and convergence of ongoing schemes for sustainable ground water management.
> - **Bureau of Indian Standards has prescribed limits** for contaminants in drinking water.
> - **Control of industrial pollution** under the provision of Water (Prevention and Control of Pollution) Act, 1974.
> - **Establishment of Common Effluent Treatment Plants (CETPs)** for cluster of Small Scale Industrial units.

5.6. ARIDITY ANOMALY OUTLOOK INDEX

Why in news?

At least 85% of districts were facing arid conditions across India, according to the Aridity Anomaly Outlook Index for July, issued by India Meteorological Department (IMD).

Anomaly of Aridity Index	Agricultural Drought Intensity
1 – 25	Mild
26 – 50	Moderate
> 50	Severe

About Aridity Anomaly Outlook Index

- **Aridity Anomaly Index is the departure of aridity index value from normal** (expressed in percentage).
  - Aridity Index refers to the **water stress suffered by a growing plant** due to **shortage of available moisture** (both rainfall and soil moisture), calculated as the percentage of annual water deficit to annual water need or annual potential evapotranspiration.
- Based on the index, IMD **prepares weekly aridity Anomaly maps/reports** which help to assess the moisture stress experienced by growing plants and to **monitor agricultural drought situation** in the country.
- A **Weekly Drought Outlook** is also issued, based on this index, which **indicates the impending drought scenario** in the country in the subsequent week.
- **Key findings of the index**:
  - **Only 63 of 756 districts were non-arid, while 660 were facing different degrees of aridity** — mild, moderate and severe.
  - **Some 196 districts are facing a 'severe' degree of dryness and 65 of these are in Uttar Pradesh.**
  - **Bihar had the second highest number of districts (33) experiencing arid conditions.**

> **Other index used by IMD for drought monitoring: Standardized Precipitation Index (SPI).**
> It is an index used for measuring drought and is based only on precipitation. This index is negative for drought and positive for wet conditions.

CLASSIFICATION OF DROUGHT BY NATIONAL COMMISSION ON AGRICULTURE

Meteorological Drought: Sustained, regionally extensive, deficiency in precipitation in an area compared to long-term average precipitation.

Deficiencies in surface and sub-surface water supplies leading to a lack of water for normal and specific needs.

Agricultural Drought: Situation when **rainfall and soil moisture are inadequate during the crop growing season to support healthy** crop growth till maturity, causing crop stress and wilting.

Hydrological Drought

About Droughts

- In general terms, **Drought is defined as a prolonged shortage of available water, primarily due to insufficient rain and other precipitation** or because exceptionally high temperatures and low humidity cause a drying of agriculture and a loss of stored water resources.
- **Differences between drought and aridity**:
  - Drought is a **recurrent and temporary aberration**, unlike aridity which is a **permanent feature of climate**.
  - Aridity is restricted to low rainfall areas, but drought **can occur under all climatic regimes** and its spread and severity is contingent on several factors, including the status of surface and ground water resources, agro-climatic features, socio-economic vulnerabilities of the local population etc.

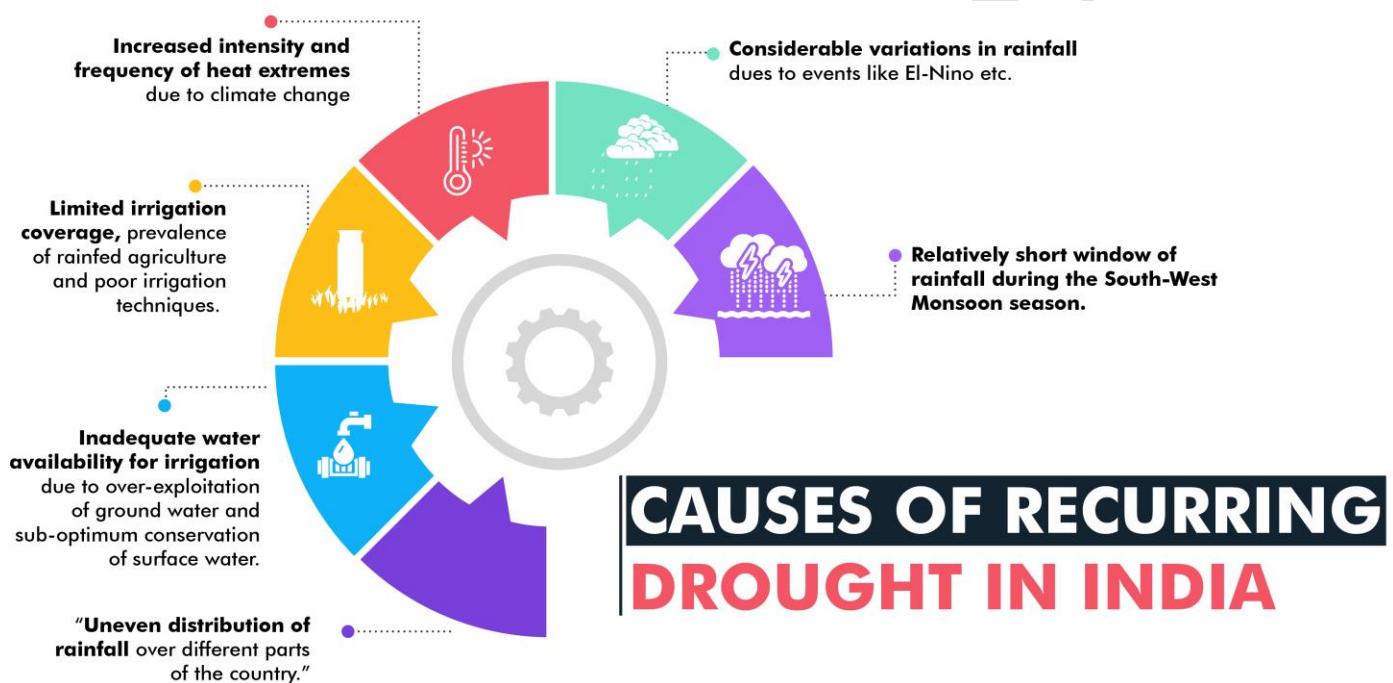> **Initiatives for drought management in India**
> - **National Agricultural Drought Assessment and Monitoring System (NADAMS),** provides near real-time information on prevalence, severity level and persistence of agricultural drought at state/ district/sub-district level.
> - **Drought Early Warning System (DEWS),** a real-time drought monitoring platform managed by the Indian Institute of Technology, Gandhinagar.
> - **Atmanirbhar Krishi app** to equip farmers with actionable agricultural insights and early weather alerts.
> - **National water policy 2012** emphasises on preparedness for flood / drought.
> - **Relief measures:** Compensation though National and State Disaster Response Funds, Crop insurance under Pradhan Mantri Fasal Bima Yojana (PMFBY) etc.
> - **Drought Mitigation Programmes**: **Atal Bhujal Yojana** for groundwater conservation; Jal Shakti Abhiyan: **Catch the Rain campaign** for rainwater harvesting; **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)** for promotion of micro irrigation techniques; **Integrated Watershed Management Programme (IWMP)** to develop rainfed/degraded areas and wastelands; etc.

- In India, around 68% of the country is prone to drought in varying degrees.
- **Impacts of drought:**
  - **Economic impacts**: Production losses in agriculture and related sectors, disruption of food supply chain, increased dependence on imports, etc.
  - **Environmental impacts**: Low water levels in ground water and surface, soil salinity, migration of wildlife and sharpening man-animal conflicts, stress on biodiversity etc.
  - **Social impacts:** Outmigration of the population from drought affected areas, rise in school dropout rates, greater indebtedness, alienation of land and livestock assets, malnutrition, starvation etc.

Issues related to drought management in India

- **Reactive and relief centric approach** and **limited focus on mitigation, adaptation and preparedness.**
- **Limited usability of climate information** due to issues like poor communication, language barriers, complex formats, late forecasts, and low capacity of the end users (both government agencies and community) to interpret and use it for decision-making.
- **Uncertainty and complexity** of **climate forecasting models** leading to lack of accurate and reliable data on water, climate parameters etc.
- **Lack of proper planning, coordination** between different functioning units and implementation at the ground level.
- **Sub-optimal management of water resources in India** due to decline in traditional water harvesting structures, cultivation of water intensive crops even in arid and semi arid regions, etc.

Increased intensity and frequency of heat extremes due to climate change

Considerable variations in rainfall dues to events like El-Nino etc.

Limited irrigation coverage, prevalence of rainfed agriculture and poor irrigation techniques.

Relatively short window of rainfall during the South-West Monsoon season.

Inadequate water availability for irrigation due to over-exploitation of ground water and sub-optimum conservation of surface water.

"Uneven distribution of rainfall over different parts of the country."

CAUSES OF RECURRING DROUGHT IN INDIA

Way Forward

- **Adoption of integrated management** emphasizing on drought prevention, mitigation and preparedness and adaptation strategies.
- **Developing mechanism for context specific and need based drought forecasting** including local language for better understanding.
- **Promote Education and Awareness of Mitigation Policies and Measures** like crop diversification, micro irrigation, water harvesting etc.
- **Organization of joint training programmes to build human capacity** at all levels for improved resilience towards drought**.**
- **Traditional knowledge and local practices** can be explored and implemented to increase the drought resistance.
- **Invest in enhancing technological capabilities for accurate forecasting.**

National Disaster Management Authority (NDMA) Guidelines on Management of Drought	
Assessment and Early Warning	• **Integrate ground-based and space-based information** for comprehensive reporting. • Monitor the soil moisture levels. • Develop **alternative methods of quicker assessment of crop yields**.
Prevention, Preparedness and Mitigation	• Micro level analysis and forecasting using **Automatic weather station and rain-gauges**. • **Develop drought resistant crop varieties.** • **Promote practices like-** crop diversification, utilization of sprinklers/drip irrigation systems, 8 Afforestation with Bio-diesel species, etc. • **Experimentation with Cloud-seeding** as a possible measure of mitigation.
Capacity Development	• **National training and capacity building programme** for drought management. • **Inclusion of drought management in curriculums**. • **Sensitizing and training the farmers, communities and other stake holders** in fields like -Natural resources management, Credit, insurance, micro -irrigation, Agro forestry, etc.
Relief and Response in drought-affected areas	• **Generating employment** to build assets such as tanks and wells which reduce the impact of drought. • **Improved Access to Financial Services**. • **Extension of Supplementary nutritional programme**.

5.7. NEWS IN SHORTS

5.7.1. ACCESS TO CLEAN AND HEALTHY ENVIRONMENT AS UNIVERSAL HUMAN RIGHT

- **India has voted in favour of a UNGA resolution** that recognizes the right to a clean, healthy and sustainable environment as a human right.
  - o The resolution also noted **that the right to a healthy environment is related to existing international law** and affirms that its promotion requires the full implementation of multilateral environmental agreements.
  - o It is **not legally binding.**
  - o It was **not included in the Universal Declaration of Human Rights, 1948.**
- Earlier in 2021, the **UN Human Rights Council in Geneva** passed a resolution recognising access to a healthy and sustainable environment as a universal right.
  - o 50 years ago, the United Nations Conference on Environment **in Stockholm concluded in 1972 with a resolution placing environmental issues at global forefront.**
- **Significance of resolution**
  - o Help to **reduce environmental injustices and protection gaps.**
  - o **Empower people**, especially those in vulnerable situations, including environmental human rights defenders, children, youth, women and indigenous people.
  - o Crucial to **tackle the triple planetary crisis** of climate change, biodiversity loss and pollution.
  - o **Help States to accelerate the implementation of their environmental and human rights** obligations and commitments.

Constitutional provisions relating to Environment and Human Rights
- **Article 21:** Guarantees fundamental right to life. Right to an environment, free of danger of disease and infection is inherent in it.
- **Article 48 A:** State shall endeavour to protect and improve the environment and to safeguard forests and wildlife of the country.
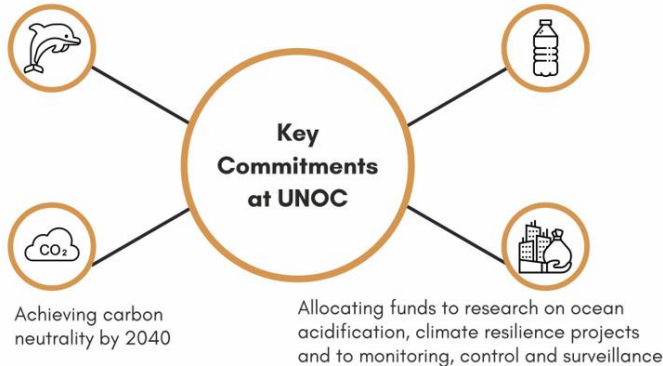- **Article 51-A (g):** Duty of every Indian citizen to protect and improve the natural environment.

5.7.2. UN OCEAN CONFERENCE (UNOC)

- The **second UNOC** ended with the **Lisbon Declaration**, a political declaration entitled **'Our Ocean, Our Future: call for action'.**
  - o It is co-hosted by **Kenya and Portugal** at **Lisbon**
  - o **In 2017, first UNOC was held at UN Headquarters in New York,** co-hosted by the Governments of **Fiji and Sweden.**
- As part of it, over **150** countries collectively agreed to **scale up science-based** and **innovative actions** to address ocean emergency, supporting the implementation of **SDG 14** (**Life Below Water**).
  - o This is in line with the United Nations Decade of Ocean Science for Sustainable Development (2021-2030).
- **Key Highlights**
  - o Emphasized the particular importance of **implementing the Paris Agreement (2015) and Glasgow Climate Pact** to help ensure the health, productivity, sustainable use, and resilience of the ocean.
  - o **States** made voluntary commitments to conserve or protect **at least 30% of the global ocean** within Marine Protected Areas, and other effective **area-based conservation measures**, by 2030.

- o India committed to a **Coastal Clean Seas Campaign** and will work toward a ban on single use plastics.
- UNESCO launched its key **State of the Ocean Report (pilot edition) during the event.** Key recommendations include:
  - o Strengthen the ocean **science-policy interface**.
  - o Act to create a **theoretical basis for sustainable ocean planning and management**, within and beyond areas of national jurisdiction.

Protecting or exceeding 30% of National Maritime Zones by 2030

Reducing plastic pollution and Increasing renewable energy use

Key Commitments at UNOC

Achieving carbon neutrality by 2040

Allocating funds to research on ocean acidification, climate resilience projects and to monitoring, control and surveillance

5.7.3. OZONE HOLE OVER THE TROPICS

- Scientists revealed a large, **all-season ozone hole** in the **lower stratosphere over the tropics comparable** in-depth **to that of the Antarctic hole**, but roughly **seven times greater in area.**
  - o **All-season ozone hole** is **defined** as **an area of ozone loss** larger than **25% compared** with the **undisturbed atmosphere.**
- **Ozone (O3)** layer is a **high ozone concentration region in the stratosphere,** protecting life on earth **by absorbing harmful ultraviolet radiations** from the Sun.
  - o Thinning of the **ozone layer was confirmed in** 1985 through the formation of the ozone hole over the Antarctic during the Southern Hemisphere spring.
    - ✓ **Causes**- Release of **certain chemicals e.g.,** chlorine and bromine, **chlorofluorocarbons (CFCs), halons, and carbon tetrachloride**.
- **Initiatives to protect Ozone Layer**
  - o **Vienna Convention on Protection of Ozone Layer 1985**, for the promotion of research and monitoring of human activities on the ozone layer.
  - o In 1987, the **Montreal Protocol** was adopted to protect the ozone layer by phasing out the chemicals which deplete it.
  - o The **Kigali Agreement** (adopted in 2016 and entered into force in 2019), provided a path to achieve an 80% reduction in HFCs (not ozone-depleting but have high global warming potential) consumption by 2047.

- **Impact of ozone layer depletion**
  - o **Increases ground-level UV radiation**, increasing the risk of skin cancer and cataracts in humans, as well as weakening human immune systems.
  - o **Decrease agricultural productivity** and affects **terrestrial and aquatic biogeochemical** cycles.

5.7.4. 5 WETLANDS GET 'INTERNATIONAL IMPORTANCE' TAG

- These wet-lands include:

Wetlands	State	Features
Karikili Bird Sanctuary	Tamil Nadu	• Home to **cormorants, egrets, grey heron, open-billed stork, darter, spoonbill, white lbnis, night herons, grebes, grey pelican among others.**
Pallikaranai Marsh Reserve Forest	Tamil Nadu	• One of the **last remaining natural wetlands of Chennai city**.
Pichavaram Mangrove	Tamil Nadu	• One of the largest mangrove ecosystems in India **with littoral and swamp forest habitats.** • Located between the estuaries of the **Vellar and Kollidam rivers**. • Trees here are **permanently rooted under a few feets of water**.
Pala wetland	Mizoram	• The **largest natural wetland in Mizoram**. • A **deep lake** (over 16 metres deep), supports a rich diversity of animal species etc. • Provide an excellent habitat for the **sambar deer, wild boars and barking deer**. • Habitat for the **endangered Hoolock gibbon and Phayre's leaf monkey**. • Revered by the **local Mara people**.
Sakhya Sagar wetland	Madhya Pradesh	• **Created from the Manier river** in 1918. • Located near **Madhav National Park in the Shivpuri district of Madhya Pradesh.**

- India now has 54 wetlands.
- A wetland is defined as **any land area that is saturated or flooded with water, either seasonally or**

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permanently such as lakes, aquifers and marshes, mangroves, peatlands, estuaries, coral reefs, etc.

- **Criteria for a Ramsar site**: A wetland must meet **at least 1 of 9 criteria as defined by the Ramsar Convention** such as supporting vulnerable, endangered, or critically endangered species or threatened ecological communities or, if it regularly supports 20,000 or more waterbirds among others.
- **Ramsar Convention** adopted in 1971, is **an intergovernmental treaty** that provides the **framework for the conservation and wise use of wetlands and their resources.**

5.7.5. RADIOCARBON DATING OR CARBON-14 DATING

- **Burning of fossil fuels** has resulted in falling proportion of radioactive carbon-14 in the atmospheric Carbon-di-oxide **affecting effectiveness of Carbon-14 dating adversely.**
- Carbon-14 dating provides **objective age estimates for carbon-based materials that originated from living organisms.**
- **Principle:**
  - o **All living things absorb carbon,** including radioactive carbon-14 from the atmosphere and food sources.
  - o When the **living being dies, they stop absorbing,** but the **radioactive carbon** that they've accumulated **continues to decay.**
  - o Measuring the **amount left over gives an estimate for how long something has been dead.**

5.7.6. RIGHT TO REPAIR

- Department of Consumer Affairs (DCA) recently set up committee on the Right to Repair to **emphasize on the LiFE (Lifestyle for the Environment) movement through sustainable consumption.**
  - o **Key sectors identified** for this framework include **Farming Equipment, Mobile Phones/ Tablets, Consumer Durables and Automobiles & Automobile Equipment.**
- Right to Repair movement calls for manufacturers to **make authentic parts available to consumers so that they can get their device repaired from independent shops** as well, if they so desire.
  - o Right to Repair has been **recognised in many countries including the US, UK and European Union.**
- **Need of Right to Repair movement**
  - o To boost business for small repair shops
  - o **Due to the culture of 'planned obsolescence'** i.e. devices are designed specifically to last a limited amount of time and to be replaced.

- o To **reduce immense pressure on the environment and wasted natural resources**.
- o Save money and time of the consumer.
- **Concern associated with right to repair**
  - o Large tech companies including Apple, Tesla, etc. argued that it'll **open their intellectual property to third party repair services or amateur repairers** could jeopardise safety and security of their devices.

About 'Lifestyle for the Environment (LiFE) Movement'
- The idea of LiFE was introduced by the PM during the 26th **UN Climate Change Conference of the Parties (COP26), 2021 at Glasgow.**
- Its vision is to live a lifestyle that is in tune with our planet and does not harm it. **People living such a lifestyle are called "Pro-Planet People (P3)".**
- The Mission seeks **to create an ecosystem that will reinforce and enable environmentally friendly behaviours to be self-sustainable.**

5.7.7. GREEN ENERGY OPEN ACCESS RULES

- Ministry of Power notified 'Green Energy Open Access' Rules.
- Objective of the **Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022** is to accelerate our renewable energy programmes.
- **Salient features of the rule**
  - o **Green Open Access** is allowed to any consumer and the limit of **Open Access Transaction has been reduced from 1 MW to 100 kW for green energy**, to enable small consumers also to purchase renewable power through open access.
  - o Consumers are entitled to **demand supply of Green Power from Discoms**.
  - o Commercial and Industrial consumers are **allowed to purchase green power on voluntarily basis.**
  - o There shall be a **uniform Renewable Purchase Obligation (RPO),** on all obligated entities in area of a distribution licensees. Green Hydrogen/Green Ammonia has also been included for fulfilment of its RPO.
  - o Consumers will be given **Green Certificates if they consume green power.**
- **Significance**
  - o Ensure the **access to affordable, reliable, sustainable, and green energy** for all.
  - o **Promote generation, purchase and consumption of green energy** including energy from Waste-to-Energy plants.
  - o **Enable simplified procedure for Open access to green power**

o Help in **achieving India's commitment of 500 GW of non-fossil fuel by 2030.**

5.7.8. GREAT INDIAN BUSTARD (GIB)

- Great Indian Bustard (GIB) count fell below 100.
- The population of GIB is dwindling due to the **lack of action to convert the overhead cable to underground power transmission** in Gujarat and Rajasthan.
- In April 2021, **Supreme Court had ordered the power companies** in the two states **to make the high-tension power lines underground** so that GIB do not get caught in the web.
    o **A three-member high-level committee was also formed** to investigate the feasibility of the work.
- However, **Centre and Rajasthan government objected to this order** stating the order was not feasible as it was ridden with potential **safety risks, high cost, adverse implications for the power sector,** and energy transition away from fossil fuels.
    o Area falling in GIB habitat is **crucial for development of the renewable energy sector.**
- **Other Threats to GIB:** Hunting, habitat erosion, 'greening' projects that transform arid grasslands to wooded areas, predators preying on the eggs, etc.
- **Steps taken for GIB Conservation:**
    o It is one of the **Species for Recovery Programme** under **Integrated Development of Wildlife Habitats** of the Ministry of Environment and Forests
    o Included under **National Wildlife Action Plan (2002-2016).**

- **About the GIB**
    o **Habitat:** Arid and semi-arid grasslands, open country with thorn scrub, tall grass interspersed with cultivation. It avoids irrigated areas. **Rajasthan has the highest population** and it is **endemic to Indian Sub-continent.**
    o **IUCN Status: Critically Endangered**
    o **Important Sites:** Desert National Park Sanctuary (Rajasthan), Naliya (Gujarat), Warora (Maharashtra) and Bellary (Karnataka)

5.7.9. MONARCH BUTTERFLY

- The **International Union for the Conservation of Nature** added the migrating monarch butterfly for the first time to its red list of threatened species and categorized it as **"endangered"**.
- This is one of the **most recognisable butterflies in the world.**
- In **North America**, millions of monarch butterflies undertake the **longest migration of any insect species known to science.**
- **Threats:** Loss of habitat**,** increased use of **herbicides and pesticides** for agriculture, and **climate change.**

- **Way ahead for recovery:** Planting milkweed, a plant that the caterpillars depend upon.

5.7.10. SNOW LEOPARD

- According to a study by the Zoological Survey of India, snow leopard regulates the populations of **its herbivores prey species Siberian ibex and blue sheep.** Hence, a **long-term absence of snow leopards** could cause depletion of vegetation cover.
- **About snow leopard**
    o **Schedule-I** species of the **Indian Wildlife (Protection) Act, 1972.**
    o **IUCN Red list status:** Vulnerable
    o **Habitat:** mountainous landscape of central Asia covering Ladakh, Himachal Pradesh, Uttarakhand, and Sikkim.
    o **Threats:** loss of natural prey species, human animal conflict and illegal trade of its fur and bones.

5.7.11. LIGHT-MANTLED ALBATROSS (PHOEBETRIA PALPEBRATE)

- Asia's first sighting of the Light-mantled Albatross, a **seabird native to the Antarctic seas**, was recorded near Rameswaram coast (Tamil Nadu).
- This seabird habits over a circumpolar distribution **in the Southern Ocean and forages over the cold Antarctic.**
- **IUCN status:** Near Threatened.

5.7.12. GLOBAL PLATFORM FOR DISASTER RISK REDUCTION 2022 (GP2022)

- Recently, the **seventh session of the GP2022 was organized by the UN Office for Disaster Risk Reduction** (UNDRR) in Bali, Indonesia.
    o GP2022 is the **main global forum to assess and discuss progress** on the **implementation of the Sendai Framework** for Disaster Risk Reduction.
- **Key takeaways of GP2022** outcomes as summarised in the **Bali Agenda for Resilience:**
    o There is a **need for a whole-of-society approach to disaster risk reduction** (DRR), ensuring no one is left behind.
    o **DRR must be at the core of development and finance policies**, legislation and plans to achieve the 2030 Agenda for Sustainable Development.
    o A **participatory and human rights-based approach in DRR planning** and implementation is crucial as people are affected differently by disasters.
    o **DRR and climate change adaptation have the common objective** of reducing vulnerability and enhancing capacity as well as resilience.

- **About UNDRR**:
  - It is the **United Nations system's focal point for disaster risk reduction and the custodian of the Sendai Framework**, supporting countries and societies in its implementation, monitoring and review of progress.
- **Sendai Framework for Disaster Risk Reduction**
  - It was the **first major agreement of the post-2015 development agenda** and **provides Member States with concrete actions** to protect development gains from the risk of disaster.

5.7.13. COASTLINE EROSION

- Ministry of Earth Science (MoES) recently informed that 34% of coastline is under varying degrees of erosion for past 28 years.
- **National Centre for Coastal Research (NCCR)**, an attached office of MoES is **monitoring shoreline erosion since 1990,** using **remote sensing data and geographic information system (GIS) mapping** techniques.
  - Totally, **6907.18 km long coastline of mainland has been analyzed** for period from **1990 to 2018**.
  - **26% is of coastline** is of an **accreting nature**, and 40% is in stable state.
  - **West Bengal suffered most erosion** followed by Kerala, Tamil Nadu, and Gujarat.
- Coastal erosion can be **defined as the long-term removal of sediment and rocks along the coastline** due to natural processes like wave action, tides, currents, wind-driven water etc.
  - According to **'National Assessment of Shoreline Changes along Indian Coast'** by NCCR, **human activities like construction of coastal structures**, beach sand mining, offshore dredging etc. have also **triggered coastal erosion.**
- **Impacts of coastal erosion**
  - **Destruction of animal and plant habitats** and esthetic losses.
  - **Fishing industries dependent on coastal habitats** suffer great economic impacts.
  - Loss of fertile land.

- Damage transport infrastructure and loss of tourism.
- **Measures taken to prevent coastal erosion**
  - Indian National Centre for Ocean Information Services (INCOIS) has carried out **Coastal Vulnerability Index (CVI)** mapping to assess implications of sea-level rise along Indian coast.
  - **Integrated Coastal Zone Management Plan (ICZM)** to ensure optimum sustainable use of coastal natural resources.
  - **National Centre for Sustainable Coastal Management (NCSCM)**, Chennai to research in area of CZM including coastal resources and environment.

5.7.14. INDIA'S LARGEST FLOATING SOLAR POWER PROJECT

- NTPC has said it has **commissioned India's largest floating solar power project**.
- **100 MW** Floating Solar Power Project has been operationalized at **NTPC Ramagundam, Telangana.**
- The project is **endowed with advanced technology** as well as environment friendly features.

5.7.15. ASIA PACIFIC SUSTAINABILITY INDEX 2021

- Released by **Knight Frank**- **a Global property consultant**.
- Four Indian cities **Bengaluru (being top)** followed by Delhi, Hyderabad and Mumbai made it to the list of top 20 sustainable cities.
- The Index rated 36 cities **based on urbanisation pressure, climate risk, carbon emissions and government initiatives**.
- **India is the 6th largest country in Asia Pacific** in terms of the total amount of green bonds issued in 2021.
  - A **green bond is a type of fixed-income instrument** that is specifically **earmarked to raise money for climate and environmental projects.**

You can scan this QR code to practice the Smart Quiz of Environment at our open test online platform for testing your understanding and recalling of the concepts.

SMART QUIZ

6. SOCIAL ISSUES

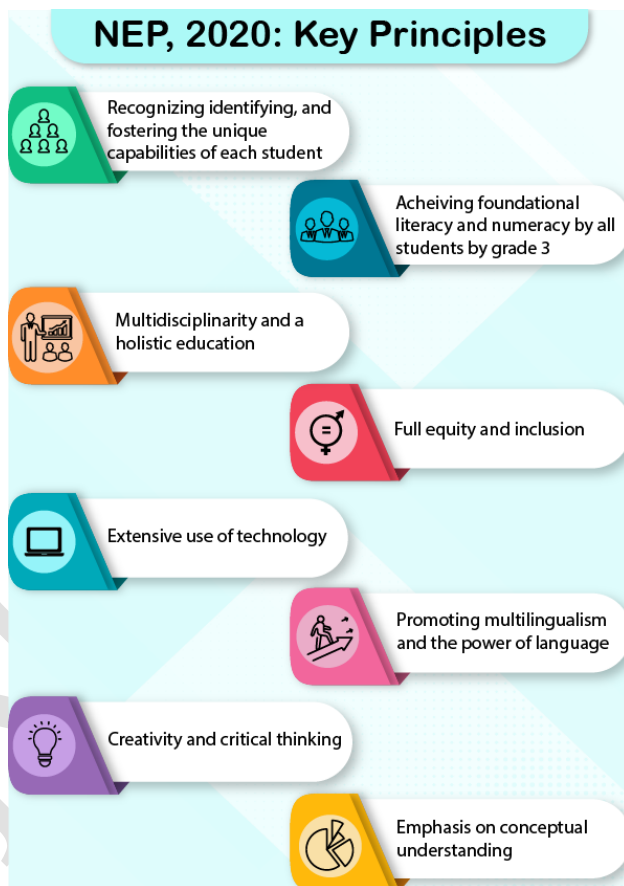## 6.1. NATIONAL EDUCATION POLICY (NEP), 2020

Why in news?

Recently, the Union Minister of Home Affairs launched several initiatives on the second anniversary of the National Education Policy (NEP) 2020.

Key initiatives launched

- **Establishment of IKS-MIC program for technology demonstration:** A joint program of the Indian Knowledge Systems (IKS) Division and the Ministry of Education Innovation Cell to promote the development of products, processes inspired and developed from the Indian's traditional knowledge systems.
- **National innovation and entrepreneurship policy** foster the culture of Ideation, Innovation, and Entrepreneurship (IIE) in schools.
- **Skill India Partnership with IGNOU** for the three-year degree programme and Skill Hubs under Pradhan Mantri Kaushal Vikas Yojana.
- **750 virtual labs in science and mathematics, and 75 skilling e-labs** for simulated learning environment, will be set-up in 2022-23.
- **100+ National Skills Qualifications Framework (NSQF)** aligned future skill qualifications to be developed under various areas.
- **National Initiative for School Heads and Teachers Holistic Advancement (NISHTHA) ECCE:** To prepare an initial cadre of high-quality early childhood care and education (ECCE) Teachers in Anganwadis.
- **Introduce 75 Bharateeya games in schools:** Each month, a seasonally appropriate Bharateeya game will be introduced in schools through the PT teachers.
- **Public Consultation Survey for National Curriculum Framework (NCF):** To conduct a Public Consultation survey in 23 languages to seek inputs and suggestions for the development of the NCF with a target respondents/ citizen of **1** Crore.

About NEP, 2020

- It was launched to **replaces NEP, 1986 (**modified in 1992) with an

NEP, 2020: Key Principles

- Recognizing identifying, and fostering the unique capabilities of each student
- Acheiving foundational literacy and numeracy by all students by grade 3
- Multidisciplinarity and a holistic education
- Full equity and inclusion
- Extensive use of technology
- Promoting multilingualism and the power of language
- Creativity and critical thinking
- Emphasis on conceptual understanding

New Education Policy, 2020 Key Specification

FOR SCHOOL

From 10+2 to 5+3+3+4:
Current 10+2 structure in which policy covered schooling from class 1 to 10 (age 6-16) & class 11-12 (16-18) gives way to 5 years of foundational education, 3 of preparatory, 3 of middle & 4 years of secondary schooling

Multi-Stream:
Flexibility to choose subjects across streams; all subjects to be offered at two levels of proficiency

Diluted board:
Board exams to test only core competencies; could become modular (objective & subjective) & will be offered twice a year

Multilingual:
3 Language policy to continue with preference for local language medium of instruction till class 8

Bag-less days:
School students to have 10 bag-less days in a year during which they are exposed to a vocation of choice (i.e informal internship)

FOR COLLEGES

SAT like college test:
National testing agency to conduct common college entrance exam twice a year

4-Year bachelor:
4-Year multi-disciplinary bachelor's programme to be preferred; mid-term dropouts to be given credit with option to complete degree after a break

No affiliation:
Over next 15 years colleges will be given graded autonomy to give degrees, affiliation with universities to end, so would deemed university status

Fee cap:
Proposal to cap fee charged by private institutions of higher learning

Going global:
Top-rated global universities to be facilitated to come to India, top Indian institutions to be encouraged to go global

aim of **transforming India into a vibrant knowledge society and global knowledge superpower** by making both school and college education more holistic, flexible, multidisciplinary, suited to 21st century needs.

- Built on the foundational **pillars of Access, Equity, Quality, Affordability and Accountability,** this policy is aligned to the **2030 Agenda for Sustainable Development.**

Initiatives taken so far under the NEP, 2020

- **School Education:** Formulation of National Curriculum Framework, under the guidance of the National Steering Committee, is in progress. In school education, initiatives like quality ECCE in Balavatika, NIPUN Bharat, Vidya Pravesh, examination reforms and innovative pedagogies like Art-Integrated Education, toy-based pedagogy are being adopted for better learning outcomes
- **Promotion of Indian Languages:** National Training Agency (NTA) has conducted the JEE exam in 13 languages. AICTE has developed an AI-based translation App and study material is being translated into Indian languages.
- **Multi Modal Education:** SWAYAM, DIKSHA, SWAYAM PRABHA, Virtual Labs and other online resource portals are providing study materials in multiple Indian languages including sign language and in audio formats for the visually impaired. The permissible limit of online content in a programme has also been raised to 40%.
- **Multidisciplinarity in Higher Education:** Multiple Entry-Exit for flexibility and lifelong learning, along with the launch Academic Bank of Credit on Digilocker platform will now make it possible for students to study as per their convenience and choice. UGC has published guidelines according to which students can pursue two academic programmes simultaneously.
- **Innovation and Start Up:** Atal Ranking of Institutions on Innovation Achievement (ARIIA) aligned with NEP has been launched in 2021 for creating a culture of research, incubation and start-ups.

Challenges in successful implementation of NEP

- **Diversity of India's education sector:** India is the largest democratic educational ecosystem in the world, with as many as 34 crore children studying here. This makes a countrywide implementation of NEP an uphill task.
- **Financial resources:** While NEP reiterates the existing commitment for education budgets at the level of 6% of GDP, it is silent on how to get there from the current level of 3.5%.
- **Legacy issues:** India's education system is heavily bureaucratized and lacks capacity for innovation and scale up. Also, moving away from a rigid content-driven rote learning system to experiential learning would require a revolutionary change in the attitudes of stakeholders including bureaucracy, teachers, parents.
- **Federalism:** Several states such as Tamil Nadu have raised strong objections to several key provisions of the NEP and the way they are being rolled out.
- **Learning loss:** In India, learning Poverty i.e. inability to read and understand a short, age-appropriate text by age 10 has risen from 54% to 70% (World Bank). It makes creative learning a huge challenge.
- **Multilingualism:** Although teaching in mother tongue improves the learning ability of the children, availability of trained teachers to handle such multi-lingual teaching would be difficult.

Way ahead

- **Financial resources:** Companies should be encouraged to use CSR fund to invest in education sector. Donation by alumni should be tax free. Just like as Harvard and MIT, India's Higher Educational Institutions should be allowed to establish 'endowment funds' and have stakes in multinational corporation.
- **Participative approach:** Creating a shared responsibility and ownership amongst key stakeholders, including the private sector, at the state, district, sub-district, and block level for the implementation of NEP.
- **Regulatory body:** Higher Education Commission of India (HECI) has been proposed in NEP to overhaul the existing regulatory system. The body needs to be established as soon as possible.
- **Cooperative federalism:** Similar to GST Council, National Education Ministers' Council needs to be constituted. The Council could serve as a forum to discuss and address implementation issues.
- **Private sector:** It is imperative for the government and regulatory bodies to create workable institutional mechanisms that would harness the contribution of the private sector and recognise them as equal partner in the NEP process.
- **Bridging the Post-pandemic Learning Gap:** Special focus should be given to children particularly school kids who are lagging on learning curve.

6.1.1. QUALITY OF HIGHER EDUCATION IN INDIA

Why in news?

Recently the Parliamentary standing committee on Education, Women, Children, Youth and Sport submitted a report on 'review of education standards, accreditation process, research, examination reforms and academic environment'.
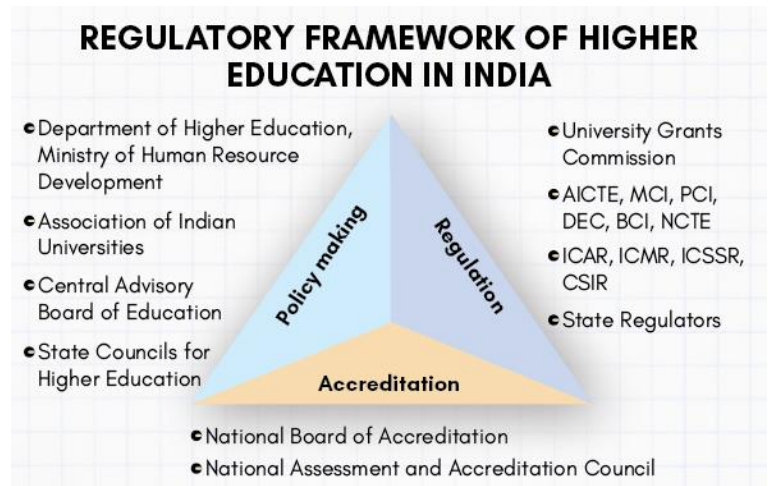
About higher educational institutions in India

- It encompasses **Universities, Colleges and Stand-alone Institutions** (not affiliated with Universities).
- As per the All-India Survey of Higher Education (AISHE), there are **1,043 universities, 42,343 colleges and 11,779 standalone institutions**.
  - Out of these, **almost 78.6% are in the private sector-** aided or unaided colleges and only about 21% are in the Government sector.

REGULATORY FRAMEWORK OF HIGHER EDUCATION IN INDIA

- Department of Higher Education, Ministry of Human Resource Development
- Association of Indian Universities
- Central Advisory Board of Education
- State Councils for Higher Education

Policy making

Regulation

- University Grants Commission
- AICTE, MCI, PCI, DEC, BCI, NCTE
- ICAR, ICMR, ICSSR, CSIR
- State Regulators

Accreditation

- National Board of Accreditation
- National Assessment and Accreditation Council

Challenges being faced by higher education in India

- **Suboptimal funding:** India's spending on education has been about 3.1% of GDP in the last few years. Moreover, Indian R&D expenditure at 0.62% of GDP is one of the lowest in emerging economies.
- **Low student enrolment:** Gross Enrolment Ratio (GER) in higher education in India is significantly low at **27.1%** for 2019-20 against the **global average of 36.7%**.
- **Inadequate Infrastructure**: Most of the colleges and universities lack in the basic facilities like labs, research equipment, computers, library, hostels, transport, sports facility etc.

> **Related News**
> **Ministry of Education Released India Rankings 2022 of higher educational institutes**
> - As many as 6,000 colleges and universities participated this year in the sixth edition of **NIRF 2022 Rankings**.
> - IIT Madras, IISc Bangalore have bagged the top three rank for the year 2022.
> - The National Institutional Ranking Framework (NIRF) was **launched in November 2015 by the Ministry of Education.**
>   - Since 2018 it is **mandatory for all government-run educational institutions** to participation in the NIRF.
> - The ranking framework judges institutions under **five broad generic groups**
>   - **Teaching, Learning & Resources (0.30)**
>   - **Research and Professional Practice (0.30)**
>   - **Graduation Outcomes (0.20)**
>   - **Outreach and Inclusivity (0.10)**
>   - **Perception (0.10)**
> - **Importance of NIRF ranking**
>   - It helps **students choose the best university**.
>   - The rank of the institute plays a crucial role in **attracting companies and organisations to campus placements.**

- **Poor human resource capacity:** 30-40% of faculty positions in HEIs are unfilled, non-availability of well-qualified faculty, **lack of female leadership** (less than 7% of Vice Chancellors in India are women), etc.
- **Poor accreditation system:** At present, barely 20% of the approximately 50,000 educational institutions go for formal accreditation. Over-centralization, Lack of accountability and transparency, and multiple regulatory organisations keep the regulatory environment complex as well as suboptimal.
- **Commercialisation:** Rise of private ownership and management of educational institutions whereby investments are made with the motive of earning profit. Recently, the Government warned edtech companies against indulging in unfair trade practices, including misleading advertisements.
- **Outdated pedagogy & Technological backwardness:** There is no mechanism to review and update curriculum to meet with the evolving demands of both, the pursuit of knowledge and the pursuit of earning a livelihood.

Way ahead

- **Financing:** Gradually enhance public spending up to 6% of GDP as mandated by the NEP, 2020. **Donations** by individuals, alumni and institutions" should be **100% tax deductible.**

- o **Education should be treated at par with the infrastructure** sector to facilitate access to banks, financial institution loans as priorities for infrastructure support to higher education.
- o **Industry academia collaboration** to bring funding from corporate sector. Also, the collaboration would help students enhance their skills through various internship programmes. In return industry would get out of the box solutions to meet its needs.

- **Pedagogy:** There should be a permanent mechanism to review and update curriculum.
  - o Also, there is a need to explore the possibility of using established satellite technologies for providing uninterrupted education in hybrid format, now called as **Phygital (Physical plus Digital).**

- **Accreditation:** Considering the importance of accreditation as it underscores standardization and a guarantee towards minimum benchmark, more efforts tooffer incentives to bring institutions under accreditation system is the need of the hour.

> **Other key initiatives for improving quality of higher education in India**
> - **National education Policy (NEP) 2020:** It aims at making "India a global knowledge superpower" through a comprehensive overhaul of the education sector.
> - **SWAYAM-** India's own MOOCs platform offering free online courses on almost all the disciplines.
> - **Higher Education Financing Agency (HEFA), 2018**, a joint venture of MoE and Canara Bank aims to leverage funds from the market, donations, and CSR funds to be used to finance improvement in infrastructure in top institutions.
> - **Revitalising Infrastructure and Systems in Education (RISE) scheme** funded by HEFA aims at Increased investments in research and related infrastructure in premier educational institutions.
> - **Prime Minister's Research Fellows (PMRF) Scheme** to enhance the quality of technical research.
> - Attracting international faculty through schemes like **GIAN (Global Initiative of Academic Networks) and VAJRA (Visiting Advanced Joint Research).**
> - **Study in India program** seeks to endorse India as a prime education hub for international students.

- **Regulatory reforms:** A Single Window System to be evolved through joint efforts of both, State Governments as well as the Central Government. This will help expedite approval from various regulatory authorities which Private/ Deemed/ other Universities are required to obtain.
  - o **For Edtechs, revamp the norms for starting online courses** and regulatory bodies need to be updated to bring them in tune with the current best practices.
- **Supporting innovators:** Evolve a mechanism in consultation with the CAG and the Ministry of Finance to ensure that innovators and incubators can also easily participate in the bidding process in response to Govt tender.
  - o A window of opportunity to such innovators and entrepreneurs alone will help them sustain in the face of tough competition.
- **Enhancing quality of faculties:** Academic planning, recruitment methodologies including headhunting, retention strategies, staff development and training, personal and professional counseling, establishing Teaching Learning Centre (TLC).
- **Institutional leadership programmes:** Evolve structured academic programmes at different levels for building the decision-making capacities of Vice Chancellors, Principals and Governing Body members of HEIs to ensure a more effective institutional leadership.

6.2. STATE RANKING INDEX FOR NATIONAL FOOD SECURITY INDEX

Why in news?

Union Food Minister **released the first State Ranking Index (SRI) for implementation of the National Food Security Act** (NFSA), 2013.

More on News

- **Odisha, Uttar Pradesh and Andhra Pradesh** secured the top three positions in the Index.
- **Tripura, Himachal Pradesh and Sikkim** obtained the top positions among the special category states (north-eastern, Himalayan, and Island states).
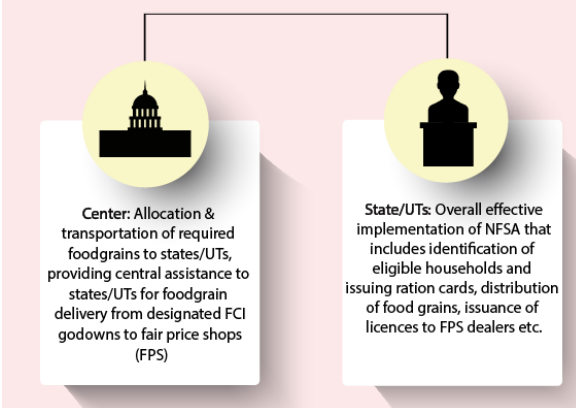
> **Parameters on which State Ranking Index is based:**
> - **Coverage of NFSA, rightful targeting,** and implementation of all provisions under NFSA.
> - **Analysis of the delivery platform** while considering the allocation of foodgrains, their movement, and last-mile delivery to Fair Price Shops (FPS).
> - **Nutrition initiatives.**

About National Food Security Act (NFSA), 2013:

- Enactment of National Food Security Act, (NFSA) 2013 **marked a paradigm shift** in the approach to food security from **welfare to rights-based approach.**
  - NFSA **envisages using the existing platform of Targeted Public Distribution System (TPDS) for foodgrain distribution.**
    - ✓ TPDS (1997) is the **revamped Public Distribution System (PDS) to target poor households.**
- NFSA's objective **is to provide for food and nutritional security in human life cycle approach**, by ensuring access to adequate quantities of quality food at affordable prices to people to live a life with dignity.
- It is now **implemented in all 36 states/ UTs** covering about 81 crore persons.

RESPONSIBILITIES OF CENTER AND STATES/UTs UNDER NFSA

Center: Allocation & transportation of required foodgrains to states/UTs, providing central assistance to states/UTs for foodgrain delivery from designated FCI godowns to fair price shops (FPS)

State/UTs: Overall effective implementation of NFSA that includes identification of eligible households and issuing ration cards, distribution of food grains, issuance of licences to FPS dealers etc.

Key features of NFSA:

Provisions	Details
Entitlement of foodgrains	• Subsidised Foodgrains will be made **available to eligible households at subsidised prices of Rs. 3/2/1 per kg** for rice, wheat and coarse grains respectively. o These are called **central issue prices** (CIPs)
Coverage of population	• NFSA gives **legal entitlement to 75% of rural and 50% in urban population** (67% of the population) **to receive highly subsidized foodgrains under TPDS** on the basis of Census 2011 population estimates. o Under the Act, **eligible households comprise of two categories – Antodaya Anna Yojana (AAY) Households and Priority Households (PHH).** ✓ **Entitlement of foodgrain**: 35 kg per AAY Household per month, and 5 kg per PHH Person per month.
Identification of Households Maternity entitlements	• **Pregnant women and lactating mothers will be entitled to receive maternity benefits** of not less than Rs. 6,000. • **Pregnant women and lactating mothers and children** (6 months-14 years) **entitled to meals as per prescribed nutritional norms** under Integrated Child Development Services (ICDS) and Mid-Day Meal (MDM) schemes.
Food Security allowance	It is given to **entitled beneficiaries in case of non-supply of foodgrains.**
Reforms in TPDS	**Centre and State to progressively undertake reforms like end-to-end computerisation of TPDS, leveraging Aadhaa**r for unique identifications etc.

Issues and challenges:

- **Identification of beneficiaries**: Current NFSA and TPDS is **criticised for their urban bias, inclusion and exclusion errors** and poor performance in targeting beneficiaries such as homeless, migrants, tribals etc.
- **Leakages and diversion**: Evaluation studies conducted by Department of Food & Public Distribution, has pointed out **leakages, pilferages, and diversions of food grains at almost every point of the Supply Chain** i.e., right from allocation to the storage in State Godowns and up to their final distribution to beneficiaries through FPS.
  - There are **losses during transportation of foodgrains** due to theft, multiple handling, spillages etc.
- **Inadequate storage infrastructure**: After foodgrain procurement by FCI, lack of adequate infrastructure and unscientific management has **led to wastage of foodgrains** (infestation by fungus, rodents etc.)
  - Also, there is a **wide regional disparity in storage infrastructure** with the majority of storage capacity being located in large procurement states like Punjab, Haryana, Andhra Pradesh etc.
- **Huge fiscal burden**: Government pays a subsidy of **about Rs. 1.70 lakh crore annually for providing subsidised foodgrains** to 67% of the population under NFSA. Also, the government **has not revised the CIPs** or subsidised prices of foodgrains.
  - **Additional allocation under PM-Garib Kalyan Ann Yojana was borne by Centre**, which further increased the burden.

- **Lack of updation of beneficiaries**: The number of NFSA beneficiaries was frozen in 2013. However, given the population increase since then, there have been demands to update the list by ensuring an annual updating system under NFSA.
- **Limited to cereal security**: Foods covered in the Act are mainly rice and wheat and does not cover pulses, vegetables, meat etc.
- **Inflationary pressure on food items**: Continuous and augmented procurement of foodgrains by government results in lesser amount available for Open markets sale, thus increasing its price.
- **Issues with Digitisation: Cumbersome process of digitisation, Aadhaar seeding** and biometric authentication for availing foodgrains has **left out illiterate poor, tribals and women in far-flung areas** with limited internet connectivity.
- **Others**: Unavailability of foodgrains in FPS, non- affordability of foodgrains by poor, lack of quality food grains etc.

Way forward

- **Scientific identification of priority households** with a target of zero exclusion error.
- **Unique identification of target beneficiaries with information technology support** to prevent bogus beneficiaries and prevent leakages.
- Agricultural and biotechnological interventions for sustainable increase in production of food grains and for improving quality with advanced post-harvest technology.
- **Augmentation of storage capacity by developing silos, cold storage chain** and indigenous methods of storage of foodgrains along with training and education on waste reduction programmes.
- **Diversification of food under NFSA** to include millets, pulses and milk products.

Significance

- Secure right to life under article 21(right to food included under right to live with human dignity)
- Protect poor against food insecurity, hunger, malnutrition and poverty
- Women empowerment (eldest women considered 'head of family' for issuing ration card)
- Extension of food security during covid -19 pandemic (PM Garib Kalyan Anna Yojana)
- Labour productivity in rural areas with access to food for the poor
- Positive impact on future human capital (nutritional interventions like MDM for school children)
- Boost to agricultural sector through procurement of foodgrains by FCI

- **Reduction of national rural and urban coverage ratio** (from existing 75-50 to 60-40) as **suggested by NITI Aayog** to reduce the fiscal burden.
  - **Revision of CIPs as recommended by Economic Survey** 2020-21.
- **Scheme of cash transfer of food subsidy** directly into the bank account of beneficiaries instead of providing foodgrains can be **expanded to reduce physical movement of foodgrain**, reducing leakages etc.
  - Presently it is **implemented on a pilot basis in three UTs** of Chandigarh, Puducherry, and Dadra and Nagar Haveli (urban areas).

6.3. DRAFT NATIONAL POLICY ON PERSONS WITH DISABILITIES (PWDS)

Why in news?

Recently, the Ministry of Social Justice and Empowerment has released the draft of the national policy for persons with disabilities for public comments.

About Draft National policy on PwD

- It seeks to replace the **National Policy on Disability, 2006.**

About PwDs in India
- PwDs means a **person with long term physical, mental, intellectual or sensory impairments** which hinders his or her full and effective participation in society.
- According to Census 2011, there are **2.68 crore PwDs in India** which accounts for 2.2% of India's population.
  - 36% of total PwDs are employed (male- 47%, female-23%).
- As of now, there are **four major national legislations which deal with PwDs**, viz;
  - Rehabilitation Council of India Act, 1992
  - National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999
  - Rights of Persons with Disabilities Act, 2016
  - Mental Healthcare Act, 2017 implemented by Ministry of Health and Family Welfare.

- The **principle of the draft policy** is to showcase the **Government's commitment to the inclusion and empowerment of PwDs** by providing a mechanism that ensures their full participation in society and helped them to lead **productive, safe and dignified lives**.
- **Draft policy is needed due to multiple factors including**:
  - Signing of **United Nations Convention on Rights of Person with Disabilities** (UNCRPD) by India in 2007.
  - Enactment of **Rights of Persons with Disabilities (RPD) Act, 2016** which increased the number of disabilities from seven conditions to 21.
  - **Adoption of National Education Policy 2020** which promotes inclusive education.
  - India is a party to the **'Incheon Strategy for Asia Pacific Decade for PwDs, 2013-2022'** prepared under aegis of **United Nations Economic and Social Commission for Asia and Pacific (UNESCAP).**
    - ✓ It identifies **10 goals for Asia-Pacific countries** to ensure the inclusion and empowerment of PwDs in conformity with Sustainable Development Goals (SDG) 2030.

CONSTITUTIONAL PROVISIONS FOR DISABLED PERSONS IN INDIA

Right to Equality for every citizen including disabled persons. — **Article 14**

Article 15 — Prohibition of discrimination against any citizen including PwDs as well.

Ensures right to life & liberty, extends to disabled persons as well. — **Article 21**

Article 23 — Protects disabled people against trafficking.

Guarantees every citizen, including disabled persons, to move to Supreme Court. — **Article 32 (1)**

Article 41 — State shall make **effective provision for securing right to work, education and public assistance** in cases of **unemployment, old age, sickness and disablement,** within limits of its economic capacity and development.

Every disabled person can move to High Court for enforcement of fundamental rights. — **Article 226**

Article 243G — Social welfare, including disabled & mentally disabled person.

Subject of 'relief of the disabled and unemployable' is specified in state list. — **Seventh Schedule**

- **Key provisions in the policy**

Specifications	Detail
Comprehensive National Programme on prevention of disability	• To **take care of entire gamut of disabilities covered under RPD Act**, and other medical conditions which are considered as risk cases that may manifest into any form of disability.
Early identification and intervention	• **One-third of most disabilities** in children being preventable, if detected early.
Cross Disability Early Intervention Centres (CDEICs)	• **CDEICs** in every district to provide facilities like **screening and identification and referral for rehabilitative services.** • EICs would be given **access to Unique Disability Identification portal** for helping parents for assessment and certification of disability.
Certification	• **Hassle free certification of Disability** based on disabilities covered by RPD Act, 2016.
Education	• States/UTs should add **provision on compliance with RPD Act when granting permission/recognition** to educational institutions.
National level employment portal	• Portal for PwDs will be developed with information like skill training in different locations, vacancies, eligibility, recruitment, etc.
Dedicated disability sports centers	• In each zone with state of art facilities for training PwDs and **encouraging Paralympic games** at district, state and national levels.
Transportation	• Guidelines on **necessary modifications in personal vehicles used by PwD** will be issued by Ministry of road transport and highways.
Fine Art	• Department of Culture should develop a **scheme to encourage fine arts and performing arts** among PwDs.

Self-reliance	• While emphasizing on research, it calls for **promoting Atmanirbhar Bharat in Disability Sector** for manufacturing assistive devices.
Health	• Ayushman Bharat-PMJAY should be **aligned with objective of the RPwD** and provide universal coverage for PwDs.

Disability Data Management	• The Government is already implementing **Unique Disability ID Card project to create a national database for PwDs**.
	  ○ The database should be linked with all service delivery mechanisms through appropriate Application Programming Interface (API) integration in the near future.
	  ○ All schemes and programmes meant for individual citizens should capture disability disaggregated data on disability.

Research and Development	• Developing low cost, indigenous aids and assistive devices for which **Artificial Limbs Manufacturing Corporation of India (ALIMCO)** should play a lead role.

Measures to be taken

- **Increase participation**: Few States have begun the initiative at local levels to increase participation. For instance, **Chhattisgarh started the initiative of nominating at least one disabled person** in each panchayat.
  ○ If a disabled person is not elected then they are **nominated as a panchayat member** as per changes in the law concerned.
- **Capacity building**: Building the capacity of disabled people's organisations and empowering their members through training in the electoral system, government structure, and basic organisational and advocacy skills.
- **Rights-based approach:** There is need to **move away from the 'charity-based approach' to the 'rights-based approach'** as significant proportion of people see a PwD as an object of 'sympathy' and 'pity' thereby leading to their treatment as a third-class citizen.

- **Coordination:** Central and State governments must work together with other stakeholders to provide adequate data on disabled persons, employment, education to PwDs and Make the Right Real etc.
  ○ There is also a need to **synergize the Policy with the international instruments** namely, UNCRPD, Incheon Strategy, SDGs and new domestic laws.
- **Increase awareness**: Mutual respect and understanding contribute to an inclusive society. Therefore, it is vital to **improve public understanding of disability, confront negative perceptions**, and **represent disability fairly**.
  ○ For example, education authorities should ensure that schools are inclusive and have an ethos of valuing diversity.
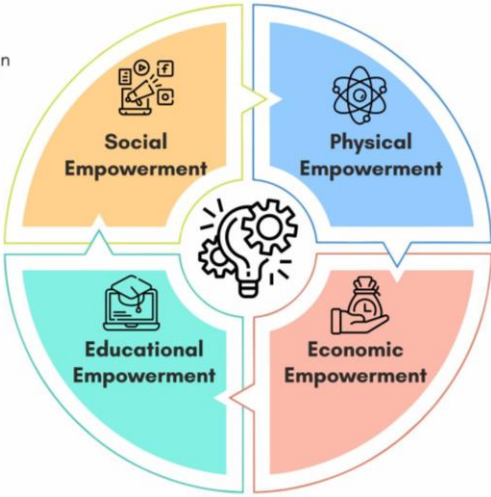
6.4. PRIME MINISTER STREET VENDOR'S ATMANIRBHAR NIDHI (PM SVANIDHI)

Why in news?

The government launched '**SVANidhi Mahotsav**' - a **cultural festival for celebrating the success of the PM SVANidhi Scheme.**

About PM SVANidhi

- It is a **micro credit scheme,** facilitating a working capital collateral free loan of ₹10,000, with subsequent loans of ₹20,000 and ₹50,000 with 7% interest subsidy.
  - It is a **Central Sector Scheme** under the **Ministry of Housing and Urban Affairs.**
  - It was **launched in July 2020 to help street vendors hit by the Covid-19 pandemic** and was to run till March 2022 but has been extended till December 2024.
- **Objectives**
  - To facilitate a **working capital loan to street vendors;**
  - To **incentivize regular repayment;**
  - To **reward digital transactions through cash back facility.**
- **Eligibility**
  - Available to all street vendors **engaged in vending in urban areas as on or before March 24, 2020.**
  - However, only Street vendors belonging to those States/UTs which have notified Rules and Scheme **under Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014** are allowed to take benefit of the scheme.
- **Features of the scheme**
  - For the loan, **no collateral will be taken.**
  - On timely or early repayment, the **vendors will be eligible for the next cycle of the working capital loans with an enhanced limit.**
  - **Rates will be as per the prevailing rate of interest** and in the case of NBFCs, interest rates will be as per RBI guidelines for respective lender category.

Importance of Street Vendors econony in India

- **The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014 defines street vendor as**
  - Any person engaged in **vending of articles, goods, wares, food items or merchandise of daily use or offering services to the public in a street, footpath, pavement etc.,** from a temporary built-up structure or by moving from place to place.
- Street vendors are the **nano entrepreneurs of the country playing a significant role in ensuring availability of the goods and services.**
- They have been an essential part of **India's economic growth with linkages with the formal economy.**
- Street vendors in India, **estimated at 1 crore, constitute roughly 11% of the urban workers.**
- The **vending economy has a turnover of around Rs 80 crore a day,** and every street entrepreneur or trader supports an average of three others.
- **Other initiatives for street vendors includes:**
  - The **Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act of 2014** was enacted by the government to protect the rights of urban street vendors and to regulate street vending activities.
  - **Support to Urban Street Vendors (SUSV)** as a component of Deendayal Antyodaya Yojana- National Urban Livelihood Mission (DAY-NULM).
  - **SVANidhi se Samriddhi** in 125 Urban Local Bodies.

Significance of the scheme

Till date, **12.8 lakh are digitally active and have recorded 19 crore digital** transactions.

More than 30 lakh new vendors have been recognised under Concept of 'Letter of Recommendation' (LoR)

More than 25 lakh sanctions have been made under these schemes **facilitating socio-economic upliftment of more than 11 Lakh beneficiaries.**

"SVANidhi se Samriddhi' program under the scheme provides social security benefits to street vendors for socio-economic upliftment

- o If a Street Vendors repays the loan EMIs promptly and conducts the required number of digital transactions, **interest subsidy and cashback availed would make the loan interest free.**
- o **Implementing partner**: Small Industries Development Bank of India (SIDBI).

Challenges in the implementation of the Scheme

- **Uneven implementation Street Vendors Act of 2014:** States across the country have unevenly implemented 2014 Act, which necessitates a survey of the vendors to provide them with a certificate of vending.
- **Only one-fourth covered:** Of the estimated 1 crore street vendors in India, scheme is aimed at half, 50 lakh.
- **Lack of letter of recommendation (LoR):** Nearly 85% of those who had applied for the SVANidhi loan scheme did not have a LoR from their local municipal corporation.
- **Hesitancy by Banks:** Banks are hesitant to provide loans to vulnerable vendors.
  - o Also, Some municipalities are also slow in issuing LORs, **which has kept hundreds of vendors waiting for the loan for months**
- **Systematic hurdles**:
  - o Many mobile numbers **of various vendors are not linked with their Aadhar cards**.
  - o Many vendors **face the issue of bureaucratic and police apathy whereby the police**, under the garb of Covid-related restrictions, harass them and ask them to shut shop.
- **State level disparity:** There remains disparity among states when it comes to implementation. Also, disbursement ration in some areas remains wilfully low.

Way forward

- **Continuous scheme**: This scheme was introduced as a short-term measure to address a crisis but **should be reimagined as a permanent development scheme for "ultra-micro industries"** (street vendors). This would allow them to access credit on a permanent basis.
- **Provision of letters of recommendation to all vendors**: "C" and "D" categories of vendors are left out of the scheme, and these are those who are less likely to be surveyed, do not possess a vending certificate from urban local bodies and need a letter of recommendation.
- **Proactive role of Local administrations**: The 2014 Act envisages formation of Town Vending Committees to ensure that all street vendors identified by the government are accommodated in the vending zones subject to norms.
- **Increased role of private sector:** Private banks which presently constitute merely around 2% of the total disbursed loan amount can play a larger role in the process.

6.5. NEWS IN SHORTS

6.5.1. THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD (SOFI) REPORT, 2022

- It is a **joint publication** by Food and Agriculture Organization, International Fund for Agricultural Development, UNICEF, UN World Food Programme and WHO.
- **Key findings**
  - o In 2021, **828 million people are affected by hunger globally,** an increase of about 46 million since 2020.
  - o World is **moving in reverse, away from the Sustainable Development Goal** of ending hunger, food insecurity, and malnutrition in all its forms, by 2030.

  - o **Major drivers of food insecurity and malnutrition:** conflict, climate extremes and economic shocks, combined with growing inequalities.
- **India related findings**
  - o **Undernourishment** in total population: 16.3%.
  - o **Wasting (low weight-for-height) in children** (under 5 years of age): 17.3%
  - o **Stunting (low height-for-age) in children** (under 5 years of age): 30.9%
  - o **Exclusively breastfeeding among infants:** 58%
- **Recommendations**
  - o **Incentivize production, supply and consumption of nutritious foods,** to make healthy diets less costly, more affordable and equitably for all.
  - o **Reduce trade barriers,** which would help lower the price of nutritious foods, such as fruits, vegetables and pulses.

6.5.2. GLOBAL GENDER GAP (GGG) REPORT, 2022

- The report was released by **World Economic Forum.**
- The GGG index **benchmarks the current state and evolution of gender parity across four key dimensions** (refer infographic)**.**
  - On each of the four sub-indices as well as on the overall index the GGG index **provides scores between 0 and 1, where 1 shows full gender parity and 0 is complete imparity.**
  - GGG index was instituted in 2006 and it **aims to support the identification of the most effective policies to close gender gaps.**
- **Key findings**
  - In 2022, the **global gender gap has been closed by 68.1%** (slight improvement from 2021).
  - At the current rate of progress, **it will take 132 years to reach full parity.**
  - Although **no country has yet achieved full gender parity**, the top 10 economies have closed at least 80% of their gender gaps.
- **India related findings**
  - India was the **worst performer in the world in the "health and survival" sub-index where it is ranked 146.**
  - India recorded a declining score on political empowerment **due to diminishing share of years women served as head of the state.**
  - India also **ranks poorly among its neighbours** and is behind Bangladesh (71), Nepal (96), Sri Lanka (110), Maldives (117) and Bhutan (126).

India's Report Card

Index/sub-index	2022 (146 countries)		2021 (156 countries)	
	Rank	Score	Rank	Score
Global Gender Gap Index	135	0.629	140	0.625
Political empowerment	48	0.267	51	0.276
Economic participation & opportunity	143	0.350	151	0.326
Educational attainment	107	0.961	114	0.962
Health and survival	146	0.937	155	0.937

Source: World Economic Forum

6.5.3. REPLACEMENT LEVEL FERTILITY (RLF)

- Speaking at **National Family Planning Summit 2022**, Minister stated that India has achieved Replacement Level Fertility (RLF), **with 31 States/UTs reaching a Total Fertility Rate of 2.1 or less.**
  - RLF is level of fertility at which a **population exactly replaces itself** from one generation to next.
  - According to World population prospects 2022, **India will overtake China as most populous country in 2023.**
- During the event, Minister also **unveiled India Family Planning 2030 vision document** with following key priorities:
  - **Teenage Childbearing and early/ child marriage:** From NFHS-4 to NHFS-5, decline in teenage childbearing was minimal— 7.9% in 2015-16 to 6.8% in 2019-21.
  - **Migration and lack of access to contraceptives**: It is mostly driven by lack of contraceptive preparedness before husband's arrival, inaccessibility to health facilities etc.
  - **Lack of male participation** in awareness programmes.
  - **Involvement of private sector** to provide modern contraceptives.
- **Measures taken by India for population control**
  - **First country** in world to **launch a National Programme for Family Planning** in 1952.
  - **National Commission on Population** was formed in 2000.
  - India is a **member of Family Planning (FP) 2020** (now transitioned to FP2030), a **global initiative for family planning.**

6.5.4. CHILD LABOUR

- Parliament standing committee on labour was recently informed that centre has no new data on child labour.
- It is for the **first time that a Parliamentary panel** is engaged in a detailed examination of the **National Child Labour Project (NCLP) scheme.**
  - **Drying up of budgetary** provisions meant for the **NCLP scheme after its merger with Samagra Shiksha Abhiyaan,** is the **prime reason** for lack of updated data.
- **About child labour**
  - **As per Census 2011** there are **10.1 million working children** of 5-14 years age in India.
  - **Causes:** Debt bondage, armed conflict, consumerism, forced labour, etc.
- **Initiatives**
  - India ratified **ILO Convention 182 on the Worst Forms of Child Labour** and **Convention 138 on the Minimum Age of Employment.**
  - **Child Labour (Prohibition and Regulation) Amendment Act 2016** prohibits the 'engagement of children (under 14 years of age) in all occupations and of adolescents (under 18 years of age) in hazardous occupations.

- o **PENCiL** (Platform for Effective Enforcement for No Child Labour) Portal **tool in rescuing and rehabilitating victims** of **child labour**.

- **Constitutional provisions on Child labour**
  - o **Article 21(A) and 45** provides for free and compulsory education to all children from 6-14 years.
  - o **Article 23** prohibits and criminalises human trafficking and forced labour.
  - o **Article 24** prohibits employment of children below the age of 14 years in factories, mines & hazardous employment.
  - o **Articles 39** directs the State to ensure health and strengths of workers and tender age of children are not abused.

SMART QUIZ

You can scan this QR code to practice the Smart Quiz of Environment at our open test online platform for testing your understanding and recalling of the concepts.

7. SCIENCE AND TECHNOLOGY

7.1. CRISPR-CAS 9

Why in the news?

It's been ten years since microbiologist Emmanuelle Charpentier and biochemist Jennifer Doudna published the research that paved the way for CRISPR-Cas9 gene editing.

What is Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)?

CRISPR is a genetic code or sequence found in bacteria. These are formed due to the activity of the previous bacteriophages that had infected them.

- Bacteria use CRISPR sequence to remember each specific virus that attacks them. They do this by **incorporating the virus' DNA into their own bacterial genome.**
- This method then gives the bacteria protection or immunity when a specific virus tries to attack again.
- **Cas 9** are the genes that are always located nearby.
- Once activated, these genes make special enzymes that seem to have co-evolved with CRISPR. The significance of these **Cas enzymes is their ability to act as "molecular scissors" that can cut into DNA.**

How does CRISPR work?

These are the 3 key elements to CRISPR-Cas9 work:

- **Guide RNA:** A piece of RNA that locates the targeted gene. This is engineered in a lab.
- **CRISPR-associated protein 9 (Cas9):** The "scissors" that snip the undesired DNA out.
- **DNA**: The desired piece of DNA that is inserted after the break.

Benefits of CRISPR

- **Predictive and Preventive Healthcare:** This can help in faster and efficient diagnosis of rare genetic diseases. This will also help in determining epidemiology of genetic diseases to enable cost-effective genetic tests, enabling efficient diagnosis of heritable cancers, etc.

Important definitions

DNA: DNA, or deoxyribonucleic acid, is the hereditary material in most of living beings.

RNA: RNA or Ribonucleic acid molecules are single-stranded nucleic acids. They are hereditary material in some viruses.

Genes: A gene is a 'specific' section of DNA. It is involved in making RNA (transcription) or protein(translation).

Genome: A genome is an organism's complete set of DNA. It includes all chromosomes, which house the DNA, and genes.

Molecular scissors act as the scissors that cut out the unwanted DNA. They are also called Restriction Enzymes. It is because of their ability to restrict the unwanted genes at the site identified by the Guided RNA.

What is CRISPR?
UNDERSTANDING HOW THE CRISPR GENE-EDITING PROCESS WORK

1. Susan has sickle cell disease caused by a single DNA letter mutation.
2. In the lab, scientists create a strand of GUIDE RNA that matches the mutated DNA sequence.
3. Cas9, AKA molecular scissors, is added to the RNA mix.
4. Susan receives an injection of RNA + Cas9 mix.
5. Guide RNA identifies the mutated DNA that causes sickle cell disease.
6. Cas9 cuts out the affected sequence.
7. Scientists insert a healthy DNA sequence to replace the clipped sequence.
8. If all goes smoothly, Susan no longer suffers from sickle cell disease.

- **Food security:** It can have a major impact on addressing food insecurity around the world by engineering more **water-efficient crops** and **high yielding varieties** of plants and animals.
  - As a corollary, it can make **farming more efficient and robust** by creating resilient crops which are impervious to droughts and other environmental impacts.
- **Pharmaceutical and Biotechnology:** CRISPR can bring customized and individualized therapies to market more quickly than was previously dreamed.
    The CRISPR generated knowledge base would also help in speeding up the traditional drug discovery process.
- **To adapt to climate change:** It can play a role in limiting agricultural emissions, making crops more resilient to a more variable and extreme climate, and using crops and soil microbes to store and sequester more carbon.

Scientific breakthroughs using CRISPR-Cas9
- **Cancer**: The first ever human trials of CRISPR in China focused **on treating a range of cancers.**
- **HIV**: Scientists from Kobe University in Japan used CRISPR to **block HIV from spreading inside** infected human cells.
- **Parkinson**: US-based biopharmaceutical company Seelos Therapeutics acquired the rights to SLS-004 gene editing therapy for Parkinson's disease.
- **Genetic manipulation**: In 2015, Chinese scientists created super muscular beagles by disabling the myostatin gene, which **directs normal muscle development**.

Advancement by India in CRISPR-Cas9 technology
- **Sickle Cell Anaemia**: Scientists at **Delhi's institute of genomics and integrated biology** are trying to find a solution to prevent genetically inherited sickle cell anaemia using the gene-editing tool**.**
- **Agri-food**: Using CRISPR CAS-9 researchers **at National agri-food biotechnology** edited the banana genome to improve its **nutritional quality and pathogen resistance.**
- **Minimize side-effects**: To overcome the **problems of 'off-targeting'**, research is being conducted for deploying naturally occurring bacteria **Francisella novicida instead of widely used streptococcus pyogenes Cas9.**
  - **Off-target effects** can be defined as unintended cleavage and mutations at untargeted genomic sites showing a similar but not an identical sequence compared to the target site.

Challenges

- **Ethical Challenges**
  - **Concerns over 'Designer Babies'**: Engineering human embryos raises the prospect of designer babies, **where embryos are altered for social rather than medical reasons.** E.g. to increase height or intelligence.
  - **Justice and Equity**: It will further widen the disparities between rich and poor since only the rich would be able to afford the editing of genes for perhaps better intelligence or a fairer complexion.
- **Balancing Risks & Benefits:** While humankind is seeing several medical treatments which were hitherto only theoretically possible are now taking the shape, this warrants caution vis-à-vis **poor or non-standardization application of this technology and associated grievance redressal.**
- **Ecological impacts:** It can cause non-reversible permanent damage to the environmental gene pool. This could propagate a set of **genes with negative traits throughout a population** which may lead to the disappearance of the whole targeted population with severe ecological consequences.

Way forward

- **Altruistic Science:** Research must be designed to **increase human health and wellbeing.** Early stage and uncertain application should be avoided to minimize the risk. **The benefits & burdens of the research** must be broadly and equitably accessible.
- **Consensus-based application:** Bioethicists & researchers believe that human genome editing for reproductive purposes should not be attempted **until safe and effective research confirms the same** and a social consensus is reached.
- **Last Resort to treatment:** All clinical **trials proceeding in human germline editing** should be permitted only when there is no reasonable alternative for disease prevention.
  - Germline editing is the process by which the genome of an individual **is edited in such a way that the change is heritable.**
- **The Drugs and Cosmetics Act,1940** provides that all clinical trials in India should follow the guidelines prescribed in **the Belmont report** based on the basic ethical principle of **respect for person, beneficence, and justice**.
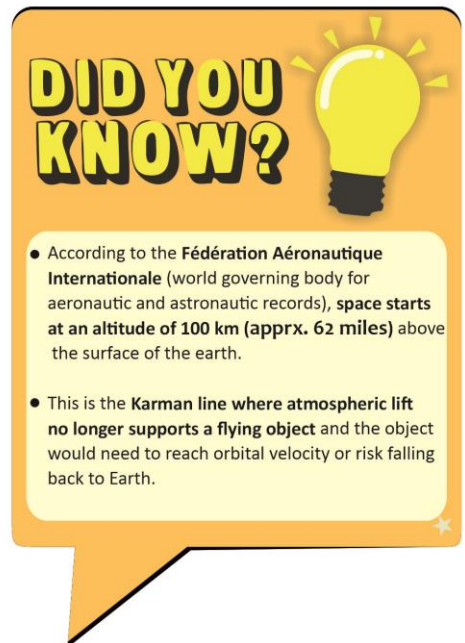
7.2. SPACE TOURISM

Why in News?

ISRO is developing capabilities towards space tourism through demonstration of human space flight capability to Low Earth Orbit (LEO).

About Space Tourism

- Space tourism is a segment of space travel that **allows lay people to travel to space for recreational, leisure or business purposes.**
  - From $350 million in 2019, the **industry is forecasted to grow to more than $1 trillion by 2040.**
- Space Tourism aims **to make space more accessible to those people who are not astronauts** and want to travel to space for non-scientific reasons.
- **Three private companies** – Blue Origin, Virgin Galactic and Elon Musk's SpaceX — **are some of the companies that have entered space tourism**.
- It's **divided into different types**, including **orbital, suborbital, and lunar (moon) tourism.**

DID YOU KNOW?

- According to the **Fédération Aéronautique Internationale** (world governing body for aeronautic and astronautic records), **space starts at an altitude of 100 km (apprx. 62 miles)** above the surface of the earth.

- This is the **Karman line where atmospheric lift no longer supports a flying object** and the object would need to reach orbital velocity or risk falling back to Earth.

	Suborbital tourism	Orbital tourism
Altitude	About **100 kilometres**	Over **400 kilometres**
Duration in Space	Gives passengers a **few minutes in space**	**Spend days or even more** than a week in space.
Velocity	• **Requires much lower speeds** (than orbital) and doesn't have the power to achieve orbit. • Instead, it will **fly up to a certain height that depends on its speed**, and then come back down once its engines are shut off.	• **Spacecraft must achieve orbital velocity** i.e. the speed that an object must maintain to remain in orbit around a planet.

Concerns related to space tourism

- **Impact on human health:** Passengers would be in a potentially severe environment under abnormal conditions. Even during normal operations, they will experience intense accelerations and the absence of gravity.
- **Lack of international rules on governance:** New rules may need to be added for certification of commercial products, services, personnel and facilities, which were never considered in previous space projects.
- **Impact on environment:** Researchers state that routine launches by the rapidly growing space tourism industry may undermine progress made by the Montreal Protocol in reversing ozone depletion.
- **Passenger Liability:** International treaties and conventions are aimed at regulating the signatory states and are bereft of the provisions to handle the liability of private entities in space.

DRIVERS OF SPACE TOURISM

Focused Efforts

With national space agencies backing private space players, private companies developing their reusable launch vehicle system, it is expected that the industry will have significant growth in this aspect.

Emerging start-ups in space tourism

Over the past few years, numerous players have entered the sub-orbital transportation and space tourism market thereby helping in cost and technology benefits.

Declining cost of space tourism

With more advanced technology, it is expected that cost of space travel will fall within the range from $30,000 to $50,000 from the present range of $200,000 to $500,000.

Development of space accommodations

In 2019, NASA announced plans to allow private citizens to fly to the ISS with stay for short visits. Private entities are also developing hotels in space for tourists' stay.

- **Unclear status of Space tourist:** No international space law has defined space tourists. Existing space treaties such as Outer Space Treaty, Rescue Agreement etc. are only applicable to astronauts, envoys of mankind, or personnel of a spacecraft
- **High cost:** Large leaps in cost metrics will be required to make space tourism a reality for the average person.

Way Forward

- **Need to formulate laws and legislations that shall regulate issues of space tourism** including the regulation of private players.
- **Peculiarities of sub-orbital flights do require the establishment of rules for the medical fitness** to protect potential passengers from a medical standpoint.
- There is an **urgent need for environmental regulation** to reduce the climatic damage from this fast-growing industry
- Enact appropriate national/global **space laws and regulations which encourages and assists the private sector** to grow technologically and commercially.

> **India's Initiatives**
> - **Gaganyaan mission is expected to take off** between 2024-25.
> - **Indian National Space Promotion and Authorisation Centre (IN-SPACe)** seeks to promote active participation of the private sector in carrying out end-to-end space activities, and this includes space tourism.

To know more about Space Exploration, please refer to our following Weekly Focus Document.

Space Exploration: Changing dynamics & pathway to the future

Space exploration has played an important role for countries with regard to their economies and security. With the sector experiencing substantial growth, the need for collaboration in the sector has also increased. India being an emerging power in the sector can play a vital role in creating and enabling space collaboration.

7.3. NATIONAL ANTI-DOPING ACT, 2022

Why in News?

Parliament passed the National Anti-Doping Act, 2022 recently.

About National Anti-Doping Act, 2022

- The act provides **statutory framework in the form of legislation for prohibition of doping in sports** and enforcing anti-doping activities in the country.
- **Key features of the act**
  - **Prohibition of doping:** Act prohibits athletes, athlete support personnel and other persons from engaging in doping in sport. Anti-doping rule violation by an individual athlete or athlete support personnel may result in:

Need of the Act

- According to WADA, India had the third highest number of dope offenders in 2019.
- To provide a statutory framework for strengthening anti-doping activities in sports & to give effect to the UNESCO's International Convention against doping in sport (ratified by India).
- Low awareness about anti-doping rules as well as the use of prohibited substances & their side effects amongst even elite Indian athletes.
- To create sufficient manpower as countries, much smaller in size than India, have far higher numbers of officials for testing, control in anti-doping.
- To resolve procedural issues in anti-doping disputes

- ✓ **Disqualification of results** including forfeiture of medals, points, and prizes,
- ✓ **Ineligibility to participate in a competition** or event for a prescribed period,
- ✓ **Financial sanctions**,
- ✓ **Consequences for team sports** which will be determined by the National Anti-Doping Disciplinary Panel after a hearing.
- o **Incorporation of National Anti-Doping Agency (NADA):** Bill seeks to provide statutory framework for the functioning of the National Anti-Doping Agency (NADA), **empowering it to conduct raids besides strengthening measures to tackle drug abuse**.
  - ✓ It will be headed by a **Director General appointed by the central government**.
  - ✓ NADA established as societies under **Societies Registration Act**, will be dissolved and reconstituted.
- o **Establishment and constitution of National Board for Anti-Doping in Sports:** It will make recommendations to the government on anti-doping regulation and compliance with international commitments on anti-doping.
  - ✓ Board will **oversee the activities of the Agency** and issue directions to it.
  - ✓ Board will **constitute a National Anti-Doping Disciplinary Panel** for determining consequences of anti-doping rule violations.

Concerns raised against the Act

Independence of Director General of NADA

According to WADA, such organisations must be independent to make operational decisions. Provisions of Act may not fully ensure that NADA is independent of the central government.

Independence of Disciplinary and Hearing Panels

As grounds of removal have not been specified in the Act giving the Board the discretion to decide the grounds of removal through Regulations.

Qualifications of members of the Disciplinary and Hearing Panels

WADA guidelines require that the members of the hearing panel must have anti-doping experience, a provision lacking in the Act.

National Dope Testing Laboratory (NDTL)
- NDTL was established with an aim **to get permanently accredited by International Olympic Committee (IOC) and WADA** to do the testing for the banned drugs in human sports
- NDTL has **regained WADA accreditation** (suspended in 2019).
  - o The restoration of accreditation is a **boost to India's efforts to achieve the highest global standards of excellence in sport**.

  - ✓ Board will also **constitute a National Anti-Doping Appeal Panel** which will consist of a chairperson (a retired High Court judge), a Vice-Chairperson (a legal expert), and 4 members (medical practitioners and retired eminent athletes).
- o **Dope Testing Laboratories**: The existing National Dope Testing Laboratory will be deemed to be the principal dope testing laboratory. The central government may establish more National Dope Testing Laboratories.

About Doping

- Doping is the **consumption of certain prohibited substances** by athletes to enhance performance.
  - o Although they enhance performance, there are **health risks involved in taking them and they're banned** by sports' governing bodies.
  - o Doping **threatens to undermine the spirit of fairness** that underpins sport.
- **Following types of substances are used in doping**

Substances/Methods	Advantage provided
Androgenic agents like anabolic steroids	• Allow athletes to train harder and build more muscle.
Stimulants	• Make athletes more alert and can hide fatigue by increasing heart rate and blood flow.
Diuretics and masking agents	• To remove fluid from the body, which can hide other drug use or in sports like boxing and horse racing, can help competitors "make the weight".
Narcotic analgesics and cannabinoids	• To mask pain caused by injury or fatigue.
Peptide hormones	• **Substances like EPO (Erythropoietin)** which increase bulk, strength and red blood cells giving athletes more energy and **HGH (Human Growth Hormone)** which builds muscle.
Others	• **Gene doping:** Body cells or genes are manipulated by use of substances that improve performance.

	• **Blood doping**, where blood is removed from the body and injected back in to boost oxygen levels.
	• **Glucocorticoids** mask serious injury because they're anti-inflammatories and affect the metabolism and regulate glycogen and blood pressure levels.
	• Things like **beta blockers** are banned in sports like archery and shooting because they keep the heart rate low and reduce tremble in the hands.

- **Monitoring of doping in Sports**
  - **World Anti-Doping Agency (WADA)** monitors doping in all kinds of competitive sports.
    - ✓ WADA was **established in 1999 as an international independent agency** composed and funded equally by the sport movement and governments of the world.
  - WADA **periodically updates its list of Prohibited Substances and Methods**. This includes steroids, anabolic agents, stimulants, and gene doping.
    - ✓ Use of prohibited substances is exempted if needed for therapeutic use, as specified.
  - **WADA monitors doping in sport based on the World Anti-Doping Code.**
    - ✓ The Code provides a framework for antidoping policies, rules, and regulations for sport organizations and public authorities.
    - ✓ **Any sportsperson competing in national or international events can be asked to give his/her blood and/or urine samples** at any point of time by anti-doping agency or sports events committee during the event.
    - ✓ Testing can be conducted in-competition and out-of-competition.
  - WADA doesn't directly conduct tests rather **it gives accreditation to laboratories.**
  - **At the national level, there is the National Anti-Doping Agency (NADA),** an independent body under Union Ministry of Sports.

Parliamentary Standing Committee on Education, Women, Children, Youth and Sports recommended following measures to improve and strengthen the anti-doping ecosystem in the country:

- **Boosting education, regular counselling and awareness-raising measures** from grass root level and improving consequential awareness amongst elite athletes.
- **Starting more sports science and sports medicine courses** in various medical colleges/Universities to address the lack of qualified personnel in these fields.
- **"Dope-free" certification by independent bodies** should be made mandatory for supplements or nutraceuticals which are regularly consumed by athletes.
- **A distinction for minor athletes should be made** while formulating the rules so that a protective mechanism is available to them.
- **Early detection mechanism** and mandatory provision for having at least one certified sports medicine doctor at all sports camps which are organized for training of athletes.
- **Enforcing athletes' responsibility** towards protection of the integrity of sports by ensuring the proper compliance of the "whereabouts guidelines.

7.4. NEWS IN SHORTS

7.4.1. POLAR SATELLITE LAUNCH VEHICLE (PSLV)

- PSLV on its 55th mission (PSLV-C53) **successfully launched three Singaporean satellites** in the **second commercial mission of New Space India Limited (NSIL).**
  - NSIL is the commercial arm of ISRO with primary responsibility of **enabling Indian industries to take up high technology space-related activities.**
- Besides placing satellites in orbit, **ISRO also achieved successful launch of PSLV Orbital Experimental Module (POEM),** a platform which **allows in-orbit**

scientific experiments using the final (fourth) stage of PSLV.

  - **PSLV is a four-stage launch vehicle** (1st & 3rd stage: Solid; 2nd & 4th: Liquid) where **first three spent stages fall back into the ocean** and **final stage ends up as space junk.**
  - Fourth stage **can be used in missions where the load is light** and can help satisfy growing demand from startups, and student and scientific communities.
- POEM has a **dedicated Navigation Guidance and Control** system which will **act as platform's brain** to stabilize it with specified accuracy.

- o POEM will derive its **power from mounted solar panels and a Li-Ion battery**.

> **About PSLV (Workhorse of ISRO)**
> - It is the **third generation launch vehicle of India.** It is the **first Indian launch vehicle to be equipped with liquid stages.**
> - It can take **up to 1,750 kg of payload to Sun-Synchronous Polar Orbits** of 600 km altitude.
> - PSLV has also been used to launch various **satellites into Geosynchronous and Geostationary orbits.**

7.4.2. JAMES WEBB SPACE TELESCOPE (JWST)

- James Webb Space Telescope (JWST) recently delivered deepest infrared image of universe yet.
- **Known as Webb's First Deep Field,** image shows the **galaxy cluster SMACS 0723** as it appeared 4.6 billion years ago.
  - o **One of the goals of JWST was to search for first galaxies** or luminous objects **formed after Big Bang** along with other goals of determining how galaxies evolved, observing stars formation etc.
- JWST, NASA's s infrared flagship observatory, is an **international collaboration between NASA, European Space Agency, and Canadian Space Agency**.
  - o It is placed in **Sun-Earth Lagrange Point 2 (L2)**.
- JWST is being **considered as successor of Hubble Space Telescope (HST).**

	Hubble	JWST
Distance from Earth	507 Km	1.5 million Km at Second Sun-Earth Lagrange point
Primary Mirror Diameter	2.4 meter	6.5 meter
Searching for	Young Galaxies (12.5 Billion years ago)	New Born Galaxies (13.5 Billion years ago)
Serviceable	Yes	No
Wavelengths	Visible, UV, Part of near-infrared	Near and mid infrared

7.4.3. LUX-ZEPLIN (LZ) DARK MATTER DETECTOR

- A test run of **LZ detector in** U.S. has shown it to be the **most sensitive dark matter detector** yet created.
- **Visible universe—**including Earth, sun, other stars, and galaxies—**is made of protons, neutrons, and electrons bundled together into atoms.**
  - o This ordinary, also called baryonic, matter **makes up less than 5 percent of the mass of universe**.
  - o **Rest of the universe appears to be made of** a mysterious, invisible substance called **dark matter** (25 percent) and a force that repels gravity known as dark energy (70 percent).

- Unlike normal matter, **dark matter does not interact with electromagnetic force.** This means it does not absorb, reflect or emit light, **making it extremely hard to spot.**
  - o Scientists study dark matter **by looking at the effects it has on visible objects**.
- **Significance of Dark matter study**
  - o It may account for **unexplained motions of stars within galaxies**.
  - o Critical to **understanding of evolution of universe** and to emergence of stars, planets etc.
  - o **Will help to determine if the universe is open** (continues to expand), **closed** (expands to a point and then collapses) **or flat** (expands and then stops when it reaches equilibrium).

> **About LUX-ZEPLIN (LZ) detector**
> - It is designed (underground) to **capture dark matter in the form of weakly interacting massive particles (WIMPs).**
> - It consists of a **huge titanium tank** filled with **extremely pure liquid xenon.**
> - Centre of LZ is one of **the purest places on Earth** (free of radiation and dust).
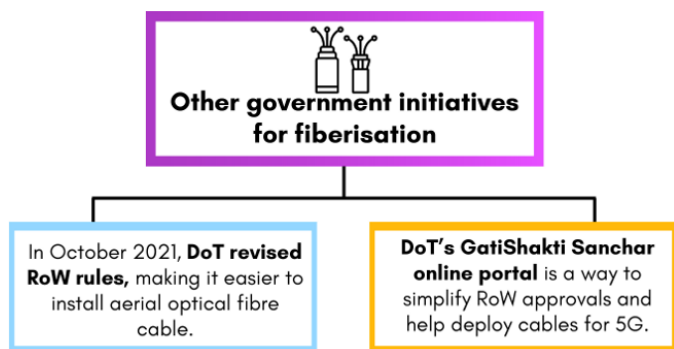> - **Collaboration** of scientists/institutions **from U.S., U.K., Portugal, and Korea.**

7.4.4. PENTAQUARKS AND TETRAQUARKS

- **Large Hadron Collider beauty (LHCb) experiment has observed three new particles** at European Organisation for Nuclear Research (CERN).
  - o **Pentaquark** and first-ever **pair of tetraquarks are** three members to list of new hadrons.
  - o They will help physicists **better understand how quarks bind together** into composite particles.
- Quarks are **elementary particles that usually combine in groups of twos and threes** to form hadrons such as protons and neutrons that make up atomic nuclei.
  - o They can also **combine into four-quark and five-quark particles,** called tetraquarks and pentaquarks.

7.4.5. FIBERISATION

- **In the backdrop of the 5G spectrum auction for telecom airwaves** by government, the challenge for requisite infrastructure in terms of fiberisation challenge is underscored.
- **Fiberisation** is the process of connecting radio towers with each other via optical fibre cables.
  - o It represents the **part of the network that connects** the **core of the network to the edge** facilitating large amounts of data used in **5G services**.

- o Also, it **provides additional bandwidth and stronger backhaul support**.
- o In India, **currently only 33% of the towers are fiberised**, compared to the 80%-90% in the U.S., Japan and China.
- o To transition to 5G, **India needs at least 16 times more fibre**.
- **Challenges to Fiberisation**
  - o **Monetary constraints** like India requires ₹2.2 lakh crore of investment to help fiberise 70% towers.
  - o **Time constraints** like to connect every village in the country with optical fiber cable (OFC) in 1000 days, cables must be laid at a speed of 1251 km a day, around 3.6 times the current speed.
  - o **Ineffective implementation of Indian Telegraph Right of Way (RoW) Rules 2016** which provide for one-time compensation and uniform procedure for establishment of Overground Telegraph Line (OTL).

Other government initiatives for fiberisation

In October 2021, **DoT revised RoW rules,** making it easier to install aerial optical fibre cable.

DoT's GatiShakti Sanchar online portal is a way to simplify RoW approvals and help deploy cables for 5G.

7.4.6. TIHAN (TECHNOLOGY INNOVATION HUB ON AUTONOMOUS NAVIGATION)

- TiHAN, **India's first Autonomous Navigation facility** (for both ground and aerial vehicle testing), **was inaugurated at IIT Hyderabad**.
- TiHAN (by Ministry of Science & Technology) is a **multidisciplinary initiative** to make India a global player **in futuristic and next generation 'smart mobility' technology.**
- **It will provide** industries, research and development labs, and academia **a platform for research in autonomous navigation.**
- It is one of the **25 technology innovation hubs** under **National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS).**

7.4.7. CRYPTOJACKING

- Cryptojacking is a cyber-attack that is hard to detect, wherein a computing device is hacked by the attacker, and its resources are used to illicitly coin mining of cryptocurrency.

- Coin mining is a **legitimate, competitive** process used to **release new crypto** coins into **circulation** or to **verify new transactions.**
  - o It involves **solving complex computational problems** to generate **blocks of verified transactions** that get added to the blockchain.

7.4.8. BATTERY CERTIFICATION AND QUALITY CONTROL

- **Amid increasing instances of fires in EVs,** Centre has formed a panel to formulate procedures on battery certification and quality control.
- **Reasons for fire** may include **manufacturing defects, external damage, faulty charging** or faults in the deployment in the battery management system, which could result in these batteries becoming a fire risk.
- With growing concern over climate change and a larger aim to reduce its crude import bill, **government's focus is on pushing passenger vehicle owners to shift to EVs**.
  - o **Different types of batteries** are available to power EVs such as Li-ion, Solid state, Nickel-Metal Hydride etc.
  - o However, **Li-ion batteries are most preferred** because of their **high power-to-weight ratio, high energy efficiency, low self-discharge etc.**
- **Steps Taken for Battery Safety**
  - o **Bureau of Indian Standard** (BIS) formulated **performance standards for EV Batteries.**
  - o **Constitution of a Probe Committee** to look into fire incidents reasons.
  - o **Regenerative braking** to increase its range by recovering energy.
  - o **Re-use of EV batteries** in factories and home energy battery storage systems.

7.4.9. REPORT ON ACCELERATING ACCESS TO GENOMICS

- **WHO's Science Council** (SC) **issued its first report on accelerating access to genomics for global health**, arguing that it is not justifiable ethically or scientifically for less-resourced countries to gain access to such technologies long after rich countries do.
  - o SC was established (2021) by Director General of WHO **to provide guidance on the science and research strategy** of the organization.
- **Report's recommendations address four themes**:
  - o **Advocacy** to promote genomics.
  - o **Implementation** of genomic methodologies.
  - o **Collaboration** among entities engaged in genomics.
  - o **Attention to the ethical, legal, and social issues** (ELSIs) raised by genomics.

- **Genomics** refers to the **study of the entire genome of organisms** and the large amounts of corresponding data generated from it.
  - **Genetics,** on the other hand, is **concerned with study of heredity.**
- **Applications and uses of genomics**:
  - **Human genomics for medical purposes** (prevent, diagnose, predict, manage, monitor, and treat genetic disorders)
  - **Microbial genomics for medical purposes** (identification of infectious agents, vaccine design etc.)
  - **Agriculture and aquaculture genomics** (identification of new traits and disease susceptibility etc.)
  - **Biological and medical research** (drug development, discovery of genes influencing disease etc.)
  - **Others** (forensic science, assessment of ancestry etc.)

> **Genomics related Initiatives in India**:
> - **'GenomeIndia: Cataloguing the Genetic Variation in Indians'** project by Department of Biotechnology (DBT).
> - **IndiGen Program** by Council of Scientific & Industrial Research (CSIR).
> - **Indian SARS-CoV-2 Genomics Consortium** (INSACOG)

7.4.10. DRAFT 'DRUG, MEDICAL DEVICES, AND COSMETICS BILL-2022'

- It **seeks to replace Drugs and Cosmetics Act of 1940** while **laying down strict regulatory guidelines** to keep pace with changing needs and technology.
  - India is **among top 20 markets for medical devices** worldwide.
  - Market is **expected to reach US$ 50 billion in 2025** ($10 billion in 2020).
- **Key highlights of the Draft Bill**
  - **New definitions** for clinical trial, over-the-counter drugs, manufacturers, medical devices, new drugs, bioavailability study, investigational new drug and imported spurious drugs, among others.
  - **Medical device testing centres** on lines of drug laboratories in states and at central level.
  - **Regulation for online pharmacies** and medical devices.
  - **Permission of central licensing authority** for clinical trials/investigation of drugs and medical devices.
  - **A separate Drugs Technical Advisory Board** and Medical Devices Technical Advisory Board to give suggestions.
  - **Allows Centre to waive requirement of conducting clinical investigation** for manufacture

or import of a new medical device in public interest.
  - **Penalties** such as imprisonment and compensation **in case of injury or death during clinical trials** for drugs.
  - Establishing a **scientific research board** for supporting **development of innovative drugs of Ayurveda, Siddha, Sowa-Rigpa, Unani and homoeopathy.**

7.4.11. MONKEYPOX

- Monkeypox **satisfied the requirement of a public health emergency of international concern (PHEIC)** under the WHO's International Health Regulations (IHR),2005.
  According to IHR, **an outbreak qualifies as a PHEIC if 1) it's unusual or unexpected, 2) has potential for international spread, and 3) requires an immediate international response.**
  - Once **it spreads internationally, it is declared as a Pandemic**.
- The PHEIC is WHO's highest level of alert and the announcement can **unlock funding and global efforts to collaborate on sharing vaccines and treatments.**
  - So far this year, there have been 15000 **cases of monkeypox in more than 60 countries.**
- **About Monkeypox**
  - It is a **viral disease** that **spreads via close contact and tends to cause flu-like symptoms and pus-filled skin lesion.**
  - The current outbreak is unlike any previous one outside of Africa in that there is **sustained person-to-person transmission of the infection.**
  - It has been **spreading chiefly in men who have sex with men** in the recent outbreak outside Africa, where it is endemic.
- **About IHR, 2005**
  - It is a **binding international legal agreement involving 196 countries** across the globe, including **all the Member States of WHO.**

What's the difference between an endemic, epidemic and pandemic disease?

Endemic Disease	Epidemic Disease	Pandemic Disease
Constantly present in a population or region,with relatively low spread	Sudden increase in cases spreading through a large population	Sudden increase in cases across several countries,continents or the world
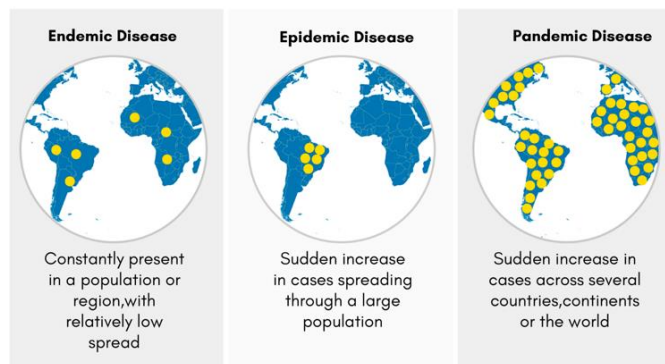
> **Why many of the diseases** like monkeypox, coronavirus, zika, and ebola **were first reported in either Asia or Africa?**
> - **Humans in these continents** have a greater chance of coming in contact with animals more often in their many **densely populated regions.**
> - **Tropical regions**, rich in host biodiversity, **already hold a large pool of pathogens,** greatly increasing the chance that a novel pathogen will emerge.
> - **Rapid growth in urbanisation and infrastructure development**, as well as the clearing of biodiversity-rich areas, has led to **more interactions among species** in the last few decades.
> - On both continents, many families **depend on subsistence farming and a minuscule supply of livestock. Disease control, feed supplementation** and housing for those animals **is extremely limited.**

7.4.12. AFRICA'S 1ST MALARIA VACCINE

- Gavi, the global vaccine alliance, announced $160 million in international support for the rollout of the first malaria vaccine in Africa from 2022-2025.
  - The first malaria vaccine in Africa will start with **Ghana, Kenya and Malawi** (that began pilot introduction in 2019) and then expand to other eligible endemic countries.
- Malaria is an **acute febrile illness caused by Plasmodium parasites**, which are **spread** to people through the bites of infected **female Anopheles mosquitoes.**
  - According to **WHO's World Malaria Report (WMR) 2021**, there were an **estimated 241 million malaria cases and 627 000 malaria deaths worldwide** in 2020.
  - Malaria remains a **primary cause of childhood illness and death in sub-Saharan Africa.**
- **Malaria in India:**
  - India accounted for **83% of estimated cases and about 82% of all malaria deaths** in WHO **South-East Asia Region** (WMR 2021).
  - India launched the **National Framework for Malaria Elimination** (NFME), 2016-2030 to **eliminate malaria** in a phased manner.
    - ✓ Goal is to **achieve zero indigenous cases of Malaria by 2027** and **sustain elimination by 2030**.
    - ✓ **Major interventions** include Early diagnosis and radical treatment; Integrated vector management; Community mobilization etc.

7.4.13. VIRUSES IN NEWS

- **Human Papilloma Virus**
  - 'Cervavac', the **country's first quadrivalent human papillomavirus vaccine (qHPV)** manufactured by Serum Institute of India was **approved by the Drug**

Controller General of India for market authorisation.
  - HPV is a sexually transmitted virus that may cause **cervical cancer.** In India, cervical cancer accounted for **9.4% of all cancers** and 18.3% (1,23,907) of new cases in 2020
  - Cervical cancer is the **second most common cancer of women** in India **despite being largely preventable.**
  - Cervical cancer **can be eliminated if all prepubertal girls are given HPV vaccination globally**.
- **Epstein Barr Virus (EBV)**
  - Scientists have found that **the cancer-causing** EBV can infect the neuronal cells leading to **diseases of the central nervous system** and **brain cancer.**
  - EBV viruses are **widely present in the human population.**
  - They are **usually harmless,** but the virus gets **reactivated inside the body in some unusual conditions** like immunological stress or immunocompetent.
  - The study was conducted by the scientists of IIT Indore under the **'Fund for Improvement of S&T Infrastructure (FIST) scheme'.**
- **Marburg virus disease (MVD)**
  - Ghana has reported first-ever suspected cases of MVD.
  - It's a **highly infectious viral haemorrhagic fever** with a **fatality ratio of up to 88 percent.**
  - It **belongs to same family as Ebola**.
  - It was **first identified in 1967 in Germany's Marburg and Frankfurt**.
  - **Fruit bats of Pteropodidae Family are key carriers** of the disease.
  - It is **transmitted to people from fruit bats and spreads among humans** through human-to-human transmission.
  - Currently there are **no vaccines or antiviral treatments** approved for MVD.

7.4.14. DISEASES IN NEWS

Kala Azar

- Also known as **Black fever, or Visceral Leishmaniasis** it is a **protozoan parasitic disease, spread by sandfly bites**. The flies are infected with the parasite **called 'leishmania donovani'.**
  - Disease is linked to **malnutrition, population displacement, poor housing, a weak immune system and environmental changes.**
  - It is a **treatable and curable disease.**
- In India, the disease is **endemic in Bihar, Jharkhand, Uttar Pradesh and West Bengal.**

- o **National Kala-Azar Elimination Programme** was launched to control this disease**.**
- o Government aimed to **eliminate the disease in India by 2015, but that deadline was missed.**

African Swine Fever

- **Recently, cases have been reported from Bihar**, leading to State government imposing a 30-day ban on the transportation of pigs, pork and pork products and pig manure.
- ASF is a **highly contagious and deadly viral disease** affecting pigs and wild boar with up to 100% case fatality rate.
  - o ASF is **not a threat to human health** and **cannot be transmitted from pigs to humans**.
  - o Currently, there is **no effective vaccine** against ASF.
  - o **Symptoms**- high fever, vomiting and diarrhoea among others.
  - o It was **first reported in India in 2019.**

7.4.15. BIOPLASTICS

- A British firm recently claimed that it has **produced the world's first bioplastic vinyl record**, which it hopes will reduce the need for highly toxic Polyvinyl Chloride (PVC).

- Bioplastics are **derived from sources such as sugars and starches**, rather than oil or gas, and do not create any toxic waste in their production.
  - o These are **100% degradable, equally resistant, and versatile**, already used in agriculture, textile industry, medicine, in the container, packaging market etc.

7.4.16. POP-FAME

- US Scientists have developed a fuel named **POP-FAME** from **bacteria**.
- POP-FAME, i.e. **polycyclopropanated fatty acid methyl ester**, is a new fuel molecule made up of **seven sets of cyclopropane rings**.
  - o **Cyclopropane** is naturally produced by **bacteria** in a family called **Streptomyces**.
  - o It has a **three-carbon ring** with each carbon atom combining with two other elements, mostly **Hydrogen**.
- POP-FAME is found to have **energy density over 50 megajoules** (MJ), as compared to **32 MJ for petrol** and **35 MJ** for RP-1 (a kerosene-based rocket fuel); making it an ideal **rocket fuel**.

8. CULTURE

8.1. ALLURI SITARAMA RAJU

Why in news?

PM launches year-long **125th birth anniversary** celebration of legendary freedom fighter **Alluri Sitarama Raju in Bhimavaram, Andhra Pradesh** by unveiling his bronze statute.

About Alluri Sitarama Raju

- Alluri Sitarama Raju was born in **1897**, in **Mogallu, a west Godavari district of Madras Presidency**.
- He emerged **as a holy man** who supposedly had messianic powers.
- He is also referred to as '**Manyam Veerudu' — loosely translated to 'hero of the forests'.**
- Sitarama Raju's reach was **not only limited to the Rampa region**, he **established contacts across India.**
  o He was a member of a **Calcutta Secret Society where he learnt to make bombs.**
  o He attended a meeting **in Chittagong where other revolutionaries came together**.
  o He arranged for **arms and ammunitions** from **across India for his fight in the Rampa region.**
- Sitarama Raju was instrumental in **spreading Non-cooperation movement in the hill region (Rampa and Gudem).**
- He was a **brilliant tactician** who studied geographical contours. He used his knowledge of the land to **engage in guerrilla warfare with the British.**

About Rampa Rebellion (August 1922 – May 1924)

- The Rampa Revolt, also referred to as the **Manyam Uprising**, was a tribal rebellion.
- **Factors that led to the revolt**
  o **The Muttadars** who were the **actual rulers** of the region had their socio-economic status **challenged** as they were **forcefully brought under the colonial structure.**
  o The sudden declaration **of Podu cultivation** (shifting cultivation) **as illegal** under the new colonial regime.
  o The colonial **government usurped the rights of the local people** to **collect Minor Forest Produce.**
  o The tribals were forcefully engaged **in Vetti, that is, free or unpaid labour**.
- Alluri Sitarama Raju told them that they were the sole owners of the forest produce and prepared them to fight against the oppressive Madras Forest Act, 1882.

Course of the movement

- Alluri sitarama raju believed the traditional weaponry would be of no use against the heavily armed the British forces. He **launched attacks on police stations** to snatch modern weapons.
- The first of such attacks was made on Chintapalli police station in Visakhapatnam Agency area.
- All the attacks were **concluded by a trademark letter** signed by Raju himself.
- Another hallmark of his attacks was that he would **announce the date and time of the attack**.
- After a relentless chase by British forces, Rama Raju was caught and martyred on May 7, 1924. This was followed by repression and violence by British.

Significance of the Revolt

- The **Rampa rebellion** through **its guerrilla warfare targeted the Britishers only** proving the **assertion that it was anti-colonial in nature and not a localised tribal revolt**.
- It **emerged** from **among the people of the Rampa**. **Popular beliefs and myths were used as an instrument to rally people.**
- The rebellion had **direct and indirect links with the nationalist ideologies.** For instance, Alluri **Sitarama Raju wore khadi,** one of the symbols of resistance against the colonial power**.** This was in solidarity with the simultaneously ongoing **non-cooperation movement.**

8.2. NATIONAL SYMBOLS OF INDIA

National Symbols

National Flag		State Emblem
		The state emblem is an adaptation from the Sarnath Lion Capital of Ashoka. The emblem represents **the seal of the Republic of India.**

National Anthem	National Song	National Calender
The National Anthem of India Jana-gana-mana, composed originally in Bengali by Rabindranath Tagore, was adopted in its Hindi version by the Constituent Assembly as the National Anthem of India on 24 January 1950.	Vande Mataram, composed in Sanskrit by Bankimchandra Chatterji. The song was a part of Bankimchandra's Anand Math (1882).	The national calendar based on the Saka Era, with Chaitra as its first month and a normal year of 365 days was adopted from 22 March 1957 along with the Gregorian calendar for official purposes.

National Bird: The Indian peacock, PAVO CRISTATUS.	National Animal: The tiger, *Panthera tigris.*	National Flower: Lotus, *Nelumbo Nucifera Gaertn.*	National Tree: Indian fig tree, *Ficus bengalensis.*

8.2.1. AMENDMENTS TO FLAG CODE OF INDIA

Why in news?

Recently, the centre amended the Flag Code of India.

More about the news

- The amendment allows the national flag to be flown **both in day and at night** if it is displayed in **the open or on the House of a member of the public**. Earlier, the tricolour could be **hoisted only between sunrise and sunset**.
  - The Flag Code of India was earlier amended in **December 2021**, allowing the **use of polyester, apart from cotton, wool, silk and khadi for making hand-spun, hand-woven and machine -made flags.**
- The amendment is brought with regards to **the Har Ghar Tiranga campaign**.
  - Har Ghar Tiranga is a campaign under the aegis of **Azadi Ka Amrit Mahotsav** to encourage people to bring the **Tiranga home and hoist it to mark the 75th year of India's independence.**
- **Department of posts** have been tasked with utilising its reach and manpower across the country by making the people aware of the importance of the **'Har Ghar Tiranga' Campaign**.

The Flag Code of India, 2002

- The Flag Code of India is **a set of laws** and **conventions about the use, display and hoisting** of the Indian national flag. It was brought into effect on **January 26th, 2002.**
  - The National Flag was adopted by the Constituent Assembly of India on 22nd July 1947.
- **It governs the display** of the National flag by private, public and government institutions.
- **Size and shape of the national flag**: It shall be **rectangular**. It can be of any size but the ratio of **the length to the height of the national flag should be 3:2**.
- **National Flag at home**: A member of the **public, a private organizatio**n, or an educational institution may display the **national flag on all days or occasions** in accordance with the dignity and honour of the national flag.
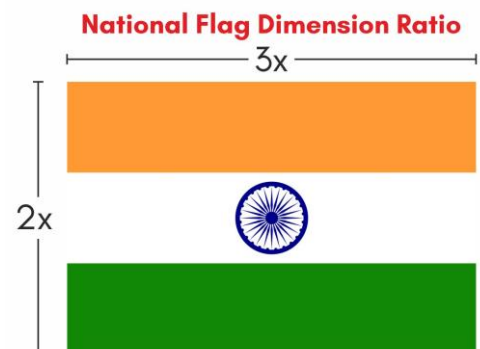
8.2.2. STATE EMBLEM OF INDIA

Why in news?

Recently, a cast of State Emblem was constructed atop the new Parliament building- the Central Vista Project.

The History behind the State Emblem

- **The Lion Capital** was erected by **Mauryan Emperor Ashoka during the year 250 BC** to mark the spot where Buddha imparted **Dharmachakra Pravartana** (first sermon after Enlightenment, explaining the Four-Noble Truths).
- **The National Emblem** is the **graphic representation of the Lion Capital** that originally sits at the top of the **Ashoka Pillar at Sarnath**, along with the **National Motto written** below it.
- **Five students** of renowned artist **Nandalal Bose** created the emblem. Among them were **Jagdish Mittal, Kripal Singh Shekhawat, Gauri Bhanja and Dinanath Bhargava.**

Why did the Constituent Assembly embrace the Sarnath pillar as the national emblem?

- It was felt that the pillar **epitomised the power, courage and confidence of the free nation.**
- The emblem depicts a **two-dimensional sculpture with the words Satyameva Jayate (truth alone triumphs)** written below it, taken from the **Mundaka Upanishad, written in Devanagari script.**

Design of the State Emblem
- **The Animals**
  - The **four majestic lions**, **roaring and facing the four cardinal directions represent power, courage, pride, confidence**. The four lions of the **capital holistically** symbolize **stress on equality and justice in all spheres of life.**
  - The four animals in between the chakras are regarded as the **guardians of four directions**. These animals appear to be rolling the chakras in the Abacus.
    - ✓ **The elephant** represents the **conception** of Prince Siddhartha.
    - ✓ **The bull** is the representative of Prince Siddhartha in **his youth**.
    - ✓ **The horse** depicts Siddhartha **renouncing his royal life** in search of **Enlightenment.**
    - ✓ **The lion** is the depiction of Siddhartha attaining **Enlightenment** under the **Peepal tree** and his **transformation as Buddha**.
- **Dharma Chakra or the Ashok Chakra** is the 'Wheel of Law' that signifies Dharma (virtue).
  - **The 24 spokes of the Chakra** represent the **number of hours in a day**, and **portray the passage of time.** The spokes signify **moving forward in life** and thus one **avoids stagnation of the mind.**

8.3. NEWS IN SHORTS

8.3.1. CONVENTION FOR SAFEGUARDING OF INTANGIBLE CULTURAL HERITAGE (ICH)

- India was **elected** to Intergovernmental Committee of **UNESCO's 2003 Convention for Safeguarding of Intangible Cultural Heritage (ICH)**.
- **Committee consists of 24 members** and is elected according to principles of equitable geographical representation and rotation.
  - **India has been elected** (overall third time) **for 2022-2026 cycle.**
  - Earlier, India was **also elected to UNESCO's World Heritage committee** (2021-2025).
- **Some of the core functions** of Committee include **promoting objectives of Convention, providing guidance on best practices,** and making recommendations for safeguarding of ICH.

  - It also **examines requests for inscription of intangible heritage** on Lists. Committee is also in charge of **granting international assistance.**
- **About UNESCO's 2003 Convention for safeguarding of ICH**
  - It aims for **Safeguarding of Intangible Heritage** along with traditions and living expression.
  - **It has 4 primary goals:** Safeguard ICH, Ensure respect for ICH, Raise awareness of the importance of ICH, Provide for international cooperation and assistance.
  - Following 2003 Convention, **ICH list has been classified into five broad domains:**
    - ✓ Oral traditions and expressions, including language as a vehicle of ICH
    - ✓ Performing arts
    - ✓ Social practices, rituals and festive events

- ✓ Knowledge and practices concerning nature and universe
- ✓ Traditional craftsmanship.

About ICH
- It means **practices, representations, expressions, knowledge, skills** – as well as the **instruments, objects, artifacts and cultural spaces** associated with them that communities, groups, individuals **recognize as a part of their cultural heritage.**
- **There are 14 Indian elements** on ICH list with **Durga Puja (2021), Kumbh Mela (2017), Yoga (2016) being the latest.**

8.3.2. WORLD'S 50 GREATEST PLACES OF 2022

- The TIME magazine recently unveiled its list of the 'World's Greatest Places' of 2022 which featured Ahmedabad and Kerala.
- **About Ahmedabad**
  - This walled city is India's first **UNESCO World Heritage City.**
    - ✓ The UNESCO's WHC Programme aims **to assist States Parties in the challenges of protecting and managing their urban heritage.**
    - ✓ To be included on the World Heritage List, sites must be of outstanding universal value and meet at least **one out of ten selection criteria**.
  - It was founded by **Sultan Ahmad Shah in the 15th century**, on the eastern bank of the **Sabarmati River**.
  - It was formerly known as **Ashawal of Asha Bhil; Karnavati of Karanadev, Rajnagar**, the capital of Jainism, etc.
  - The important architecture include the **Bhadra citadel, the walls and gates of the Fort city** and numerous **mosques and tombs** as well as **important Hindu and Jain temples** of later periods.
  - The **timber-based architecture** is of exceptional significance and is the **most unique aspect of its heritage.**
  - Ahmadabad city's settlement planning in a hierarchy of living environment, **with streets as also community spaces, is representative of the local wisdom and sense of strong community bondage.**

8.3.3. MANGARH HILLOCK

- **As a tribute to tribal freedom fighters** who lost their lives, government is exploring possibility of declaring **Mangarh Hillock, in Banswara District (Rajasthan)**, a monument of national importance.
  - It is situated at **Gujarat-Rajasthan border.** Place has become sacred and is better known as Mangarh Dham.

- **About Mangarh massacre**
  - In 1913 some **bhils revolted against British rule under headship of a social reformer Govind Guru** (a local tribal) and Punja.
  - **Govind Guru launched 'Bhagat movement among Bhils** asking them to adhere to vegetarianism and abstain from all types of intoxicants.
  - **In November 1913, hundreds of tribals** had gathered at the Mangarh hillock for a peaceful meeting when they **were surrounded and shot dead** by British forces.
    - ✓ Event is also known as **Mini Jalianwala Bagh massacre**.
- **Archaeological Survey of India (ASI)** under Ancient Monuments and Archaeological Sites and Remains (AMASR) Act, 1958 **considers sites for declaration as national importance** provided, they meet certain criterion.
  - **There are at present more than 3650** ancient monuments and archaeological **sites and remains of national importance.**
- **Criteria for declaration**
  - Ancient monument or archaeological site is not less than 100 years old.
  - It has special historical, archaeological or artistic interest.
  - It qualifies under the provisions of definition as contained under ASAMR Act, 1958.
  - Interested public do not have major objections to declare them as of national importance.

Related News:
- National Monuments Authority has also **recommended following two sites to be declared as Monuments of National Importance:**
  - **Sankalp Bhumi Banyan tree campus in Vadodara,** where Dr. Ambedkar had taken a resolve to eradicate untouchability on 23rd September 1917.
  - **Pratap Rao Bhosle High School,** place in Satara in Maharashtra where Dr Ambedkar received his primary education.

8.3.4. KANAGANAHALLI

- Archaeological Survey of India (ASI) plans to conserve an **ancient Buddhist site near Kanaganahalli (forming part of Sannati site) in Karnataka.**
- Sannati is a small village situated on banks of Bhima River.
  - It is famous for **discovery of a Buddhist Mahastupa (referred to as Adholoka Maha Chaitya)** and stone-portrait of Emperor Ashoka.
- Stupa is believed to have been developed in three constructional phases – Maurya, Early Satavahana and Later Satavahana period (3rd Century B.C. to 3rd Century A.D).

- o Stone-portrait is considered the **only surviving image of Ashoka with inscription 'Raya Asoko' in Brahmi on it.**

8.3.5. WHITE ONION

- **White onion** from **Alibagh (Maharashtra)** gets Geographic Indication (GI) tag**.**
  - o White onions are grown in Alibagh only with traditional methods and genuine seeds and **Geo-climatic conditions of region is the reason for** unique taste, flavour, and shape as well, say farmers.
- **About GI tag**
  - o Geographical indications registered as **collective and certification marks are generally protected for renewable ten-year periods**.
  - o **GI of Goods (Registration and Protection) Act, 1999 govern GI tags in India**.

8.3.6. INDIAN KNOWLEDGE SYSTEMS (IKS) INITIATIVE

- Raja mantri chor sipahi, posham pa, gilli danda etc. are among **75 indigenous games that will be introduced in schools** under IKS initiative.

- IKS is an **innovative cell under Ministry of Education** at All India Council for Technical Education (AICTE).
- It is established **to promote interdisciplinary research** on all aspects of IKS, **preserve and disseminate IKS** for further research and societal applications.
- It aims **to spread rich heritage and traditional knowledge** in field of Arts and literature, Agriculture, Basic Sciences, Engineering & Technology, Architecture, Management, Economics, etc.

8.3.7. FIELDS MEDAL

- Ukrainian mathematician became second woman to win Fields Medal.
- Fields Medal is often described as **Nobel Prize in mathematics.**
  - o It is administered by **International Mathematics Union (IMU),** an international non-governmental and non-profit scientific organisation to **promote international cooperation** in mathematics.
  - o It is **awarded every four years** to mathematicians **under age of 40**.
  - o Honour carries a **physical medal of 14K gold**. There is also **cash award of Canadian dollars 15,000**.
  - o Fields Medal Symposium is organised by Fields Institute, Toronto, Canada.

9. ETHICS

9.1. ALCOHOLISM IN INDIA

Introduction

Growing alcohol consumption in India is becoming a **major health hazard** and a **social menace**. The recent death of over 40 people in Gujarat's Botad district in a hooch tragedy highlights the limitations of **prohibition** in addressing it; calling for a change in approach to address growing alcohol consumption.

Who are the key stakeholders and their Interests in the context of Alcoholism and Prohibition?

| Stakeholder	Interests
Government	• **Ethical Dilemma** over **relation between State and Individual**, i.e., whether to protect **individual liberty or autonomy** under **Fundamental Rights** or fulfill **constitutional responsibilities** under **DPSPs** to intervene in public health matters. o Alcohol consumption leads to multiple chronic health issues, social violence and increased road accidents (8,355 accidents in 2020). • **Ethical Dilemma** over contribution of liquor business in **government revenues** (for State Government) and its duty to **protect weak, vulnerable, and impressionable individuals**.
Individuals and Families	• **Right of Freedom of Choice and Privacy** of Individuals. • **Need to reduce domestic violence** against women and children caused in inebriated situation. • **Avoiding indebtedness** by reducing money spent on alcohol, especially for the poor; helping to overcome challenges of land alienation, bonded labour, trafficking etc. due to indebtedness.
Liquor Industry	• **Ethical Dilemma** of marketing products with harmful impact on individuals and families to **maximize profits or follow Social Responsibility** to encourage sensible drinking. • **Protecting jobs** in the liquor industry by **overcoming the challenges** from **illegal liquor business which grows due to prohibition**.
Local Administration	• **Effective implementation of laws** to curb the illegal liquor industry. • **Increasing awareness among people** on ills of liquor consumption, helping to reduce crimes committed by intoxicated people
Society	• **Ethical Dilemma** over **use of social norms or social pressure** to protect relationships and families or leave it to **personal discretion of individuals** with **limited moderation**. • Also, within societies, the **views on alcohol consumption** differ as in some it is part of **socio-religious rituals** while others call to abstain.

What is Prohibition and how effective it is?

- Prohibition is the action of forbidding something, especially by law.
- In India, under **Article 47 of the Constitution of India**, as part of the public health- prohibition of the consumption of intoxicating drinks and of drugs which are injurious to health except for medicinal purposes is among **Directive Principles of State Policy (DPSPs)**.
- Under the **Seventh Schedule**- production, manufacture, possession, transport, purchase and sale of intoxicating liquors and excise duties comes under the **List II (State List)**.
  - Presently, **four States** and **one Union Territory** in India prohibit alcohol state-wide as- **Gujarat, Bihar, Mizoram, Nagaland** and **Lakshadweep**.
  - Some states tried prohibitions in the past (e.g. Haryana and Andhra Pradesh) or have prohibited it in certain districts. E.g., Maharashtra in 3 districts.

Historical evidence shows that **prohibition does not encourage or enable people to behave responsibly and drink sensibly or quit drinking**. E.g., in the USA (18th Amendment of 1920), after an initial decline in consumption and related hospitalizations prohibition lead to multiple issues leading to its repeal.

What are the major issues and challenges with Prohibition in India?

- **Black marketing** of alcohol in Gujarat and Bihar through neighboring areas of Daman and Nepal in respective states.

- **Loss to the exchequer** through loss of taxation and its indirect impact on tourism in states. E.g. Andhra Pradesh removed prohibition in 1997 due to rising budgetary deficit caused by loss of revenue.
- **Clogged Judiciary** through increased number of cases in courts with an already high pendency. E.g. the prohibition in Bihar has resulted in the arrest of more than **four lakh people** in around **3.5 lakh cases**.
- **Rise in hooch tragedies** due to consumption of illegal country made liquor.
- **Increased administrative corruption** as the growth of bootlegging industry increases opportunity of rent-seeking and systemic corruption.
- **Intrusion in people's freedom of choice** by state and society through coercive laws or social norms.
- **Other Challenges:** Though prohibition makes a **moral appeal**, it is difficult to prohibit due to various practical difficulties (see **image**).
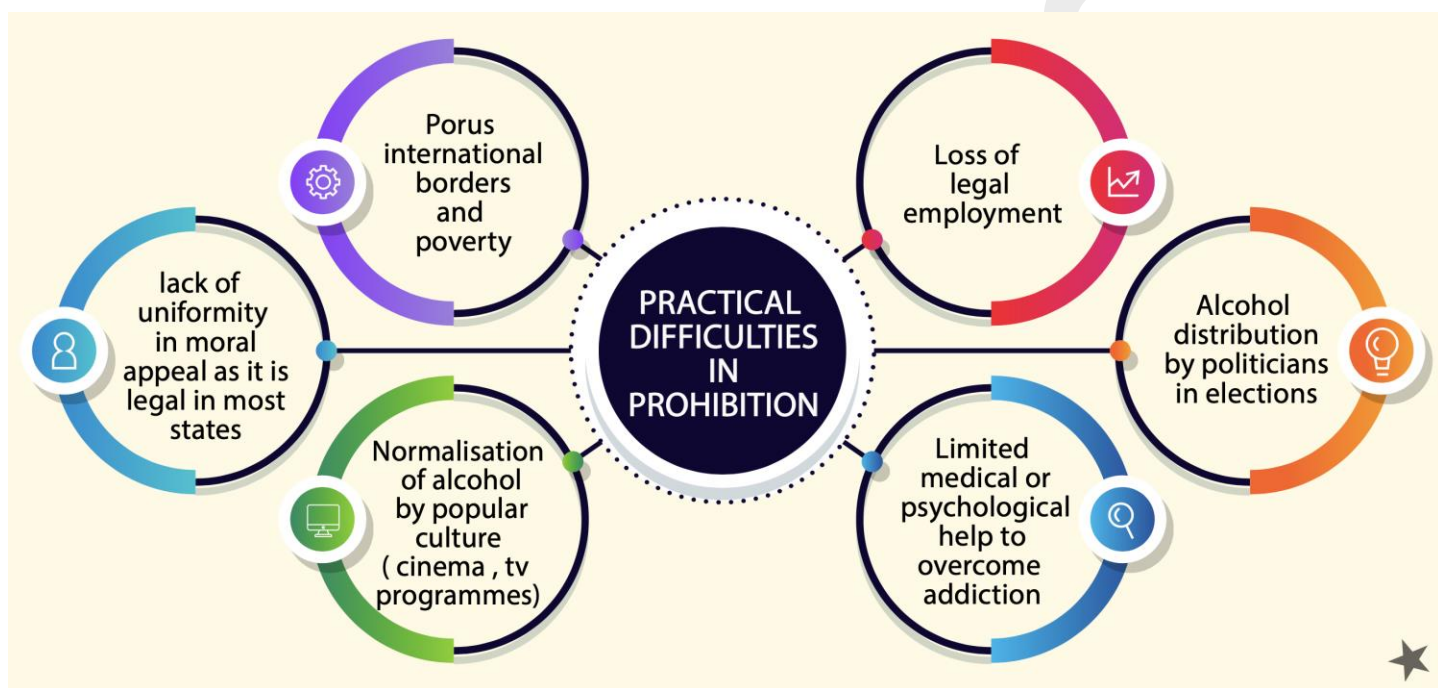
What can be done?

With differing socio-religious opinions and dilemmas faced by multiple stakeholders, a **participatory approach** becomes vital for a **good public policy**. It can help in creating an atmosphere where each stakeholder, including individuals, understands their responsibility through:

- **Laws** which encourage responsible behavior and compliance while being strong against domestic violence, drunk driving or illegal liquor industry or its smuggling.
  - E.g., having a **uniform drinking age law across the country** where no person below that should be permitted to buy alcohol.
- **Regulations over liquor Industry** to avoid indirect marketing tactics to promote liquor consumption (e.g., surrogate marketing).
- **Labeling Standards** with adequate notices and cautions to help people in making informed decisions.
- **Avoiding Arbitrary or Discretionary actions** while containing negative fallouts of prohibition on tourism and MICE (meetings, incentives, conferences and exhibitions) sector.
- **Use of Corporate Social Responsibility** to ensure responsible drinking and increasing the **de-addiction facilities**.
- **Gathering community support** to avoid addiction and rehabilitate people suffering from addiction.
- **Information, Education and Awareness (IEC)** campaigns from state and district administration to educate people about the ill effects of alcoholism, as Adi Shankara said:

"Action cannot destroy ignorance, for it is not in conflict with or opposed to ignorance. Knowledge does verily destroy ignorance as light destroys deep darkness".

GUIDING PRINCIPLES: ADDRESSING GROWING ALCOHOLISM

ETHICAL SKILLSET FOR A CIVIL SERVANT

▶ **Emotional Intelligence** to understand and manage the emotions of individuals and communities regarding alcohol consumption.

▶ **Compassion** towards women and children who face most of the social violence due to alcohol consumption.

▶ **Selflessness** to ensure actions taken in public interest.

▶ **Leadership Skills** to influence people's attitude and persuade them to overcome bad habits of alcoholism through diligence.

APPRECIATION OF ETHICAL PHILOSOPHIES, LAWS, AND RIGHTS

▶ **Ethical Philosophy:** Ethical Egoism (self-interest) vs Utilitarianism (greatest good for the greatest number of people).

▶ **Constitution:** Balancing Individual Rights or autonomy with State responsibilities to improve Public Health.

▶ **Legal:** Implementation of state specific laws to control liquor industry while ensuring no use of unfair means by the industry or presence of illegal liquor businesses/activities.
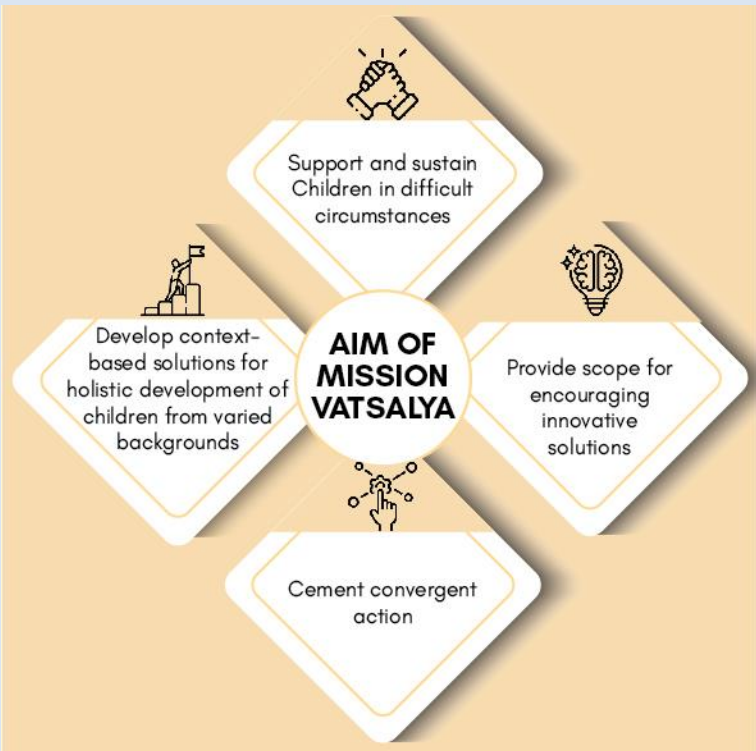
10. SCHEMES IN NEWS

10.1. MISSION VATSALYA

Why in News?

Ministry of Women & Child Development (MoWCD) has launched 'Mission Vatsalya' to unify all its efforts for children in difficult circumstances which include **missing, orphaned, abandoned, and surrendered children.**

Mission Vatsalya

Objectives	Salient features

• It promotes **family based non-institutional care of children** in difficult circumstances based on the principle of **institutionalization of children as a measure of last resort.**
• To establish **essential services and strengthen emergency outreach**, noninstitutional care within the family and community, and institutional care counselling and support services at the national, regional, state and district levels.
• Ensuring Children's **right to Survival, Development, Protection and Participation.**
• **Encourage private sector partnerships** and interventions to support children within the framework of law.
• **Raise public awareness**, educate public about child rights, vulnerabilities and measures for protection sponsored by government and engage community at all levels as
	• **Vision:** To secure a healthy & happy childhood for each and every child in India, **ensure opportunities to enable them to discover their full potential** and assist them in flourishing in all respects, in a sustained manner.
	• The Mission Vatsalya underscores India's obligations under international treaties i.e., the **United Nations Convention on Rights of Child 1992,** and the **Hague convention on Adoption of children 1993** which mandate systemic development and strengthening of juvenile justice system in the country.
	  o Mission Vatsalya is a **roadmap to achieve development and child protection priorities aligned with the Sustainable Development Goals (SDGs)**.
	• **Child Protection Services (CPS) Scheme has been subsumed under Mission Vatsalya** from 2021-22 onwards.
	  o CPS is Government of India's (GoI's) flagship programme **to provide preventive and statutory care, and rehabilitation services to children in need of care and protection** and those in conflict with the law as defined under the Juvenile Justice (Care and Protection of Children) Act, 2015.
	• **Centrally Sponsored Scheme**: The fund sharing pattern shall be in the ratio of
	  o **60:40** and State & Union Territories with legislatures
	  o **90:10** for the 8 North-Eastern States, Himachal Pradesh, Uttarakhand, and UT of Jammu and Kashmir
	  o **100%** by Centre for Union Territories without Legislature
	• **State Adoption Resource Agency (SARA):** It shall be established in in every State/UT to support the Central Adoption Resource Authority (CARA) **in promoting in-country adoption and regulating inter-country adoption,**
	• **The State Child Protection Society (SCPS):** It shall ensure the **implementation** including mapping, planning of the scheme.
	• **State Child Welfare and Protection Committee:** To supervise implementation of Mission Vatsalya with the help of the State Child Protection Society (SCPS).

Support and sustain Children in difficult circumstances

Develop context-based solutions for holistic development of children from varied backgrounds

AIM OF MISSION VATSALYA

Provide scope for encouraging innovative solutions

Cement convergent action

stakeholder in ensuring the best interest of children.
• **Participation of Panchayats and Municipal Local** for sustained assessment of the issues deserving attention, implementation of appropriate interventions, regular monitoring to develop a robust social safety net for children.
	• **District Child Protection Unit (DCPU):** It will function under the overall supervision of District Magistrate in ensuring service delivery and care and protection of children in the district.
	• **Cradle baby reception centres:** These centres shall be set up in at least one specialised adoption agency in a district to receive infants who are abandoned and vulnerable to be trafficked.
	• **Child Welfare Committee (CWC):** It shall be setup in district as the authority to dispose of cases for the **care, protection, treatment, development and rehabilitation of children in need of care & protection** and to provide for their basic needs and protection of human rights.
	• **Mission Vatsalya Portal:** It will provide a unified Digital Platform for various MIS related to children in difficult circumstances. This portal shall be formed by integrating:
	  o **TrackChild** (for Missing/Found Children)
	  o **CARINGS** (for the adoption of Children)
	  o **ICPS portal** (for monitoring the scheme)
	  o **Khoya-Paya (**Citizen centric application for Missing and Sighted)
	• **Vatsalya Sadan:** It will be an **integrated home complex**, children home, observation home, special home and place of safety. **Juvenile Justice Boards and child welfare institutions** will also be located within the same premises for implementation of the JJ Act, 2015. States have been asked to propose such set-ups for 75 children in each home.
	• **Children's homes:** Separate children's homes based on gender (including separate homes for transgender children) and age will be established for children in need of care, as well as for special needs children.
	• **Children under PM CARES:**
	  o For **non-institutional care** financial support at the rate of **Rs. 4000/- per month per child** shall be provided to Children (in account with guardian) .
	  o For child in **institutional care,** a maintenance grant **@ Rs. 3000/- per month** shall be given to **Child Care Institutions.**
	  o Any provision for **subsistence support under the State scheme may also be provided additionally** to the children.
	• **24×7 helpline service :** Mission Vatsalya, in partnership with states and districts, will execute a 24×7 helpline service for children, as defined under JJ Act, 2015.
	• **Mission Vatsalya Project Approval Board (PAB):** The board under the chairmanship of the WCD Secretary shall approve fund to states under this mission.
	• **Obligations for states:** In order to access Central funds and benefits under the scheme states will have to retain the official name, as given by the Centre.

10.2. MISSION SHAKTI

Why in news?

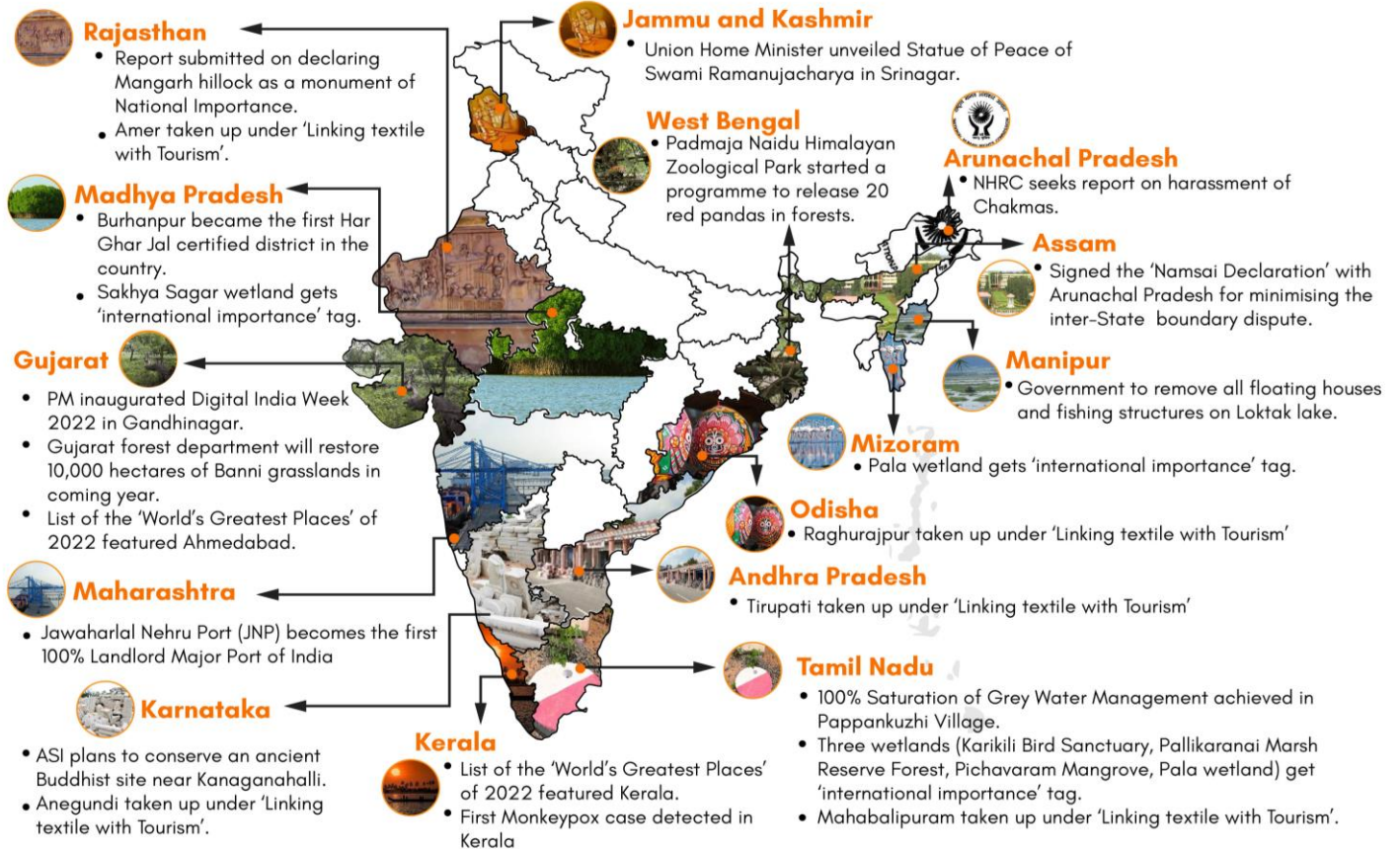Recently, the Ministry of Women and Child Development (MWCD) issued Detailed Guidelines for 'Mission Shakti'.

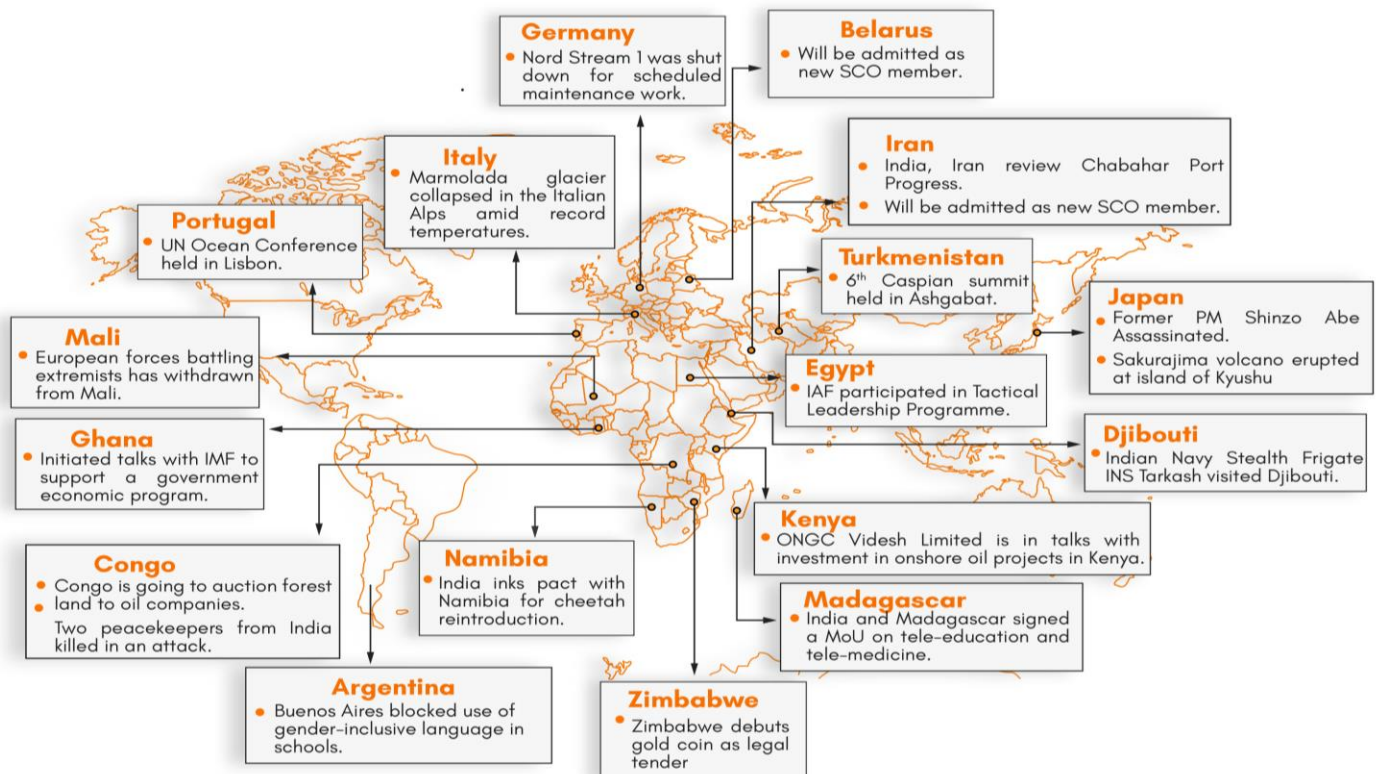| Objectives	Salient features

• Provide immediate and comprehensive **continuum of care, support and assistance** to women affected by violence and for those in distress
• To put in place **quality mechanisms for rescue, protection and rehabilitation** of women in need of assistance and
	• The scheme is an **integrated women empowerment programme** launched as umbrella scheme for the **safety, security and empowerment of women**.
	• It will be implemented during the 15th Finance Commission period **2021-22 to 2025-26.**
	• The mission addresses issues affecting women **on a life-cycle continuum basis.**
	• Mission seeks to **reduce care burden on women and increase female labour force participation** by promoting skill development, capacity building, financial literacy, access to micro-credit, etc.
	Mission Shakti has **two sub-schemes**
	• **'Sambal'**: It encompasses schemes related to **safety and security** of women and is **100% funded by the Centre**. Its components are:
	  o **One Stop Centre (OSC):** It is being implemented from 2015 to provide integrated support and assistance to women **affected by violence and in distress, both in private and public spaces** under one roof.
	  o **Women Helpline (WHL):** Provides toll-free 24-hours telecom service to women seeking support and information **for all emergency services** like police/ fire/ Ambulance services and with OSC.

victims of crime and violence • To **improve accessibility to various government services** available for women at various levels • Making people aware about **Government schemes and programmes as well as legal provisions to fight social evils** like dowry, domestic violence, etc. • **Capacity building and training of functionaries/** duty bearers under various schemes/ Legislation • **Collaboration with partner Ministries/ Departments/** States/ UTs for convergence of policies, programmes/ schemes and to create an enabling environment for public private partnership for safety and empowerment of women across sectors • Create awareness among masses for inducing positive **behavioural change towards women and girls**. • To prevent gender-biased sex selective elimination.	o **Beti Bachao Beti Padhao (BBBP):** It was launched in 2015 as a **tri-ministerial effort of the MoWCD, Ministry of Education and Ministry of Health and Family Welfare**. ✓ Now, the **Ministry of Skill Development and Entrepreneurship and Ministry of Minority Affairs** have also been added. ✓ The component of BBBP will **cover all the districts** of the country through multi-sectoral interventions. it was operational in **only in 405 districts earlier.** ✓ The scheme will **aim for zero-budget advertising** and encouraging greater spend on activities that have on ground impact, e.g.,for promoting sports among girls, self-defence camps, construction of girls toilets, etc. o **Nari Adalats** – This is a new component meant for providing women with an **alternate Grievance Redressal Mechanism for** resolving cases of petty nature (harassment, subversion, etc.) faced by women **at Gram Panachayat level.** • **'Samarthya':** It encompasses schemes for **empowerment of women.** Funding will be shared between **Centre and States in 90:10 ration North East & Special Category States and 60:40** for other states and Unioin Territories (UTs) with legislature, for **UTs without legislature** the scheme would be **completely (100%) funded by the government.** Its components include: o **Shakti Sadan-**Integrated Relief and Rehabilitation Home. It incorporates the erstwhile SwadharGreh and Ujjawala Scheme o **Anti-Human Trafficking Units:** These will facilitate **'reintegration and repatriation'** of the victims of trafficking and of commercial sexual exploitation. o **Home for Widows:** It is the Central Sector Component of Umbrella Scheme for protection and Empowerment for Women o **SakhiNiwas– Working Women Hostel: T**he existing scheme has been revised to promote **availability of safe and conveniently located accommodation** for working women and other women pursuing higher education or training, who need to live away from their families due to professional commitments. o **Palna – Creche facility:** To provide crèche facility to all mothers, irrespective of their employment status. An **integrated package of the services such as day care facilities** including Sleeping Facilities, Early Stimulation for children below 3 years and Pre-school Education for 3 to 6 years old children, Supplementary Nutrition (to be locally sourced), **Growth Monitoring and Health Check-up and Immunization in convergence with Mission Poshan 2.0** will be provided. o **Pradhan Mantri Matru Vandana Yojana (PMMVY):** It is being implemented as per the National Food Security Act (NFSA), 2013 since 2017 under the umbrella Integrated Child Development Services (ICDS). It provides **cash incentive for partial compensation for the wage loss to pregnant and lactating mothers** so that the woman can take adequate rest before and after delivery of the first child; o **Hub for Empowerment of Women (HEW):** To facilitate inter-sectoral convergence of schemes and programs meant for women both at the **central, State/ UT level and district level.** o **Gender Budgeting, Research, Publication & Monitoring schemes** have been included under this component. ✓ A **new component of Gap Funding** for Economic Empowerment has also been added while existing subschemes of Mahila Shakti Kendra (MSK) and Mahila Police Volunteers (MPV) have been discontinued. ✓ **Gender Budgeting was adopted by the Government of India in 2005-06** as a tool for promoting gender equality and ensuring continued investments through Government planning and budgeting. **Financing for gender equality** is central to mitigate gender inequalities, and GB is a critical strategy in this endeavour.

Places in News : India

Rajasthan
- Report submitted on declaring Mangarh hillock as a monument of National Importance.
- Amer taken up under 'Linking textile with Tourism'.

Madhya Pradesh
- Burhanpur became the first Har Ghar Jal certified district in the country.
- Sakhya Sagar wetland gets 'international importance' tag.

Gujarat
- PM inaugurated Digital India Week 2022 in Gandhinagar.
- Gujarat forest department will restore 10,000 hectares of Banni grasslands in coming year.
- List of the 'World's Greatest Places' of 2022 featured Ahmedabad.

Maharashtra
- Jawaharlal Nehru Port (JNP) becomes the first 100% Landlord Major Port of India

Karnataka
- ASI plans to conserve an ancient Buddhist site near Kanaganahalli.
- Anegundi taken up under 'Linking textile with Tourism'.

Kerala
- List of the 'World's Greatest Places' of 2022 featured Kerala.
- First Monkeypox case detected in Kerala

Jammu and Kashmir
- Union Home Minister unveiled Statue of Peace of Swami Ramanujacharya in Srinagar.

West Bengal
- Padmaja Naidu Himalayan Zoological Park started a programme to release 20 red pandas in forests.

Arunachal Pradesh
- NHRC seeks report on harassment of Chakmas.

Assam
- Signed the 'Namsai Declaration' with Arunachal Pradesh for minimising the inter-State boundary dispute.

Manipur
- Government to remove all floating houses and fishing structures on Loktak lake.

Mizoram
- Pala wetland gets 'international importance' tag.

Odisha
- Raghurajpur taken up under 'Linking textile with Tourism'

Andhra Pradesh
- Tirupati taken up under 'Linking textile with Tourism'

Tamil Nadu
- 100% Saturation of Grey Water Management achieved in Pappankuzhi Village.
- Three wetlands (Karikili Bird Sanctuary, Pallikaranai Marsh Reserve Forest, Pichavaram Mangrove, Pala wetland) get 'international importance' tag.
- Mahabalipuram taken up under 'Linking textile with Tourism'.

Places in News : World

Germany
- Nord Stream 1 was shut down for scheduled maintenance work.

Belarus
- Will be admitted as new SCO member.

Iran
- India, Iran review Chabahar Port Progress.
- Will be admitted as new SCO member.

Italy
- Marmolada glacier collapsed in the Italian Alps amid record temperatures.

Portugal
- UN Ocean Conference held in Lisbon.

Turkmenistan
- 6th Caspian summit held in Ashgabat.

Japan
- Former PM Shinzo Abe Assassinated.
- Sakurajima volcano erupted at island of Kyushu

Mali
- European forces battling extremists has withdrawn from Mali.

Ghana
- Initiated talks with IMF to support a government economic program.

Egypt
- IAF participated in Tactical Leadership Programme.

Djibouti
- Indian Navy Stealth Frigate INS Tarkash visited Djibouti.

Congo
- Congo is going to auction forest land to oil companies.
- Two peacekeepers from India killed in an attack.

Namibia
- India inks pact with Namibia for cheetah reintroduction.

Kenya
- ONGC Videsh Limited is in talks with investment in onshore oil projects in Kenya.

Madagascar
- India and Madagascar signed a MoU on tele-education and tele-medicine.

Argentina
- Buenos Aires blocked use of gender-inclusive language in schools.

Zimbabwe
- Zimbabwe debuts gold coin as legal tender

Personalities in News

Personalities	About	Values Exhibited by the Personality

Chhatrapati Sambhaji	• **Chhatrapati Sambhaji** (1657–1689)
	  ▪ Maharashtra Government gave its **approval to rename Aurangabad and Osmanabad cities as Chhatrapati Sambhajinagar and Dharashiv**, respectively.
	    ▸ **Aurangabad was originally called Khadki**, built-in 1610 by **Malik Ambar**.
	    ▸ It was later **renamed Aurangabad after it became the headquarters of Aurangzeb** during his rule over the Deccan.
	• **Sambhaji** was the **eldest son of Chhatrapati Shivaji** (founder of Maratha Empire) and the second ruler of Maratha Empire after his father's death.
	  ▪ He is **remembered for sacrificing his life to protect his people and beliefs.**
	• **Books written by Sanbhaji:**
	  ▪ **Sanskrit treatise Budhabhushan-Rajneeti.**
	  ▪ **Nayikabhed, Nakhshikha, Satshatak.**
	  ▪ He wrote these books in Braj language.
		Valour and Sacrifice
		▪ He laid a solid bulwark against invaders.
		▪ His supreme sacrifice for people and tactics of winning wars made him a symbol of greatness

Raja Serfoji II	• A rare **19th century painting of Raja Serfoji and his son Sivaji,** stolen from Saraswathi Mahal, Thanjavur, has been **traced to a US Museum.**
	• Raja Serfoji II, **scion of the Bhosle dynasty, was the ruler of the dominions of the Maratha principality of Thanjavur.**
	  ▪ Chhatrapati Shivaji's half-brother **Venkoji founded the Thanjavur Maratha dynasty** in 1675.
	• **Contributions:**
	  ▪ **Established Dhanvantari Mahal,** a hospital that took care of patients of all specialties.
	    ▸ He also **carried out ophthalmic practices.**
	    ▸ Also compiled a medical book **called Sarabhendra Vaidhya System.**
	  ▪ **Promoted women's education** through the Navavidhya Kalanidhi Sala, a school.
	  ▪ Created the **1st Zoological Garden** in Tamil Nadu.
		Visionary
		▪ He pioneered new administrative and educational reforms. His vision helped Thanjavur forge ahead of other princely states and advance into a new age and emerge as a fitting competitor to European nations.

Gopal Ganesh Agarkar	• Born in 1856 in Maharashtra, Agarkar was a social reformer deeply influenced by philosophers Voltaire and Rousseau etc.
	• **Contributions –**
	  ▪ He worked for **women's rights including women education and in deepening the role of press.**
	  ▪ **He conceptualised the New English School, the Deccan Education Society, and Fergusson College (along with Tilak).**
	  ▪ He was the editor of Tilak's weekly Kesari.
	  ▪ He founded **the periodical, Sudharak.**
		Rationalism and social justice
		▪ He believed that education and the press could play a critical role in spreading rationalism, equality and humanism.
		▪ He stood for women's liberation, eradication of superstitions, removal of caste discrimination and scientific temperament

Acharya Prafulla Chandra Ray	• He was known as **"Father of Indian Chemistry".** • He **discovered stable compound mercurous nitrite in 1896** and **established Bengal Chemical and Pharmaceutical Works Ltd,** India's first pharmaceutical company in 1901. • He **researched organic compounds** containing sulphur, double salt, homomorphism and fluorination. • He **published "The History of Hindu Chemistry"** which contains extensive knowledge of metallurgy and medicine in ancient India. • He **did not support caste system, promoted khadi material, helped famine and flood struck people in Bengal.** • He was elected as **Indian Science Congress President in 1920.**	**Scientific aptitude and Service** ▪ He consistently contributed through his research in the field of chemical science. ▪ He was a rationalist and was completely against the caste system and other irrational social systems.

Personalities	About	Values Exhibited by the Personality
Kumaraswami Kamaraj	• Born in Tamil Nadu, **Kamraj was an Indian independence activist and statesman.** • He participated in **the Salt March and 'Quit India' movement.** • He was **elected to the Madras Presidency legislature in 1937 and in 1946.** He became Madras state's chief minister in 1954. • He introduced **compulsory education, and provided meals and free uniforms for students.** • In 1963 he resigned from Congress under the **'Kamaraj Plan' to devote himself to serving the nation.**	**Integrity and simplicity** ▪ As a chief minister of Madras (later Tamil Nadu), he held the impeccable record of fulfilling the goals of public policies on public health, education and infrastructure. ▪ Coming from a very humble background, he never gave attention to his private life and lived a very modest life.
Swami Atmasthananda	PM paid his tributes to Swami Atmasthananda on his birth centenary. • He was the **15th President of the Ramakrishna Math and the Ramakrishna Mission.** ▪ Ramakrishna Mission was **founded by Swami Vivekananda** (1897) to **propagate the teachings of Vedanta** as embodied by Ramakrishna Paramahamsa. • **Contributions:** Massive relief and rehabilitation services in various parts of India, Nepal, and Bangladesh; setting up of TB hospital in Burma etc.	**Devotion and Social Service** ▪ He emphasized on to work for society by rising above oneself, and to live for the sake of society. ▪ He had conducted various relief works and service activities in rural areas.

DR. A.P.J. Abdul Kalam	• He **became the 11th President of India in July 2002.**
	• **Contributions in the space sector:**
	  ▪ Made significant contribution as **Project Director to develop India's first indigenous Satellite Launch Vehicle (SLV-III).**
	  ▪ He was **responsible for the evolution of ISRO's Polar Satellite launch vehicle.**
	  ▪ **Known as the Missile man of India,** he was **responsible for the development of AGNI and PRITHVI Missiles**
	  ▪ He played a key role in the **Pokhran–II nuclear tests in collaboration with Department of Atomic Energy.**
		Vision and Simplicity
		▪ He significantly contributed to the development of rockets in India. His vision helped him to lead projects with great outcomes.
		▪ He lived a very simple and pious life. His life and thoughts has continued to inspire generations to come.

Dalai Lama	**Dalai Lama**
	• The **14th Dalai Lama** (Tenzin Gyatso), the spiritual head of Tibetans, celebrated his 87th birthday.
	• According to teachings, each **Dalai Lama is a reincarnation of the Avalokiteśvara,** who embodies the compassion of all Buddhas.
	  ▪ Dalai Lama is found rather than chosen. Following Buddhist belief in reincarnation, the Dalai Lama is believed to be able to choose the body into which he is reincarnated.
	• Dalai Lama belongs to the **Gelugpa tradition of Tibetan Buddhism** and has **traditionally been responsible for governing Tibet,** until the **Chinese took control** in 1959.
	  ▪ His **official residence was Potala Palace** in Lhasa, the capital of Tibet. Post 1959, he **finally settled for a life in exile in Dharamsala.**
	• **Contributions:**
	  ▪ He has travelled the world and spoken about the welfare of Tibetans, environment, women's rights, nonviolence, interfaith dialogue etc.
	  ▪ He **received the Nobel Peace Prize** for maintaining a policy of non-violence with the Chinese government (1989).
		Compassion and Selflessness
		▪ According to him True compassion is not an emotional response but a firm commitment founded on reason. Therefore, a truly compassionate attitude towards others does not change even if they behave negatively.
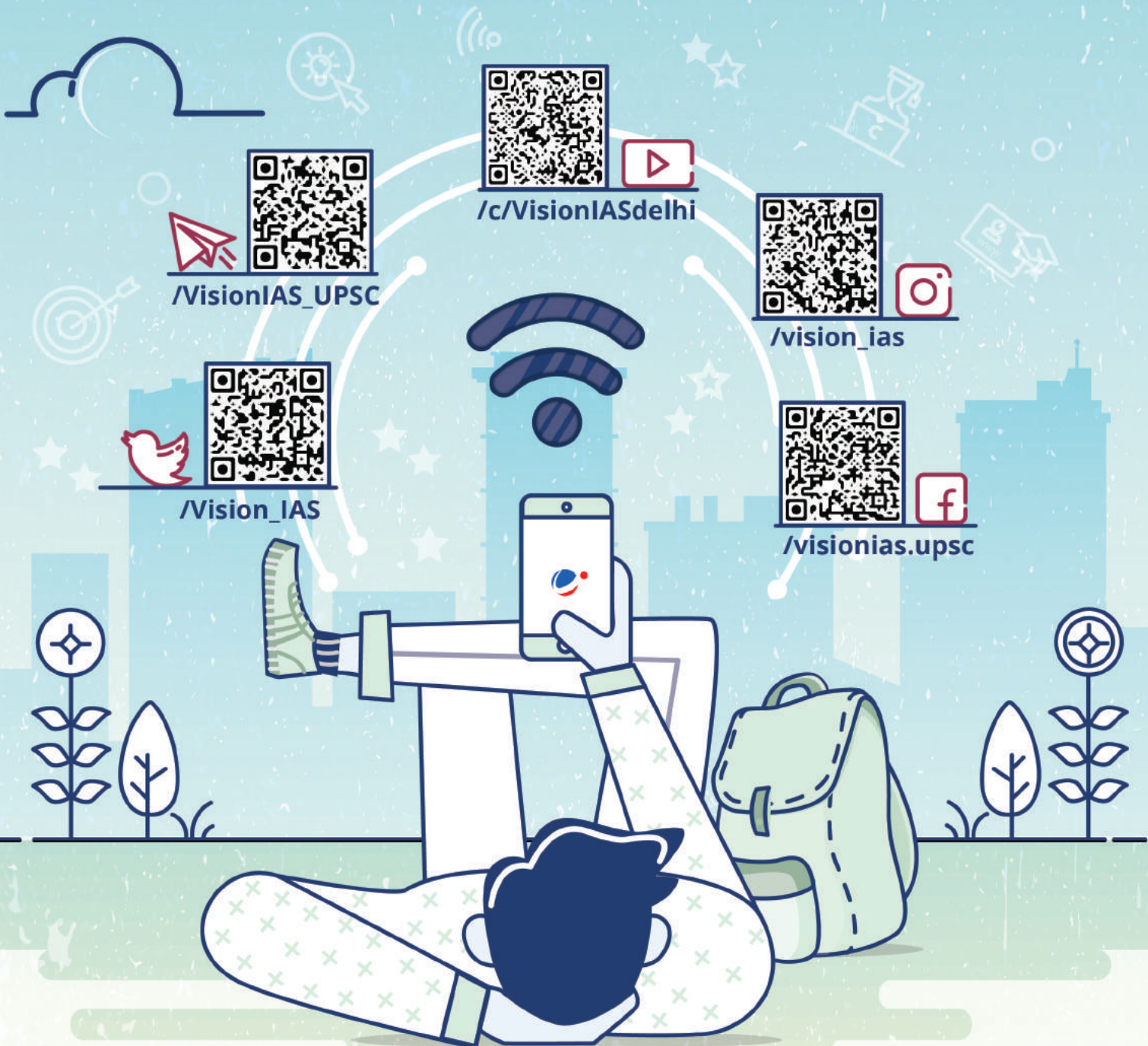
8 IN TOP 10 SELECTIONS IN CSE 2021

from various programs of Vision Ias

CIVIL SERVICES EXAMINATION 2020

2 AIR — ANKITA AGARWAL

1 AIR — SHUBHAM KUMAR

3 AIR — GAMINI SINGLA

4 AIR — AISHWARYA VERMA

5 AIR — UTKARSH DWIVEDI

6 AIR — YAKSH CHAUDHARY

7 AIR — SAMYAK S JAIN

8 AIR — ISHITA RATHI

9 AIR — PREETAM KUMAR

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