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The analysis, titled "**A Decade of Pocso**," was conducted by the Justice, Access, and Lowering Delays in India (JALDI) Initiative at Vidhi Centre for Legal Policy in partnership with the **World Bank's** Data Evidence for Justice Reform (DE JURE) initiative.

Protection of Children from Sexual Offences (POCSO) Act

- It is the **first comprehensive law** in the country dealing specifically with sexual abuse of children, enacted in 2012 and is administered by Ministry of Women and Child Development.
- It was intended to protect children from sexual assault, sexual harassment and pornographic violations, as well as to establish Special Courts for such trials.

Key provisions:



Gender-neutral legislation: The Act defines a child as "any person" under the age of 18.



Non-reporting is a crime: Any person in charge of an institution (excluding children) who fails to report the commission of a sexual offense involving a subordinate, faces punishment..



No time limit for reporting abuse: A victim may report an offence at any time, even years after the abuse has occurred.



Keeping victim's identity confidential in any form of media unless authorised by the special courts established by the Act.



Amendment to the Act

- The Act was amended for the first time in **2019** for enhancing the punishments for **specific offences**.
- This amendment enhanced the punishment to include **death penalty for aggravated penetrative sexual assault** of the child. It also provides for levy of fines and imprisonment up to 20 years to curb child pornography.
- The **new definition of child pornography** reads, "Any visual depiction of sexually explicit conduct involving a child which include photographs, video, digital or computer-generated image indistinguishable from an actual child and an image created, adapted or modified but appear to depict a child."

POCSO Rules 2020

- **Mandatory police verification:** Any institution housing children or coming in regular contact is required to conduct a periodic police verification and background check of every employee. Such an institution must impart regular training to sensitise its employees on child safety and protection.
- **Support persons:** It also made a provision for appointment of support persons for victims to render assistance to them through the process of investigation and trial.
 - A support person may be a person or organisation working in the field of child rights or child protection, an official of a children's home or a shelter home having custody of the child, or a person employed by the District Child Protection Unit (DCPU), who hand holds the victim through the entire legal process.

Implementation Hurdles in POCSO Act

- **Such abuse is on the rise:** According to a recent survey, one in every two children is a victim of sexual abuse in India. In 2018, Delhi had the highest number of POCSO trials, with 13.54 cases per 100,000 people.
- **Limited POCSO courts:** The POCSO courts have not been designated in all districts. As of 2022, only 408 POCSO courts have been set up in 28 States as part of the Government's Fast Track Special Court's Scheme.
 - There is also a **lack of Special Public Prosecutors** appointed to handle POCSO cases.
- **Excessive delays:** The slow pace of designation of Special Courts, delay in investigation and filing of charge sheets, delay in depositing samples with the Forensic Science Laboratories, non-appointment of support persons for child victims in most case leads to tardy implementation of the Act.

- **Uttar Pradesh** has the highest pendency with more than three-fourths (77.77%) of the total POCSO cases filed between November 2012 and February 2021 pending.
- **Poor disposal rate:** On an average, it takes 509.78 days for a POCSO case to be disposed of whereas it has been stipulated under the Act that such cases need to be disposed of within a year.
 - **Chandigarh and West Bengal** are the only states where the average time taken for convictions is within one year.
- **High acquittal rate:** 43.44% of trials under POCSO end in acquittals while only 14.03% end in convictions, i.e., for every one conviction in a POCSO case, there are three acquittals.
 - This goes contrary to the data published by the National Crime Record Bureau (NCRB) in 2021 wherein 96% of the cases filed under the POCSO Act, the accused was a person known to the child victim.
 - The accused were known to the victims in 22.9%, which is about fourth of the 138 judgments examined in detail.
 - Acquittals were 7 times more common in Andhra Pradesh than convictions, and 5 times more common in West Bengal.
 - **In Kerala**, however, the difference between acquittal and conviction is not as large.
- **Absence of support persons:** Supreme Court had noted that in 96% of cases, a support person was not provided to the victim.
- **Lack of awareness:** The general knowledge of the POCSO Act remains severely inadequate in India.
- **New challenges:** Incidents of child abuse have also risen exponentially since the Covid-19 pandemic, with the emergence of new forms of cybercrime.

Way forward

- **Adopting best practices:** Strong data systems and digital platforms can also help transfer learning across states and contextualize the best practices to the local courts.
- **Policy interventions:** Legislative changes to improve the functioning of the Act and one-size-fits-all approach should be avoided.
- **Making POCSO courts functional:** The appointment of adequately trained Special Public Prosecutors exclusively for POCSO courts should be expedited. Progress for this can be monitored by respective High Courts.
- **Gathering evidence:** Employing a 'hybrid' approach for recording of evidence wherein the evidence of certain witnesses like doctors, forensic experts etc. can be recorded virtually.
- **Uniformity in e-Courts data:** A standardised drop-down menu for putting information pertaining to the name of the legislation, case type, court complex, police station etc. need to be incorporated.
- **Periodic training:** Integrated capacity building programmes for stakeholders like judicial officers, magistrates, police officers, medical practitioners etc., with a focus on sensitivity training to be conducted to improve coordination between them.
- **Comprehensive outreach system:** Engagement of parents, schools, communities, NGOs partners and local governments, police and lawyers are needed
- **Other measures:** Educating children about the legislation and its provisions, proper implementation of the Fast Track Special Court's Scheme, etc.



Framework For Fake E-commerce Reviews

- The Department of Consumer Affairs launched the framework for protecting consumer interest from **fake and deceptive reviews in e-commerce**.
- Titled ***Indian Standard (IS) 19000:2022 Online Consumer Reviews — Principles and Requirements for their Collection, Moderation and Publication***, the framework was **prepared by Bureau of Indian Standards (BIS)**.

Need for the Standard

- Over the last few years, there has been a steady rise in e-commerce transactions across the country.
- Since e-commerce involves a **virtual shopping experience** without any opportunity to physically view or examine the product, consumers heavily rely on reviews posted on platforms.
- According to a survey by LocalCircles, a community research platform and part of the committee that drafted the guidelines, 64% respondents consult reviews at all times, 26% occasionally, 7% only for expensive products.
- However, there have been **concerns about the integrity of these reviews**. There are complaints of manufactured positive reviews by sellers or negative reviews by a competitor.
- Further, “**online reputation management**” companies are being engaged for improving reviews.
- Moreover, companies have both penalised and incentivised consumers for writing negative and positive reviews respectively.
- As per the survey, 80% respondents had purchased a product seeing higher reviews and were disappointed – at least once.
- Noting the impact of fake reviews, the consumer affairs department **constituted a committee** for developing a framework on checking fake and deceptive reviews in June, 2022.
- The committee included various stakeholders, including e-commerce companies, industry associations, consumer organizations and law chairs.

Key Points of the Standard

- The guiding principles of the standard are integrity, accuracy, privacy, security, transparency, accessibility and responsiveness.
- The standard will be **applicable to every online platform that publishes consumer reviews**. These include suppliers of products and services which collect reviews from their customers, third parties contracted by suppliers or independent third parties.
- The organization will have to develop a code of practice, and necessary requirements for terms and conditions like *accessibility, criteria, and ensuring content does not contain financial information etc.*

Paid Reviews

- The BIS has defined reviews as **solicited and unsolicited**. Solicited review refers to consumers' reviews of products or services as requested by the supplier or review administrator.
- E-commerce platforms will **need to “voluntarily” disclose “paid customer reviews”** of products and services.
 - If a review is purchased or you are rewarding the person for writing the review, then that has to be clearly marked as a purchased review.

Review Authors and Review Administrators

- The person responsible for handling the review in any organisation will be called the **review administrator**.

- The standard prescribes specific responsibilities for the review author and the review administrator.
 - **For review author**, these include confirming acceptance of terms and conditions, providing contact information.
 - **For review administrator**, responsibilities include safeguarding personal information and training of staff.
- The guidelines provide for **ways to 'verify a review author'** through email, telephone or text message to confirm the registration, or by clicking a link, and using a captcha system, to establish genuineness
- It also has provisions to protect the reviewer's identity that should not be revealed without permission.

Methodology Disclosure

- Disclosure is an important factor on the basis of which the standards for online reviews are computed. All the organizations will have to be transparent about the methodology used to rate the products.
- For instance, if a product gets a 4-5 stars rating, the organization will have to inform the period in which the data was collected, and if an average was calculated.

Certification

BIS will soon come out with a certification process to check whether an organisation is complying with these standards. E-commerce players can apply for the **certification of this standard** with the BSI.

Impact

- The standard will drive increased transparency for both consumers and brands and promote information accuracy.
- It would ensure that negative reviews on e-commerce platforms are not removed without reason.
- For platforms such as Google and Meta, the validation guidelines would, over time, erase accounts created solely for fake reviews.
- It will help to increase confidence among consumers to purchase goods online and help them take better purchase decisions.
- Thus, the standard is expected to benefit all stakeholders in the e-commerce ecosystem i.e., consumers, e-commerce platforms, sellers etc.

Way Ahead

- The standard will be **voluntary** but the government will consider making them mandatory in case the issue of fake reviews continue on the online platforms.
- Once made mandatory, if required, the violation of the standards may be considered as an unfair trade practice or violation of consumer rights.
- And a consumer may submit such grievances to the National Consumer Helpline, Consumer Commissions or the Central Consumer Protection Authority (CCPA).

Bureau of Indian Standards (BIS)

- Bureau of Indian Standards Act, 2016 established BIS as the **National Standards Body of India** working under the Ministry of Consumer Affairs, Food & Public Distribution.
- BIS is **established by the Bureau of Indian Standards Act, 1986**.
- The Minister in charge of the Ministry or Department having administrative control of the BIS is the ex-officio President of the BIS.
- The organisation was **formerly the Indian Standards Institution (ISI)**, which was registered under the Societies Registration Act, 1860.

- It has 25 members drawn from Central or State Governments, industry, scientific and research institutions and consumer organisations.
- It also works as a **WTO-TBT** enquiry point for India.
 - The Agreement on Technical Barriers to Trade (WTO-TBT) Agreement, is an international treaty (binding on all WTO members) administered by World Trade Organisation (WTO).



Report on MII Regulation

The Securities and Exchange Board of India (SEBI) recently submitted a report on '**Strengthening governance of market infrastructure institutions (MIIs)**'.

- ✓ MIIs are institutions providing infrastructure of **trading, settlement and record keeping** and include **stock exchanges, clearing corporations and depositories**.

MIIs

- **Stock exchanges, depositories and clearing houses** are all Market Infrastructure Institutions and constitute a key part of the nation's vital economic infrastructure.
- The primary purpose of securities /capital market is to enable allocation/reallocation of capital/financial resources. It helps optimal use of money in the economy and stimulates economic development.
- According to a panel set up in 2010, under the chairmanship of former Governor Bimal Jalan:
 - The term 'infrastructure' would mean the basic, underlying framework or features of a system; and
 - The term '**market infrastructure**' denotes such fundamental facilities and systems serving this market.
- Well-functioning MIIs, constitute the nucleus of the capital allocation system, are essential for economic growth and have a net positive effect on society like any other infrastructure institution.

Background

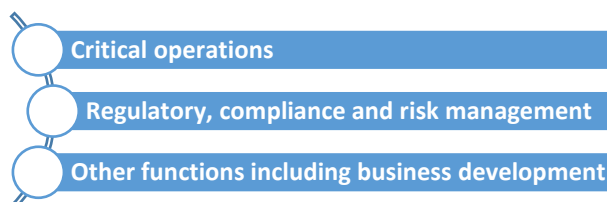
- In April, 2022, SEBI had formed a committee under **G. Mahalingam**, a former whole-time member, to strengthen governance norms at the MIIs.
- The committee was formed after India's largest stock exchange--the National Stock Exchange (NSE), was found dealing with corporate governance issues related to the **co-location scam**.

Key Points Of The Report

- The report has proposed stricter regulations for enhancing accountability and transparency of MIIs.
- The panel has proposed measures for:
 - Strengthening the role played by the **governing board and committees** of MIIs.
 - Reviewing the requirements related to **appointment and role & responsibility of directors on the board and key managerial persons (KMPs)**.
 - Developing effective metrics for monitoring various aspects of their functioning.
 - Reviewing the policy on safekeeping and sharing of information held by MIIs.
 - Revisiting the code of conduct and code of ethics for directors of the governing board and KMPs and
 - Activities and governance of investee companies of MIIs.

Functions of MIIs

- Under the proposal, the functions of MIIs should be categorized into **three verticals**:



- The KMPs heading the functions under the first two verticals should be at par in hierarchy with the KMPs heading the third vertical.
- In terms of *resource allocation and utilization*, the functions under the first two verticals separately should be given higher priority by MIIs over functions under the third vertical.
 - The resources including the **human as well as financial and technology resources** deployed by MIIs for each of the core functions should be disclosed in the annual report of the MIIs.

Guidelines For The Board

- To ensure greater independence of the Board of the MII, at least two-third members of the Board of the MII should comprise Public interest directors (PIDs).
- The roles and responsibilities of all directors should be clearly outlined, especially their responsibilities towards *regulatory, compliance and risk management functions*.
- In order to enhance transparency, the MIIs should disclose the **agenda and minutes of meetings of their board**.
- The board meetings of MIIs should be required to have **audio and video recordings**.

Periodic Review

- Periodic review through an internal as well as external mechanism, should be conducted to evaluate the effectiveness of the MIIs in discharging their core and critical functions.
 - Accordingly, the MIIs, should internally evaluate its own performance on an **annual** basis and engage an external agency for evaluating its performance once in every **three years**.
- The first external evaluation should be conducted within a period of twelve months from the date of implementation of the recommendations.
- MII may frame its own **evaluation metrics** based on the indicative parameters specified by SEBI.

Escalation Matrix

- MIIs should develop an escalation matrix for *sharing confidential and sensitive information for any legitimate purpose*.
- If any KMP or Board member becomes/ is aware of any acts of wrongdoing and fails to report the same to the Board of the MII or to SEBI, respectively, then such person should be held accountable.

Systemic Importance of MIIs

- MIIs are systemically important in India, due to the significant growth of these institutions in terms of market capitalization of listed companies, capital raised and the number of investor accounts with brokers and depositories and the value of assets held in the depositories' account.
- Moreover, unlike typical financial institutions, the number of stock exchanges, depositories and clearing corporations in an economy is **limited** due to the nature of its business, although they serve the entire marketplace.
- Any failure of such an MII could lead to even bigger collapse that may result in an overall economic downfall that could potentially extend beyond the boundaries of the securities market and the country.
- Therefore, governance and oversight are absolutely critical and need to be of the highest standards.

Specific Institutions In India That Qualify as MIIs

- Among stock exchanges, the **SEBI lists seven**, including the BSE, the NSE, the Multi Commodity Exchange of India and the Metropolitan Stock Exchange of India.
- There are **two depositories** — charged with the safekeeping of securities and enabling their trading and transfer — that are tagged MIIs: the Central Depository Services Ltd. and the National Securities Depository Ltd.

- The regulator also lists seven **clearing houses** including the Multi Commodity Exchange Clearing Corporation.
 - Clearing houses, help validate and finalise securities trades and ensure that both buyers and sellers honour their obligations.



AMENDMENTS TO IT RULES 2021

Government has notified amendments to the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021** pushing towards an open, safe, trusted, and accountable internet.

About IT Rules, 2021

- The new rules were released under **Section 87(2)** of Information Technology Act, 2000 and superseded the earlier Information Technology (Intermediary Guidelines) Rules, 2011.
- They prescribe a framework for the regulation of content by **online publishers** of news and current affairs content, and curated audio-visual content.

Need for 2021 Rules

- Misuse of social media for persistent spread of fake news, sharing morphed images of women, settling corporate rivalries, use of abusive language, defamatory and obscene content and blatant disrespect to religious sentiments brought new challenges for law enforcement agencies.
- Lack of transparency and absence of robust grievance redressal mechanism left the users totally dependent on the whims and fancies of social media platforms.

Aim

- Protecting the rights of **Digital Nagriks**
- Enhancing due diligence requirements and ensuring accountability of social media and other intermediaries in case of infringement of rights

Features

- **Due Diligence to be Followed by Social Media Intermediaries** failing which safe-harbour provisions will not apply to them.
 - **Social Media Intermediaries (SMI)** are the ones which primarily or solely enable interaction between two or more users and allow them to create, upload, share, disseminate, modify or access information using its services.
- **Grievance Redressal Mechanism**
 - A Grievance Officer will be appointed and his contact details will be shared on the website of SMI.
 - The officer should acknowledge complaint within 24 hours and resolve it within 15 days of its receipt.
 - A **three-level grievance redressal mechanism** has been established.
 - Level I- Self-regulation by the Publisher:** Publisher shall appoint a Grievance Redressal Officer based in India. The officer shall take a decision on every grievance received by it within 15 days.
 - Level II- Self-Regulatory Body:** There may be one or more self-regulatory bodies of publishers. Such a body shall be headed by a retired judge of the Supreme Court / High Court or independent eminent person and have not more than six members. Such a body will have to register with the Ministry of Information and Broadcasting (Mo I&B), and it will oversee the adherence by the publisher to the Code of Ethics and address grievances that have not been resolved by the publisher within 15 days.

- iii. **Level III- Oversight Mechanism:** Ministry of I&B, shall formulate an oversight mechanism and publish a charter for self-regulating bodies, including Codes of Practices. It shall establish an Inter-Departmental Committee for hearing grievances.
- **Ensuring Online Safety:** Content showing individuals in full or partial nudity or in impersonation including morphed images etc. should be removed or disabled access within 24 hours of receipt of complaints filed either by the individual or by any other person on his/her behalf.
- **Categorization of SMIs:** The rules distinguish between Social Media Intermediaries (SMIs) and Significant Social Media Intermediaries (SSMIs) based on the number of users on their platform. Intermediaries with registered users above a **notified** threshold will be classified as SSMIs. SSMIs are required to follow additional due diligence which includes:
 - **Appointing:**
 - A Chief Compliance Officer for ensuring compliance with the Act and Rules.
 - Nodal Contact Person for 24x7 coordination with law enforcement agencies.
 - A Resident Grievance Officer for performing functions under Grievance Redressal Mechanism.
 - They should all be Indian residents.
 - Publishing a monthly compliance report with details of complaints received and action taken as well as details of contents removed proactively by the SSMIs.
 - **User Identification:** Enabling identification of the **first originator** of the information required for prevention, detection, investigation, prosecution or punishment of an offence related to sovereignty and integrity of India, security of the State, public order or of incitement to an offence etc.
- **Opportunity to Be Heard:** Prior intimation should be communicated to the user whose content has been removed or disabled access to by the SSMIs explaining the grounds and reasons for such action.
- **Code of Ethics:** Prescribes the guidelines to be followed by OTT platforms and online news and digital media entities.
- **Self-Classification of Content:** Should be done by the OTT platforms into 5 age-based categories- U (Universal), U/A 7+, U/A 13+, U/A 16+, and A (Adult). Parental locks should be implemented for content classified as U/A 13+ or higher.

Amendments to IT Rules 2021

These amendments are called the IT (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2022 and include:

- **Imposing Legal Obligation:** Currently, Intermediaries are required to **only inform** users about not uploading certain categories of harmful/unlawful content under IT Rules 2021. The new amendments impose a legal obligation on these intermediaries to take reasonable efforts to prevent users from uploading such content.
- **Use of Regional Languages** for effective communication of the rules and regulations.
- **Judicial Review:** The grounds in rule 3 (subclause 1) have been rationalized by removing the words 'defamatory' and 'libellous'.
 - Whether any content is defamatory/ libelous will be determined through judicial review.
- **Respecting Constitutional Rights:** Intermediaries are required to respect the rights guaranteed to users under the Constitution including in the articles 14, 19 and 21 and ensure accessibility of its services to users with a reasonable expectation of due diligence, privacy and transparency.
- **Grievance Appellate Committee(s):**
 - To be established within 3 months from the date of commencement of the IT Amendment Rules, 2022.
 - It will allow users to **appeal** against the inaction or decisions taken by intermediaries on user complaints.

- Each appellate committee will consist of a chairperson (ex-officio) and two whole time (independent) members appointed by the Central Government.
- Any aggrieved person can appeal to the Grievance Appellate Committee within a period of 30 days from the date of receipt of communication from the Grievance Officer.
- The appeal should be resolved within 30 days from the date of receipt.
- It may seek assistance from any person having the requisite qualification, experience and expertise in the subject matter if required.
- It will adopt an **online dispute resolution** mechanism wherein the entire appeal process, from filing of appeal to the decision shall be conducted through digital mode.
- All its orders will be complied with by the intermediary concerned and its report will be uploaded on its website.

Related Concerns

- The rules impose excessive government control on SMIs.
- They are restrictive in nature and may be used to curb government criticism.
- Imposes restrictions on freedom of speech.
- Identification of the first originator of information affects individual privacy.
- Early-stage Indian start-ups will be impacted by complying with the rules.

EXTRA MILE

During the hearing of a petition, Twitter questioned the “**confidentiality clause**” in Centre’s rules for blocking Twitter accounts and tweets and termed it unreasonable stating that some of the posts did not violate **Section 69A of IT Act, 2000**.

- ✓ **Confidentiality Clause** disallows information to users about the reasons why their accounts were blocked.

Key Points

Twitter’s petition pointed to two structural problems-

- a) Absence of case-specific rationale for blocking the content and accounts.
- b) Not giving the content originators chance of mandatory hearing (violation of the freedom of speech).

In response, the Centre argued that Twitter being a foreign platform cannot seek freedom of speech and other fundamental rights available to Indian citizens for its users. The Ministry’s blocking order had been issued under Rule 16 of IT (Procedures and Safeguards for Blocking of Access to Information by Public) Rules 2009, which requires strict confidentiality regarding all blocking requests.

Section 69A of IT Act, 2000

- It empowers the government to restrict access to an intermediary in the interest of country’s sovereignty and integrity, security, friendly relations with foreign countries or for public order or for preventing incitement to the commission of any cognizable offence.
 - ✓ Intermediary includes “telecom service providers, network service providers, internet service providers, web-hosting service providers, search engines, online payment sites, online auction sites, online marketplaces, cyber cafes etc.”.
- There should be **written orders** for restricting information or content in circulation.
- Its provisions are enlisted in IT (Procedure & Safeguards for Blocking for Access of Information by Public) Rules, 2009.



Voting Rights of Prisoners

The Supreme Court has decided to examine a petition challenging an election law provision that imposes blanket ban on under trials and prisoners from casting their votes.

Key Points

- According to the 2021 report of National Crime Reports Bureau (NCRB), a total of 5,54,034 prisoners were confined in various jails across the country as on December 31, 2021. The reported number was-

Convicts- 1,22,852 (22.2%)

Undertrials - 4,27,165 (77.1%)

Detainees- 3,470 (0.6%)

- The petitioners argued that this provision denied the prisoners the right to vote and had no connection with decriminalizing politics which is concerned with the right to contest candidates with criminal antecedents.
- The petition pointed out that the ban lacked **reasonable classification** based on the nature of crime or sentence duration unlike in countries like South Africa, UK, France, Germany etc. and violated the right to equality.

Right to Vote

This right to vote is a **Constitutional Right** conferred under **Article 326** of the constitution and the rules pertaining to this are mentioned under **Section 62** of the Representation of Peoples Act (RPA), 1950 which states that:

- Every person whose name is entered in the electoral roll of any constituency shall be entitled to vote in that constituency.
- A person is ineligible to vote if he is subject to any of the disqualifications referred to in section 16 of the RPA 1950.
- One cannot vote in more than one constituency/ vote in a constituency more than once at a general election and if he does so, all his votes will be considered void at all constituencies.
- A person is ineligible to vote if he is confined in a prison, whether under a sentence of imprisonment or transportation or otherwise or is in the lawful custody of the police.
- The above restriction **does not apply** to a person under preventive detention.

Why Should The Prisoners Be Allowed To Vote?

- Right to Equality:** The rights of prisoners should not be abridged only because those people are convicted or imprisoned. All the citizens should be given equal opportunity to elect their representatives.
- Responsible Law Making:** Allowing the prisoners to vote includes them in responsible law-making processes rather than leaving them having no stake in it thereby extending the alienation from society that the offender might already feel.

Why Not?

- Section 62(5)** of the RPA, 1950: It goes without saying what kind of choices a prisoner or most of them would make for the betterment of society. Thus, **Section 62(5)** of the RPA correctly restricts the prisoners to vote in the elections and needs no amendment.

Related Judgements

- Anukul Chandra Pradhan v/s Union of India, 1997:** Supreme Court (SC) rejected the petition and justified this ban by stating that-

- i. Permitting every prisoner to vote would require deployment of a much larger police force and greater security arrangements resulting in resource crunch.
 - ii. A person who is in prison because of his own conduct cannot claim equal freedom.
 - iii. The ban is to keep persons with criminal background away from the election scene.
- **S. Radhakrishnan v/s Union of India, 1999:** The SC agreed with the judgement in the case of *Anukul Chandra Pradhan v/s Union of India, 1997* and rejected the petition.
 - **Praveen Kumar Chaudhary & Ors v/s Election Commission of India & Ors, 2019:** The Delhi High Court rejected the petition noting that the right to cast vote was neither a fundamental right nor a common law right and was only provided under a statute- RPA, 1950 which was subjected to restrictions imposed by law that doesn't allow prisoners to cast vote.
 - **Nawab Malik v/s Directorate of Enforcement, 2022:** The Supreme Court rejected the plea of Maharashtra cabinet minister Nawab Malik seeking temporary release from jail for a day to cast vote in Maharashtra Member of Legislative Council (MLC) elections.

Status Across the World

- BBC 2012 report lists 18 European countries which have given full voting rights to all prisoners.
- Countries such as Iran, Israel, and Pakistan also provide rights to its prisoners to vote in elections.
- In the African Continent, South Africa, Ghana, Kenya and Botswana provide their prisoners with the right to vote in elections.
- In countries like UK, New Zealand undertrials are allowed to vote but there would be a blanket ban on convicted prisoners.
 - In others, there are limitations related to severity or type of offence like Germany bars those convicted of terrorism charges, number of years sentenced as in the case of Australia, where those sentenced for three years minimum cannot vote.
- In France, there is no default ban on prisoners to vote in the elections, rather the court may decide to disallow any convict on a case-by-case basis.
- In Italy and some states of the US, convicts can lose the right to vote even after their release.

United Nations and Universal Right to Vote

- Article 21 of Universal Declaration of Human Rights (UDHR) provides everyone the right to take part in the government of their country, directly or through freely chosen representatives.
- International Covenant on Civil and Political Rights (ICCPR)'s Article 25 states that every citizen should have the right and the opportunity, without any of the distinctions like race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status and without unreasonable restrictions:
 - i. To take part in the conduct of public affairs, directly or through freely chosen representatives;
 - ii. To vote and to be elected at genuine periodic elections by universal and equal suffrage and held by secret ballot, guaranteeing the free expression of the will of the electors.

REMOTE VOTING FACILITY FOR NRIs

The Supreme Court disposed-off petitions seeking remote voting rights for NRIs, migrant labourers and others. This disposal came after an assurance by the Attorney General of India that the government is working on ways to facilitate remote voting for NRIs.

Background

- The **in-person** provision of the amended Representation of People Act in 2010 discouraged many and petitions were filed in the Supreme Court between 2013 and 2014 by NRIs arguing that they should not be

deprived of their right to vote simply because they exercised their right to freely practice a profession or trade.

Representation of People (Amendment) Act, 2010: It conferred voting rights to citizens of India who are absent from their place or ordinary residence in India owing to their employment, education, or otherwise outside India (whether temporarily or not). It entitled them to have their names registered in the electoral roll in the Assembly/Parliamentary constituency in which their place of residence in India as mentioned in their passport is located.

- Prior to 2010, NRI's name was deleted from electoral rolls if he or she stayed outside the country for more than 6 months at a stretch.

- The Supreme Court issued a notice to the Election Commission of India (ECI) in response to this petition requesting remote voting facility for NRIs.
- ECI then constituted a **committee in 2014** to investigate the matter and find out ways so that NRIs and migrant workers can take part in the electoral process.
- The committee submitted its report to the Centre.
- The government then introduced the Representation of People (Amendment) Bill, 2018 in Lok Sabha to amend the provisions of **Section 60** of the Representation of People Act, 1951.
- The amendment would have enabled electors overseas to have proxies to cast votes on their behalf. The bill was passed in Lok Sabha but was not introduced in Rajya Sabha and because of which the bill itself lapsed.

Size of NRI Electorate

- Nearly, 1.35 crore NRIs are spread across the globe with many of them living in the Gulf countries, U.S., and U.K.
- In 2019 Lok Sabha elections, 99,844 NRIs registered to vote and only 25,606 turned up to vote with most of them hailing from Kerala.
- Of these overseas electors, 90% belong to Kerala and others from Gujarat, Punjab, and Tamil Nadu among other states.

Current Status of NRI Voting Rights

- **Post Representation of the People (Amendment) Act, 2010:**
 - NRIs who had stayed abroad beyond six months have been able to vote, but only **in person** at the polling station where they have been enrolled as an overseas elector.
 - They have to produce their passport in original at the polling station for establishing identity.
- **2016 Amendment to The Conduct of Election Rules, 1961:**
 - Allowed **service voters** to use the Electronically Transmitted Postal Ballot System (ETPBS).
 - The ECI proposed to extend this facility to overseas voters as well.
 - To extend the postal voting facility to overseas voters, the government only needs to amend the Conduct of Election Rules 1961. It doesn't require Parliament's nod.

ECI Committee Recommendations

It came up with two remote voting options: e-postal ballot and proxy voting.

- **E-Postal Ballot or Electronically Transmitted Postal Ballot System (ETPBS):**
 - NRI voter sending an application to the returning officer in person or online.
 - The returning officer sends the **ballot electronically** in response to the application.
 - The voter can then register their mandate on the ballot printout and send it back with an attested declaration by ordinary post or drop it at an Indian Embassy where it is segregated and posted.

- **Proxy Voting:** It enables NRI voters to appoint proxies to vote on their behalf. The ECI suggested it as a “convenient” and “do-able” method.
- Both ETPBS and proxy voting are currently available to **only service voters** like those in the armed forces or diplomatic missions.

Postal Voting

It is a facility given to restricted set of voters. Through this facility, a voter can cast the vote remotely by recording her/his preference on the ballot paper and sending to the election officer before counting. Following voter can avail the facility.

1. Service voters (armed forces, armed police force of a state & government, servants posted abroad)
2. Voters on election duty
3. Voter above 80 years of age or person with disabilities (PwD)
4. Voter who are under preventive detention.
5. Media persons (Journalist)

Issues Associated With Postal Ballot In India

- **Vote buying:** There is a chance that someone else is casting the vote on behalf of the voter because the voter chooses to sell his or her vote.
- **Freedom of voting & secrecy might be affected:** As the voter will have vote on a printed ballot from their respective home, someone might observe the voter casting her/his vote.
 - This might lead to coercion or forcing the voter to make a particular choice.
- **Reliability and delay of postal services:** The postal voting process must start early enough to take into account any unforeseeable conditions.

Pros And Cons of Remote Voting for NRI

PROS	CONS
Postal Ballot/proxy voting are more pragmatic ways of registering overseas mandates rather than in -person voting.	It can increase the burden of embassy or consular officials.
NRIs can constitute a more substantial chunk among the electorate in some states.	Limiting voters to specific constituencies on account of their residency can become pointless.
It will allow more NRIs participation in the election process.	This facility is unavailable to internal migrant workers, and they need to travel back to their registered constituencies to vote. Thus, this facility becomes discriminatory.

Rules in Other Countries: Other countries allow absentee voting if their overseas electors are not abroad for a specified period and if they intend to return.

Absentee voting enables persons who cannot appear at their designated polling places to vote from **another location**. The usual method of absentee voting is by mail, although provision is sometimes made for voting at prescribed places in advance of the polling date



DISQUALIFICATION OF CONVICTED MLAs

Two Uttar Pradesh legislators were convicted recently but only one of them was disqualified from the legislature and his seat was declared vacant by the Legislative Assembly Secretariat whereas no action was taken in case of the other convicted legislator.

Process of Disqualification

Section 8 of Representation of People Act (RPA), 1951 deals with the disqualification of MP/MLAs on conviction for certain offences.

Offences Related To	Disqualification will occur if the convicted person is sentenced to:
<ul style="list-style-type: none"> • Promoting enmity between different groups (on ground of religion, race, place of birth, residence, language, etc.) and doing acts prejudicial to maintenance of harmony • Bribery and personation during elections and other electoral offences • Rape or cruelty towards a woman by husband or relatives of a husband. • Protection of Civil Rights, 1955- punishment for preaching and practice of “untouchability” • Customs Act, 1962 • Unlawful (Prevention) Activities Act, 1967 • Foreign Exchange (Regulation) Act, 1973 • Narcotic Drugs and Psychotropic Substances Act, 1985 • Terrorist and Disruptive Activities (Prevention) Act, 1987 • Religious Institutions (Prevention of Misuse) Act, 1988 • Prevention of Corruption Act, 1988 	<ul style="list-style-type: none"> ✓ Only fine: For a period of 6 years from the date of such conviction. ✓ Imprisonment: From the date of such conviction and shall continue to be disqualified for a further period of 6 years after his release.
<ul style="list-style-type: none"> • Prevention of hoarding or profiteering; • Any law relating to the adulteration of food or drugs; • Any provisions of the Dowry Prohibition Act 	<p>Imprisonment for <i>not less than six months</i>: Then he shall be disqualified from the date of such conviction and shall continue to be disqualified for a further period of six years since his release for offences</p>
<ul style="list-style-type: none"> • Other than the ones mentioned above 	<p>A person convicted of any offence and sentenced to imprisonment for <i>not less than two years</i> will be disqualified from the date of such conviction and will continue to be disqualified for a further period of six years.</p>

Can The Members Avoid Disqualification?

- **Section 8(4) of RPA, 1951:** If a person is a member of Parliament or the Legislature of a State on the date of conviction then his disqualification will not take effect until three months have elapsed from that date or if within that period an appeal or application for revision is brought in respect of the conviction or the sentence and until that appeal or application is disposed of by the court.

- This provision was struck down by the Supreme Court in the *Lily Thomas v/s Union of India* case.
 - ✓ It ruled that any MP, MLA, or MLC who is convicted of a crime and sentenced to a minimum of two years in jail loses their membership in the house **immediately**.

Why Was Section 8(4) of RPA, 1951 Struck Down

- In the case *Lily Thomas v/s Union of India, 2013* (later in *Lok Prahari vs Uoi, 2018* also) the SC found it unconstitutional that the convicted persons could be disqualified from **contesting elections** but **could continue** to be MP, MLA, or MLC once elected
- It held that the provisions of Article 101(3) (a) and 190(3) (a) of the Constitution prohibited Parliament to defer the date from which the disqualification can come into effect in case of a sitting member of Parliament or a State Legislature. But Parliament had exceeded its powers conferred by the Constitution in enacting Section 8(4) of the Act.
 - ✓ **Article 101(3)(a) and Article 190(3)(a)**: State that the seat gets vacated if a member of either House of Parliament or a member of a House of the Legislature of a State becomes subject to any of the disqualification according to Article 102 and Article 191.
- It held that Section 8(4) of the Act ultra vires the Constitution and thus, struck it down.

Other Supreme Court Judgments to Decriminalize Politics

- **Association for Democratic Reforms (ADR) vs. Uoi in 2002**: Mandated the disclosure of information relating to criminal antecedents, educational qualification, and personal assets of a candidate contesting elections.
- **Public Interest Foundation and Ors. vs Uoi 2014**: Trials of sitting MPs and MLAs be completed within a year of charges being filed against them.
- **Rambabu Singh Thakur v Sunil Arora 2020**: All candidates (both state and federal), to make their criminal records public if they wish to run for office.

Can The Disqualification Be Removed/Reduced?

- The Supreme Court has the power to stay any sentence or conviction. But the SC has made it clear that the stay should be very rare and only for special reasons.
- Even the RPA, 1950 provides an answer to this question through the Election Commission (EC).
 - Under Section 11 of RPA, the EC may record reasons and either remove or reduce the period of disqualification.
 - This power was exercised by the EC in the case of Sikkim Chief Minister P.S.Tawang who served a one-year sentence on corruption charges. The EC reduced his disqualification period to enable him to contest a by-election and remain in the office.



EWS QUOTA

In a landmark ruling, the Supreme Court upheld the 103rd Amendment Act, 2019.

Background

- Reservation for Economically Weaker Sections (EWS) of the society was granted based on the recommendations of a commission headed by **Major General (retd) S R Sinho**.
- The Commission was constituted by the then Union government in 2005, and submitted its report in 2010.
- To implement this, a Cabinet Note was prepared by the Ministry of Social Justice and Empowerment in 2019.

- Based on this, the Cabinet, in 2019, decided to amend the Constitution (103rd Amendment) to provide reservation to EWS.

About EWS Reservations (103rd Constitutional Amendment Act, 2019)

- It inserted clauses in Articles 15 and 16 to introduce quotas for provide up to 10% reservation to the EWS among **non-OBC and non-SC/ST sections** of the population and empowered the state governments to give reservation on the basis of economic status.
- It **added Clause (6) to Article 15**: Allows up to 10% reservation in public and private educational institutions, whether aided or unaided, with the **exception of** minority-run institutions.
- It also **added Clause (6) to Article 16** of the Constitution to make **employment reservations** easier.
 - ✓ Article 16 of the Indian Constitution guarantees equal opportunity to all citizens in matters related to employment in the public sector.
- It was enacted to promote the welfare of the poor not covered by the 50% reservation policy for SCs, STs and OBCs.
- The Act states unequivocally that the EWS reservation will be **added** to the existing reservation.
- It enables both the **Centre and the States** to provide reservations to the EWS of society.

The Amendment Had Many Firsts Like

- Economic criterion was considered solely for providing reservation.
- The SC/ST/OBCs were excluded from the newly inserted clauses of Article 15(6) and 16(6) (sub clause 4 was for SC/ST/OBC)
- The ceiling of 50% reservation was breached.
- The individual rather than the group became the basis of backwardness.
- The amendment was challenged in the Supreme Court and was referred to a five-judge Constitution Bench in August 2020.


Applicability: The quota is available to people from economically weaker sections to seek admissions in higher educational institutions and in initial recruitment in central government jobs.

Basis of Challenge

More than 20 petitions were filed challenging the constitutional validity of the 103rd Amendment arguing that it violated the basic structure of the Constitution and the fundamental right to equality under Article 14. Following arguments were made:


- Reservations cannot be based solely on the basis of economic criteria, given the Supreme Court's judgment in **Indra Sawhney v. Union of India (1992)**.
- SC/STs and OBCs cannot be excluded from economic reservations as this would violate the fundamental right to equality.
- It exceeds the 50% ceiling-limit on reservations fixed by the Supreme Court in the Mandal Commission Case.


EWS QUOTA



- Persons who are not covered under SC/ST/OBC reservation and whose family's gross annual income is below Rs 8 lakhs are to be identified as EWSs.
 - Income shall include income from all sources i.e., salary, agriculture, business, profession, etc. for the financial year prior to the year of application.

- Persons whose family owns or possesses any of the following assets shall be excluded from being identified as EWS, irrespective of their family income:
 - 5 acres of agricultural land and above;
 - Residential flat of 1000 sq. ft. and above;
 - Residential plot of 100 sq. yards and above in notified municipalities;
 - Residential plot of 200 sq. yards and above in areas other than the notified municipalities.





- The property held by a "Family" in different locations or different places/cities would be clubbed while applying for the land or property holding test to determine EWS status.
 - The term "Family" will include the person who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also his/her spouse and children below the age of 18 years.

- ✓ **Mandal Commission:** Constituted by the President in 1978 to determine the criteria for defining India’s “socially and educationally backward classes” and to recommend steps for their advancement. It suggested 27% reservation in government jobs for OBCs.



4. It imposes reservations on educational institutions that do not receive State aid, this violates the fundamental right to equality.

Government’s Stand

- The government said that the EWS quota would not in any way erode the rights of SC/STs and OBCs as they have been given reservation for the first time whereas the SC/STs are loaded with benefits by way of affirmative actions.
- Speaking against the argument of violation of constitution’s **basic structure**, the government said that it must be shown that the very identity of the Constitution has been altered.
- Ministry of Social Justice and Empowerment argued that under Article 46 of the Constitution, the state can take such measures as it has a duty to protect the interests of EWS.

Final Verdict

- The amendment was upheld by a **3:2 majority**.
- **Justice Dinesh Maheshwari** has ruled that reservation based only on economic criteria does not violate the basic structure of the Constitution.
 - He also added that the exclusion of classes covered in Article 15(4) and 16(4) — that is OBCs and SC/STs — in the 103rd amendment does not damage the basic structure.

SCO CASES	Justices Maheshwari, Trivedi and Pardiwala	Chief Justice Lalit and Justice Bhat
Issues		
Can reservations be provided on an economic criteria?	YES	YES
Can SC/ST/OBC groups be excluded from EWS reservation benefits?	YES, they form a separate disadvantaged group.	NO, SEBCs form the bulk of the poorest population of India.
Can EWS reservations exceed 50% limit?	YES, the 50% limit is flexible and applies only to SEBCs	NO, breaching the 50% limit here will be a gateway for further compartmentalisation

- **Justice Bela Trivedi** ruled that treating EWS as a separate class would be a reasonable classification, and that treating unequal equally would violate the principle of equality.
 - He said that 75 years after independence, it was time to revisit the system of reservation in the larger interest of society.
- **Justice S B Pardiwala** observed that “Reservation is not an end, **it is means**, it should not be allowed to become a vested interest”.

Dissenting Judgement

- **Justice Bhat** has ruled that while reservation on economic criteria is per se not violative of the Constitution, excluding SC/ST/OBC from the purview of EWS is violative of basic structure.
 - He strikes down Articles 15(6) & 16(6) for being discriminatory & violative of equality code.
- **CJI U U Lalit** said he concurs entirely with the judgment of Justice Bhat.

Opening The Gates For The Most Distressed

- **Discouraging Caste-based Reservations:** The top court while acknowledging caste to be a prominent cause of injustice in the country historically, emphasized that it could not be the sole determinant of backwardness and the State should uncover emerging forms of backwardness in an evolving society.
- **New Determinants Of Backwardness:** New practices, methods and yardsticks need to be continuously evolved moving away from caste-centric definition of backwardness.
 - ✓ **Transgender quota:** Identifying a form of social backwardness that had nothing to do with caste or class, and recognizing transgender as a distinct community with justiciable rights and eligibility for government benefits.

- **Identifying Genuine Category:** The court held that the principle of affirmative action under the Constitution obligated the state “to reach out to the most deserving” class and gates would be opened only to permit entry of the most distressed.
 - Any other inclusions would be a serious abdication of the constitutional duty of State,”
 - The court warned that a palliative policy keeping in mind only historical injustice would result in under-protection of the most deserving backward class of citizens.

Way Forward

Including poverty as a cause of discrimination and proposing redress is a welcome step but expanding the economic pie remains the principal imperative which needs heavy lifting socially, economically and politically.

PREVIOUS JUDGEMENTS ON RESERVATION POLICIES

Champakam Dorairajan v/s State of Madras, 1951: This landmark judgement of SC led to the First Amendment of the Constitution of India and was the first major judgement regarding reservations. In this ruling, the SC struck down the Government Order of caste-based reservation in government jobs and college which according to the Madras Government was passed in accordance with Article 46 to promote social justice among all the sections of society. The SC termed the order as a violation of Article 15 by classifying students solely on the grounds of religion, race, and caste and said that the Directive Principles of State Policy could not override the Fundamental Rights.

- **The Constitution (First Amendment) Act, 1951:** It inserted Article 15(4) which empowered the State to make any special provision for the advancement of socially and educationally backward classes of citizens or for the Scheduled Castes or Scheduled Tribes.

M.R.Balaji v/s State of Mysore, 1963: The court in this case agreed that reservation should essentially be provided to the weaker sections of the society in order to uplift them, but it should not be done by undermining the interest of the remaining sections of society. The court also made it clear that reservation must not exceed 50% in any case, or else it would be unreasonable.

N.M Thomas v/s State of Kerala, 1975: The case revolved around the reservation policy of State and challenged the relaxation of promotion policies and rules for the SC/STs and OBCs. The court justified the SC/ST categorization from the rest of the community for adequate representation in services under the state due to their social backwardness. As per the carry forward rule, the reservation came up to 64.4% and the court ruled that it was not excessive.

Indra Sawhney v/s Union of India, 1992: In this case, a nine-judge bench upheld 27% quota for OBCs but struck down the 10% quota based on economic criteria. It held that backward class cannot be determined only and exclusively based on economic criteria and can be considered as a criterion only when clubbed along with social backwardness. It also held that reservation cannot exceed 50% limit unless a special case is made out under extra ordinary situations. It ruled that reservations in appointments, granted to the State by Article 16(4), do not apply to promotions.

M. Nagaraj v/s Union of India, 2006: In this case, the Court validated Parliament’s decision to extend SC/ST reservation in promotions. It laid down three controlling conditions that the State must meet prior to granting a SC/ST a reservation in promotion:

- The State must show the backwardness of the class.
- It must show that the class is inadequately represented in the position/service for which reservations in promotion have to be granted.
- It must show that the reservations are in the interest of administrative efficiency.

The Constitutional Bench in the *Nagaraj case* validated the following constitutional amendments:

- 77th Amendment Act, 1995 which inserted Article 16(4A).
- 81st Amendment Act, 2000 which added Article 16(4B).

- 82nd Amendment Act, 2000 which inserted a provision to Article 335.
- 85th Amendment Act, 2001 which added “consequential seniority” for SC/STs under 16(4B).
- ✓ **Article 16(4A)** enables the State to make any law regarding reservation in promotions for SC/STs.
- ✓ **Article 16(4B)** provides that reserved promotion posts for SC/STs that remain unfilled, can be carried forward to the subsequent year. It also ensures that the ceiling on the reservation quota capped at 50% by *Indra Sawhney case* for these carried forward unfilled posts does not apply to subsequent years.
- ✓ **Article 335** mandates that reservations have to be balanced with the ‘maintenance of efficiency’. The 2001 amendment to Article 335 clarified that the Article will not apply to the State relaxing evaluation standards ‘in matters of promotion’.



Challenge to First Constitutional Amendment Act

The Supreme Court (SC) has agreed to hear a petition challenging the first amendment to the Constitution which made changes to the right to free speech and expression (Article 19(1)(a)). The petitioner claimed that the amendment violates the basic structure doctrine.

First Constitutional Amendment Act, 1951

- It was introduced by the Jawaharlal Nehru Government in 1951.
- It added new provisions which empowered the government to restrict freedom of speech and expression, validated zamindari abolition laws, and clarified that the right to equality does not bar the enactment of laws which provide "special consideration" for weaker sections of society.
- It set the precedent of amending the Constitution to overcome judicial judgements.

Background

The government tried to suppress media criticism by curbing their fundamental right of freedom of speech and expression. But two Supreme Court rulings- *Brij Bhushan v State of Delhi*, 1950 and *Romesh Thappar v State of Madras*, 1950 termed the government actions unconstitutional and compelled the government to find alternative solutions.

Romesh Thappar v State of Madras, 1950

- In 1949, the Madras government banned ‘Cross Roads’, a left-leaning magazine, for publishing a series of articles which criticized the government for firing communist prisoners.
- The petitioner challenged Section 9(1-A) of the Madras Maintenance of Public Order Act, 1949 as *unconstitutional* which authorized the government to impose restrictions for the **wider purpose** of securing “public safety” or the “maintenance of public order”.
- This led to the first significant free speech ruling by the Supreme Court.
- The court defined terms “public safety” and “public order” and examined if they fell within the scope of the restrictions allowed in Article 19(2).
- **The government argued** that the words “undermining the security of the State” in Article 19(2) could be equated with “public safety” and “maintenance of public order.”
- The majority opinion of court struck down this provision terming it unconstitutional.

- But Justice Fazal Ali dissented from the majority view and said that disrupting public order is a means to undermine the security of the State.

Brij Bhushan v State of Delhi, 1950

- In 1950, a publication named “Organizer” published against the government criticizing its foreign policy for Pakistan.
- Responding to this, the Chief Commissioner of Delhi issued a “pre-censorship order” under East Punjab Public Safety Act, 1949 requiring the editor and publisher to submit all communal matters and news related to Pakistan to the government for approval.
- As a result, its publisher Brij Bhushan appealed against this order and challenged Section 7(1)(c) of the East Punjab Public Safety Act, 1949 which allowed pre-publication scrutiny of material “prejudicial to public safety or the maintenance of public order”.
- In the ruling, the majority struck down the law, but Justice Fazal Ali dissented.

Changes Introduced: It amended articles 15, 19, 85, 87, 174, 176, 341, 342, 372, and 376. Two key changes were made to Article 19(2)-

- It added the qualification “**reasonable**” to the restrictions imposed by Article 19(2) which left the door open for the courts to intervene and examine the legitimacy of Parliament’s restrictions.
- The terms “**friendly relations with foreign states**”, “**public order**” and “**incitement to an offence**” were added to the Constitution which was required by two Supreme Court rulings in 1950 that went against the state’s power to limit free speech.
 - It provided that *state trading and nationalization of any trade or business by the state* cannot be held invalid on the grounds of violation of the right to trade or business.
 - It added the 9th Schedule to protect the land reforms and other laws included in it from judicial review.
 - It added Articles 31A and 31B (after article 31) which empowered the state to acquire any estate or property in public interest.

Petitioner’s Arguments

The petitioner urged the court to declare **Section 3 (1)(a) and 3 (2) of the 1st Amendment** *beyond the amending power of Parliament* and *void* since the same damages the basic or essential features of the Constitution and destroys its basic structure. He argued that:

- **Section 3(1)**- It replaced original Article 19(2) which dealt with restrictions on the freedom of speech and expression with a new clause containing **two objectionable insertions**- “*in the interest of public order*” and “*in relation to incitement to an offence*” which:
 - Allowed restrictions.
 - Protected the following sections of IPC “from the vice of unconstitutionality”:
 - **Section 124A**- Sedition.
 - **Section 153A**- Promoting enmity between different groups on grounds of religion, race, place of birth, residence, language, etc by words, either spoken or written, or by signs or by visible representations or otherwise and doing acts prejudicial to maintenance of harmony.
 - **Section 295A**- Deliberate and malicious acts intended to outrage religious feelings of any class by insulting its religion or religious beliefs.
 - **Section 505**- Statements conducing to public mischief.
 - Unduly curtailed the right to freedom of speech and expression.
 - Damaged democracy, republicanism and supremacy of the Constitution.

- **Section 3(1)** also omitted the expression “*tends to overthrow the State*” from the original article 19(2) raising grave concerns in the context of the dangers posed to the concept of secular, democratic and republic by *radicalism, terrorism and religious fundamentalism*.
- **Section 3 (2)** effected validation of certain laws even if they took away the right to freedom of speech and expression.




DIGITAL PERSONAL DATA PROTECTION BILL, 2022

Ministry of Electronics and Information Technology (MeitY) released the **revised** Digital Personal Data Protection Bill (DPDP), 2022 and invited public comments for the same. The latest DPDP Bill, 2022 is the 4th iteration of a data protection law in India.

Objective: To process digital personal data in a way that recognizes the right of an individual to protect his/her personal data and the need to process it for **lawful purposes**.

PERSONAL DATA PROTECTION



BACKGROUND

- Its first draft was proposed in 2018 by **Justice Srikrishna Committee**.
- The revised draft was introduced as the **Personal Data Protection Bill, 2019** in the Lok Sabha and was referred to a Joint Committee of both the Houses of Parliament (JPC) which submitted its report after two years and proposed a new draft bill.
- The bill was withdrawn by the government in August 2022 citing the report of JPC and “extensive changes” suggested by it.

Key Provisions of the New Bill

- **Global Principles of Data Protection**—The bill is based on globally accepted principles of data protection-
 - Lawfulness, fairness, and transparency.
 - Purpose limitation.
 - Data minimization.
 - Accuracy.
 - Storage limitation to fixed duration
 - Integrity and confidentiality.
 - Accountability.
- **Applicability** –

Includes	Excludes
<ul style="list-style-type: none"> Within Indian Territory: To process personal data collected online or offline and digitized. Outside Indian Territory: To process digital personal data if it is concerned with profiling of or activity of <u>offering goods or services to individuals within India.</u> <ul style="list-style-type: none"> ✓ Profiling is any form of personal data processing that analyses or predicts the 	<ul style="list-style-type: none"> Data processing by <u>Indian data fiduciaries that collect and process personal data outside India, of data principals who are not located in India.</u> Non-automated processing of personal data Offline personal data Personal data processed by an individual for any personal or domestic use

behavior, attributes or interests of an individual.

• Personal data about an individual that is contained in a record for at least 100 years.

• **Defines Data fiduciary and Data Principal:**

- **Data Fiduciary-** Any person who alone or in conjunction with other persons determines the purpose and means of processing of personal data.
- **Data Principal-** it is the individual to whom the personal data belongs and if such individual is a child, it includes his parents or lawful guardian.

• **Rights of Data Principal:**

<u>Right to Information</u>	<u>Right to Correction or Erasure</u>	<u>Right to Grievance Redressal</u>	<u>Right to Nominate</u>
About the following: ✓ Confirmation about processing personal data' ✓ Summary of personal data being processed ✓ Identities of all the Data Fiduciaries with which data has been shared	Upon receiving a request from Data Principal, a Data Fiduciary can make: ✓ Corrections ✓ Updatons ✓ Erase any personal data no longer required except for legal purposes.	If the data principal is unsatisfied with the response of a Data Fiduciary to a grievance or receives no response within 7 days , it may register a complaint with the Board.	In the event of death or incapacity of the Data Principal, any nominated individual can exercise the rights on behalf of the Data Principal.

• **Notice and Consent –**

- A Data Fiduciary is required to give the Data Principal a notice in clear and plain language with details of personal data being sought and the purpose of processing it.
- The notice should be in either English or any of the 22 languages specified under the **8th Schedule** of the Constitution.
- The Data Principal has the right to withdraw her consent at any time and its consequences shall be borne by the Data Principal.
- The withdrawal of consent will not affect the lawfulness of processing of personal data based on consent before its withdrawal.

• **Data Protection Board-**

Functions	Powers	Working
<ul style="list-style-type: none"> ▪ Directs Data Fiduciary to adopt urgent measures to remedy personal data breach or mitigate any harm caused to Data Principals. ▪ Mandate appointment of Data Protection Officers and independent data auditors to ensure compliance with the law. They will be appointed by businesses of “significant” size (based on the volume of data they process) 	<ul style="list-style-type: none"> ▪ It has the power of a Civil Court as provided in the <u>Code of Civil Procedure, 1908</u>. ▪ <u>Its decisions can be appealed in a High Court.</u> ▪ Power to summon and enforce the attendance of persons, examine them on oath and inspect any data, book, document, register, books of account or any other document. 	<ul style="list-style-type: none"> ▪ On receiving a complaint, it will first determine whether there are sufficient grounds to proceed with an inquiry or not. <ul style="list-style-type: none"> ✓ <i>In case of insufficient ground-</i> Close the proceedings with reasons recorded in writing. ✓ <i>In case of sufficient ground-</i> Set up an inquiry following the principles of natural justice i.e., giving reasonable opportunity of being heard.

<ul style="list-style-type: none"> Hold companies responsible for <u>not storing</u> user data that no longer serves a business purpose, with special safeguards with respect to personal data of minors. Act on complaints received from the affected person/ reference by the Central or State Government/ court orders/ non-compliance by a Data Principal. 	<ul style="list-style-type: none"> <u>Review its order</u> on a representation made to it, or on its own, and can modify, suspend, withdraw or cancel any of its orders. Refer complaints for Alternate Dispute Resolution. Accept voluntary undertakings. 	<ul style="list-style-type: none"> On completion of the inquiry, if the board determines non-compliance is- <ul style="list-style-type: none"> ✓ <i>Insignificant</i>- Inquiry will be closed. ✓ <i>Significant</i>- Financial penalty will be imposed. At any stage after receiving the complaint, if the Board determines that the complaint is devoid of merit, it may issue a warning or impose costs on the complainant.
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- **Cross-border Transfer of Data** – Storage and transfer of data will be permissible in “**trusted**” jurisdictions as defined by the central government.
- **Financial Penalty:**
 - o Upon non-compliance, the board may impose a financial penalty between Rs 50 – 500 crores on companies in each instance.
 - o For users, a consumer who submits false documents for an online service or makes bogus grievance complaints may face a Rs 10,000 fine.
 - o Amount of financial penalty will be determined by -
 - Nature, gravity and duration of non-compliance.
 - Type and nature of personal data affected by non-compliance;
 - Repetitive nature of non-compliance;
 - Whether the person has realized a gain or avoided any loss because of non-compliance.
 - Whether the person took any action to mitigate the effects and consequences of the non-compliance.
 - Likely impact of financial penalty on the person.
- **Exemption:**
 - o The bill exempts any or all of government agencies (as specified by government) from adhering to its provisions in the interest of “sovereignty and integrity of India, security of the state, friendly relations with foreign states, and maintenance of public order or preventing incitement to any cognizable offense.”
 - o The government also holds the power to exclude certain enterprises from Bill’s restrictions based on the volume of users and personal data handling.

Difference Between New Bill and 2019 Draft

New Bill	2019 Bill
Has less number of clauses.	Had around 90 clauses.
Proposes a Data Protection Board appointed by the central government.	Proposed Data Protection Authority which was recognized as a statutory body.
<u>Relaxes data localization</u> norms and permits cross border data transfer.	Prohibited cross border data transfer and mandated the companies to keep a copy of their data stored locally if located outside India.

Has revised penalties to Rs 50 crores and eliminated the possibility of any criminal convictions in case of violations.	Provided for penalties of ₹15 crore, or 4% of the total worldwide turnover of any data collection or processing entity, for violating provisions.
First ever legislation to use the pronouns 'she' and 'her' to refer to all individuals, as against the use of 'he', 'him' and 'his.'	No such use of pronouns.
Dropped hardware regulation terming its scope to be very large and prone to misuse, allegation and counter-allegations and legal disputes.	Mandated monitoring, testing and certification of hardware devices by the Data Protection Authority (DPA).
Right to post mortem privacy	No such provision
Incorporates "deemed consent" : DPDP Bill, 2022, states that personal data can be processed for " lawful purposes " or for which processing could be performed on the basis of "deemed permission." Deemed consent refers to consenting to voluntarily provide data that may be used for purposes other than what it was initially collected for.	Personal data can be processed for the purpose consented to by the data principal .

Concerns Raised

- **Overarching Powers:** The revised bill grants overarching powers to the central government for appointing data protection officials. This can be a serious threat to the independence of the Data Protection Board due to inadequate checks and balances.
- **Blanket Powers:** Granting exemptions to government agencies has been construed as a threat to the right to privacy of citizens. Clauses such as "public order" and "national security" can be ambiguously deployed and misused to deny consent-based data collection and processing.
- **Relaxing Data Localization:** Relaxing these norms will make it difficult to detect and investigate non-compliance and breaches in a foreign jurisdiction, making the data of Indian citizens' vulnerable.
- **Absence of Criminal Proceedings:** It may put a price on citizens' privacy as data breaches can be bought and sold by giant firms.
- **Ignoring Sensitive Personal Data:** The new bill ignores unlawful processing of certain categories of personal data such as biometric data, health data, genetic data etc. known as sensitive personal data that may require explicit consent before processing and mandatory data protection impact assessments.
- **Narrowed Scope:** The scope of the bill has significantly narrowed by removing provisions related to non-personal data, social media intermediaries and hardware like IoT (Internet of Things) etc.
- **Denies Right to Information:** The bill states that any information relating to an individual can be withheld and effectively enables Public Information Officers to use the Right to Information as Right to Deny.
- **No compensation:** The victim can't seek monetary compensation of any form, in case of a data breach.
- **Issue with deemed consent:** The 'deemed consent' provision may allow anyone to gather data with a 'take it or leave it' attitude, which goes against the letter and spirit of Puttaswamy's privacy judgment
 - The right to informational privacy has been upheld as a fundamental right by the Supreme Court (K.S. Puttaswamy vs Union of India) in 2017.

Global Practices

- **EU MODEL:** The GDPR (General Data Protection Regulation) focuses on a comprehensive data protection law for processing of personal data. It has been criticized for being excessively stringent, and imposing many

obligations on organizations processing data, but it is the template for most of the legislation drafted around the world.

- **US MODEL:** It is viewed as being somewhat narrow in focus as it enables collection of personal information if the individual is informed of such collection and use.
- **CHINA MODEL:** New Chinese laws on data privacy and security include the Personal Information Protection Law (PIPL) which gives Chinese data principals new rights as it seeks to prevent the misuse of personal data and the Data Security Law (DSL), which requires business data to be categorized by levels of importance and puts new restrictions on cross-border transfers.



FORCED CONVERSIONS

The Supreme Court while hearing a petition held that religious conversions by means of *force, allurement or fraud* ultimately affect the security of the nation, freedom of religion and conscience of citizens and needs to be curbed. It directed the Centre to file an affidavit detailing its actions to curb such conversions.

About The Petition

- It stated that forced conversion is a nationwide problem which needs to be tackled immediately.
- It claimed that the Centre and the States have not taken adequate steps to control such incidents reported every week throughout the country.
- It sought directions to the Law Commission of India to prepare a report as well as a bill to control such religious conversions.

Reasons

1. **Voluntary Conversions-** Conversions by free choice or because of change of beliefs.
2. **Forceful Conversions-** Conversions by intimidating, threatening, deceiving through gifts and monetary benefits, black magic, superstition etc.
3. **Marital Conversions-** Conversions due to marriage.
4. **Conversion for convenience.**

Anti-Conversion Laws

Attempts at National Level: Many attempts were made but all the bills failed to pass through Parliament.

- **Indian Conversion (Regulation and Registration) Bill, 1954-** To enforce licensing of missionaries and the registration of conversion with government officials.
- **Backward Communities (Religious Protection) Bill, 1960-** To check conversion of Hindus to non-Indian religions like Zoroastrian.
- **Freedom of Religion Bill, 1979-** To curb inter-religious conversions.
- The Union law ministry in 2015 stated that a law against forced and fraudulent conversions could not be created at a national level since it is a state subject.

At State Level

- **The Orissa Freedom of Religion Act, 1967-** *First such law* in the country which prohibited conversion from one religion to the other by “force or inducement or by fraudulent means”.
- **Himachal Pradesh Freedom of Religion (Amendment) Bill, 2022** – It is a more stringent version of the existing anti-religious conversion law passed in 2019. It inserts a specific mention of “mass conversion” in the 2019 law forbidding forced conversions.

- **Uttar Pradesh Prohibition of Unlawful Conversion of Religion Ordinance, 2020-** It mandated prior permission from DM for those seeking conversion and those performing it followed by a police enquiry to know the “intention, purpose, and cause of the proposed conversion.”
- **Gujarat Freedom of Religion Act, 2003-** In 2021, amendment to the previous law was introduced with a clause on interfaith marriages used as a means to carry out forced conversion. It was stayed by the Gujarat High Court stating that the burden of proof fell on the parties entering inter-faith marriage to prove that it was not solemnized on “account of any fraud, allurement, or coercion”.
- Chhattisgarh, Arunachal Pradesh, Jharkhand, Madhya Pradesh, Karnataka are some other states who have passed similar acts criminalizing forced conversions.

Does the Right To Conversion Fall Under Right to Propagation of Religion?

- This question was dealt with in *Rev Stanislaus v/s State of Madhya Pradesh, 1977* case which challenged Madhya Pradesh Dharma Swatantrya Adhiniyam, 1968, and the Orissa Freedom of Religion Act, 1967 since these Acts were hindrances in the propagation of religion.
- The Supreme Court upheld the constitutional validity of these laws. It also held that the “right to propagate” does not mean the “right to convert”.
- **Ripple effects of the verdict:** Since the verdict came, over a dozen states like Rajasthan, Gujarat, Tamil Nadu, Chhattisgarh, UP, Uttarakhand passed stringent conversion laws.

Need for Conversion Laws

- To protect every individual’s right to freedom of conscience and religion.
- To curb the conversions done by intimidation, allurement, black magic, superstition etc.
- To protect socially and economically underprivileged people, particularly those belonging to Scheduled Castes and Scheduled Tribes.

Issues With The Contemporary Anti-Conversion Laws

- **Poor Conviction Rate:** For example, in 2021, Madhya Pradesh came up with a stringent ordinance and within the first 23 days, as many as 23 cases were filed alleging forced conversions. However, none of them have resulted in conviction.
- The anti-conversion laws do not consider re-conversion as conversion (they are rather called “ghar wapsi”, that is, homecoming).
- **State Intervention In Private Affairs:** Also called **Freedom of Religion laws**, these laws provide for the prior permission of public authorities for conversion which is a private act with which the state should have no concern.
- **Based On Presumptions:** These laws had been enacted on the premise that women, SCs & STs are vulnerable and need protection. Thus, these laws perpetuate social hierarchies of a casteist and patriarchal society.
- **Against international treaties:** Instruments like Universal Declaration of Human Rights (UDHR) and International Covenant on Civil and Political Rights (ICCPR), to which India is a party, specifically include the right to conversion within the freedom of religion provided.
- **Against people’s right to protest:** Mass conversions in independent India, though rare, have been acts of protest against social discrimination. e.g. The 1982 Meenakshipuram conversions, when 180 Dalit families in a Tamil Nadu village embraced Islam
- **No considerable increase in population:** Nationally speaking, there is no significant increase in the number of Christians, though in some villages/tribal areas, their numbers have gone up.
 - Christians are just 2.3% of India’s population but they are in a majority in Nagaland, Mizoram and Meghalaya.

- As per PEW findings, only 0.4 per cent Hindu adults are Christian converts.



Australian Parliament Clears Way For India Trade Deal

The Australian Parliament ratified the **Economic Cooperation and Trade Agreement (ECTA)** with India, paving the way for implementing the deal. In April 2022, India and Australia signed an Economic Co-operation and Trade Agreement (ECTA). The aim of this agreement is to double the bilateral trade to \$50 billion in five years and ease movement of people, goods and services across borders.

Key Highlights of ECTA

- **Ambitious Pact With Significant Commitments To Tariff Cuts**

- Australia has agreed to eliminate Customs duty immediately on 98.3% of the traded goods and on 100% tariff lines over a period of five years.
- India, on the other hand, will do away with Customs duties on 40% of products immediately and on 70.3% of tariff lines over a period of 10 years.

- **With Respect To Labour Intensive Sector**

- Major labour-intensive sectors in India that will benefit from the elimination of 5% Customs duty at present include textiles and apparel, agricultural products, leather, furniture, jewellery, and pharmaceuticals.

- **With Respect To Agriculture And Dairy Sectors**

- India has managed to completely shield its **dairy sector** from any tariff reduction under the FTA while excluding most sensitive agriculture items.

- **Provisions for Services**

- Both countries have decided to facilitate the recognition of professional qualifications, licensing, and registration procedures between professional services bodies.

- Indian graduates from **STEM** (Science, Technology, Engineering and Mathematics) will be granted extended post-study work visas.

A WIN-WIN

- Australia to eliminate Customs duties on 100% of tariff lines
- India will do away with import duties on 70.3% of traded goods
- India can every year send 1,800 yoga teachers and Indian chefs to Australia
- Post-study work visa up to 4 years for Indian students
- 1,000 work-cum-holiday visas for young Indian professionals

“AUSTRALIA IS OPENING 100 PER CENT OF ITS TARIFF LINES FOR THE FIRST TIME FOR ANY COUNTRY. IT REFLECTS THE CONFIDENCE AND TRUST BETWEEN THE TWO COUNTRIES”

PIYUSH GOYAL
Commerce and industry minister

“INDIA’S YOUTHFUL POPULATION, ECONOMIC DEMAND, AND GROWTH TRAJECTORY PRESENT UNPARALLELED OPPORTUNITIES FOR AUSTRALIAN EXPORTERS”

DON FARRELL
Australian Trade minister

Significance

- This is the first **Free trade agreement** signed by India with a developed economy after more than a decade.
- The pact is expected to give a big push to bilateral trade. It will eliminate or lower tariffs on a large number of goods.
- It will also **address the non-tariff barriers** such as technical barriers to trade, apart from sanitary and phytosanitary restrictions.

- Since India is not a part of any significant regional trading bloc, this agreement will ensure that it does not lose out on preferential market share and weaken its export competitiveness.
- The FTA with Australia will give a positive signal to other developed countries such as UK, Canada and EU, who are already on the negotiating table for similar pacts with India.
- On the basis of this agreement, both the countries will be able to **increase the resilience of supply chains**, and also contribute to the **stability of the Indo-Pacific region**.
- The deal is also significant for Australia who is in the midst of a protracted trade battle with China.

India-Australia Bilateral Relation: In Brief

India and Australia established diplomatic relations in the pre-Independence period, with the establishment of India Trade Office in Sydney in 1941.

Strategic Relationship

- In 2009, **India and Australia established a 'Strategic Partnership'**, including a Joint Declaration on Security Cooperation.
- This cooperation has been further elevated to **Comprehensive Strategic Partnership (CSP) in 2020**.
- The Australian foreign policy blueprint released in November 2017 sees India in the front rank of Australia's international partnerships.
- In order to pursue the CSP, Foreign and Defence Ministers of both countries agreed to meet in a '2+2' format biennially.

Economic and Trade Relationship

- As part of its efforts to develop strong economic relationship with India, the Australian Government commissioned the India Economic Strategy to 2035 in July 2018.
- This was done to define a pathway for Australia to unlock opportunities offered by Indian Economic growth.
- **Bilateral Trade:**
 - India had a trade deficit of \$8.5 billion with Australia in FY22, with \$8.3 billion worth of exports and \$16.8 billion worth of imports.
 - Total bilateral trade is expected to cross \$45-50 billion in five years from \$ 27.5 billion at present after the free trade deal comes into force.
 - India was the 8th largest trade partner of Australia with trade in goods and services representing 3% share of the total Australian trade in FY 2019-20.

Civil Nuclear Cooperation

- A Civil Nuclear Cooperation Agreement between the two countries was signed in September 2014 during the visit of then PM Tony Abbott to India.
- The agreement provides the framework for substantial new trade in energy between Australia and India.

Defence Cooperation

- During PM Modi's visit to Australia in November 2014, both sides decided to extend defence cooperation to cover research, development and industry engagement.
- Arrangement concerning Mutual Logistics Support (MLSA) and Implementing Arrangement concerning cooperation in Defence Science & Technology were concluded during Virtual Summit held in June 2020.

- India and Australia conduct their bilateral naval exercise 'AUSINDEX' since 2015.
 - In 2018, Indian Air Force participated for the first time in the Exercise Pitch Black in Australia.
 - In October-November 2020, the Australian Navy participated in Malabar Exercises.

Repatriation of Indian Cultural Artifacts

- A number of artifacts have been successfully repatriated to India in recent years. They include:
 - Bronze Idol of Nataraja from Art Gallery of South Australia (AGSA) (2019),
 - Nagaraja stone sculpture (2020),
 - Two Dwarpala stone sculptures (2020).

Indian Community in Australia

- The Indian community in Australia continues to grow in size and importance, with the population of about seven hundred thousand.
- India is one of the top sources of skilled immigrants to Australia.
- The number of Indian students continue to grow with approximately 105,000 students presently studying in Australian universities.
 - After England, India is the second largest migrant group in Australia in 2020.



India Successfully Tests Ballistic Missile Defence Interceptor

- India conducted the first successful flight test of the **Phase-II of Ballistic Missile Defence (BMD) interceptor missile** from the APJ Abdul Kalam Island off the Odisha coast.
- The **long-range interceptor missile, called AD-1**, was successfully tested by DRDO.
- The AD-II, which is capable of neutralising missiles of even higher ranges, is also said to be under development.
- AD-1 is designed for both **low exo-atmospheric and endo-atmospheric interception of long-range ballistic missiles as well as aircraft**.
- It is propelled by a two-stage solid motor and equipped with an indigenously developed advanced control system and a navigation and guidance algorithm.

India's Ballistic Missile Defence (BMD) Programme

- India's BMD is being developed in 2 phase.
- The first phase aims to develop a shield to intercept missile with a range up to 2000 km. 1st phase radar range is up to 600 km.
- The second phase will have to intercept missile with 5000 km range. Radar range of this phase would be 1500 km.

- It aims to provide an air-defence shield from all types of hostile missiles, even the nuclear ones.
- DRDO is developing a two-tier BMD system to provide a multi-layered shield against ballistic missile attacks.
- BMD system consists of advance radar system, Early warning system (also called sensors system), Integrated command and control center and Interceptor missile batteries
- The two-tier system is intended to destroy an incoming missile, at a higher altitude, in the exo-atmosphere and if that miscarries, an endo-atmospheric interception will take place.

- **Prithvi Air Defence (PAD) Missile**
 - This can intercept and destroy missiles at exo-atmospheric altitudes of 50–80 kilometres.
 - It is a two-stage missile based on the Prithvi missile. **Pradyumna Ballistic Missile Interceptor** is going to replace the Prithvi air defence.
- **Advanced Air Defence (AAD) Missile**
 - Also called Ashwin Ballistic Missile Interceptor.
 - The second layer is Advanced Air Defence (AAD) Missile for lower altitude interception.
 - This is designed to knock down hostile missiles in the endo-atmosphere at altitudes of 15-40 kilometres.
 - Akash Surface-to-Air Missiles (SAM) is part of AAD.

Current Status

- The development of anti-ballistic missiles is said to have started by the DRDO around the 2000s in view of the development of ballistic assets by Pakistan and China.
- The phase-1 of the programme is said to have been completed towards the end of 2010s
 - The government, however, has so far refrained from sanctioning its full-scale operational deployment of this system at any vital location.
 - This could be due to the high costs involved, or even strategic calculations that it may provoke Pakistan to go for a larger nuclear arsenal and countermeasures to defeat the BMD system.
- The 2nd phase of this programme focuses on the development of anti-ballistic defence **systems** like the US's Theatre High-Altitude Area Defence system (THAAD), which can neutralise **intermediate-range ballistic missiles**.
 - DRDO had also planned to develop two new ballistic missiles, namely AD-1 and AD-2, in phase 2 of the missile shield development.
 - The AD-1 and AD-2 interceptors can engage intermediate-range ballistic missiles (IRBMs) / intercontinental ballistic missiles (ICBMs).

Other Missiles Boosting India's Defence Capabilities

- India also conducted its first successful **Anti-satellite (ASAT) test**, under **Mission Shakti** in March 2019.
- India is also getting the Russian S-400 Triumf air defence system.
 - S-400 Triumf is one of the world's most advanced air defence systems that can simultaneously track numerous incoming objects and neutralise them.
- Recently, the first deliverable firing unit of Medium-Range Surface-to-Air Missile (MRSAM) system was handed over to Indian Air Force.
 - It provides a point and area air defence for **ground assets** against a wide range of threats.
- With the induction of Indian naval ship Dhruv, **the nuclear missile tracking ship**, Indian joins an elite group of countries like the US, Russia, China, UK and France to have such capability.



Report on Groundwater Extraction

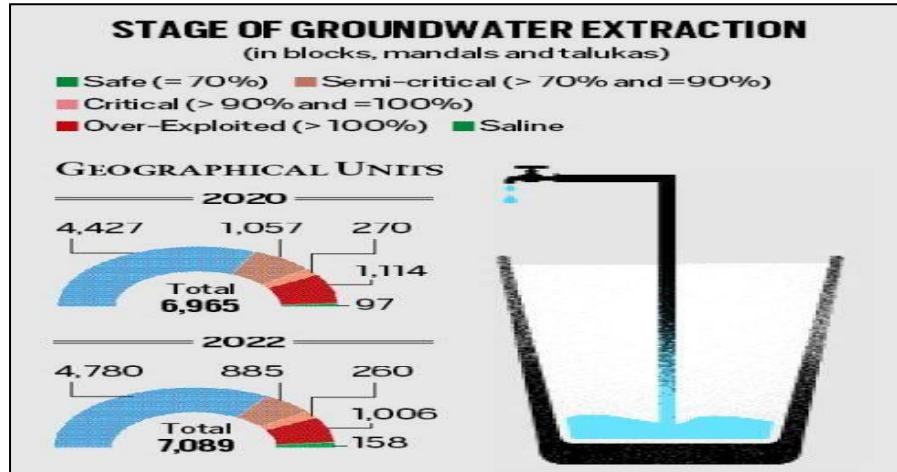
The **Ministry of Jal Shakti** released the National Compilation on Dynamic Ground Water Resources of India, 2022. The assessment was jointly carried out by the Central Ground Water Board (CGWB), States and Union Territories. Previous assessments were carried out in 1980, 1995, 2004, 2009, 2011, 2013, 2017 & 2020.

Key Highlights of This Report

Total annual ground water recharge is 437.60 Billion Cubic Meters (BCM) and annual ground water extraction is 239.16 BCM.

- **Extraction:** The total annual extractable GW resources have also increased by 0.56 bcm.

➤ Annual groundwater (GW) extraction for irrigation, domestic and industrial uses have decreased by about 6 BCM from 2020 to ~239 BCM in 2022.



➤ About 87% of **total annual groundwater extraction** i.e. 208.49 bcm is for **irrigation use**. Only 30.69 bcm (13%) is for domestic and industrial use.

➤ The annual GW extraction has seen a decline **since 2017** when it came down 249 bcm from a record high of 253 bcm in 2013.

- **Recharge:** The report shows the annual GW recharge was assessed at around **438 bcm** in 2022, witnessing an increase by 1.29 bcm as compared to the last assessment (2020). But this was lower than the 447 bcm annual GW recharge assessed in 2013.
- The report also states that the monitoring of the groundwater resources was affected by the Covid-19 outbreak in the country.

About Ground Water

- It is the water found underground in the cracks and spaces in soil, sand and rock.
- It is stored in and moves slowly through geologic formations of soil, sand and rocks called **aquifers**.
- It is responsible for providing up to 40% of freshwater in the world and just 0.62% of the **total water**.
- Worldwide, 2.5 billion people depend solely on GW resources to satisfy their basic daily water needs.

Causes of Groundwater Depletion

- Pumping the water more quickly than it can renew itself.
- A small portion of GW depletion also occurs naturally, due to the change in our climate.
- Inadequate regulation of encourages the exhaustion of GW resources without any penalty.

Effects of Excess Groundwater Extraction

- It will force us to pump water from deeper within the Earth.
- As the depth to water increases, more energy is required to drive the pump. Using the well can become prohibitively expensive.
- GW that is deep often intermingles with saltwater that we shouldn't drink.
- A GW shortage keeps additional water from flowing into lakes, rivers and seas. As a result, large bodies of water will become shallower.
- The less water is available, the less food we have, and we will be faced with the issue of great demand and very little supply.

- The underground (hydrogeological) setting in India can be divided into -
 - **Hard-rock aquifers of peninsular India:** These represent around **65%** of India's overall aquifer surface area, mostly found in central peninsular India.
 - **Alluvial aquifers of the Indo-Gangetic plains:** Found in the Gangetic and Indus plains in Northern India, these have significant storage spaces.
- **GW availability in India:**
 - Out of the 1,123 BCM/year usable water, the share of GW is 433 BCM/year.

Parameter	Unit (Billion Cubic Meter/Year)
Annual water availability	1,869
Usable water	1,123
Surface water	690
Ground water	433

Groundwater Governance In India

- Legal framework in India does not explicitly define GW ownership and rights, as these are still determined by the archaic **Indian Easement Act, 1882**.
- These rights tied to **land ownership rights** exclude a large part of the society and give landowners the liberty to withdraw limitless water.
- The constitution of India confers the jurisdiction of water on the state government, but it does not explicitly state anything about the groundwater.
- The government of India regulates groundwater exploitation in water-stressed states through notification for highly overexploited blocks.
 - It restricts development of new groundwater structures, except those for drinking water.

Steps Taken To Control Groundwater Depletion

- The Central Ground Water Board (CGWB) was formed in 1970 specifically to develop groundwater policies and programs.
 - It was later empowered by the **Environment (Protection) Act in 1986** to form the Central Ground Water Authority (CGWA).
- GW was acknowledged as a **public resource** supporting the 2004 Supreme Court judgement highlighting the '**public trust doctrine**' - GW are so important to the population that making them a matter of private ownership would be unjustified.
- Government of India launched **Jal Shakti Abhiyan**, intended to improve water availability including groundwater conditions in the water stressed blocks of 256 districts in India.
- **Atal Bhujal Yojana scheme** was launched for sustainable management of groundwater, with community participation, in identified over-exploited and water scarce areas.
- **Aquifer Mapping and Management Program** was launched which aims at aquifer mapping and their characterization for preparation of aquifer/area specific groundwater management plan with community participation.

Way forward

- The best way to approach the topic of groundwater depletion and to find a solution is to think on both at personal and government level.
- The pumping of groundwater should be regulated. Laws that are in place for the pumping of groundwater should be stricter and follow specific regulations.
- We must find alternative sources of water. Like we can capture the rainwater, use atmospheric water generation, and use the same water after purifying it.



Conference of the Parties (COP27)

- The 27th session of the Conference of the Parties (COP27) to the United Nations Framework Convention on Climate Change (UNFCCC) was held in Sharm El Sheikh, Egypt.
- COP27 seeks *renewed* solidarity between countries, to deliver on the landmark Paris Agreement adopted in 2015, for people and the planet. It is built on COP26 outcomes to deliver action on tackling climate emergency issues like reducing greenhouse gas (GHG) emissions, building resilience, financing climate action etc.
- It included the issue of loss and damage in its formal main agenda for the 1st time ever.

Key Themes

Adapting to Climate Change	Loss and Damage	Finance
Renewable energy	Net Zero	Biodiversity

“Loss and Damage” Issue

- Impacts of climate change results in unquantifiable loss and damages which include loss of lives and livelihoods, degradation of territory, cultural heritage, ecosystem etc.
- Calculating the “Loss and damage” is difficult as it consists of **economic or non-economic loss**. Economic loss can be calculated like infrastructure cost but non-economic is difficult to assess like loss of biodiversity.
- To compensate for these losses the UN proposed a “loss and damage” **fund** for the vulnerable countries. It mandates the rich countries to pay the vulnerable ones for the losses and new adaptation efforts and is based on the “*polluter pays*” principle.
- It was pushed by blocs like the Alliance of Small Island States (AOSIS) and Least Developed Countries (LDCs) backed by G77.
- US and EU (one of the largest carbon emitters) have resisted this fund fearing spiralling liabilities.

Initiatives

- In 2009, **developed countries agreed to provide US\$ 100 billion** every year from 2020 to help developing nations fight climate change.
- Warsaw International Mechanism for Loss and Damages was set up in 2013 to compensate developing countries.
- Small funding commitments have been made by countries like Denmark and Scotland.

India’s Participation in COP27

- At the COP27 India submitted its **long-term strategy** to achieve low GHG emissions.
- National Museum of Natural History (NMNH), under the Ministry of Environment Forest and Climate Change and UNDP, jointly launched “*In Our LiFetime*” **campaign** at COP 27.

Long-Term Low Emission Development Strategy (LT-LEDS)

- Under the 2015 Paris Agreement, all countries had to submit their LT-LEDS document to the UNFCC by 2020.
- It is a way to showcase how they will implement respective climate action goals.
- So far, only 57 countries (including India) have submitted their document.
 - India is the last of the world’s 5 biggest economies to submit this strategy document.

In Our LiFEtime Campaign

- It aims to encourage youth from around the world between the ages of 18 to 23 years to become message bearers of sustainable lifestyles.
- The campaign gives a global call for **ideas from youth** who are passionate about living environmentally conscious lives.
- The youth will be encouraged to submit their climate actions that contribute to lifestyles for the environment within their capacity.

India's Position At The COP27 Climate Summit

- India is prioritizing a gradual transition to cleaner fuels but does not want a single sector, fuel source, or gas to be singled out for climate action.
 - India's call to "phase down all fossil fuels" has reportedly received support from the European Union.
- On decarbonization, India clarified that its low-carbon development strategy will not come at the cost of *food and energy insecurity or slowdown of economic growth and employment.*
- India expects developed countries to take the lead as "the bulk of both finance and technology transfer is available with them."
- It committed to achieving net zero emissions by 2070.
- Pushed for a new global climate finance target called **New Collective Quantified Goal on Climate Finance (NCQG)** for addressing and adapting to climate-change.
 - It is expected to be finalised by 2024.
 - It will replace the current climate finance goal of \$100 billion annually from developed countries which was set in Copenhagen conference, 2009 (COP-15).

Important COP Meeting

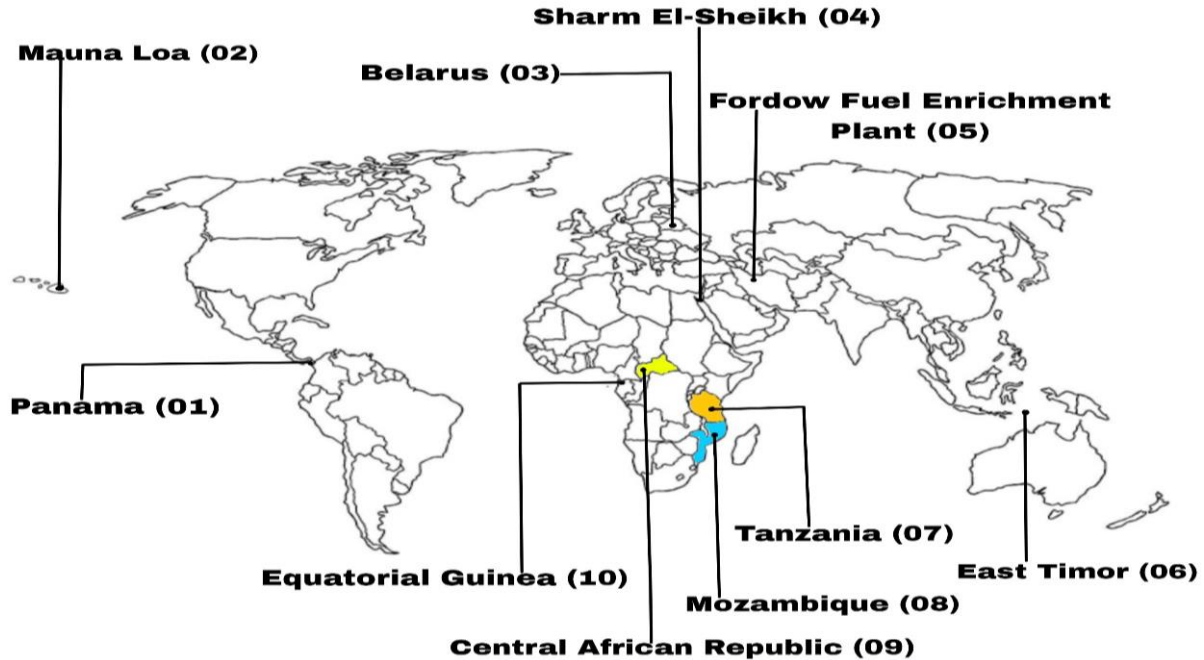
- The COP comes under the UNFCCC which came into force in 1994.
- COP1 - The 1st conference was held in 1995 in Berlin.
- COP3 - It was held in Kyoto, Japan, in 1997, the famous Kyoto Protocol was adopted. It commits the member states to pursue limitation or reduction of greenhouse gas emissions.
- **COP8 - India hosted the 8th COP in 2002 in New Delhi.**
- COP21 - it took place in 2015, in Paris, France. Here countries agreed to work together to limit global warming to well below 2, preferably at 1.5 °C, compared to pre-industrial levels.
- COP 26 - The 26th edition of the COP was held in Glasgow, Scotland in 2021.
- COP28 – It Will Be Held In Dubai, UAE In November 2023.

How The Hosts Of COP Are Decided?

- Regular sessions of the Conference of the Parties (COP) are held every two years according to the Rules of Procedure of the COP.
- At each regular session, the COP decides on the dates and venue of its next regular session.
 - According to the Rules of Procedure, extraordinary sessions of the COP may be held at the request of any Party, provided that it is supported by at least **one third** of the Parties.

MAPS: PLACES IN NEWS

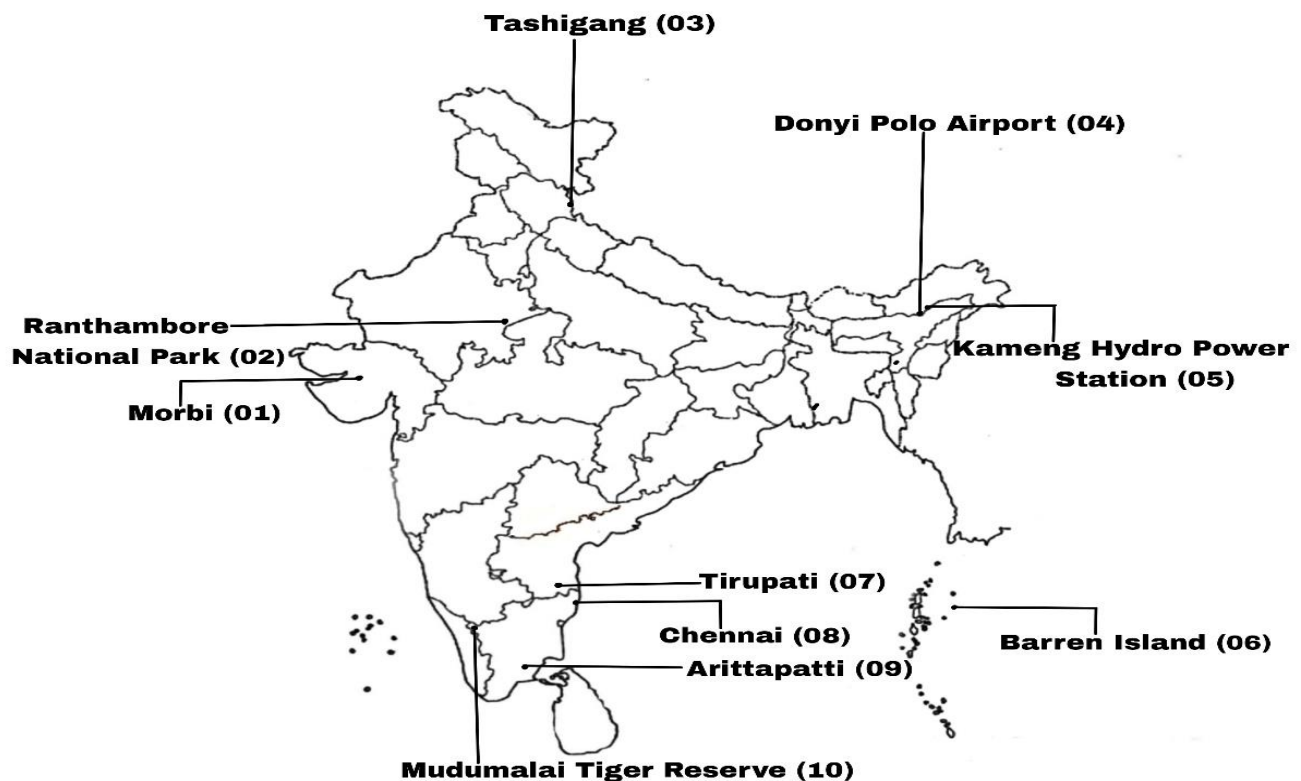
International Places in News



01	Panama	India and Panama held the 2nd foreign office consultations in Panama City. Panama is a country of Central America located on the Isthmus of Panama , the narrow bridge of land that connects North and South America. It shares its boundary with Costa Rica, Colombia, the Caribbean Sea and the Pacific Ocean.
02	Mauna Loa	There has been a recent spike in earthquakes at the Mauna Loa. <u>It is the world's largest subaerial volcano in both mass and volume</u> , located in Hawaii, US. The volcano makes up roughly 51% of Hawaii Island. It rises an astonishing 30,000 feet from the bottom of the sea, a height greater than Mount Everest. The most recent eruption from Mauna Loa was recorded in 1984. So far in history, it is recorded to have erupted 33 times from 1843, once every five years on an average.
03	Belarus	It is a landlocked country in Eastern Europe. It is bordered by Russia, Ukraine, Poland, Lithuania and Latvia . It is part of Eurasian Economic Union (EEU), a 5 members economic union established in 2015, other 4 members are Russia, Kazakhstan, Kyrgyzstan, and Armenia. India was one of the 1 st countries to recognize Belarus as an independent country in 1991 after the break-up of the Soviet Union.
04	Sharm El Sheikh	COP27 took place in Sharm el-Sheikh, Egypt. It is a city on the southern tip of the Sinai Peninsula , on the coastal strip along the Red Sea. It is an attractive location for a number of international peace conferences, gaining Sharm el-Sheikh special recognition from UNESCO as a city of peace.
05	Fordow Fuel Enrichment Plant (FFEP)	Iran has recently begun producing uranium enriched to 60% at Fordow underground facility. FFEP is an Iranian underground uranium enrichment facility. It is the 2 nd Iranian uranium enrichment facility. The 1st is the Pilot Fuel Enrichment Plant at Natanz.
06	East Timor	ASEAN has agreed in principle to admit East Timor as the group's 11 th member. It is also known as Timor-Leste , which is an island country in Southeast Asia. Dili is the capital and largest city. It shares its boundary with the Timor Sea, the Wetar Strait, the Ombai Strait, and western Timor (part of the Indonesian province). Hydrocarbon production

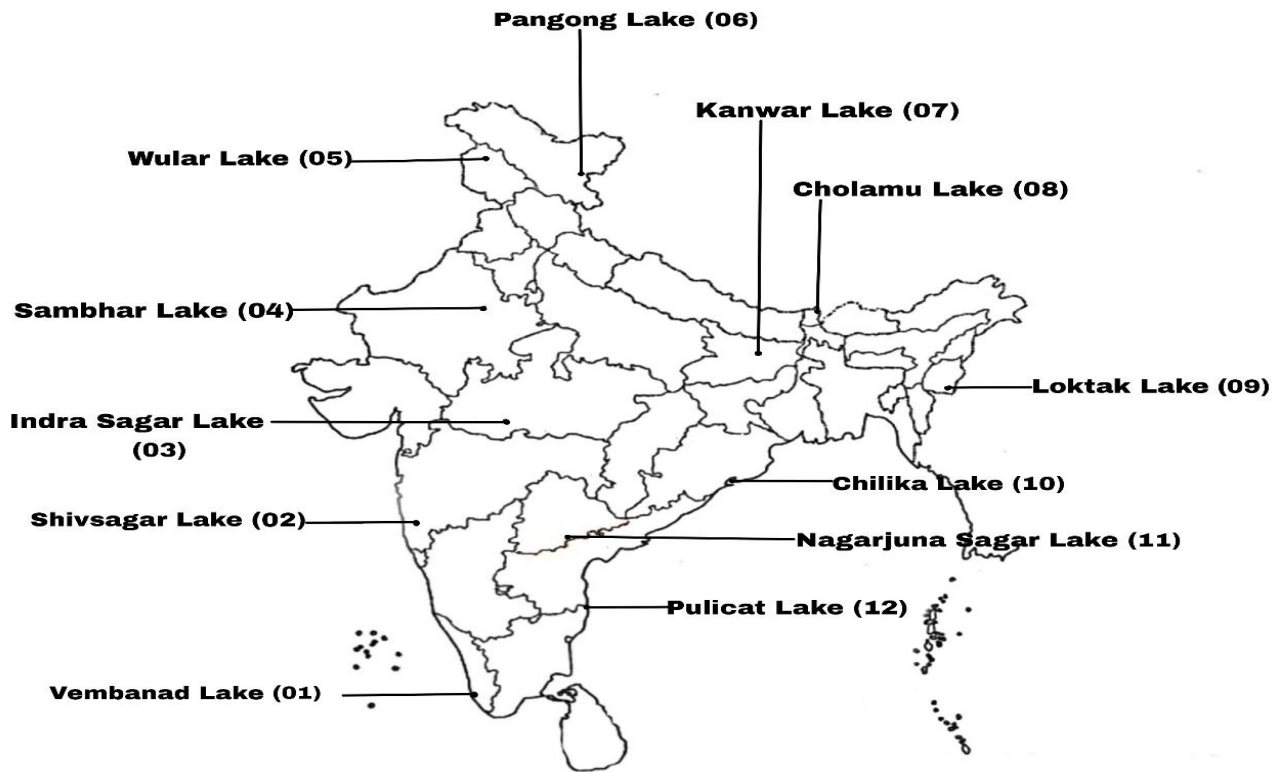
		notably from offshore natural gas deposits is the most important component of East Timor's economy in terms of value.
07	Tanzania	Indian Navy Participated in maiden Trilateral Exercise with Mozambique and Tanzania known as IMT TRILAT . Tanzania is an East African country situated just south of the Equator. Mount Kilimanjaro , Africa's highest mountain, is in north-eastern Tanzania.
08	Mozambique	Mozambique is a country located in south-eastern Africa. It is separated from the Comoros, Mayotte and Madagascar by the Mozambique Channel to the east. The capital and largest city is Maputo .
09	Central African Republic	The Central African Republic seeks Indian investments to mine gold, uranium. It is a landlocked country in Central Africa. The capital, Bangui , is located on the southern border, which is formed by the Ubangi River , a tributary of the Congo River.
10	Equatorial Guinea	Kerala CM has sought PM help to free 16 Indians sailors aboard an oil carrier seized by Equatorial Guinea. It is a country on the west coast of Central Africa. It shares its boundary with only Cameroon, Gabon and the Atlantic Ocean. The capital is Malabo . The <u>Benito River, also known as Mbini River</u> , rises in Gabon and <u>crosses into Equatorial Guinea</u> where it divides the country roughly along the middle, running east to west.

National Places In News



01	Morbi	The Julto Pul suspension bridge , which crossed the Machchhu River collapsed in Morbi, Gujarat. It is situated on the Kathiawar peninsula. Around 70% of India's ceramics are produced in Morbi, and ceramic tiles manufactured here are exported to countries in the Middle East, East Asia, and Africa.
02	Ranthambore Tiger Reserve	The NGT has ordered that Ranthambore Festival, a musical festival proposed to be conducted close to the Ranthambore Tiger Reserve, can be held only if it is permitted by the authorities. It lies in eastern part of Rajasthan, on the junction of Aravali valley and Vindhya. The Rivers <u>Chambal in the South</u> and the <u>Banas</u>

		<u>River in the North</u> bound the tiger reserve. In 1973, it was declared as a Tiger reserve and then a national park in 1980.
03	Tashigang	Recently, Tashigang polling station witnessed 100% voting. It is located in the Buddhist-dominated Lahaul-Spiti district of Himachal Pradesh, in the Sutlej River valley near the India-Tibet border. It is the world's highest polling station.
04	Donyi Polo Airport	The Union Cabinet has approved naming of Hollongi Airport as Donyi Polo Airport. It is a greenfield airport, which will serve Itanagar, Arunachal Pradesh . It is built by the Airports Authority of India and is the 3 rd airport in Arunachal.
05	Kameng Hydro Power Station	The Ministry of Power has built a 600 MW Kameng Hydro Power Station in Arunachal Pradesh. It is a run-of-the river scheme to harness the hydro power of Bichom and Tenga Rivers , both are the tributaries of the river Kameng . River Kameng Originates in Tawang district, and is one of the major tributaries of the Brahmaputra River. It flows through Arunachal Pradesh and Assam.
06	Barren Island	Active volcano in barren Island is being closely watched to check for signs of an eruption. Barren Island is located in the Andaman Sea. The only location in India where the volcano is still active. It is a part of the Union territory of Andaman and Nicobar Islands. The island is largely uninhabited, due to the volcano eruptions that take place here at frequent intervals.
07	Tirupati	Most of the megalithic burial sites in Tirupati, Andhra Pradesh are found to be in a state of neglect. Tirupati was developed by the Pallava kings from the 6 th century onwards. The city became a great Vaishnava center during the time of Ramanujacharya in the 11 th century. The city is famous for the Tirumala Venkateswara Temple. It has been selected as one of the hundred Indian cities to be developed as a smart city under Smart Cities Mission.
08	Chennai	Reliance Industries Ltd (RIL) has been awarded the project to build India's 1 st multimodal logistics park in Chennai, Tamil Nadu. It is referred to as the gateway to South India. In the year 1639 British East India Company ventured into Chennai and chose this place as their headquarters. In October 2017, it was added to the UNESCO Creative Cities Network list for its rich musical tradition .
09	Arittapatti	The Tamil Nadu Government issued a notification declaring the Arittapatti village as a Biodiversity Heritage Site (BHS) . Arittapatti, known for its ecological and historical significance. It houses around 250 species of birds. It has one of the oldest known Tamil Brahmi inscriptions , as well the oldest known Shaivism-related Lakulisha iconography in Tamil Nadu and Jain monuments. It also features various megalithic structures and 2200-year-old rock-cut temples. It consists of a chain of seven barren granite hillocks. The Anaikondan tank, built during the reign of Pandiyan kings in the 16th century is one among them.
10	Mudumalai Tiger Reserve	The Forest Department is coming up with a comprehensive strategy to deal with the spread of the invasive species like Senna spectabilis which spread rapidly in the buffer zone of the Mudumalai Tiger Reserve. It is situated in Tamil Nadu's Nilgiris District, at the crossroads of three states: Karnataka, Kerala, and Tamil Nadu. It lies on the north-western side of the Nilgiri Hills. It is a part of Nilgiri Biosphere Reserve along with Wayanad Wildlife Sanctuary, Bandipur National Park, Mukurthi National Park and Silent Valley. It was designated as a tiger reserve in 2007. The Reserve has tall grasses referred to as Elephant Grass.



S.no	Lake	State /UT	Details
01	Vembanad Lake	Kerala	It is the longest freshwater Lake in India. The lake has its source in four rivers, Meenachil, Achankovil, Pampa and Manimala. It is separated from the Arabian Sea by a narrow barrier island. Nehru Trophy Boat Race , also known Vallam Kali , is held every year in Vembanad Lake. It was designated as Ramsar Site in 2002. It is the 2nd largest Ramsar site in India only after the Sundarbans in West Bengal.
02	Shiv Sagar Lake	Maharashtra	It is an artificial backwater formed when the Koyna Dam was constructed. The lake lies towards the south of Mahabaleshwar. It is a catchment area of Koyna Wildlife Sanctuary . The Koyna River and its tributaries Solishi and Kandati join together to form this huge lake.
03	Indira Sagar Lake	Madhya Pradesh	This lake was created by damming the Narmada River. It is the 2 nd largest artificial freshwater lake in terms of surface area after Shivsagar lake in Maharashtra.
04	Sambhar Lake	Rajasthan	It is the largest inland Salt Lake in India. It is the source of most of Rajasthan's salt production, which accounts for about 9% of India's salt production. It was designated as Ramsar Site in 1990. The lake basin is spread, at the confluence of three districts of Rajasthan namely Jaipur, Nagaur and Ajmer close to the desert fringe line. It receives water from 6 rivers, namely Samaod, Khari, Mantha, Khandela, Medtha, and Roopangarh. It forms part of the desert circuit in the Centre's Swadesh Darshan Scheme.
05	Wular Lake	Jammu and Kashmir	It is the largest freshwater lake in India. The lake basin was formed due to a tectonic activity and is the <u>source of water for River Jhelum</u> . The lake also forms a huge absorption basin for annual floodwater. It plays an

			important part in the hydrographic system of Kashmir Valley. It was designated as Ramsar Site in 1990.
06	Pangong Lake	Ladakh	It is the world's highest saltwater lake, covering an area of 700 sq km. What makes this lake even more notable is the <u>Line of Actual Control passing through it</u> . The lake extends 134 km in length across the Ladakh region of India and Tibet. The easternmost part of the lake is freshwater in character. The westernmost part of the lake is extremely saline in character.
07	Kanwar Lake	Bihar	It is the largest oxbow lake in India and in Asia. Also known as Kabartal Wetland, it covers 2,620 hectares of the Indo-Gangetic plains. It acts as a vital flood buffer for the region besides providing livelihood opportunities to local communities. It is an important stopover along the Central Asian Flyway. It was designated as Ramsar Sites in 2020.
08	Cholamu lake	Sikkim	It is a glacial, fresh-water lake located northeast of the Kangchenjunga range. It is also known as Tso Lhamo lake , is one of the highest lakes in the world , located at an altitude of 6,200 m. It is highest lake in India . It is fed by waters from Zemu glacier, Kangtse glacier or Pahunri glacier, and is the source of the Teesta River.
09	Loktak Lake	Manipur	It is the largest freshwater lake in north east India. The lake is fed by the Manipur River and its tributaries which traverse Myanmar and India. This lake is most famous for its floating swamps, known as phumdis . Phumdis look like small islands that are formed as a collection of vegetation, soil and organic matter. It houses the only <u>floating national park in the world</u> , the <u>Keibul Lamjao National Park</u> , which is the last refuge of the endangered brow-antlered deer or sangai, Manipur's state animal. It was also listed under the Montreux Record in 1993.
10	Chilika Lake	Orissa	The lake has also the pride to be known as the 2nd largest brackish water lagoon in the world after the New Caledonian barrier reef. It was the 1 st designated Ramsar site in India. The large Nalabana Island covering in the lagoon area was declared a bird sanctuary in 1987. Kalijai Temple - Located on an island in the Chilika Lake.
11	Nagarjuna Sagar Lake	Telangana & Andhra Pradesh	The construction of Nagarjuna Sagar dam on the river Krishna created Nagarjuna Sagar Lake. The lake is spread across Guntur district of Andhra Pradesh and Nalgonda district of Telangana. In terms of water storage capacity, it is 2nd only to Indira Sagar reservoir in Madhya Pradesh. Srisailem Wildlife Sanctuary is near the lake.
12	Pulicat Lake	Andhra Pradesh	Pulicat Lagoon is the <u>2nd largest brackish water lagoon in India, after Chilika Lake</u> . It is located on the boundary of Tamil Nadu and Andhra Pradesh. Only 16% of the lagoon is in Tamil Nadu; the rest is in Andhra Pradesh. It is fed by the Araani River, Swarnamukhi river and the Kalangi River. Buckingham canal passes through the lagoon. Sriharikota Island is on the eastern boundary of this lagoon, which separates the lagoon from the Bay of Bengal. It was designated as a Ramsar site in 2002. Flamingo Festival is held every year to promote tourism in Pulicat and Nelapattu. (Nelapattu Bird Sanctuary is located near this lake)

New TV channels Norms

The Centre has approved new guidelines under which it has become obligatory for channels to telecast content of national interest and public importance.

- The Union Cabinet has approved the 'Guidelines for Uplinking and Downlinking of Satellite Television Channels in India, 2022'.
 - **Uplink** refers to a communication channel to transmit messages of electronic nature to a satellite. **Downlinking**, on the other hand, means the communication channel used to receive the electronic messages coming from the satellite.
- The new guidelines have been amended after a gap of 11 years.
- Also, a number of steps have been taken for ease of doing business, as there are more than 890 channels operating in the country now.

Key Highlights Of The New Guidelines

- **Obligation for TV channels**
 - All TV channels in India, including private channels, are required to broadcast at least 30 minutes of content daily on themes of national importance and of social relevance.
 - The Ministry will soon issue a specific advisory on the date it comes into effect, and on the time slots for the telecast of this content.
- **8 Themes Of National Importance And Of Social Relevance**
 - education and spread of literacy;
 - agriculture and rural development;
 - health and family welfare;
 - science and technology;
 - welfare of women;
 - welfare of the weaker sections of the society;
 - protection of environment and of cultural heritage; and
 - national integration.
- **Exemptions Given**
 - The condition applies to all channels, except where it may not be feasible, such as in the case of sports channels, wildlife channels, foreign channels etc.
- **On Uplinking and Downlinking**
 - Uplinking and downlinking shall be subject to clearance and approval by the Ministry of Home Affairs, and wherever considered necessary, of other authorities.
 - The policy mandates that channels uplinking in frequency bands other than C-band must encrypt their signals.
 - Broadcast companies will be allowed to uplink foreign channels from Indian teleports.
 - This would create employment opportunities and make India a teleport hub for other countries.
 - Currently, only 30 channels are uplinked from India out of the total 897 registered with Ministry of Information & Broadcasting (Moi&B).
 - Currently, Singapore is considered the hub of teleport uplinking.

- However, after the new guidelines come into effect, foreign channels are expected to show greater interest in using Indian teleports.

- **Other Aspects**

- The new guidelines allow a news agency to get permission for 5 years instead of the current 1 year.
- The penalty clauses have been rationalised, and separate sets of penalties have been proposed for different types of contraventions as against the uniform penalty that is applicable currently.
- Requirement for seeking permission for the live telecast of events has been done away with; only prior registration of events to be telecast live would be necessary.
- No requirement of prior permission for change of language or conversion of mode of transmission from Standard Definition (SD) to High Definition (HD) or vice versa, only prior intimation would be required

- **Compliance mechanism**

- The MoI&B will monitor the channels for the broadcast of this content.
- In case non-compliance is observed in the Ministry's view, an explanation will be sought.
- If a channel continues to be non-compliant, more steps can be taken based on specific advisories that will be issued from time to time, and on a case-to-case basis.

Rationale Behind The New Guidelines

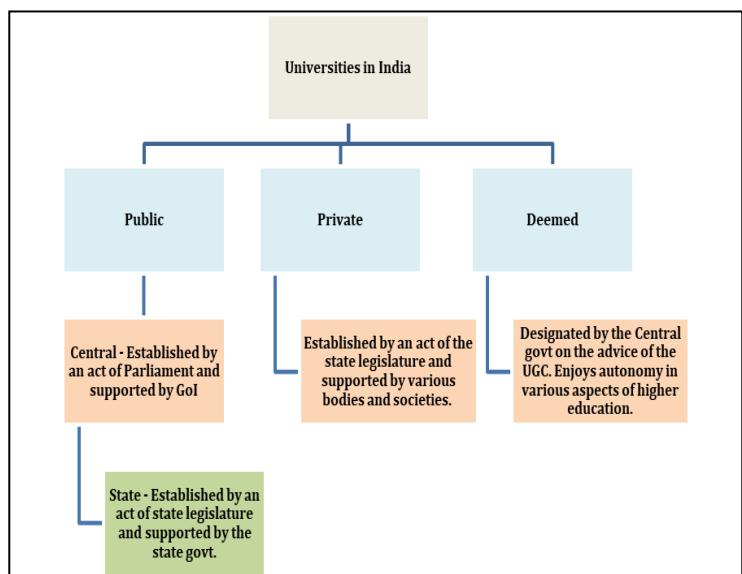
- The government has argued that since airwaves/ frequencies are public property they need to be used in the best interest of the society.
- However, analysts criticize this move by saying the, while airwaves may be public property, broadcasters had paid hefty fees for their use.
- Any binding guidelines that adversely impact their commercial interests may not, therefore, be fair.

Govt. Floats Draft Regulations For Deemed Varsities

- The Government of India has released the draft **UGC (Institutions Deemed to be Universities) Regulations, 2022** that will replace 2019 Regulations
- The draft proposed to remove the requirement that an institute be in operation for at least 20 years before applying for the tag - 'deemed-to-be' universities.
- Amendments to the existing guidelines are required to bring them in line with the **National Education Policy (NEP) 2020**, which calls for the removal of the terms "deemed-to-be university" or "affiliating institution" altogether.

Deemed Universities In India

- Universities in India are recognized by the University Grants Commission (**UGC**), which draws its power from the UGC Act, 1956.
- A deemed university or deemed-to-be-university is an accreditation granted to higher educational institutions in India.
 - According to the Ministry of Education, an Institution of Higher Education that works at a very high standard in a specific field of study might be designated as a 'Deemed-to-be-university' by the Central Government on the advice of the UGC.



- Such institutions enjoy the academic status and privileges of a university. Also, the status of deemed university allows for complete autonomy in terms of courses, curriculum, admissions and fees.
- This provision was introduced to ensure that more higher education institutions achieve university status for all practical purposes.
 - Under the UGC Act, 1956, university status can be obtained by institutes established under state or union laws.
- As of 2021, the UGC lists **126** institutes that have been given deemed university status.
- According to this list, the first institute to be given deemed university status was the Indian Institute of Science in 1958 and Tamil Nadu has the most deemed universities (28).

Salient Features Of Draft UGC (Institutions Deemed To Be Universities) Regulations, 2022

- The governance structure of the deemed universities will be similar to that of the Central Universities.
- Making multi-disciplinary institutions or a cluster of them, with a minimum of five departments eligible to apply for the deemed university status.
- Under the existing regulations, the **20-year condition to get the deemed university status is waived only** in cases where applicants can establish that they will address the strategic needs of the country, engaged in preservation of cultural heritage, etc.
 - Presently, such applicants are granted deemed status under '**De Novo**' status.
 - De-Novo Deemed University is an institution which will undertake study and research in unique and emerging areas of knowledge that are not offered by any existing institution.
 - The draft regulations also envisage replacing the term 'De Novo' with '**Distinct institution**'.
- The **eligibility criteria** will be National Assessment and Accreditation Council (NAAC) 'A' grade with at least a 3.01 CGPA for three consecutive cycles or National Board of Accreditation (NBA) accreditation for two third of eligible programmes
- A proposal has been made to simplify the process of sanctioning off-campus centres of deemed universities.
 - The approval for off-campus centres will be granted by the UGC. Earlier this approval was given by the Ministry of Education.
- Deemed to be universities will also be eligible to start off-shore campus centres as per UGC regulations on the subject.
- The deemed universities should maintain transparency in fee policy keeping non-profiteering or non-commercial aspects in view.
- Such universities may implement the reservation policy in admissions/recruitment as per the law and may offer online/distance courses/degrees in accordance with the UGC Regulations.
- Government or UGC can conduct enquiry or inspection on complaints in matters of academics, administration and finance or any matter connected with the functioning of such universities.
- In case of violations of the regulations, graded penalties have been introduced.

Mother Tongue Survey of India

The Ministry of Home Affairs (MHA) has completed the Mother Tongue Survey of India (MTSI) with field videography of the country's 576 languages.

Mother Tongue Survey of India (MTSI)

- It is a project that surveys the mother tongues, which are returned consistently across two and more Census decades.
- It also documents the linguistic features of the selected languages.

- The National Informatics Centre (NIC) and the National Film Development Corporation (NFDC) will be documenting and preserving the linguistic data of the surveyed mother tongues in audio-video files.

Number of mother tongues spoken in India

- According to the 2011 linguistic census data released in 2018, there are more than 19,500 languages and dialects spoken as mother tongues in India.
- These 19,500 languages were further grouped into **121 categories** of mother tongue after linguistic scrutiny and rationalising.
- According to 2011 linguistic census data, **Hindi is the most spoken mother tongue** by 52.8 crore people of the country, accounting for 43.6% of the population.
- Following that, 9.7 crore people or 8% of the population spoke **Bengali, making it the country's second most popular mother tongue.**
 - It should be noted that mother tongue is a designation given to a language by the respondent of the survey.
 - It need not be identical with the actual linguistic medium.



Mother Tongue In Education

- In September 2022, President Murmu emphasised that talent development in science, literature and social sciences can be more effective if taught in one's mother tongue.
- In July 2022, Union Home Minister said that pursuing education in a language other than one's mother tongue prevented 95% of Indians from achieving their true potential.
- **National Education Policy (NEP), 2020**, also aims to promote mother tongue and regional languages.
- The new **National Curriculum Framework (NCF)** for the foundational stages (ages 3 to 8) of education has recommended that mother tongue should be the primary medium of instruction in schools for children up to eight years of age.

Linguistic Survey of India (LSI)

- LSI is a regular research activity in the country since the 6th Five Year Plan.
- The primary objective of the present Linguistic Survey of India is to present an updated linguistic scenario.
- It further aims to provide necessary inputs to the social/educational planners in respective States for their planning to attain the envisaged goals.

{For more about National Curriculum Framework (NCF), refer The Recitals-October 2022}

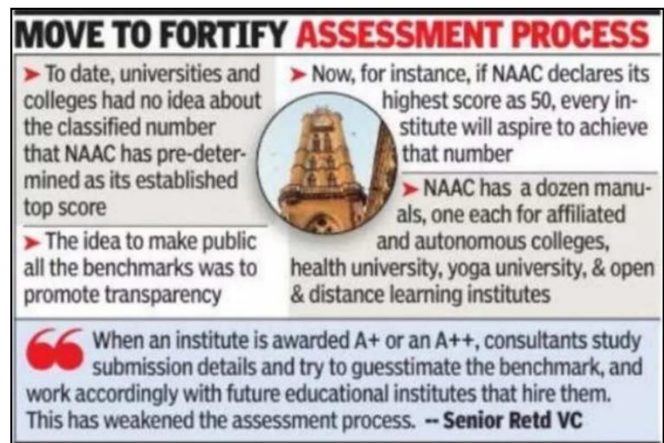
NAAC To Divulge Secret Scores For College Grade Benchmarks

- The National Assessment and Accreditation Council (NAAC) has decided to open up its secret ledger of maximum scores it awards to colleges.
- It will, for the very first time, declare the highest marks, called as **benchmarks** in NAAC terminology, that it has set aside for each of the parameters it grades colleges on.
- For any college to receive accreditation, it is asked several questions on the basis of faculty, facilities, academic and administrative processes, like the number of PhD faculty, students enrolled, number of computers, books in the library, etc.
 - For each question asked, there is a top score that was a well-kept secret for years.
- But now, NAAC will reveal that score, thus allowing institutes to push the pedal and aim for higher numbers.

MOVE TO FORTIFY ASSESSMENT PROCESS

> To date, universities and colleges had no idea about the classified number that NAAC has pre-determined as its established top score
 > Now, for instance, if NAAC declares its highest score as 50, every institute will aspire to achieve that number
 > The idea to make public all the benchmarks was to promote transparency
 > NAAC has a dozen manuals, one each for affiliated and autonomous colleges, health university, yoga university, & open & distance learning institutes

“When an institute is awarded A+ or an A++, consultants study submission details and try to guesstimate the benchmark, and work accordingly with future educational institutes that hire them. This has weakened the assessment process. — Senior Retd VC



About National Assessment and Accreditation Council (NAAC)

- NAAC is an autonomous body established by the University Grants Commission (UGC).

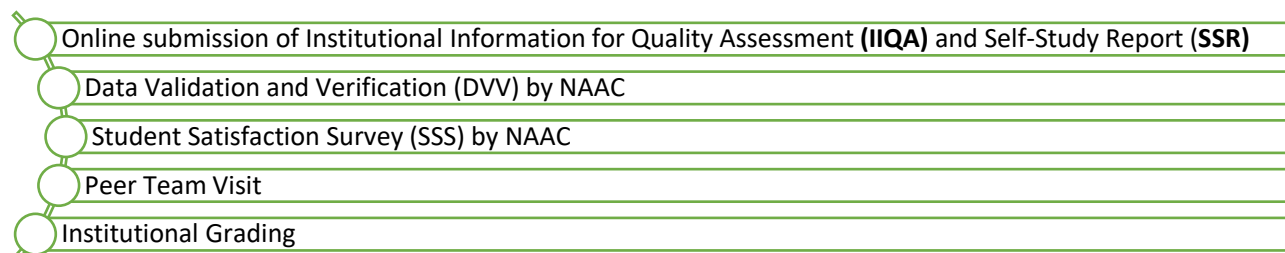
- It was established in **1994** on the basis of recommendations made under the **National Education Policy (1986)**.
- It is registered under the Karnataka Societies Registration Act of 1960.
- **Vision:** *To make quality the defining element of higher education in India through a combination of self and external quality evaluation, promotion and sustenance initiatives.*
- **Headquarters:** Bengaluru

Objectives of NAAC

- To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programmes or projects;
- To stimulate the academic environment for promotion of quality of teaching-learning and research in higher education institutions;
- To encourage self-evaluation, accountability, autonomy and innovations in higher education;
- To undertake quality-related research studies, consultancy and training programmes

- **Assessment:** Performance evaluation of an institution or its units based on certain established criteria.
- **Accreditation:** Certification of quality for a fixed period, which in the case of NAAC is five years.
 - UGC through a gazette notification in January 2013, has made it mandatory for Higher Educational Institutions (HEIs) to undergo accreditation.

Accreditation Process: The process of Assessment and Accreditation broadly consists of –



Benefits of Being NAAC-Accredited

- Through a multi-layered process steered by the NAAC, a higher education institution gets to know whether it meets certain standards of quality set by the evaluator in terms of curriculum, faculty, infrastructure, research and financial well-being among others.
- Based on these parameters, the **NAAC gives institutions grades ranging from A++ to C**. If an institution is graded D, it means it is not accredited.
- Apart from recognition, it also helps institutions attract capital as funding agencies look for objective data for performance funding.
- It helps an institution know its strengths, weaknesses, and opportunities
- NAAC accreditation helps students going for higher education abroad as many global higher education authorities insist on recognition and accreditation of the institution where the student has studied.

New PhD Regulations

- UGC has notified new regulations on PhD (Doctor of Philosophy) degrees called "UGC (Minimum Standards and Procedures for Award of PhD Degree) Regulations, 2022".
- These rules will replace the rules notified in 2016.
 - The new regulation has introduced a set of sweeping changes in eligibility criteria, admission procedure and evaluation methods governing doctoral programmes in college and universities.

Key Highlights

• Eligibility Criteria For Admissions

- Anyone with a four-year/eight-semester Bachelor's programme degree with a minimum 75% marks in aggregate or its equivalent grade will be eligible for a PhD.

- So far, a Master's degree with at least 55% marks in aggregate was mandatory for doctoral aspirants.

- Many universities also insisted on using M.Phil as the gateway.

- Those joining PhD programmes after a four-year UG programme can do so after a one-year Master's degree.
- Graduates with conventional three-year UG degrees need to have completed two-year Master's degrees.

- **M.Phil programme to be discontinued:** However, new rules will have no bearing on those holding or pursuing M.Phil degrees currently.

• Mandatory requirement of publishing research papers has been scrapped

- The mandatory requirement of publishing research papers in refereed (Peer-reviewed) journals or presenting in conferences has been scrapped.
- Part-time PhDs have been launched for working professionals.
 - Eligibility conditions are the same for both full-time and part-time candidates.
 - Their PhD work will be assessed in the same way as is done for the full-time PhD students.
 - However, in addition to meeting the regular criteria, the part-time PhD candidates will also have to produce a No-Objection Certificate (NOC) from their employer.

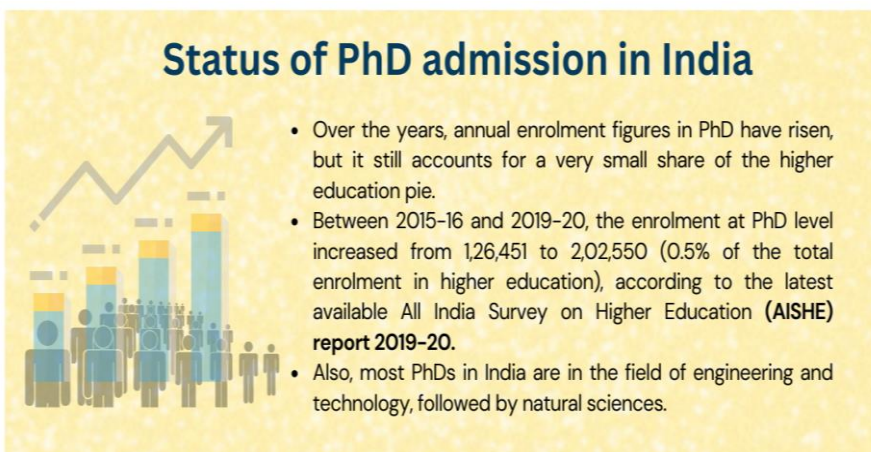
- **Relaxation for EWS candidate:** Apart from reserved category applicants, those falling under the EWS bracket will also be granted 5% relaxations.

- **No major changes in the procedure for admissions:** As was the norm so far, universities and colleges will be free to admit students through the NET/JRF qualification route as well as entrance exams at the level of the institutions.

- The proposed common entrance test for PhDs has been left out of the new Regulations.

• Functioning of research supervisors

- Eligible professors, associate professors, and assistant professors can continue to guide up to eight, six, and four PhD candidates respectively at any given time, as earlier.
- However, earlier, professors, associate professors, and assistant professors could also guide three, two, and one M.Phil scholars respectively over and above their PhD candidates. Now they cannot do so as the MPhil programme has been scrapped



- The new Rules also bar faculty members with less than 3 years of service left before superannuation from taking new research scholars under their supervision.
- **Quality of doctoral education and research**
 - It has introduced a new requirement for **PhD scholars**, irrespective of discipline, to train in teaching / education/ pedagogy/ writing related to their chosen subject during their doctoral period.
 - They may also be assigned four to six hours per week of teaching/ research assistantship for conducting tutorial or laboratory work and evaluations.
 - Earlier, to ensure the quality of their output, research scholars had to appear before a **Research Advisory Committee** once in six months and present the progress of their work for evaluation and further guidance.
 - They will now have to do this every semester.

Why Has The Requirement To Publish Research Papers In Peer-Reviewed Journals Before The Submission Of A Phd Thesis Been Scrapped?

- The UGC has been grappling with this issue for quite some time, particularly with the proliferation of so-called predatory journals, where many doctoral scholars were found publishing their research in return for a fee.
- In 2019, UGC panel had recommended that publication of research material in such journals or presentations in conferences organised by their publishers should **not** be considered for academic credit in any form.
- As per experts, by removing the mandatory clause, the commission is trying to ease some pressure of scholars so that they can focus more on high-quality research.

Population Criteria For New Eklavya School

- The Tribal Affairs Ministry intends to go ahead with its plan to build new **Eklavya Model Residential Schools (EMRS)** on 15 acres of land in all sub-districts which have Scheduled Tribe communities of more than 20,000 people, who make up at least 50% of their total population.
- This is despite a **Parliamentary panel saying that this criteria is “impractical”**.

About Eklavya Model Residential School (EMRS)

- EMRS started in **1997-98** with the aim of imparting quality education to children belonging to Scheduled Tribes (ST) in remote areas.
- It enables students to avail of opportunities in high and professional educational courses and get employment in various sectors.
- Each school has a **capacity of 480 students, catering to students from Class VI to XII**.
- These are being set up by grants provided under **Article 275(1) of the Constitution**.
- Nodal Ministry – Ministry of Tribal Affairs

Background:

- Earlier this year, the **Parliamentary Standing Committee on Social Justice and Empowerment** recommended immediate review of criteria of having 15 acres of continuous land.
- The committee had pointed out that in many areas where the population criteria is met, **suitable land is not available for constructing the schools and even if the land is available, the legal acquisition of the land is taking time**.
 - In hilly areas, Left-Wing Extremism-affected areas, and North-East India, finding a contiguous piece of land measuring 15-acres, as recommended, is becoming one of the most difficult tasks.
- This criterion would also deprive scattered ST populations of the benefit of the Eklavya schools, the panel said.
- However, the **Tribal Affairs Ministry** said that these criteria were decided and finalised by the Union Cabinet and the ministry intends to go ahead with it.
- In keeping with the government’s intent, President Murmu laid the foundation stones for seven more such Eklavya schools in Jharkhand on **Janjatiya Gaurav Divas (November 15)**.

- Tribal Affairs Ministry in May , 2021, signed an MoU with Microsoft to help Tribal schools such as EMRS and Ashram Schools have digital transformation
- National Education Society for Tribal Students (**NESTS**), an autonomous Society has been set up under the Ministry of Tribal Affairs to establish, endow, maintain, control, and manage the schools and to do all acts and things necessary for or conducive to the promotion of such schools. The NESTS shall function through an Executive Committee under the Chairmanship of Secretary, Tribal Affairs.
- **Eklavya Model Day Boarding Schools (EMDBS) –**
 - Wherever density of ST population is higher in identified Sub-Districts (90% or more), it is proposed to set up Eklavya Model Day Boarding School (EMDBS) on an experimental basis.
 - This is aimed at providing additional scope for ST Students seeking to avail school education without residential facility.

Latest Changes Made By The Ministry

- In order to give further impetus to EMRS, it has been decided that by the year 2022, every block with more than 50% ST population and at least 20,000 tribal persons, will have an EMRS.
- Eklavya schools will be on par with Navodaya Vidyalaya and will have special facilities for preserving local art and culture besides providing training in sports and skill development.
- Across the country, as per census 2011 figures, there are 564 such sub-districts out of which there is an EMRS in 102 sub-districts. Thus, 462 new schools have to be opened by the year 2022.

PGI 2020-21

The Department of School Education and Literacy, Ministry of Education released the Performance Grading Index (PGI) for States/UTs for 2020-21.

About Performance Grading Index (PGI)

- The PGI is an annual publication, released by the **Ministry of Education**.
- It assesses states' performance in school education based on data drawn from several sources:

Unified District Information System
for Education Plus

National Achievement Survey


Mid-Day Meal

- The prime objective of PGI is to promote evidence-based policymaking and highlight course correction to ensure quality education for all.
- The Education Ministry released the first PGI in 2019 for the reference year 2017-18.

What Does The Grading System Reflect?

- The PGI grading system has **10 levels**.
- Level I indicates top-notch performance and a score between 951 and 1,000 points.
- Level II indicates a score between 901 and 950.
- The lowest is Level X, and it means a score between 0 and 550 points.
- The ultimate aim of PGI is to propel States and UTs towards

Grading System



- States are scored on a **total of 1,000 points across 70 parameters**, which are grouped under **five broad categories**
 - **Access** (e.g., enrolment ratio, transition rate and retention rate);
 - **Governance process;**
 - **Infrastructure & Facilities;**
 - **Equity** (difference in performance between scheduled caste students and general category students) and
 - **Learning outcomes** (average score in mathematics, science, languages and social science).

undertaking multi-pronged interventions that will bring about the much-desired optimal education outcomes covering all dimensions.

About PGI 2020-21

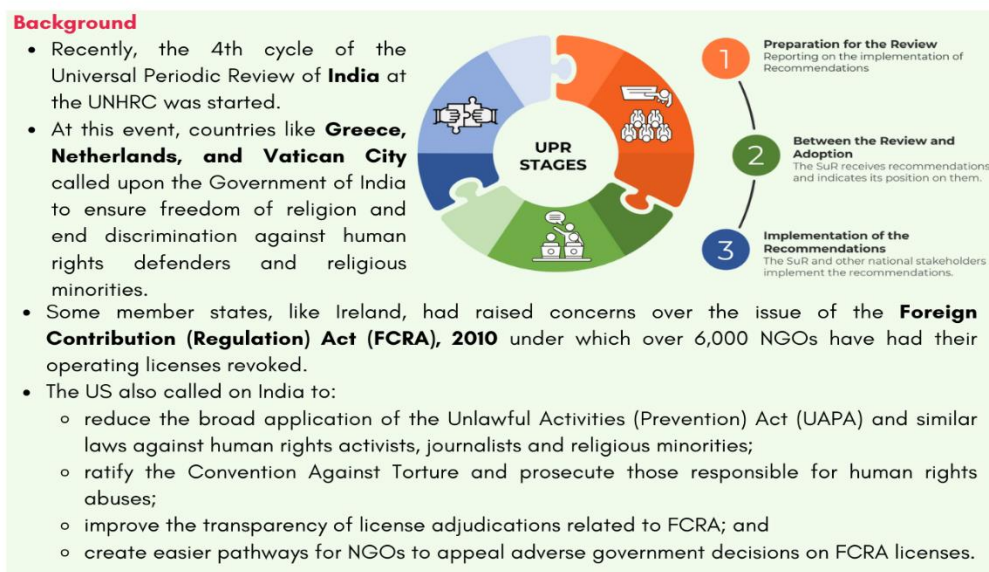
- No state/UT managed to attain the highest achievable grade of level I.
- **Punjab** shared top honours with **Kerala** and **Maharashtra** as all three states have scored 928 out of total of 1,000 points to make it to **Level II**
- Apart from the above three states, four new state/ UTs have been listed in Level II for the first time. These are **Gujarat, Chandigarh, Rajasthan** and **Andhra Pradesh**.
- The newly formed UT viz., **Ladakh** has made significant improvement in PGI from Level 8 to Level 4 in 2020-21 or improved its score by 299 points in 2020-21 as compared to 2019-20 resulting into the highest ever improvement in a single year.

Universal Periodic Review (UPR)

Indian government at the Universal Periodic Review (UPR) Working Group meeting at the UN Human Rights Council (UNHRC) in Geneva asserted that activities of civil society and human rights groups must conform to local laws.

Universal Periodic Review (UPR)

- The UPR is a process through which all UN Member States are provided the opportunity to review the human rights records of all other Member States.
- At the same time, each State under review has the opportunity to report on human rights conditions within their own borders.
 - This includes actions that have been taken to address concerns detailed by other States.
- UPR sessions take place in Geneva 3 times a year under the auspices of UNHRC & are orchestrated by the Office of the High Commissioner for Human Rights.
- Individual countries are scheduled for review every **four and a half years.**
- Outcome of the review consists of the questions, comments and recommendations made by States to the country under review, as well as the responses by the reviewed State.
 - State has the primary responsibility to implement the recommendations contained in the final outcome.
 - However, UNHRC will decide on the measures it would need to take in case of persistent non-cooperation by a State with the UPR.



India's Stand at UPR

- **Regarding civil societies**
 - Actions were taken against some organisations due to their illegal practices.
 - This includes mala fide re-routing of money and wilful and continuing violations of extant legal provisions, foreign exchange management rules and tax law of India.
 - Civil society organisations are permitted to operate in India, but they must do so in accordance with law.
- **India's FCRA is robust and at par with international standards**
 - The legal provisions of FCRA are similar to regulations in other democratic countries and that the process of registration under the Act is transparent and technology driven.
- **On Jammu & Kashmir**
 - India also firmly told Pakistan that the entire UT of Jammu & Kashmir and Ladakh was and would always be its integral and inalienable part.
 - It also slammed Pakistan for raking up the Kashmir issue at the forum.
- **On Citizenship Amendment Act 2019 (CAA, 2019)**
 - India told the UNHRC that its Citizenship Amendment Act 2019 is a limited and focused legislation.
 - CAA fast-tracks citizenship for persecuted minority groups in Pakistan, Bangladesh and Afghanistan.
 - The six minority groups that have been specifically identified are Hindus, Jains, Sikhs, Buddhists, Christians and Parsis.
 - It reaffirms the country's commitment to the welfare of persecuted minorities and takes into account historical context and the current ground realities.
 - The legislation is similar to laws that exist elsewhere in defining specific criteria for citizenship pathways.
 - It will help reduce their statelessness and would enable beneficiaries to have a more secured and dignified life.

AAP And Congress Promise A Return To Old Pension Scheme

With elections for the 182-member Gujarat Assembly to be held in December, the Aam Aadmi Party (AAP) and Congress are attempting to halt the BJP's 27-year rule in the state with a range of poll promises. One such promise is the restoration of the Old Pension Scheme (OPS).

What Were The Concerns With OPS?

- The pension liability remained unfunded — that is, **there was no corpus specifically for pension**, which would grow continuously and could be dipped into for payments.
- The Government of India budget provided for pensions every year; there was no clear plan on how to pay year after year in the future.
- The 'pay-as-you-go' scheme created **inter-generational equity issues** — meaning the present generation had to bear the continuously rising burden of pensioners.

OLD PENSION SCHEME



- OPS offers pensions to government employees on the basis of their last drawn salary. **50% of the last drawn salary.**
- The attraction of the OPS lay in its promise of an assured or 'defined' benefit to the retiree. It was hence described as a '**Defined Benefit Scheme**'.
- Like the salaries of government employees, *the monthly pay-outs of pensioners also increased with hikes in dearness allowance (DA) announced by the government for serving employees.*
- The OPS was discontinued by the Central government in April 2004.

About New Pension Scheme (NPS)

- As a substitute of OPS, the NPS was introduced by the Central government in **April, 2004**.
- This pension programme is open to employees from the **public, private** and even the **unorganised sectors** except those from the armed forces.
- The scheme encourages people to invest in a pension account at regular intervals during the course of their employment.
- After retirement, the subscribers can take out a **certain percentage of the corpus**.
 - The beneficiary receives the remaining amount as a monthly pension, post retirement.
- **Nodal agency:** Pension Fund Regulatory and Development Authority (PFRDA)
- **Eligibility:** Any Indian citizen **between 18-60 years** can join NPS. **NRIs** are also eligible to apply.
- **Permanent Retirement Account Number (PRAN):** Every NPS subscriber is issued a card with 12-digit unique number called Permanent Retirement Account Number or PRAN.
- **Minimum contribution in NPS:** The subscriber has to contribute a minimum of **Rs. 6,000 in a financial year**. If the subscriber fails to contribute the minimum amount, his/her account is frozen by the PFRDA.

Who Manages The Money Invested In NPS?

- The money invested in NPS is managed by PFRDA-registered Pension Fund Managers.
- At the moment, there are eight pension fund managers.

Difference Between NPS and OPS

- In OPS, **the pension amount is constant**.
- On the other hand, the National Pension Scheme is an investment cum pension scheme.
- NPS contributions are invested in market-linked securities, i.e., equity and debt instruments.
 - Therefore, **NPS doesn't guarantee returns**.
- However, the investments, in NPS, are volatile and hence have the potential to generate significant returns.

World @ 8 billion

- The United Nations Population Fund said that the world's population reached 8 billion on November 15, 2022.
- This unprecedented growth is due to the gradual increase in human lifespan owing to improvements in public health, nutrition, personal hygiene and medicine.
- It is also the result of high and persistent levels of fertility in some countries.

United Nations Population Fund (UNFPA)

- UNFPA, formerly (1969–87) known as United Nations Fund for Population Activities, is trust fund under the jurisdiction of the United Nations Development Programme (UNDP).
- Established in 1969, the UNFPA is the largest international source of assistance for population programs.
- It is the leading UN organization for the implementation of the 1994 Programme of Action of the International Conference on Population and Development.
- In other words, UNFPA is the United Nations sexual and reproductive health agency.
 - Its mission is to deliver a world where every pregnancy is wanted, every childbirth is safe and every young person's potential is fulfilled.

UNFPA Assistance

- UNFPA funds assistance, research, and advocacy programs in three major areas:
 - reproductive health, including family planning, safe motherhood, and the prevention and treatment of sexually transmitted diseases,
 - the population problems of developed and developing countries and possible strategies for addressing them,
 - issues related to the status of women, including the gender gap in education.
- UNFPA assistance programs are undertaken only in response to government requests.

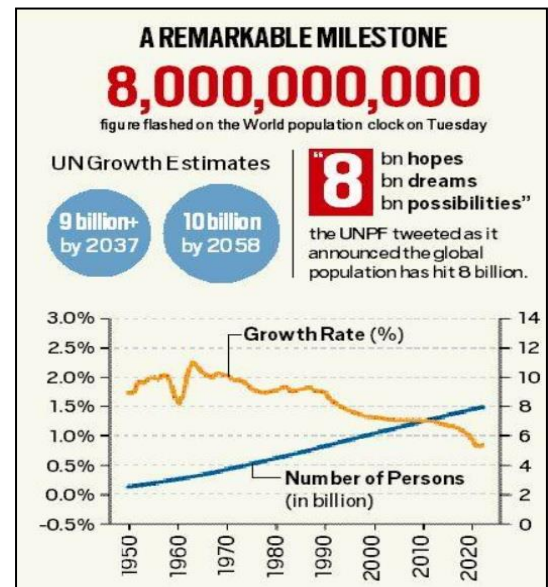
Key Highlights

• Overall Growth Rate Of Population Is Slowing

- The UN said while it took the global population 12 years to grow from 7 billion to 8 billion.
- However, it will take approximately 15 years — until 2037 — for it to reach 9 billion. This is a sign that overall growth rate of global population is slowing.

• Growth Trend

- Falling mortality rate first led to a spectacular population growth, peaking at 2.1% per year between 1962 and 1965.
- Between 1950 and 1987, world population doubled from 2.5 billion to 5 billion.
- But as fewer children were born generation to generation, growth started to slow.



- **As of 2022 More than half the world's population lives in Asia:** China and India being the two most populous countries with more than 1.4 billion people each.
 - World Population Prospects 2022, released in July 2022, put India's population estimate at 1.412 billion this year, compared with China's 1.426 billion.
 - It also said that India is set to become the world's most populous country next year by surpassing China.
- **World population to peak in 2080s:** The UNFPA projects world population to peak at 10.4 billion in the 2080s and stay there until the end of the century.
 - As per the current trend, India is likely to peak in 2048 at 1.7 billion population and then start declining to 1.1 billion at the end of the century.
- **International migration is now the driver of growth in many countries**, with 281 million people living outside their country of birth in 2020.
 - All South Asian nations — India, Pakistan, Nepal, Bangladesh and Sri Lanka — have seen high levels of emigration in recent years.
- **Observations regarding India**
 - While India's population growth is stabilising, it is still growing at 0.7% per year and is set to surpass China in 2023 as the world's most populous country.
 - It noted that **India's fertility rate has hit 2.1 births per woman** — replacement-level fertility — and is falling.
 - Replacement Rate – is the required number of births per woman in a country required to keep the population size stable.

- **We need to address the issue of growing inequality**
 - A handful of billionaires control as much wealth as the poorest half of the world.
 - The top one per cent globally pockets one fifth of the world's income.
 - People in the richest countries can expect to live up to 30 years longer than those in the poorest.
 - The UN said that unless we bridge the yawning chasm between the global haves and have-nots, we are setting ourselves up for an 8-billion-strong world filled with tensions and mistrust, crisis and conflict.

MHA Underlines Need To Update NPR

- The Home ministry in its latest annual report has underlined the need to update the National Population Register (NPR) database across the country, except Assam.
- This is to incorporate the changes due to birth, death, and migration for which demographic and other particulars of each family and individual are to be collected.



NATIONAL POPULATION REGISTER (NPR)

- The NPR is a register of **usual residents of the country**. It is mandatory for every usual resident of India to register in the NPR.
 - According to the Citizenship (Registration of Citizens and issue of National Identity Cards) Rules, 2003, a usual resident is:
 - a person **who has resided** in a local area for the past 6 months or more; or
 - a person **who intends to reside** in that area for the next 6 months or more.
 - It includes both **Indian citizens as well as a foreign citizen**.
- The first National Population Register was prepared in 2010 and updating this data was done during 2015 by conducting door to door survey.
 - The next National Population Register was to be held along with the Census 2021.
 - Due to the outbreak of Covid-19 pandemic, the work of NPR updation and other related field activities got postponed.
- NPR is conducted by the Office of the Registrar General of India (RGI) under the Home Ministry.



Legal basis of NPR

- NPR is prepared under Rule 3 of the **Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003**.
 - These rules were framed under the **Citizenship Act, 1955**.
- The NPR is different from the National Register of Citizens (NRC) which excludes the foreign citizens.
 - **NRC is a register containing details of Indian Citizens living in India and outside India.**



Details required for NPR

- The demographic details are required for every usual resident on 21 points.
- This includes 'date and place of birth of parents', last place of residence, Permanent Account Number (PAN), Aadhar (on a voluntary basis), Voter ID card number, Driving License Number and Mobile Number.
- In the NPR done in 2010, the data was collected on the 15 points and it did not include 'date and place of birth of parents' and last place of residence.

Key Highlights Of The Report

- **Three-pronged approach for updating the NPR database**
 - self-updating wherein residents will update their own data after following some authentication protocols on a web portal.
 - updating of NPR data in paper format, and

- mobile mode.
- The demographic and other particulars of each family and individual are to be collected/updated during the exercise.
- No documents or biometrics will be collected during the updation.
- **Citizenship certificates granted by authorities**
 - From April 1, 2021, to December 31, 2021, a total of 1,414 citizenship certificates have been granted by all authorities.
 - As per the report, the Central government has delegated its powers to grant Indian citizenship with respect to certain categories to *Collectors of 29 districts and Home Secretaries of nine states.*
 - This includes powers to grant citizenship by registration or naturalisation with respect to members of Hindu, Sikh, Jain, Buddhist, Christian or Parsi communities from Pakistan, Bangladesh and Afghanistan.
- **Long-term visas issued**
 - Home Ministry granted long-term visas to 2,439 members of minority communities from the three neighbouring countries (Pakistan, Afghanistan and Bangladesh) in the last one year.
 - Long term visa is a precursor to Indian citizenship.
- **CAA not mentioned**
 - The report, a compilation of all the achievements and functions of the Ministry, however, does not mention the Citizenship Amendment Act (CAA), 2019.
 - CAA fast-tracks the citizenship of six non-Muslim undocumented communities from Pakistan, Afghanistan and Bangladesh who entered India before December 31, 2014,
 - This legislation is yet to be implemented as the rules have not been framed yet.

{For more about NCR, refer The Recitals-October 22}

NCPDR Launches 'GHAR'


- On World Children’s Day (November 20), the National Commission for Protection of Child Rights (NCPDR) launched a web portal - “**GHAR - Go Home and Re-Unite.**”
- The portal will be a platform for digital tracking and monitoring of children from every district to smoothen the process of their repatriation and restoration.
- NCPDR also launched the -
 - **Training Modules** for the Child Welfare Committees (CWCs) for implementing the amendments brought in the Juvenile Justice Act.
 - Protocols for Restoration and Repatriation of Children.

Need For GHAR Portal

- The portal **will enable digital transfer** of cases of children to the authorities concerned.
- It will ensure that the rights of children related to **restoration and**

About NCPDR

- It is a **statutory** body established in 2007 under the Commission for Protection of Child Rights Act, 2005. It works under the aegis of Union Ministry of Women & Child Development (WCD).
- Its mandate is to ensure that all laws, policies, programs and administrative systems **conform to the vision of the rights of the child** (age 0 - 18 years) as enunciated in the Indian Constitution as well as the UN Convention on the Rights of the Child.
- The Commission envisages a **rights-based perspective**, which flows into national-state-local policies and programmes & Strong institution-building processes.



- **Some portals of NCPDR -**
 - **MASI Portal** (Monitoring App for Seamless Inspection at shelter homes)
 - **Baal Swaraj Portal** (for online tracking and digital real-time monitoring mechanism of children in need of care and protection).

repatriation are realised, which was a challenge due to lack of convergence and information-sharing between authorities.

- Many children who were taken before Juvenile Justice Board (JJBs) and the CWCs were discovered to be from another place, but it was difficult to repatriate them due to a lack of information on their native place.
- It will significantly reduce the number of children languishing in child care Institutions (CCIs).

NCERT Proposal for 'PARAKH'

Three global educational non-profits approached the National Council of Educational Research and Training (NCERT) to set up the proposed regulator PARAKH.

PARAKH

- The benchmark assessment framework - PARAKH, has been proposed by NEP 2020.
- It will function as a standard-setting body for student assessment and evaluation for all school boards in the country and will put an end to the emphasis on rote learning.
- While NCERT is an autonomous organisation under the Ministry of Education, PARAKH will act as a constituent unit of the NCERT.
- PARAKH will be tasked with -

Ministry of Education
Government of India

National Education Policy 2020

PARAKH
Performance Assessment, Review, and Analysis of Knowledge for Holistic Development

Background

- Earlier, the NCERT convened a series of meetings with various stakeholders towards the implementation of **National Education Policy (NEP) 2020**. This discussion also included the establishment of a new assessment regulator.
- During the discussions, most states endorsed the NEP proposal of **developing a benchmark framework** to ensure consistency between state and central boards
- As a result, the Union Ministry of Education invited bids to establish a regulator - PARAKH.
- Educational Testing Services (ETS), American Institutes for Research (AIR) and the Australian Council for Educational Research (ACER) have **expressed interest in assisting** with the establishment of India's first national school-level testing and assessment regulator, PARAKH.
 - ETS is well-known for conducting the TOEFL and GRE, which are gateways to admission in the top universities of the world, AIR and ACER are well-known for conducting research on behavioural and social science domains.
- Once chosen, the agency will, among other things,
 - **Assist the PARAKH team in incorporating international evidence** to develop evaluation processes in India to meet Covid-19 and other pandemic circumstances.
 - **Provide technical guidelines** and advice to boards for designing, developing and implementing state-wide methods for measuring student learning that are consistent with state and national curricular standards.
 - **Support examination boards** with novel assessment patterns (both internal and external), evaluation processes and practices, result calculation and compilation, post-result practices and the recent research.

- **Setting norms, standards and guidelines** for student assessment and evaluation for all recognised school boards of India.
- Holding **periodic learning outcome tests** like the National Achievement Survey (NAS) and State Achievement Surveys.
 - If the plans are on track, the NAS in 2024 will be conducted by PARAKH.
- PARAKH **will manage India's participation in international assessments** such as the Program for International Student Assessment (PISA), Trends in International Mathematics and Science Study (TIMSS) and Progress in International Reading Literacy Study (PIRLS) in addition to NAS.
- PARAKH will eventually become the national single-window source for all assessment-related information and expertise, with a mandate to assist all forms of learning assessment, both nationally and globally.

Significance

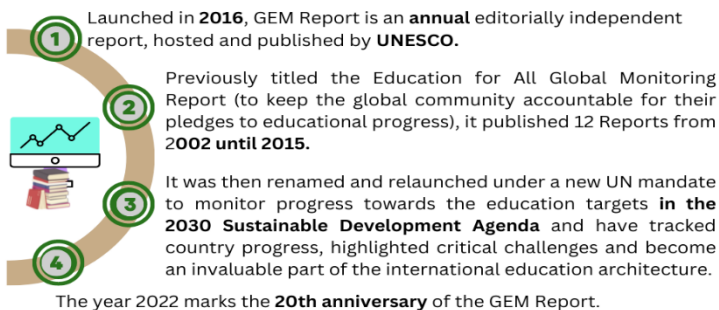
- **Uniformity:** PARAKH would be expected to address the issue of differences in scores among students associated with different boards, who are at a disadvantage during college admissions when compared to their CBSE peers.

- **Standardisation:** It will establish and implement technical standards for test design, administration, analysis and reporting at all levels of schooling.
- **Skill development:** It will encourage and help school boards to shift their assessment patterns towards meeting the skill requirements of the 21st century.

70% New Schools In India Private: UNESCO Report

- According to the UNESCO's released Global Education Monitoring Report 2022, South Asia has undergone tremendous education expansion in the last 30 years, surpassing the rest of the globe.
- While India is driving these regional averages, 7 of every 10 new schools built in the last eight years in India have been private independent institutions.

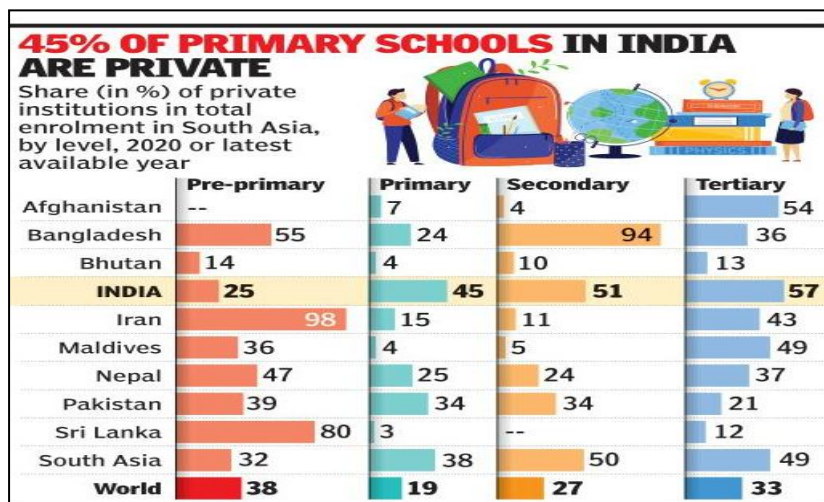
Global Education Monitoring (GEM) Report



Highlights Of GEM 2022 With Focus On India

- ~1/3rd of students are in private schools that receive no state help, highlighting the fact that non-state actors are heavily involved in all aspects of education systems in South Asia.

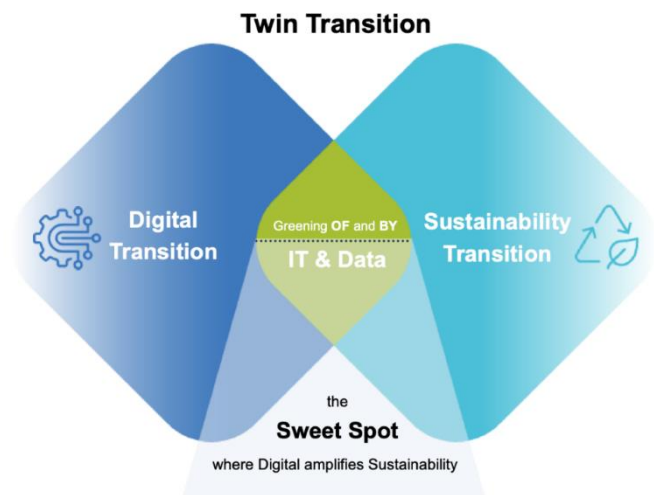
- 67,000 of the 97,000 schools established since 2014 have been private and unaided.
- Approximately 29,600 unrecognised schools educating 3.8 million children in 2020.
- Over 500,000 students are educated at an estimated 4,139 unrecognised madrasas.



- Only 46% of adults thought that the government bore primary responsibility for delivering school education, the lowest number among 35 middle- and high-income countries.
- Furthermore, there has been a significant increase in the rates of private tutoring in India, with 61% of secondary school students reporting that they sought tutoring owing to low schooling quality.
 - While regulations prohibit teachers from instructing their own students, no licensing or registration is currently required to establish a private tutoring business.
- The main choice criteria of a school by parents included English-medium instruction, schools' ability to provide classes beyond pre-primary, proximity to home and education quality proxies such as school reputation.
- Inadequate supply and quality of public education, combined with parental aspirations, have driven private education growth in India.
- Expanding access to education through non-state provision is inequitable.

Twin Transition

- The World Economic Forum (WEF) shared that the **twin transition approach** can bring the *digital and sustainability agendas* together to improve digital function, drive sustainability goals and future-proof organizations.
- Rather than treating digital and sustainability in isolation, a twin transition strategy combines these critical functions to extract huge benefits in terms of efficiency and productivity.
- Although digitization has brought significant benefits, it continues to carry a significant **carbon cost**.
- Twin transition can make a positive impact by '**greening**' *technology, data assets and infrastructures* while accelerating sustainability across the organization
- While organizations understand the urgency of the twin transition, many struggle to put it into practice.
 - Contributing factors include the lack of a consistent approach, inertia caused by perceived and real complexities, conflicting strategic priorities and lack of accountability.
- By following a defined twin transition roadmap, organizations can reduce their environmental impact, enhance their digital offering, and meet their moral obligation to future generations by contributing to a more sustainable world.



Niveshak Didi

- India Post Payments Bank (IPPB) recently conducted **India's first floating financial literacy camp** with an initiative called **Niveshak Didi**, under '**By the women, for the women**' concept.
- The floating camp was conducted among the local residents around the Dal Lake of Srinagar.
- **Implementing agency: Niveshak Didi** is launched by IPPB in collaboration with **Investor Education and Protection Fund Authority (IEPFA)** under the aegis of Ministry of Corporate Affairs (MCA).
- It is based on the ideology of, **women for women** as rural area women feel more comfortable to share their queries with a female itself.
- **Niveshak Didi - a female postwoman**, having deep social connect to rural masses, will be able to collaborate and resolve their queries in a comfortable environment.
- The initiative will help to overcome the challenges faced by rural masses (especially women) in terms of language and their basic understanding of financial products and services.

IPPB

- Launched in 2018, IPPB has been established under the **Department of Posts, Ministry of Communication** with 100% equity owned by the Union Government.
- The bank has been set up with the vision to build the **most accessible, affordable and trusted bank for the common man** in India.
- Its fundamental mandate is to remove barriers for the **unbanked and under-banked** and reach the last mile by utilising a network comprising 160,000 post offices (145,000 in rural areas) and 400,000 postal employees.
- IPPB's operating model is built on the key pillars of India Stack - Enabling paperless, cashless and presence-less banking in a simple and secure manner at the customers' doorstep, through a Core Banking Solution (CBS) - integrated smartphone and biometric device.

Decline In Food Price Index

- The UN Food and Agricultural Organisation's (FAO's) **Food Price Index (FPI)** averaged 135.9 points in October, marginally lower compared to the previous month's 136 points.
- This marks the seventh successive month of decline in the index, which means that **international food prices have eased for seven consecutive months**.
- The FPI reached an all-time high of 159.7 points in March 2022, the month that followed Russia's invasion of Ukraine.
- The latest index value of 135.9 is the lowest since the 135.6 level of January, which was before the war. On a cumulative basis, the index has fallen by 14.9% between March and October.

Impact on India

- A decline in global food prices **reduces the risks of imported inflation**, which was seen particularly in **edible oils**.
- While **overall** year-on-year **retail inflation** in September, at 7.41%, stood well above the upper tolerance level of 6% in India, food inflation was even higher, at 8.6%.
- Thus, the continued easing of international food prices will provide some relief to RBI's monetary policy committee (MPC).
- More so, because the **food items have a 45.86% weight** in the official consumer price index.

FAO Food Price Index

- FAO FPI was introduced in 1996, to help in monitoring developments in the global agricultural commodity markets.
- It is a measure of the **monthly change in international prices of a basket of food commodities**.
- It measures changes for a basket of **5 commodity groups**:

cereals

oilseeds

dairy products

meat

sugar

- The **base period** for calculation is: **2014-16 (value 100)**

New Varieties Of Kalanamak Rice

The Indian Agriculture Research Institute (IARI) recently tested **two new dwarf varieties** of Kalanamak Rice - **Pusa Narendra Kalanamak 1638** and **Pusa Narendra Kalanamak 1652** - that give double the yield.

Kalanamak rice

- Kalanamak rice, a traditional variety of paddy, is a **black husk** with a strong aroma. It is grown in Nepal and in 11 districts of the Terai region in the northeast of Uttar Pradesh.
- It is regarded as a gift from Lord Buddha to the people of Sravasti when he visited the area after enlightenment.
- It has been awarded under '**One District One Product**' (ODOP) scheme as an ODOP product of Siddharthnagar which is an aspirational district
- It has been awarded the Geographical Indication (GI) tag and FAO featured it in its book called "Speciality Rice of the World".



Food and Agriculture
Organization of the
United Nations

17-21 OCTOBER 2022



- Founded in **1945**, FAO is a specialized agency of the United Nations, that leads international efforts to defeat hunger, and improve nutrition and food security.
- **Headquartered in Rome**, it helps governments and development agencies coordinate their activities to improve and develop agriculture, forestry, fisheries, and land and water resources.
- It also conducts research, provides technical assistance to projects, operates educational and training programs, and collects data on agricultural output, production and development.

Major Publications:

- The State of World Fisheries and Aquaculture (SOFIA).
- The State of the World's Forests (SOFO).
- The State of Food Security and Nutrition in the World (SOFI).

Benefits Of Kalanamak Rice	Issues
<ul style="list-style-type: none"> It is ideal for crop production because it is <u>mostly grown without the use of fertilizer or pesticide residues</u>, which leads to economic and environmental benefits. It is high in micronutrients like <u>iron and zinc</u>, which can help prevent Alzheimer's. It also has 11% protein, almost twice as much as other rice varieties. In addition, its low Glycemic Index (49-52%) makes it suitable for diabetics and it contains antioxidants like anthocyanin, which aid in skin health improvement and prevent heart disease. 	<ul style="list-style-type: none"> The <u>conventional variety</u> of Kalanamak rice is tall and prone to lodging, which <u>seriously affects grain filling and quality</u>. <ul style="list-style-type: none"> ➤ Lodging is a condition in which the top of the plant becomes heavy because of grain formation, the stem becomes weak, and the plant falls on the ground. Its market has also experienced a significant decline with a yield of just 2-2.5 tonnes per hectare. Further, the blight bacterial disease outbreak also impacts the paddy.

Improvements In The New Varieties

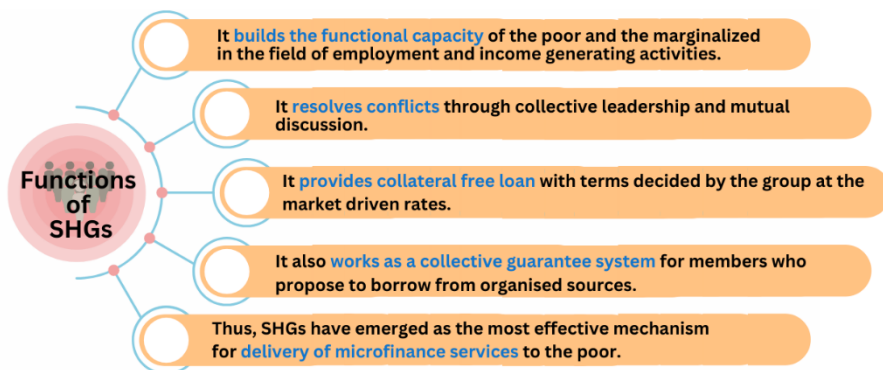
- The lodging issue has been addressed in the new varieties. The length of the new Kalanamak varieties is 95-100 centimeters, whereas the length of the old variety was around 140 centimeters.
- Due to this, productivity has gone up to 4.5- 5 tonnes per hectare as against 2.5 tonnes in the case of traditional Kalanamak. The aroma of the new breed is higher and nutritional qualities are also better.
- Furthermore, the issue of the blight bacterial disease has also been addressed by inducing blight tolerant genes.

Saras Food Festival

- The Saras **Food Festival-2022** was recently organized in New Delhi. It is an initiative of the **Ministry of Rural Development (MoRD)** to empower women on a large scale.
- Women from self-help groups (SHGs), formed under the flagship program **National Rural Livelihoods Mission** of the MoRD participated in the festival.
- The event gives them an opportunity to showcase their skills in the field of food making and introduce people to the food culture of the country.

Self Help Groups

- Self-help groups are informal groups of people who come together to **address their common problems**.
- It can be defined as self-governed, peer-controlled information group of people with similar socio-economic background.



- These SHG women are skillful in making rural products (ethnic and home-made handicrafts, paintings, toys, etc.) and preparing traditional dishes of their states.

Distribution and Promotion

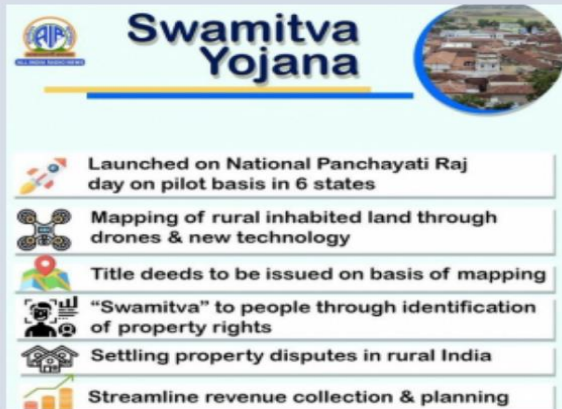
- MoRD has launched the e-commerce portal for better and effective marketing of Saras products.
- MoRD will also take steps to establish **Saras stalls by women SHGs** in all State capitals, major cities and metros, airports and railway stations for widening the reach of marketing.

Report of Expert Committee on SVAMITVA Scheme

- The **Report of Expert Committee on SVAMITVA Scheme** was recently released during the National Conference on SVAMITVA Scheme and Rural Planning in Bhopal (Madhya Pradesh).
- The Expert Committee was formed in February, 2022 under the Chairmanship of B. K. Agarwal.
- It provides the guiding principles that States may adopt in order to realize the objectives of the scheme holistically.

Recommendations of the report

- Create systems that **promote transparency** in the implementation of the scheme.
- Promote the **adoption of “Record of rights”** for availing bank loan.
- Develop **linkages between different departments** for informed decision-making related to property tax assessment and collection.
- Wider adoption of SVAMITVA data-sets by government and private agencies as per new geospatial guidelines.
- Adoption of **RADPFI (Rural Area Development Plan Formulation and Implementation)** guidelines and SVAMITVA data for accurate village level-planning.
- Increase capacity at state, district and block level for Geographic Information System (GIS) skillsets.
 - **Geographic Information System (GIS)** is a framework that provides the ability to capture and analyze spatial and geographic data.



Survey of Villages and Mapping with Improved Technology in Village Areas (SVAMITVA) Scheme

- Launched on 24th April 2021(Panchayati Raj Day), it is a **Central Sector Scheme** of **Ministry of Panchayati Raj**.
- Technology Implementing agency: **Survey of India**
- It aims to provide the ‘Record of rights’ to village household owners in rural inhabited areas and issue property cards.
- These cards are physical copies of property titles of the villagers’ homes and the area surrounding their respective houses (as opposed to cultivated land).
- Mapping of all 6.62 lakh villages in the country, will be done by the **Survey of India**, using **CORS (Continuously Operating Reference Stations)** that provides very low estimated error margin of 5 cms.
- It will cover around 6.62 Lakh villages of the entire country during 2021-2025.

Benefits of SVAMITVA

- Experts across the world have stressed that property ownership rights play a big role in a country’s development.
- The cards will help the villagers to use property as a financial asset for taking loans and other financial benefits, and end disputes among villagers over land ownership.
- It will help in strengthening the Panchayati Raj system and will also make village management easier for gram panchayats in a systematic way like municipalities and municipal corporations.
- Moreover, development related work in the village will also become easier, due to accurate land records.
- Drone survey technology makes mapping activities easier and more efficient. It reduces survey time and survey costs, as data capture by a drone is much faster compared to land-based methods.
- The drone requirements for SVAMITVA scheme has also given a boost to the drone manufacturing sector in India.

- The Scheme has also improved employment generation for skilled manpower. Due to the huge requirement for GIS manpower, more than 600 GIS Digitizers have been engaged at various Survey of India offices.
- As a result, numerous START-UPS and MSME service companies have started increasing their GIS manpower to address these requirements.

United States' Currency Monitoring List

- India was recently removed from the United States' Currency Monitoring List (CML). Italy, Mexico, Vietnam and Thailand were also removed from the list.
- The Currency Monitoring List is **released twice a year** by the **US Department of Treasury**.
- It reviews the currency practices and policies of the trading partners of the US during the last four quarters.
- It is a monitoring list of countries with potentially "questionable foreign exchange policies" and "currency manipulation".
 - Currency manipulator label is given by US government to countries it feels are engaging in unfair Currency Practices By Deliberately Devaluing Their Currency Against The Dollar

Criteria For Inclusion In The List

- The Treasury Department has to assess the macroeconomic and exchange rate policies of the US' trading partners for 3 specific criteria:

A significant bilateral trade surplus with US	• That is a goods and services trade surplus of at least \$15 billion
A material current account surplus	• That is at least 3% of GDP , or a surplus for which Treasury estimates there is a material current account "gap" using Treasury's Global Exchange Rate Assessment Framework (GERAF).
Persistent, one-sided intervention	Which occurs when net purchases of foreign currency are conducted repeatedly, in at least 8 out of 12 months , and these net purchases total at least 2% of an economy's GDP over a 12-month period.

- Economies that **meet two or three criteria** are **placed on the watch list**.
- Countries that meet all 3 criteria are labelled as **currency manipulators** by the Treasury.
- India and four other countries were removed from the Monitoring List as they **now** only met one of the three criteria for two consecutive reports
 - Once on the list, an economy **remains on it for at least two consecutive reports** so that the Treasury can assess whether any improvements in performance is durable and not due to temporary factors. India had been on the list for about two years.

Why India Was Included In This List?

- As per the US Department of Treasury, India had fulfilled the criteria for inclusion in the list in December 2020 and it continued to do during the review of April 2021.
- The reasons cited by the US for India's inclusion in April 2021 were:
 - India's trade surplus with the United States had gone up by nearly \$5 billion in the financial year 2020/21.
 - India's bilateral trade surplus in goods with the United States totalled \$24 billion in 2020, along with a services trade surplus of \$8 billion.
 - The report also highlighted that the RBI's dollar purchase stood at 5% of the GDP exceeded the **2% threshold**.

Countries On The List

- Countries currently on the Currency Monitoring List are: China, Japan, Korea, Germany, Malaysia, Singapore and Taiwan.
- In China's case the report stated that China's failure to publish foreign exchange intervention and broader lack of transparency around its exchange rate mechanism makes it necessary to keep it on monitoring list.

National Investment and Infrastructure Fund (NIIF)

The 5th meeting of Governing Council (GC) of NIIF was held in New Delhi.

Highlights Of The Meeting

- NIIF's **first bilateral fund** - an "**India Japan Fund**" with contribution from Union Government has been proposed through an MoU between National Investment and Infrastructure Fund Limited (NIIFL) and Japan Bank for International Development (JBIC).



- 1 NIIF is an **Indian-government backed entity** established to **provide long-term capital** to the country's infrastructure sector.
- 2 It was set up as an **alternative investment fund (AIF)** (Category II) in 2016 with a planned corpus of ₹40,000 crore.
- 3 The objective behind creating this fund was to maximize economic impact mainly through infrastructure investment in **commercially viable projects, both greenfield and brownfield**.
- 4 The **Indian government has 49% stake** in NIIF with the rest held by foreign and domestic investors such as Abu Dhabi Investment Authority, Temasek and HDFC Group.
- 5 With the Centre's significant stake, NIIF is considered India's **quasi sovereign wealth fund**. A sovereign wealth fund is a **state-owned fund**.
- 6 Its portfolio now includes investments in ports and logistics, real estate and renewables.

- The GC was informed that the two infrastructure Non-Banking Financial Companies (NBFCs), where NIIF has majority stakes, have increased their combined loan book from ₹4,200 crore to ₹26,000 crore in 3 years without experiencing any non-performing loans.
- The GC guided NIIF to undertake advisory activities pro-actively to support central and state governments to create a pipeline of investible PPP projects.
- The finance minister urged the NIIF to expand its operations and explore ways to attract private capital for projects under the **National Infrastructure Pipeline, PM Gati Shakti and National Infrastructure Corridor**.

Funds under NIIF

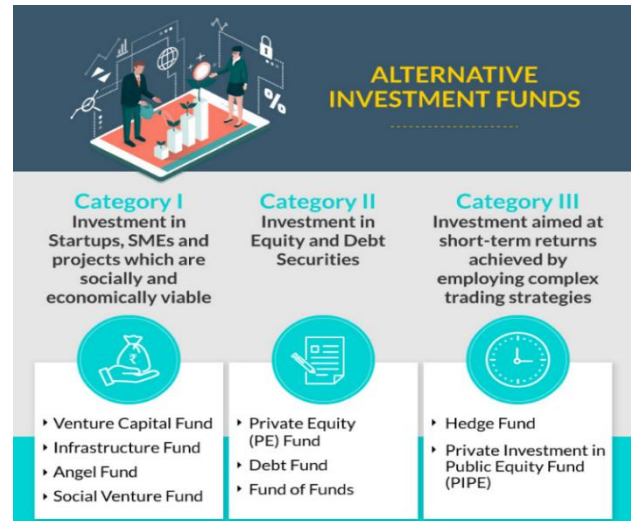
- Across its three funds NIIF **manages \$3 billion of capital**. The three funds under NIIF are:

Master Fund	<ul style="list-style-type: none"> • It is an infrastructure fund with the objective of primarily investing in operating assets in the core infrastructure sectors such as roads, ports, airports, power etc.
Fund of Funds (FoF)	<ul style="list-style-type: none"> • FoF invests in <u>funds managed by fund managers</u> who have good track records in infrastructure and associated sectors in India. • Some of the sectors of focus include green infrastructure, mid-income & affordable housing, infrastructure services and allied sectors.
Strategic Opportunities Fund (SoF)	<ul style="list-style-type: none"> • Its objective is to invest largely in <u>equity and equity-linked instruments</u> and is one of the largest India-focused growth equity fund.

- It has been established to provide long-term capital to high-growth future-ready businesses in India.
- The fund's strategy is to build a portfolio of large entrepreneur-led or professionally managed domestic champions and unicorns

Alternative Investment Fund (AIF)

- As per, **Regulation Act, 2012** of Securities and Exchange Board of India (SEBI), AIF is any fund incorporated in India which is a **privately pooled investment vehicle**.
- It collects funds from both Indian and foreign investors. Generally, high net worth individuals and institutions invest in AIFs as it requires a high investment amount, unlike Mutual Funds.
- It can be established in the **form of a company or a corporate body or a trust or a Limited Liability Partnership (LLP)**.
- AIFs are divided into 3 unique categories – **Category I, Category II and Category III**.



International Tourism Mart for the North East

- The Ministry of Tourism, recently organized the 10th International Tourism Mart (ITM) for the North East Region in Aizawl, Mizoram.
- Objective of ITM 2022 is to highlight tourism potential of the Northeast region in domestic and international markets.
- The ITMs are organized in the 8 North-Eastern States **on rotation basis**. Mizoram is hosting this Mart for the first time.
 - The earlier editions have been held in Guwahati, Tawang, Shillong, Gangtok, Agartala, Imphal and Kohima.

Tourism Potential in North East

- North East India is endowed with diverse tourist attractions like scenic natural beauty, rich biodiversity, rare wildlife, historical sites, distinct cultural and ethnic heritage.
- Each State has its own distinct features and has great potential for accelerating tourism growth.

Key Points from Mizoram

- **Mizoram has 90% of its area under forest cover** with its attitude, geographic location, pleasant climate as its strongest points. There is ample scope for eco-tourism and adventure tourism.
- Mizoram is the happiest state in India as per the India Happiness Report, 2020. It has a high literacy rate of 91.33 and stands third in the country.

National Centre of Excellence for Green Port & Shipping

- The Ministry of Ports, Shipping and Waterways (MoPSW) announced India's first **National Centre of Excellence for Green Port & Shipping (NCoEGPS)**.
- The announcement was made at the recently concluded "INMARCO 2022" in Mumbai.

- INMARCO is a quadrennial **International Maritime Conference and Exhibition**, hosted by the Institute of Marine Engineers (India), to showcase the expertise of Maritime India to the global maritime fraternity.
- NCoEGPS will be working under the framework of the **Sagarmala programme** of the MoPSW
- **The Energy and Resources Institute (TERI)** is the knowledge and implementation partner for this project.

Need for NCoEGPS

- The centre aims to develop a *regulatory framework and alternate technology adoption road map* for Green Shipping to promote carbon neutrality and circular economy (CE) in shipping sector in India.
 - Green shipping refers to minimum use of resources and energy in transporting people or goods, to protect the environment from the pollutants generated by the ships.
 - It promotes cleaner practices to enforce emission control, efficient port management, and equipment management.
- India intends to increase the **share of renewable energy to 60%** of the total power demand of each of its **major ports** from a present share of less than 10%. This will be through solar and wind-generated power.
- The ports have also aimed to reduce carbon emissions per ton of cargo handled by 30% by 2030.
- The government has also launched **Mission LiFE movement**, which will be an India led global movement for collective action to protect & preserve environment.
- NCoEGPS is an important step towards this movement as it aims to transform ports and shipping turn more environment friendly.
- India has been selected as the first country under the **IMO Green Voyage 2050** project to conduct a pilot project related to Green Shipping.

Objectives of NCoEGPS

- Empower 'Make in India' in Port, Coastal and Inland water transport, and Engineering by developing *state of art technologies and application products*.
- Enable fast-track innovations in order to provide most appropriate solutions to various challenges in these sectors.
- Create a pool of competent manpower to the industry equipped with state of the art theoretical and practical knowhow.
- Self-sufficiency in providing short term solutions through *scientific studies technology development technical arm* in identifying and analysing complex problems and solving issues

Green Voyage 2050

- Launched in **2019**, it is a partnership project between **Norway and International Maritime Organization (IMO)** to transform the shipping industry towards a **lower carbon future**.
- The global partnership is supporting developing countries, including Small Islands Developing States (SIDS) and Least Developed Countries (LDCs).
- It supports them in meeting their commitment towards relevant climate change and energy efficiency goals, for international shipping, through supporting the **Initial IMO Green House Gas (GHG) Strategy**.

Project Unnati

The **Ministry of Rural Development** is planning to *link performances of the States* under Project Unnati *with its labour budget* for the upcoming financial year. This is due to the **subpar response** to the project.

Details of the Project

- Project Unnati was launched in 2020 with the intention of **upgrading the skill base of the MGNREGS workers** to help them transition from partial employment to full employment, thereby reducing their dependence on the employment guarantee scheme.
- The aim of the project is to **train one adult member (18-45 years) of a household** that has completed 100 days of work under MGNREGS.
 - If a household is working for 100 days under MGNREGS that shows that they are completely dependent on it for their livelihood and are the poorest of the lot. Thus, this criterion was used as the baseline.
- The selected candidate is **eligible for wages on par with that given under the MGNREGS** during the period of the training, for a maximum period of 100 days and for one program per household.
- **Full expenditures** towards a stipend, against wage loss compensation, are entirely **borne by Central Government**.

Training Programmes

Under the project, the selected candidates are skilled using **3 established training programmes**:

Deen Dayal Upadhyay Grameen Kaushal Yojana (DDU-GKY)	<ul style="list-style-type: none"> • It is a placement-linked programme, in which 70% of the trained candidates have to be compulsorily employed with a minimum salary of ₹6,000 per month.
Rural Self Training Institute (RSETI)	<ul style="list-style-type: none"> • It is for entrepreneurial skills where persons in the age group of 18-45 get short-term residential training with long-term hand-holding support for up to two years.
Krishi Vigyan Kendra	<ul style="list-style-type: none"> • It trains candidates in trades related to the agricultural sectors.

Scheme's Performance

- A total of 2,00,000 beneficiaries had to be imparted training under this project in a span of three years in 26 States and 2 UTs.
- At least 20% of the households that complete 100 days of work under MGNREGS should be targeted by the States under the scheme to fully utilise its potential. However, the performance so far has been far below this 20% target.
- In **FY 2020-21**, 71 lakh households worked for 100 days in the country under MGNREGS but **only 8,658 persons** received training under the Unnati project.
- Similarly, in **FY 2021-2022**, the number of eligible households stood at 59 lakh, but **only 12,577 persons** were trained.
- The onset of the COVID-19 pandemic that coincided with the launch of the project is also blamed for the subpar implementation. With a decline in cases, the Ministry is hoping that the project will pick up pace.

MAARG portal

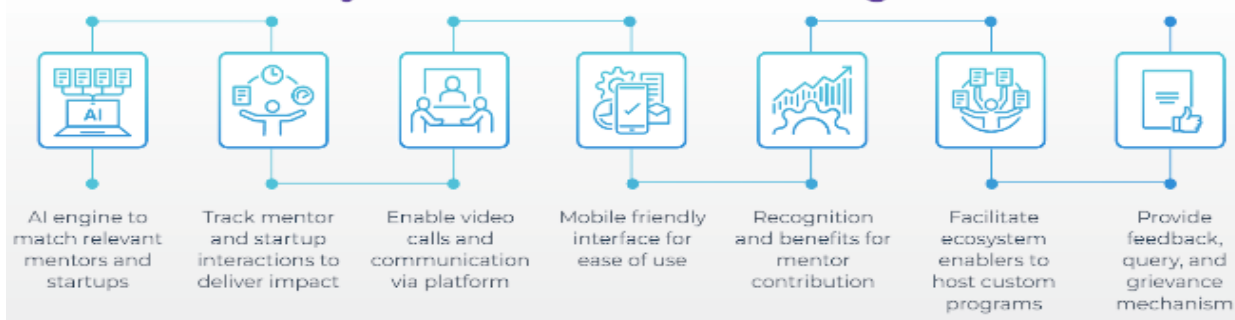
- Department for Promotion of Industry and Internal Trade (DPIIT), launched a call for startup applications for registration on the **MAARG portal**, the National Mentorship Platform by Startup India.
- MAARG portal - **Mentorship, Advisory, Assistance, Resilience and Growth**, is a **one stop platform to facilitate mentorship for startups** across diverse sectors, functions, stages, geographies, and backgrounds.

- Startups can now effectively connect with academicians, industry experts, successful founders, investors, and other experts from across the globe, through Artificial Intelligence (AI) based matchmaking, to get personalized guidance.
- All DPIIT-recognized startups, from all sectors and stages of the startup lifecycle, are eligible to apply for mentorship on the platform all year-round.

Objectives of MAARG

- Provide sector focused guidance, handholding, and support to startups throughout their lifecycle.
- Establish a formalized and structured platform that facilitates intelligent matchmaking between the mentors and their respective mentees.
- Facilitate efficient and expert mentorship for startups and build an outcome-oriented mechanism that allows timely tracking of the mentor-mentee engagements.

Key Functions of MAARG Program



Operationalization Phases

The MAARG portal is being operationalised in 3 phases:

Phase I: Mentor Onboarding	•Successfully launched and executed, 400+ expert mentors are onboarded across sectors.
Phase II: Startup Onboarding	•DPIIT has recently launched the onboarding of startups on the portal with effect from November 2022.
Phase III: MAARG Portal Launch and Mentor Matchmaking	•Final launch where the mentors will be matched to the startups

{For more on startups, refer The Recitals-September 2022}

Report on Municipal Finances

- RBI released a **Report on Municipal Finances in India.**
- The report is a **compilation and analysis of budget data of 201 municipal corporations (MCs)** across all states and explores 'Alternative Sources of Financing for Municipal Corporations' as its theme.

Key Findings

- The report highlights several issues in the working of municipal corporations, stating that there has been no appreciable improvement in their functioning despite institutionalization of the structure of local governance in India.
- The availability and quality of essential services for urban populations in India has thus remained poor.

Financial Inefficiencies

- Most municipalities only prepare budgets and review actuals against budgeted plans but do not use their audited financial statements for balance sheet and cash flow management, resulting in significant inefficiencies.
- MCs' committed expenditure in the form of establishment expenses, administrative costs and interest and finance charges is rising, but **capital expenditure is minimal**.
 - The **ratio of revenue expenditure to capital expenditure** of MCs was at 2.4 as against 7.1 for the Centre and 5.9 for states in 2017-18.
- Various factors, like size of the MC, population density, and nature of expenditure of the parent state government, have impacted the quality of expenditure of municipal corporations in India.

Financial Dependence

- MCs mostly rely on borrowings from banks and financial institutions and loans from centre/ state governments to finance their resource gaps in the absence of a well-developed market for municipal bonds.
- Municipal revenues/expenditures in India have stagnated at around **1% of GDP for over a decade**.
- In contrast, municipal revenues/ expenditures account for 7.4% of GDP in Brazil and 6% of GDP in South Africa.

Ineffective State Financial Commissions (SFCs)

- State governments have not set up SFCs in a regular and timely manner even though they are required to be set up every five years.
- Accordingly, in most of the States, SFCs have not been effective in ensuring rule-based devolution of funds to local governments.

Reasons For Delay In Setting Up of SFCs

- SFCs on an average take around 32 months to submit their reports, resulting in an average delay of about 16 months.
- State governments take considerable time (11 months average) in tabling the action taken report (ATR) in State legislatures.

Recommendations

- The rapid rise in urban population density, calls for better urban infrastructure, and hence, requires greater flow of financial resources to local governments.
- MCs should adopt sound and transparent accounting practices with proper monitoring and documentation of various receipt and expenditure items.
- Municipalities in India need to balance their budgets by law, and any municipal borrowing needs to be **approved by the State government**.
- Central and State governments in India finance their deficits primarily through market borrowings – States and UTs finance around 85% and the Central government finances around 61% of their gross fiscal deficit through market borrowings.
- Thus, MCs should **explore different innovative bond and land-based financing mechanisms** to improve their resources.
- Moreover, to improve the buoyancy of municipal revenue, the **Centre and the States may share one-sixth of their GST**.

Municipal Corporations

- MC is a type of **local government** in India that administers urban areas with a population of more than one million.

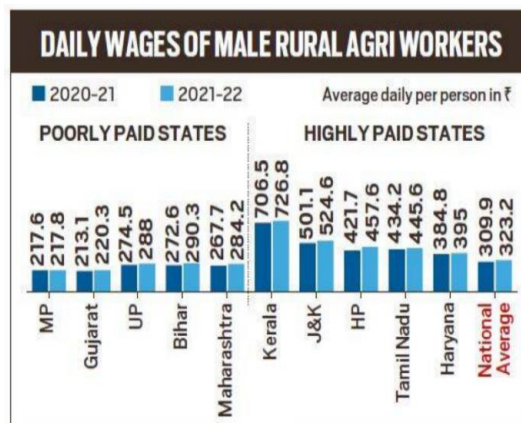
- It is also called as Mahanagar Palika, Nagar Palika, Nagar Nigam, City Corporation, etc.
- MC's sources of revenue include property tax, water tax, professional tax, drainage tax, etc and some fixed aid from the state government.

Rural Daily Wages

RBI released data on rural daily wage payments in India during FY 2021-22.

Agricultural Workers

- Male agricultural workers in Madhya Pradesh and Gujarat get only Rs 217.8 and Rs 220.3 per day, respectively. These states are followed by Odisha, Tripura, Uttar Pradesh, Maharashtra and Bihar.
- The **national average** for agricultural daily wage rate was **Rs 323.32**. Of the 20 states and Union territories assessed only 10 pay above the national average.
- **Kerala leads in highly paid agricultural workers** with an average wage of Rs 726.8 per worker.
- The high wages in Kerala have attracted farm workers from other poorly paid states with around 25 lakh migrant workers reportedly living in the state.
- Kerala is followed by Jammu and Kashmir at Rs 524.6, Himachal Pradesh at Rs 457.6 and Tamil Nadu at Rs 445.6.



Non-Agricultural workers

- In the case of **male non-agricultural workers**, the lowest wage was in MP with an average wage of Rs 230.3 while Gujarat workers got a daily wage of Rs 252.5 and Tripura Rs 250 — all below the **national average of Rs 326.6**.
- On the other hand, **Kerala again leads in non-agricultural workers' wages** with Rs 681.8 wage per person.
- Kerala was followed by J&K, Tamil Nadu and Haryana.

Construction Workers

- The trend is similar for wages of **rural male construction workers**. Workers in Tripura, Madhya Pradesh and Gujarat get a meagre Rs 250, Rs 266.7 and Rs 295.9 as daily wages.
- But their counterparts in **Kerala get Rs 837.7**. Kerala is followed by J&K, Tamil Nadu and Himachal Pradesh.
- Rural jobs are dependent on agriculture which in turn is influenced by monsoon and rabi and kharif production.

FPI Flows In India

Singapore has overtaken Mauritius to become the second-largest source of foreign portfolio investment (FPI) inflows into India.

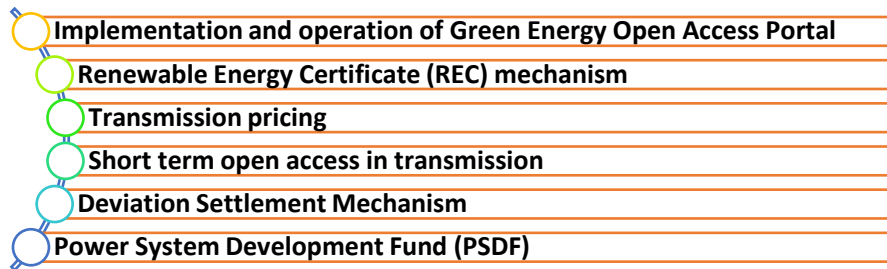
- As on October 31, Singapore-based offshore funds held ₹4.89 lakh crore worth of securities in India compared to ₹4.69 lakh crore for Mauritius-based funds.
- The largest source of FPI inflows is the **United States of America**, holding ₹20.1 lakh crore worth of securities as of October 1.
- Singapore, which adopted a *new fund framework* earlier this year, traditionally had a stable fund management regime. Its Variable Capital Companies Act (VCC) is aimed at providing fund managers with greater operational flexibility and cost savings.

- South Korean and Japanese funds managers increasingly prefer Singapore to Hong Kong for routing their investments to Asian countries.
- The renegotiation of India's tax treaties with Mauritius and Singapore in 2016 and the introduction of **General Anti-Avoidance Rule (GAAR) in 2017** have also benefited Singapore indirectly.
 - GAAR requires entities seeking treaty benefits to show sufficient commercial substance, which is easier to establish in Singapore than in Mauritius because of the availability of a large workforce there.

Grid Controller of India Limited

India's National Grid Operator **Power System Operation Corporation Limited (POSOCO)** announced a change in its name. Henceforth, it will be known as the **Grid Controller of India Limited**.

- The change in name has been made to reflect the critical role of Grid Operators in ensuring integrity, reliability, economy, resilience and sustainable operation of the Indian Electricity Grid.
- Grid Controller of India Limited (Grid-India) **operates the National Load Despatch Centre (NLDC) and 5 Regional Load Despatch Centres (RLDCs)**.
- Grid-India is also designated as the **nodal agency for major reforms in the power sector** such as:



Central Counterparty De-recognition

- The European Union's financial markets regulator **European Securities and Markets Authority (ESMA)** said that it will withdraw recognition of 6 Indian clearing bodies or central counterparties (CCPs).
- These six CCPs are Clearing Corporation of India (CCIL), Indian Clearing Corporation Ltd (ICCL), NSE Clearing Ltd (NSCCL), Multi Commodity Exchange Clearing (MCXCCL), India International Clearing Corporation (IFSC) Ltd (IICC) and NSE IFSC Clearing Corporation Ltd (NICCL).
- As per the European Market Infrastructure Regulations (EMIR), a CCP in a third country can provide clearing services to European banks only if it is recognized by the ESMA.

Reasons for De-recognition

- The ESMA said it reviewed the recognition of all third country CCPs (TC-CCPs) that had been recognised prior to September 2020, as per the EMIR regime.

Central Counterparties (CCPs)

- Central counterparty clearing house (CCP) is operated by banks in each country and **helps to facilitate the trading** in various European derivatives and equities markets.
- CCP mainly work towards establishing efficiency and stability in the financial markets.
- The **main functions** performed by the CCP are **clearing and settlement**.
- It acts as a counterparty for both buyers and sellers **acting as an intermediary** in their transactions.
- It **collects money from both the buyers and sellers**, which helps the CCP to **guarantee terms of the trade** that takes place between both these parties.
- The money collected is enough to cover the potential losses in case any party fails to follow through the contract.
- Thus, it reduces counterparty, operational, settlement, market and legal risks for traders.
- In India, a CCP is authorised by the RBI to operate under **Payment and Settlement Systems Act, 2007**.



- The decision to de-recognise Indian CCPs came due to ‘no cooperation arrangements’ between the ESMA and Indian regulators — RBI, SEBI and the International Financial Services Centres Authority (IFSCA).
- The ESMA wants to supervise these CCPs, which the Indian regulators are not in favour of as they feel that these entities have robust risk management and there is no need for a foreign regulator to inspect them.

Compulsory Convertible Preferred Shares

- Insurance regulator IRDAI has rejected proposal of Fairfax to **convert** the company’s holdings in **compulsory convertible preferred shares (CCPS)** issued by Go Digit Infoworks **into equity shares**.
- CCPS are shares that are issued with the terms that it can be converted into n number of equity shares after a period of time (that is mentioned in the contract or as discussed earlier).
- They are a **key element of start-up financing**. If an early investor has CCPS, he can have more rights than other investors who come in later at a higher valuation.
- It also helps investors maintain their stake and have a say even if their stake gets diluted later.
- However, these shares get converted to ordinary equity shares after 10-15 years.
- That is more than sufficient time for most startups to give their investors an exit.
- CCPS also helps founders keep control of a company even if their stake is lower than that of investors.

COMPULSORILY CONVERTIBLE PREFERENCE SHARES		
WHAT DOES IT DO? Gives investors and founders malleable rights on shares, as a company scales	WHY IS IT HOT? As startups grow fast, CCPS helps change terms from time to time, and protect the investor’s interests	WHO USES IT? Most internet startups, private equity-backed firms, fast growing companies

Authorised Push Payment Scams

- The growth of real-time payments has given rise to a new type of fraud where victims are tricked into willingly making large bank transfers.
- Such scams are known as **authorised push payment frauds**, and such losses are expected to nearly double to \$612 million in India by 2026 from \$330 million in 2021- a record CAGR of 13.15%.
- Push payments refer to any situation in which a **payer** (party making the payment) **initiates a transaction and sends or “pushes” money to a payee** (party receiving the payment).
- By comparison, most traditional payment types require the payee to initiate the transaction by requesting or “pulling” money from the payer.

Reasons For Popularity Of Push Payments Popular With Consumers

- **Extra security:** Payees do not have to share their personal information or account credentials with payers
- **Control of the timing:** Payers can only make a payment when they have sufficient funds in their accounts
- **Faster than pull payments:** Preauthorization allows for more rapid payment reconciliation

Authorised Push Payment scam (APP)

- The term describes a method of fraud in which criminals push legitimate users to initiate a payment to a destination account under their control.
- Funds leaving legitimate customers’ accounts travel through one or several accounts before being collected by the fraudsters or converted by them into hard-to-trace digital assets, such as crypto or NFTs.
- As payments made using real-time payment schemes are **irreversible**, the victims cannot reverse a payment once they realise they have been cheated.

Examples of APP Scams

- **Social engineering APP scams** involve fraudsters acting as trusted institutions or individuals in order to convince payers to share personal information or account information.
- The scammers can then use to gain access to payers' accounts and make push payments to their own accounts.
- Different types of social engineering scams include phishing, romance scams, purchase scams, investment scams, advance fee scams, invoice and mandate scams, CEO fraud and impersonation scams.
- **Account takeovers:** A scammer acquires partial or complete payer information (either by hacking into systems or purchasing it through the dark web).
- The information is then used to gain access to the payer's account(s) and then make push payments to their own account.

APP Fraud Prevention

- Banks must get ahead of incoming regulatory changes and strengthen and optimize both processes and technologies in the fight against APP scams.
- Robust technology solutions are needed for the collection of *more and better customer data* – as behavioural data is key to tackling social engineering.
- Banks at the initiating and receiving ends of transactions must collaborate more closely to better understand where money is being sent and why.
- This means creating a network of intelligence based on the sharing of fraud signals in real time.

Electronic-Negotiable Warehouse Receipt

The Warehousing Development and Regulatory Authority (WDRA) under the **Department of Food and Public Distribution (DFPD)** conducted a seminar on "**e-NWR – An Effective Tool for Promoting Pledge Financing**".

NWR

- The negotiable warehouse receipt (NWR) system was **launched in 2011** allowing the transfer of ownership of a commodity stored in a warehouse without delivering it physically.
- These receipts are issued in negotiable form, making them eligible as collateral.
- This has been enabled by enabling the financing of warehouse receipts through the Warehouse (Development and Regulation) Act, 2007.

e-NWR

- An e-NWR is **available only in electronic form**. It has a **time validity** that is co-terminus with the shelf-life of the commodity or withdrawal of the commodity fully from the warehouse, after which it expires.
- The single source of information for the e-NWR is the **repository system** where e-NWR is issued by registered warehouses.
- Confidentiality, integrity and availability of the e-NWR information is provided by the repository system.

WDRA

- WDRA was constituted in **2010** under the **Warehousing (Development and Regulation) Act, 2007**. It consists of a chairperson and two members.
- WDRA's main objective is to **implement Negotiable Warehouse Receipt (NWR)/electronic-Negotiable Warehouse Receipt (e-NWR) system** in India.
- This prevents farmers from distress sale by helping them to store their produce in storage godowns near their farms. **Farmers can also seek loans from banks against their NWR/e-NWR.**
- WDRA **regulates negotiability of warehouse receipts** so as to improve the trust of depositors and banks in the newly evolving ecosystem.
- **Other functions include:** registration of warehouses, promotion of scientific warehousing of goods, enhancing liquidity in rural areas and promoting efficient supply chain.



- All e-NWRS can be traded through off-market or on-market in Commodity Exchanges platforms. It can also be **transferred fully or in part**.
- An **e-NWR can be auctioned** under certain conditions such as loan not repaid, on expiry and delivery not taken, and on likely damage or spoilage of the commodity in the warehouse.

Benefits of e-NWR System

- Avoidance of forgery/loss/tamper/mutilation of a physical NWR.
- Avoidance of multiple financing against the same NWR.
- **Reduction of monitoring costs** and building credibility amongst market participants.
- Market participants have **secured accessibility** to view and manage their warehouse receipts via online portal.
- **Easy access to finance** by enabling multiple transfers without physical movement of goods.
- Splitting of NWRs for partial sale/pledge/withdrawal.

Pledge Financing

- Pledging is a process in which holder of the eNWR will get a loan from the financial institution using the underlying commodity of eNWR as collateral.
- When a pledge is marked, the eNWR balances will remain in the client's account (borrower) only but the control on the balance will be with the financial institution.
- Thus, the client will not be able to use the eNWR balances until the pledge in favour of the financial institution is **active**.
- Further, if the client has repaid the loan, the financial institution will release the pledge and upon such release, the balances of eNWR will be available in client's account for his use.
- However, if the client does not repay the loan or defaults the repayment, the financial institution will have absolute right to get the eNWR balances (ownership of eNWRs) transferred to financial institution's account.

India Infrastructure Project Development Fund (IIPDF)

- The Department of Economic Affairs (DEA), Ministry of Finance, notified the India Infrastructure Project Development Fund (IIPDF) Scheme.
- IIPDF is a **Central Sector Scheme**, will aid development of quality PPP projects by providing necessary funding support to the **Project sponsoring authorities (PSAs)**, both in the Central and State Governments.
- It will extend financial assistance in meeting the cost of transaction advisors and consultants engaged in the development of PPP projects.
- IIPDF will contribute upto 75% of the project development expenses to the Sponsoring Authority as an interest free loan. The balance 25% will be co-funded by the Sponsoring Authority.
 - On successful completion of the bidding process, the project development expenditure would be recovered from the successful bidder. However, in the case of failure of the bid, the loan would be converted into grant.
 - In case the Sponsoring Authority does not conclude the bidding process for some reason, the entire amount contributed would be refunded to the IIPDF.
- Funding under IIPDF Scheme is in addition to the already operational Scheme for Financial Support to PPPs in Infrastructure (VGF Scheme) notified in 2020.
- Under this infrastructure projects undertaken through PPP mode that are economically justified but commercially unviable are supported

Two Finger Test

The supreme court recently termed the “two-finger test” as a **sexist medical practice** that re-victimized and re-traumatized the rape survivors and held that anyone conducting the test “shall be guilty of misconduct”.

Problems With The Test

- The origin of the two- finger test lies in the **misogynistic belief** that a torn hymen is an indication that the survivor is habituated to sex and therefore, cannot be raped or is more likely to make false claims about being raped.
- It violates the privacy and dignity of the assaulted woman.
- It re-victimizes and re-traumatizes the victim.

What is the “two finger test”?

- A sexually assaulted woman undergoes a series of medical examination for ascertaining her health and medical needs, collection of evidence, etc. This test is a part of that medical examination.
- It involves the medical examiner inserting his/her two fingers into the vagina of a survivor to note the presence or absence of the hymen.
 - A hymen can be torn and its orifice(opening) may vary in size for many reasons unrelated to sexual intercourse.

Its Scientific Validity: WHO states that there is no place for this test while dealing with sexual assault victim and has no scientific validity and doesn't provide any confirmation about rape.

Government Guidelines

- In a document titled ‘GUIDELINES & PROTOCOLS Medico-legal care for survivors/victims of sexual violence’ released by Union Health Ministry in 2014, the government said that per-vaginum examination commonly referred to as ‘two-finger test’, must **not** be conducted for establishing rape/sexual violence and the size of the vaginal opening has no bearing on a case of sexual violence.
- It said that this examination can only be conducted in adult women when medically indicated.
- It stated that a rape victim’s consent (or her guardian’s, if she is minor/mentally disabled) is necessary for any medical examination. In case consent is not provided, the victim **cannot** be denied medical treatment.
- These guidelines are **not legally binding**.

Attempts To Stop the Test

- **Verma Committee Recommendations:** After the Nirbhaya case in 2012, the Verma Committee formed under former CJI JS Verma, recommended the banning of the two-finger test.
- **Criminal Law (Amendment) Act of 2013:** It incorporated **Section 53A** to the Indian Evidence Act that “evidence of the character” or the previous sexual experience of the survivor shall not be relevant to the issue of consent or the quality of consent, in prosecutions of sexual offences.
- **2013 Judgement:** Supreme Court (SC) observed that two-finger test violated a woman’s right to privacy & asked the government to provide better medical procedures to confirm sexual assault.
 - It invoked the *International Covenant on Economic, Social, and Cultural Rights 1966* and the *UN Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power 1985* and entitled the rape survivors to such legal recourse that does not **re-traumatize** them or violate their physical or mental integrity and dignity.
- **Removal of Procedure from Medical Textbooks:** In 2019, a curriculum panel of the Maharashtra University of Health Sciences (MUHS) approved the removal of chapters about the test from its textbooks following a petition.
- **2022 Judgement:** The Madras High Court observed that despite the SC’s 2013 judgement, the test is still being conducted, even on minors, and directed the state to ban this test.
- **Modified Guidelines in August 2022:** The National Medical Commission (NMC), country’s top medical education regulator, modified modules for forensic medicine including guidelines about the two-finger test.

The modification stated that students will be trained on “how to intimate courts about unscientific basis of these tests if court orders it”.

Way Forward

Government guidelines should be circulated in all the government and private hospitals across the country. All medical institutes and universities should adhere to scientific literature, government guidelines and court directives while teaching students about virginity testing. The law enforcement agencies and the judiciary should strictly penalize the medical professionals for noncompliance in order to make the ban meaningful.

Employees' Pension (Amendment) Scheme 2014

The Supreme Court (SC) upheld the Employees' Pension (*Amendment*) Scheme, 2014 but read down certain provisions concerning the current subscribers of the scheme.

Background

- Several litigations were filed after the amendment to Employees' Pension Scheme (EPS) in 2014
- These litigations have been filed by individuals eligible for pension under the Employees' Pension Scheme-1995 (EPS-1995) of the **Employees' Provident Fund Organization (EPFO)** and those who already draw PF pension.
- A three-judge bench of the Supreme Court ruled in the matter where the EPFO appealed against various orders issued by the Kerala, Rajasthan, and Delhi High Courts quashing Employees' Pension (Amendment) Scheme, 2014.

EPFO (Employee Provident Fund Organization)

- It is a **non-constitutional** body that promotes employees to save funds for retirement. The organization is governed by the Ministry of Labour and Employment, and was launched in 1951.
- The schemes offered by the organization cover Indian workers and international workers (from countries with whom the EPFO has signed bilateral agreements).

Schemes Offered Under EPFO

- Employees' Provident Funds Scheme 1952 (EPF)
- Employees' Pension Scheme 1995 (EPS)

Employee Pension Scheme

About

- It is a social security scheme which entitles the employees working in the **organized sector** to a pension after their retirement at the age of **58 years**.
- It was first introduced in 1995 by the central government under the **Employees' Provident Funds and Miscellaneous Provisions Act, 1952**. Thus, it is also known as Employee Pension Scheme, 1995 and applied to the employees of all factories and other establishments.

Eligibility of EPS

- The scheme's benefits are **available to both existing and new the Employee Provident Fund (EPF) members**.
- Must have attained the age of 50 years for an early pension (reduced rate of interest) & 58 years for a regular pension.
- In case one defers the pension for 2 years (until the age of 60 years), he will be eligible to receive the pension at an additional rate of 4% per year.
- But pension benefits **can be availed only if** the employee has been in service for **at least 10 years** (continuous service is not necessary).

EPF

EPF is the main scheme under the Employees' Provident Funds and Miscellaneous Act, of 1952.

- It is mandatory for organizations to register for the EPF scheme if they have more than 20 employees working for them.
- Organisations with less than 20 employees can also join the EPF scheme voluntarily.

EPF Contribution	EPS Contribution
<ul style="list-style-type: none"> • The employee and employer each contribute 12% of the employee's basic salary and dearness allowance towards EPF account. • Currently, the rate of interest on EPF deposits is 8.10% p.a. 	<ul style="list-style-type: none"> • Both the employee and the employer contribute 12% of the employee's basic salary and Dearness Allowance (DA) • The employee's entire part (12%) goes to EPF • The 12% contribution made by the employer is split into: <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <div style="background-color: #4a86e8; color: white; padding: 5px; text-align: center;"> EPF Contribution: 3.67% </div> <div style="background-color: #4a86e8; color: white; padding: 5px; text-align: center;"> EPS Contribution: 8.33% </div> </div> • Apart from the above-mentioned contributions, Government of India contributes 1.16% as well.

• **Benefits:**

Complete withdrawal on leaving service before 58 years of age	Pension on total disablement during the service	Family Pension after Death
<p>If a member is not able to continue the 10 years of service before turning 58 years old, he/she can withdraw the complete sum invested so far after turning 58 years but there won't be any monthly pension benefit post retirement.</p>	<p>In the case of permanent disability during service, he is entitled to lifelong monthly pension irrespective of the service period from the date of permanent disablement.</p>	<p>Family gets pension benefits if the member:</p> <ul style="list-style-type: none"> ➤ Dies while in service and the employer has deposited funds in his EPS account for at least one month. ➤ Has completed 10 years of service and dies before attaining retirement age. ➤ Dies after the commencement of the monthly pension. ➤ After the death of widow/widower, the children will receive the pension amount until they attain the age of 25 years.

2014 Amendments to EPS

- It amended Section 11(3) and 11(4) of the EPS.
 - Section 11(3) enhanced the maximum pensionable salary limit from ₹6,500 to **₹15,000**.
 - Section 11(4) allowed only existing members along with their employers to exercise the option of contributing **8.33%** on their *pensionable capped salary* towards the pension fund. They were given a window of **6 months** to exercise this option which was extendable by another **6 months** at the discretion of the Regional Provident Fund Commissioner.
- It, however, excluded **new members who earned above 15,000** and joined after **September 2014** from the scheme completely.
- It also required *such members* with salaries exceeding Rs 15,000 a month to contribute an **additional 1.16%** of their salary exceeding Rs 15,000 a month towards the pension fund.
- Those existing members who did not exercise the option within the stipulated period or extended period, were deemed to have **not opted** for contribution over the pensionable salary cap and the extra contributions

already made to the pension fund were diverted to the Provident Fund account of the member along with interest.

- The pensionable salary was earlier computed as the average of the salary drawn during the 12 months prior to exit from membership of the Pension Fund. The 2014 amendment raised this to an **average of 60 months** prior to exit from the membership of the Pension Fund.
- It completely **excluded the new members** who earned above Rs. 15,000 and joined the scheme after September 2014.

Reasons for Litigation

- Due to information asymmetry, most members could not exercise the option of availing increased pension within the stipulated time and have been contributing to the pension fund only **within the salary cap and not on actual pay**. This reduced the pension benefit sharply.
- Thus, the employees filed litigations challenging the six-month time limit for which no communication was made to them.

SC Judgement

- Supreme Court ruling gives EPFO members, who have availed of the EPS, another opportunity over the next four months to opt and contribute up to 8.33% of their **actual salaries** as against 8.33% of the pensionable salary capped at Rs 15,000/month towards pension.
- It declared the provisions contained under Employees' Pension Amendment (Scheme), 2014 which capped the maximum pensionable salary (basic pay plus dearness allowance) at **₹15,000 per month legal and valid (for new membership)**.
- It **did not find any flaw** in altering the basis for computation of pensionable salary i.e., changing the average pensionable salary period from 12 months to 60 months.
- It used its extraordinary powers under Article 142 of the Constitution to allow eligible employees **who had not opted for enhanced pension coverage** post 2014 amendments to jointly do so with their employers within the next 4 months.
 - ✓ **Article 142:** It deals with the SC's extraordinary power to pass orders and provide justice to litigants who have suffered delay or injustice during legal proceedings.
- It **struck down** the mandatory requirement to contribute 1.16% of their monthly salary to the pension scheme beyond Rs. 15000 and held it ultra-vires with the provisions of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952.
- It barred employees who retired prior to September 1, 2014, without exercising any option to claim any benefits.
- It directed that the amended scheme would apply to the **employees of exempted establishments**, who are allowed to maintain their contributions in Provident Fund trusts, rather than with the PF authorities.

UIDAI Tops Grievance Redressal Index

Unique Identification Authority of India (UIDAI) topped the Grievance Redressal Index third time in a row for resolving public grievances efficiently.

Grievance Redressal Index

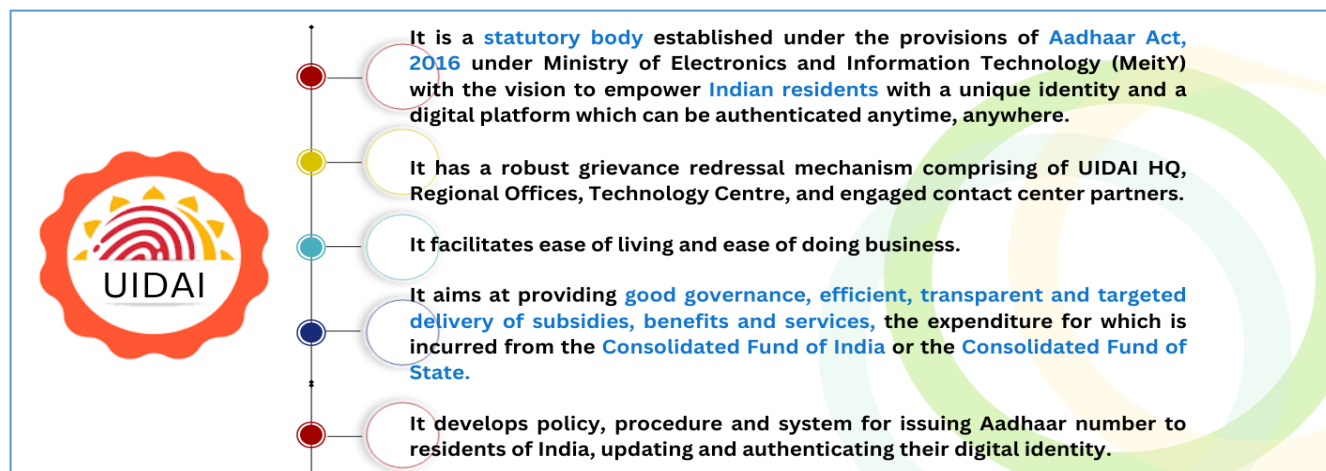
- It is published by the **Department of Administrative Reforms and Public Grievances (DARPG)** and is developed based on two dimensions, having 5 parameters:

S.No	Dimension	Parameter	Indicator	Weightage
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1	Timely Disposal of Grievance Redressal	% of Grievances Disposed within 45 Days	Positive	30%
2		% of Grievances pending for more than 45 Days	Negative	10%
3	Quality Disposal of Grievance Redressal	% of Grievances Redressal (closed) and received Feedback as Excellent & Very Good	Positive	30%
4		% of Grievances Redressal (closed) and received Feedback as Average & Poor	Negative	20%
5		% of Appeals Filed (on closed grievances)	Negative	10%
Total Weightage				100%

Reasons For Topping The Index

- It is making continuous efforts to make Aadhaar holders' experience better for which it has launched its new *Artificial Intelligence/Machine Learning based Chatbot, Aadhaar Mitra* with enhanced features like - checking Aadhaar enrolment/update status, tracking of Aadhaar PVC card status, information on enrolment center location etc. Residents can even register their grievances and track them using *Aadhaar Mitra*.
- It uses a resident centric coordinated approach to resolve nearly 92% of CRM Grievances within a week.
- It is gradually rolling out advanced and futuristic *Open-Source CRM (Customer Relationship Management) solutions* designed with advanced features to enhance service delivery to residents. The new CRM solution has the capacity to support multi-channels like phone call, email, chatbot, web portal, social media, letter, and walk-in through which the grievances can be lodged, tracked and resolved effectively.



Release Of Rajiv Gandhi Case Convicts

The Supreme Court, invoking its extraordinary power under Article 142 of the Constitution ordered the premature release of all 6 remaining convicts serving life sentences in the Rajiv Gandhi assassination case.

Basis of Release

- The court noted that the Tamil Nadu State Cabinet had recommended the premature release of the convicts to the Governor in 2018. He was bound by the advice of the Cabinet under Article 161 as their convictions

under the now-lapsed Terrorism and Disruptive Activities (Prevention) Act was set aside by the apex court. But the Governor passed the files to the Centre instead of deciding on the matter.

- The court also referred to the case of former co-convict A.G. Perarivalan, who was granted premature release by the apex court in May by exercising its extraordinary powers under Article 142 of the Constitution.
- The court took into account the fact that each of the convicts had individually exhibited satisfactory conduct during their long incarceration and thus ordered them to be released by exercising its extra ordinary powers under Article 142.

About Article 142

It has two clauses that state:

Article 142(1)

•Supreme Court in the exercise of its jurisdiction may pass any orders as it feels is necessary for doing complete justice in any case or matter pending before it, and any such order passed shall be enforceable throughout India.

Article 142(2):

•Supreme Court with respect to whole territory of India has all the power to make any order for the purpose of securing the attendance of any person, the discovery or production of any documents, or the investigation or punishment of any contempt of itself.

Why Was It Included In The Constitution?

To empower SC to deliver justice in exceptional cases without being hindered by legal or bureaucratic red tape as the makers believed that a disadvantaged judiciary could be the cause for many not being able to get justice or achieve their rights.

Certain Cases Where Article 142 Was Invoked

- **Babri Masjid Case:** The SC ordered formation of a trust by the Centre to construct Ram Mandir at the demolition site.
- **Bhopal Gas Tragedy** to provide compensation to victims.
- **Liquor Sale Ban Case:** The SC banned liquor shops within 500 m radius from National and State Highways to prevent drunken driving.
- **IPL Match Fixing Controversy** to order a probe into the matter.

PARDONING POWERS OF PRESIDENT V/S GOVERNOR	
President	Governor
He has the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence in case of a death sentence under Article 72.	He has the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence against any law relating to a matter to which the executive power of the State extends under Article 161.
It has a much wider scope.	It has less scope.
Pardon can be granted in cases of court martial.	No such power with the governor.
Pardon can be granted in cases of death sentence.	The pardoning power of governor doesn't extent to death sentences.

{For more about Perarivalan Case & Mercy Petition, refer The recitals-May 2022}

INTERNATIONAL RELATIONS

Lula Da Silva Elected As New President Of Brazil

- Brazilian leftist leader **Luiz Inacio Lula da Silva** narrowly defeated President Jair Bolsonaro in a run-off election. He secured 50.9% of votes against 49.1% for Mr. Bolsonaro.
- Lula da Silva is a former union leader who served as the president of Brazil for two consecutive terms between 2002 and 2010.
 - Lula's rule saw Brazil's economy grow rapidly even as he used government revenues to launch several social welfare programmes such as Bolsa Familia (2003).
 - **Bolsa Familia** was essentially about providing cash to poor families' conditional upon sending their kids to schools and getting them regular health checks.

Presidential Election in Brazil: Electoral system

- Brazil is a presidential republic. The president and state governors are elected by an absolute majority with a run-off election, if necessary.
- The president and state governors may serve for two consecutive four-year terms.
 - The Constitution does not prohibit a third non-consecutive term. Hence, they may run again after a subsequent four-year term.
- The Constitution defines three electoral systems for different positions, which are detailed in the Electoral Code:
 - A simple majority system is used to elect senators;
 - An absolute majority system is used to elect the president and governors; and
 - A proportional representation system is used to elect federal district and state deputies.
- Elections for the 81-member Federal Senate take place every four years, alternately for one-third and two-thirds of its members.
 - At the election, held recently, one-third, or 27, senators are to be chosen.

Voting Eligibility

- Voting is compulsory in Brazil for all those who are literate and aged between 18 and 70. The Electoral Code defines the civil penalties for eligible voters if they fail to vote.
- People aged 16 to 17 or older than 70 or who cannot read or write can cast a ballot if they wish.

Election Process

- Under Brazil's election rules, if no candidate in the elections for president and governors receives more than 50% of the vote, there will be a second round.
- In the current election, none of the contesting candidates was able to secure at least 50% of the votes.
- Hence, the top two - leftist former leader Lula and incumbent far-right president Bolsonaro - advance to a second-round election.

News President In Israel

- As per the Israel's electoral commission, **former Prime Minister Benjamin Netanyahu** and his right-wing allies secured a clear victory and a majority in the Parliament. Netanyahu already holds the record of being the longest-serving Prime Minister in the country's history.

- According to final results released, Mr. Netanyahu's **Likud party** and its far-right and religious allies won 64 of the 120 seats in parliament.
- On the other hand, caretaker Prime Minister Yair Lapid's centrist bloc won 51 seats.


Background

- Earlier this year in April, lawmaker Idit Silman resigned from then PM Naftali Bennett's religious-nationalist Yamina party, essentially leaving the party without a majority.
- As a result, Israel went to the polls again, for the fifth time in a span of three years to elect a new **Knesset** or the country's parliament.

Electoral Process of Israel

- Israel is a parliamentary democracy, where **people vote for the party they support**.
 - Every Israeli citizen who is at least 18 years old has the right to vote; every Israel citizen who is at least 21 years old has the right to be elected.
- **Under Israel's Basic Law**, national **Knesset** (Parliament) elections are generally scheduled to take place every four years (in the Jewish month of Cheshvan).
 - But early elections are a frequent occurrence.
- Israel follows a **"closed-list"** method of proportional representation.
 - In this system, citizens have the chance to vote for a party or group of parties but not for individual candidates to the Knesset.
- The 120 seats in the Knesset are then assigned proportionally to each party that received votes, provided that the party gained votes which met or exceeded the electoral threshold, which is currently 3.25%.
- Parties have various ways of choosing the order of candidates on their list.
 - Party leaders may appoint candidates directly, the party may vote amongst themselves, or they can hold primaries with voters.
- When seat distributions are over, the President steps in to select a Knesset member who is most likely to be able to form a stable government.
 - This is usually the leader of the party who received the most seats. If a party ever wins more than 50% it could form a government without coalition.

Why does Israel have elections so often?



- Israel has a parliamentary system made up of several parties – none of which have ever received enough votes to secure a majority on their own.
- That means parties must team up to form coalitions and reach the 61 seats needed to form a ruling government.
- The other factor is Benjamin Netanyahu. He served as prime minister for longer than anyone else in Israeli history & is in the midst of a corruption trial.
 - Some top politicians on the center-right, who agree with him ideologically, refuse to work with him for personal or political reasons.
 - Last year, his opponents managed to cobble together a coalition of parties from across the political spectrum to keep him out of power.
 - But that coalition only held together for about a year and a quarter before its leaders, Yair Lapid and Naftali Bennett, pulled the plug and called for new elections.

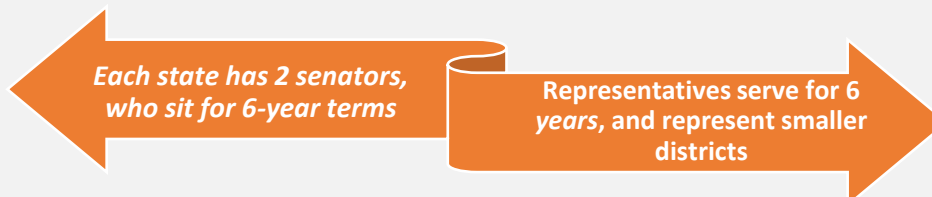
U.S. Midterm Polls

- In the recently held midterm polls in US, the Republicans have taken control of the **House of Representatives** after they passed the threshold of 218 seats.
- On the other hand, Democrats have retained control of the **Senate**.



US Midterm Elections

- The US Congress is made up of two parts - **the House of Representatives and the Senate**.
- Control of these two houses is decided by the midterm election, which was held recently on November 8, 2022.
- These votes are held every two years and when they fall in the middle of the president's four-year term of office, they are called the midterms.



- In the recently held election, all the seats in the House of Representatives were up for election, alongside one-third of the Senate.

Situation Before The November 8 Midterm Election

- The Senate has 100 members, with two from each of the 50 states. Elections were held for 34 seats, and winners serve six-year terms.
- Before the recent election, Senate was at a 50-50 deadlock. However, it was controlled by Democrats because Vice President Kamala Harris had the tiebreaking vote.
- The House, with 435 voting members, was controlled by the **Democrats**, 222-213.
 - Elections were held for all the 435 seats, with winners serving two-year terms.

Why Midterm Elections Matter?

- It is exceedingly difficult to pass legislation unless one party controls the presidency, the House and the Senate.
 - The US Congress makes nationwide laws.
 - The House decides which laws are voted on while the Senate can block or approve them, confirm appointments made by the president and, more rarely, conduct any investigations against him.
- If Republicans win either the House or the Senate, they can prevent any major Democratic legislation before 2024, the next presidential election.
- On the other hand, if Democrats hold onto the House and increase their lead in the Senate, it could give them more ability to pass new laws.
 - Since senators serve six-year terms, running up a lead now would give them some breathing room in 2024.
- Control of the Senate includes the power to approve federal court justices, up to and including the Supreme Court.
 - If Republicans claim control, they could use their power to block Biden's nominations.

Russia Launches Nuclear Icebreakers in Arctic Region

President Putin presided over the flag-raising ceremony and dock launch for two nuclear-powered icebreakers that will ensure year-round navigation in the Western Arctic.

Key Highlights

- The 173.3-metre **Yakutia**, with a displacement of up to **33,540 tonnes**, was launched into water. It can smash through ice of up to three metres. It will join service by end-2024.
- The flag was raised on another vessel **Ural**. It is expected to become operational in December.
- Two other icebreakers in the same series, **Arktika and Sibir**, are already in service and another, the Chukotka, is scheduled for 2026.
- Super-powerful nuclear icebreaker known as Rossiya, with a displacement of up to 71,380 tonnes, would be completed by 2027. It will be able to break through ice four metres thick.

Significance for Russia

- **Strengthen Russia's status as a great Arctic power**
 - Both icebreakers are part of the large-scale, systematic work to re-equip and replenish the Russian icebreaker fleet.
 - This will strengthen Russia's status as a great Arctic power.
- **Strategic significance of Arctic**
 - The Arctic is taking on greater strategic significance due to climate change, as a shrinking ice cap opens up new sea lanes.
 - There has been a race among Arctic states and near-arctic states to augment their capabilities in a bid to be ready to capitalize on the melting Arctic.
 - E.g., NATO has been conducting regular exercises in the region. China, which calls itself near-Arctic state, has also announced ambitious plan for polar silk route to connect to Europe.
 - **Unlike Antarctica, the Arctic is not a global common.**
 - Vast oil and gas resources lie in Russia's Arctic regions, including a liquefied natural gas plant on the Yamal Peninsula.
 - As the earth further heats up, which is more profound at the poles, the race for the Arctic is set to accelerate. This makes the Arctic the next geopolitical hotspot.
- **For Development of the Arctic**
 - These vessels are needed for the study and development of the Arctic, to ensure safe, sustainable navigation in this region, to increase traffic along the Northern Sea Route.
 - The development of this most important transport corridor will allow Russia to more fully unlock its export potential and establish efficient logistics routes, including to Southeast Asia.
 - This route, often called as **Northern Sea Route**, cuts down time to reach Asia by up to two weeks compared to the current route via the **Suez Canal**.

India's Involvement in Arctic

Initial Phase

- India's engagement with the Arctic dates back to 1920 with the signing of the Svalbard Treaty in Paris.
- India is one of the very few countries to set up a permanent station in the Arctic for the purposes of scientific research.
- It launched its first scientific expedition to Arctic in the first week of August, 2007.

- Subsequently, India has been sending scientific teams every summer and winter for carrying out studies in the Arctic.
- Indian studies are primarily focused in the fields of glaciology, hydrochemistry, microbiology, and atmospheric sciences.

Subsequent Involvement

- The **Himadri research station**, located in Ny Alesund, Svalbard in Norway, was started in July 2008.
- In 2014, India deployed **IndArc**, a multisensory observatory in Kongsfjorden.
- In 2016, India's northernmost atmospheric laboratory was established at Gruvebadet. It was established to study clouds, precipitation, long-range pollutants, and other background atmospheric parameters.

India is an observer in the Arctic Council since 2013.

Its membership as an observer was renewed in 2019 for another five years.

- The Council is the leading intergovernmental forum promoting cooperation on common Arctic issues.
- Established by the eight Arctic States — the countries whose territories fall in the Arctic region — through the **Ottawa Declaration of 1996**.
- **Member Nations of the Council** - Canada, Kingdom of Denmark, Finland, Iceland, Norway, Russian Federation, Sweden and United States.

Arctic Policy launched

- In March 2022, the Indian government unveiled an Arctic policy.
- It envisages India's engagement in the Arctic region for climate research, environmental monitoring, maritime cooperation and energy security.
- The National Centre for Polar and Ocean Research (under the Ministry of Earth Sciences) will serve as the nodal agency in implementing the Arctic Policy.

Egypt President To Be Chief Guest At Republic Day Celebrations

- As per the Ministry of External Affairs, Egyptian President **Abdel Fattah Al Sisi** will be the chief guest at the Republic Day in January 2023.
 - This is the first time that the President of the **Arab Republic of Egypt** will be the Chief Guest at our Republic Day.
- Mr. Sisi will be the first such guest since 2020, as plans for guests in 2021 and 2022 were cancelled due to COVID-19.
- India and Egypt, two of the world's oldest civilizations, have enjoyed a history of close contact from ancient times. Both countries had signed a **Friendship Treaty between in 1955**.
- The year 2022 marks the **75th anniversary of diplomatic relation** between India and Egypt.
- Egypt has been invited as a 'Guest Country' during India's Presidency of G20 in 2022-23.

SUMMITS AND ORGANISATIONS

21st Meeting of SCO Council of Heads of Government

- The 21st Meeting of SCO Council of Heads of Government (CHG) was held recently in the virtual format. External
 - ✓ CHG is held annually to focus on the trade and economic agenda of the organisation and approves the SCO's annual budget.
- Affairs Minister S. Jaishankar represented India in a virtual meeting of the **SCO Council of Heads of Government**.
- It was hosted by the Chinese Premier Li Keqiang since the Council of Heads of Government is chaired by China.

India's Stand At The Meeting

- **On Connectivity Projects in the SCO region**
 - Connectivity projects in the SCO region should focus on the interests of Central Asian states and respect the sovereignty and territorial integrity of countries.
 - India said better connectivity will unlock the economic potential of the SCO region.
 - In this context, Iran's Chabahar port and the International North-South Transport Corridor (INSTC) could become enablers.
 - India has developed a terminal at Chabahar port and there are plans to integrate the strategic port with INSTC.
 - The port has also played a key role in the trans-shipment of goods from Russia to India following the start of the Ukraine war.
- **India did not support China's Belt and Road Initiative (BRI)**
 - India was the only SCO member state that did not reaffirm support for China's BRI in a joint communique issued after the meeting.
 - Other countries reaffirmed their support for China's BRI and to work jointly to implement the project.
 - India has for long opposed the BRI because a key part of it – the China-Pakistan Economic Corridor (CPEC) - passes through Pakistan-occupied Kashmir (PoK).
- **On Trade With SCO Members**
 - Indian EAM said that our total trade with SCO Members is only \$141 billion, which has potential to increase manifold.
 - The bulk of India's trade with SCO countries is with China, which crossed \$100 billion this year.
 - Fair market access is to our mutual benefit and only way to move forward.
 - He also reiterated India's commitment to deepen multilateral cooperation in areas such as food and energy security, climate change and trade.
- **On Mission LiFE (Lifestyle For Environment)**
 - EAM also spoke about Mission LiFE launched by PM Modi, which envisions replacing the prevalent 'use and dispose' economy by a circular economy.
 - He highlighted that in 2023, the UN International Year of Millets, India intends to foster greater cooperation with SCO member states on countering the food crisis.

- **On India's Ongoing Chair-ship of the SCO**

- India assumed the chairmanship of the grouping following the summit held in Uzbekistan.
 - The 22nd Meeting of the **Council of Heads of State of SCO** was held in Uzbekistan in September 2022.
 - India will host the next **SCO summit (Meeting of Council of Heads of State)** as a chairman of organisation in 2023.
- This was the first meeting of the SCO since India took over the bloc's rotating presidency.
 - The current meeting, hosted by China, was the meeting of **SCO Council of Heads of Government**.

[For detailed discussion on SCO, refer the topic "**SCO Summit 2022**" from September 2022 edition of the Recitals]

Siddharth Chatterjee appointed as UN Resident Coordinator in China

- United Nations Secretary-General has appointed **Siddharth Chatterjee of India** as the United Nations Resident Coordinator in China.
 - ✓ The Resident Coordinator (RC) is the leader of the **United Nations Country Team (UNCT)** of agencies such as ILO, UNICEF, WHO, World Food Programme (WFP) or United Nations Population Fund (UNFPA).
 - ✓ RC coordinates UN support to countries in implementing the 2030 SDG Agenda in support to national priorities and capacity building.
- As an Indian military officer, he fought for the Indian Peace Keeping Force (IPKF) in Sri Lanka and battled insurgencies in Nagaland.

17th G20 Summit 2022: Bali Declaration

The G20 Bali Declaration was finally adopted by consensus even though it failed to gloss over serious differences over Ukraine.

Bali Declaration: Key Highlights

- **Theme:** 'Recover Together, Recover Stronger'.
- **On the Russia-Ukraine**
 - The declaration acknowledged differences among members on the Russia-Ukraine war but stressed that it was essential to adhere to international law, including protection of civilians caught in conflicts.
 - Most members strongly condemned the war in Ukraine, but the declaration noted that there were other views and assessments of the situation.
 - It also said that the use/threat of use of nuclear weapons is inadmissible.
- **Welcomed the Turkey and UN-brokered Black Sea Grain Initiative**
 - The declaration welcomed the Turkey and UN-brokered **Black Sea Grain Initiative** that secured a Russia Guarantee to allow the export of Ukrainian grain.
- **Other issues covered**
 - The declaration covered a range of issues, from **climate change** to corruption, and from Covid vaccination to imparting computer skills to women.
- **The G20 is not the forum to resolve security issues**
 - The declaration recognised that the G20 is not the forum to resolve security issues.
 - However, it agreed that security issues can have significant consequences for the global economy.

India Emerged As Leader, Consensus Builder

- **Declaration Strengthened India's position:** The declaration reiterated India's position since the beginning of the war:

respect for UN charter

advocating diplomacy and dialogue

need for peace and stability

against the use and threat of use of nuclear weapons

- **Declaration echoed PM Modi's remark**
 - The declaration proclaimed "**today's era must not be of war**", echoing PM Modi's remarks before President Putin on the sidelines of the SCO summit in September.
- **India Acted As Consensus Builder**
 - India has emerged as a leader, solution provider and consensus builder through its positive and constructive approach in framing the G20 communique.
 - India played a key and critical role in bringing consensus amongst countries after all the meetings round the year failed and when there was total deadlock.
 - India worked in partnership with all developing countries and emerging markets to draft the final statement and the preamble to the statement.
 - India made sure that the country's viewpoints are prominently reflected in the statement.
- **India also managed to get important references in the communique on** - sustainable development and lifestyles; new quantified goals for climate finance post 2025; additional finance by multilateral development banks for SDGs; multilateral reforms aimed at implementing the 2030 agenda; seamless and interoperable international travel.

India Unveils G20 Logo

- PM Modi unveiled the logo, theme and website of India's G20 presidency.
- India will assume the presidency of the powerful G20 grouping from the current chair, Indonesia, on December 1, and hold the post for a year.

Key Highlights

- **The logo** — Earth juxtaposed with the lotus,
- **Theme** — "Vasudhaiva Kutumbakam" or "One Earth One Family One Future"
 - The logo reflects India's idea of Vasudhaiva Kutumbakam (the whole earth is a family), because of which India has always believed in global harmony.



[For detailed discussion on G-20, refer the topic "**G20 foreign ministers' summit**" from July 2022 edition of the Recitals.]

19th ASEAN-India Summit

- The 19th ASEAN-India Summit was held recently in Phnom Penh, Cambodia. India was represented by Vice President Jagdeep Dhankhar. Cambodia, as the current Chair of ASEAN, hosted this Summit.
 - **ASEAN-India Summits are held annually.** It provides opportunity for India and ASEAN to engage at the highest level.
 - PM Modi attended the 18th ASEAN-India Summit held virtually in October 2021.

- Vice-President Dhankhar announced an additional contribution of USD 5 million to the ASEAN-India science and technology fund.
 - This fund is aimed at enhancing cooperation in sectors of public health, renewable energy and smart agriculture.

Key Highlights Of The Summit

- At the end of summit, both sides released a joint statement reaffirming the importance of:
 - maintaining and promoting peace, stability, maritime safety, freedom of navigation and overflight in the Indo-Pacific region, and
 - also, commitment to peaceful resolution of disputes, in accordance with international law, including UNCLOS.
- The joint declaration called for establishing a ***Comprehensive Strategic Partnership***.
- The ASEAN states appreciated India's support for ASEAN centrality in the evolving regional architecture.
- India and ASEAN also agreed to enhance cooperation against terrorism and transnational crimes, including international economic crimes and money laundering, cybercrime, drugs and human trafficking, and arms smuggling.
- They also called for deepening cooperation in military medicine.

ASEAN-India Engagement

• Key Milestones in India – ASEAN Relationship

- ASEAN and India became **Summit-level partners in 2002**, and **Strategic partners in 2012**.
- They elevated their relationship to a **Comprehensive Strategic Partnership** in November 2022, during 19th ASEAN-India Summit in Phnom Penh.
- The year 2022 marks **30 years of ASEAN-India relations** and it has been designated as ASEAN-India Friendship Year by the leaders in October 2021.
- There is **ample closeness** between India's "**Indo Pacific Oceans Initiative**" and ASEAN's "**Outlook on Indo Pacific**".
- India firmly believes that a "Cohesive and Responsive ASEAN" is essential for "Security and Growth for All in the Region (SAGAR)".



• India-ASEAN Trade Relation

- ASEAN is India's 4th largest trading partner (accounting for 10.2% of India's total trade) and India is ASEAN's 7th largest trading partner
- India's total trade with ASEAN from April 2021 to March 2022 was \$78.90 billion. Balance of trade is highly favourable to ASEAN.
 - On the other hand, ASEAN became China's largest trading partner in 2020 and remains so.
 - ASEAN's total trade with China in for the period January to April 2022 amounted to \$274.50 billion.
- ASEAN and India have set a trade target of 200 billion USD by 2022.
- **Investment:** Between 2000-2021 cumulative FDIs from ASEAN to India was \$117.88 billion. These were mainly accounted for by Singaporean investments in India (\$115 billion).

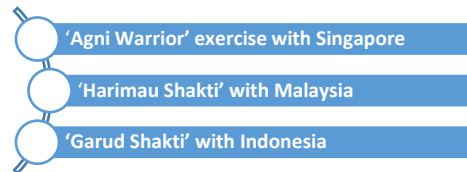
ASEAN Outlook for the Indo-Pacific (AOIP)

- In June 2019, the ten-member Association of Southeast Asian Nations (ASEAN) has adopted the 'ASEAN Outlook on the Indo-Pacific'.
- It outlines the ASEAN's concept and strategy of the Indo-Pacific.

- Indian investment into ASEAN since April 2019 till March 2022 is US\$ 55.5 billion out of which US\$ 51.5 billion investment is in Singapore.
- On trade and investment, the review of ASEAN-India Trade in Goods Agreement (AITIGA) has been long pending. India has called for an early review of the Agreement.
 - AITIGA has been in place since 2010.

● **India’s Military Relationship With ASEAN Countries**

- With an eye on China, India has been steadily cranking up military relations with ASEAN countries through combat exercises, exchanges, training programmes and now increasingly weapon supplies over the years.
 - India conducted the **SIMBEX naval exercise with Singapore** in the Bay of Bengal earlier this month.
 - In the November-December time-frame, the Indian Army is also conducting:



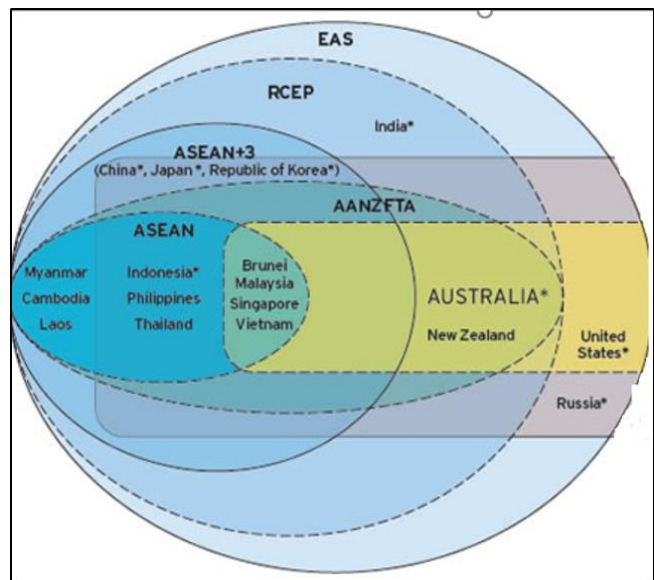
- India inked the \$375 million contract to export the 290-km range BrahMos supersonic cruise missiles to the Philippines in January 2022. It is now looking for more such deals with other ASEAN countries like Indonesia and Vietnam.
- India also plans to sell the indigenous Akash missile systems to countries like Philippines, Indonesia and Vietnam, among other countries.
 - Akash missile systems can intercept hostile aircraft, helicopters, drones and subsonic cruise missiles at a range of 25-km.

17th East Asia Summit

- Vice President Jagdeep Dhankhar participated in the 17th East Asia Summit in Phnom Penh, Cambodia. The summit was **chaired by Cambodia** in its capacity as the ASEAN Chair.
- During the summit, India highlighted global concerns on food and energy security.
- India also emphasised the role of the EAS mechanism in promoting free, open and inclusive Indo-Pacific with freedom of navigation and overflight.

In Focus: East Asia Summit

- EAS is the only leader-led forum of 18 regional leaders for strategic dialogue and cooperation on the key political, security, and economic challenges facing the Indo-Pacific region.
 - It is the Indo-Pacific's premier forum for strategic dialogue.
- It comprises:



- **Ten-member states of the Association of Southeast Asian Nations (ASEAN).**
- **Eight dialogue partners of ASEAN** - Australia, China, Japan, India, New Zealand, Republic of Korea, Russia and the United States.

- United States and Russian Federation joined at the 6th East Asia Summit in 2011.
- EAS membership represents around 54% of world's population & accounts for 58% of global GDP.

6 Priority Areas Of Regional Cooperation Within The Framework Of The EAS



ADMM-Plus Meeting

- The 9th ASEAN defence ministers-plus (ADMM Plus) meeting was held at Siem Reap, Cambodia.
- During this visit, India and Cambodia also co-chaired the **maiden India-ASEAN defence ministers meeting**. This was hosted to commemorate 30 years of India-ASEAN relations.

ASEAN Defense Ministers plus Meeting (ADMM)

- It is the highest defence consultative and cooperative mechanism in ASEAN.
- It was established in 2006 and includes the 10 members of ASEAN.
- It aims to promote mutual trust and confidence through greater understanding of defence and security challenges as well as enhancement of transparency and openness.

ADMM-Plus

- The ADMM-Plus is a platform for **ASEAN and its 8 Dialogue Partners**.
- The aim of ADMM-Plus is to strengthen security and defence cooperation for peace, stability, and development in the region.
- It currently focuses on seven areas of practical cooperation, namely: Maritime security, Counter-terrorism, Humanitarian assistance and disaster management, Peacekeeping operations, Military medicine, Humanitarian mine action, and Cyber security.
- The Inaugural ADMM-Plus was convened in Ha Noi, Vietnam, in October 2010.

China Holds Its First Meeting With 19 Countries In Indian Ocean Region Without India

China convened a first “**China-Indian Ocean Region Forum**” bringing together 19 countries from the region. Experts believe that the Chinese forum apparently is aimed at countering India’s strong influence in the Indian Ocean region where India-backed organisations like the **Indian Ocean Rim Association (IORA)** have taken strong roots.

Key Highlights

- **Organised by** China International Development Cooperation Agency (CIDCA), an organisation connected with the Chinese Foreign Ministry.
- **Theme:** The meeting was held in a hybrid manner under the theme of “*Shared Development: Theory and Practice from the Perspective of the Blue Economy*”.
- **Participating countries**
 - Participating countries included - Indonesia, Pakistan, Myanmar, Sri Lanka, Bangladesh, Maldives, Nepal, Afghanistan, Iran, Oman, South Africa, Kenya, Mozambique, Tanzania, Seychelles, Madagascar, Mauritius, Djibouti, Australia and representatives of 3 international organisations were present.
 - *India was not invited.*
- **Marine disaster prevention and mitigation cooperation mechanism**
 - During the meeting, China proposed to establish a marine disaster prevention and mitigation cooperation mechanism between China and countries in the Indian Ocean region.

- o China expressed its willingness to provide necessary financial, material, and technical support to countries in need.

China Is Looking To Increase Its Presence In IOR

- China is vying for influence in the strategic Indian Ocean region with substantial investments in ports and infrastructure in several countries.
- China has established a full-fledged naval base in Djibouti, its first outside the country.
- It has acquired the Hambantota port in Sri Lanka on a 99-year lease besides building the port at Pakistan’s Gwadar in the Arabian Sea opposite India’s western coast.
- China has also invested in infrastructure of the Maldives.

India’s Presence in IOR

- India has strong influence in the Indian Ocean region where India-backed organisations like the **Indian Ocean Rim Association (IORA)** have taken strong roots.
 - o IORA became an observer to the UN General Assembly and the African Union in 2015.
- PM Modi has proposed “**Security and Growth for All in the Region**” (SAGAR) in 2015 for active cooperation among the littoral countries of the Indian Ocean region.
- The Indian Navy-backed ‘**Indian Ocean Naval Symposium**’ (IONS) seeks to increase maritime cooperation among navies of the region.

IORA

- IORA is an inter-governmental organisation which was established in March 1997. It was formerly known as the Indian Ocean Rim Initiative and the Indian Ocean Rim Association for Regional Cooperation (IOR-ARC).
- IORA Secretariat is based in Mauritius. It became an observer to the UN General Assembly and the African Union in 2015.
- **Members** – It has 23 Member States and 9 Dialogue Partners. China is a dialogue partner in the IORA.
- **Objectives**
 - o To promote sustainable growth and balanced development of the region;
 - o To focus on those areas of economic cooperation which provide maximum opportunities for development, shared interest and mutual benefits;
 - o To promote liberalisation, remove impediments and lower barriers towards a freer and enhanced flow of goods, services, investment, and technology within the Indian Ocean rim.

Priority pillars



Significance

- The region is home to 35% of the world’s population and also accounts for 19% of total GDP
- Moreover, 80% of seaborne trade uses routes through the Indian Ocean.
- Furthermore, 80% of seaborne oil trade and 100,000 commercial vessels depend on this route every year.

DEFENSE AND SECURITY

Meghalaya Villagers Killed In Border Firing By Assam Cops

- Six persons, including an Assam Forest Guard, were killed in a clash between Assam Police and a mob over an alleged timber-smuggling attempt across the inter-state border.
- The incident took place in an area bordering West Karbi Anglong district of Assam and Mukroh village in Meghalaya's West Jaintia Hill.
- This incident has the potential to derail the Assam-Meghalaya talks or delay a resolution in the border dispute between the two states.
 - The second round of talks between the two states to resolve their boundary dispute have become complicated.



Assam-Meghalaya Border Dispute

- During British rule, undivided Assam included present-day Nagaland, Arunachal Pradesh, Meghalaya and Mizoram.
- Meghalaya was carved out of Assam under the North-Eastern Region (Reorganisation) Act, 1971.
- Due to different interpretation of this act, it was challenged by both the parties which led to the boundary dispute between these two states.
- As a result, both sides have a longstanding dispute in **12 stretches** of the 884-km-long shared border.



Efforts To Resolve The Dispute

- The two States had in June 2021 adopted a **give-and-take policy** to start the process of resolving the boundary dispute.
- For this, they constituted **three regional committees each**.
- The draft resolution, released in March 2022, was prepared on the basis of the recommendations of these regional panels.

Assam-Meghalaya Border Pact

- In March 2022, Assam and Meghalaya partially resolved a 50-year-old border dispute in six of the 12 sectors along their 884-km boundary.
 - The two governments had taken up six of 12 disputed sectors in the first phase of discussions.
- In August, both the States decided to form regional committees.
 - The second round of discussions was set to commence by the end of November.

The Agreement

- As per the agreement, out of the disputed **36.79 sq. km land**, Assam will get 18.51 sq. km of the disputed areas and Meghalaya will get the remaining 18.28 sq.km.
- About 70% of the inter-State boundary has now become dispute-free with the signing of the agreement.
- The problem in the six other areas will be resolved in the near future.

What Lies Ahead?

- The freshly demarcated border will have to be passed by Parliament by amending the North Eastern Region (reorganisation) Act, 1971.
- This will then have to be ratified by the legislative assemblies of both the states.

3rd No Money for Terror (NMFT) Conference

- PM Modi inaugurated the 3rd No Money for Terror (NMFT) conference, which was held in New Delhi.
- This conference was largely a build-up on concerns raised during the **Interpol Conference** and **UN General Assembly's Counter Terrorism Committee Conference** held in Delhi recently.

Key Highlights

- **Organised by**
 - The conference was organized by the **Ministry of Home Affairs**.
 - India was supposed to host the conference in 2020, but it was postponed due to the pandemic.
- **Agenda** for the NMFT 2022 included:
 - use of virtual assets and crowdfunding platforms by terrorist entities, their use of the dark web,
 - the links between terror financing and legitimate economic activities, and payment intermediaries
 - the misuse of non-profit organisations and non-financial businesses and professions in terror financing, as well as such financing through the Money Transfer Service Scheme and hawala networks.

No Money for Terror (NMFT) Conference

- The NMFT started in **2018** as an initiative of the French government which had, in 1989, laid the foundation of the Financial Action Task Force (FATF).
 - FATF is the international body at the forefront of combating money laundering and terrorist financing.
- The Conference aims to create platform for international discussions on countering terror financing.
- It also includes discussions on technical, legal, regulatory and cooperative aspects of the terrorism financing.
- The continuing activities of the Islamic State and Al Qaeda, despite territorial defeats in Syria-Iraq and Afghanistan respectively, necessitated the NMFT conference.

Previous NMFT Conferences

The 2018 conference

- It was organized by France, which was attended by ~ 70 countries and the leaders of almost 20 agencies.
- The conference agreed on fully **criminalising** terrorism financing, even in the absence of a link to a specific terrorist act.
- It also agreed on enhancing the traceability and transparency of financial flows, including those of non-profit organisations (NPOs) and charitable funds.

The 2019 conference

- It was hosted by Australia with participation from 65 delegations and representatives from 15 international bodies.
- The conference identified **new channels** through which terrorism may be financed. These included:
 - kidnapping for ransom
 - emerging technologies such as digital and cryptocurrencies, stored value cards, online payment systems and crowdfunding platforms.

- o It recognised the critical role played by the private sector to detect and prevent misuse of financial systems by terrorists and flagged the need for monitoring of NPOs.

INDIA'S STRATEGY AGAINST THE FINANCING OF TERRORISM

- During the 3rd No Money for Terror (NMFT) conference, Minister of Home Affairs highlighted India's strategy against the financing of terrorism.
- This strategy is based on these six pillars:

- 1. Strengthening the **Legislative and Technological** Framework
- 2. Creation of a **Comprehensive Monitoring Framework**
- 3. Actionable intelligence sharing mechanism and strengthening of the investigation and police operations
- 4. Provision for confiscation of property
- 5. Prevent misuse of legal entities and new technologies
- 6. Establishing international cooperation and coordination

- The minister also highlighted the fact that the transformation of terrorism from "**Dynamite to Metaverse**" and "**AK-47 to Virtual Assets**" is definitely a matter of concern for the world.

Exercises

Sea Vigil - 22	<ul style="list-style-type: none"> • The third edition of 'Sea Vigil-22' commenced on the eastern seaboard as part of the nation-wide coastal defence exercise. <ul style="list-style-type: none"> o This exercise was a build-up towards the major Theatre Level Readiness Operational Exercise (TROPEX), which is conducted by the Indian Navy every two years. o Sea Vigil and TROPEX together cover the entire spectrum of maritime security challenges. • This exercise was undertaken along the 7,516 km coastline of the country, covering the Exclusive Economic Zone (EEZ) of India. • It was conducted by the <u>Indian Navy in coordination with the Indian Coast Guard (ICG)</u> and the Ministries entrusted with the task of maritime activities. • This exercise was conceptualised in 2018 to validate various measures that have been instituted towards enhancing the maritime security since the 26/11 Mumbai attack.
Garuda-VII air exercise	<ul style="list-style-type: none"> • It was held between Indian Air Force and French Air and Space Force (FAF) at Jodhpur. • This exercise highlighted the growing interoperability between both air forces, which has been developing with each successive edition of the exercise, a <u>regular bilateral exercise since 2003</u>. • It is also the first occasion for the LCA Tejas and the recently inducted LCH Prachand to participate in any international exercise.
Exercise Malabar 2022	<ul style="list-style-type: none"> • India, US, Japan and Australia kicked off the Malabar naval drills 2022. • The drills were aimed at strengthening the synergy and interoperability among the participating navies. • Malabar began as an annual bilateral naval exercise between India and the US in 1992, and it has increased in scope and complexity over the years. • In 2014, Japan became a permanent participant in the drills followed by Australia in 2020.

Kuki-Chin Bangladeshi Refugee Issue

- More than 200 people belonging to the **Kuki-Chin-Mizo community** from Bangladesh's Chittagong Hill Tracts (CHT) have entered **Mizoram's** Lawngtlai district.
 - The Kuki-Chin Community from Bangladesh is a **Christian community** which shares ethnic ties with the people in Mizoram.
- They have entered Mizoram illegally due to an armed conflict between the neighbouring country's Army and an ethnic armed group.
 - The Bangladesh Rapid Action Battalion has launched operation against some insurgents belonging to the group.
- The matter was discussed by the Ministry of Home Affairs with the External Affairs Ministry.
 - At present, members of Kuki-Chin-Mizo community are being referred to as **officially displaced persons** in the government records, as India does not have a law on refugees.
 - They have been allowed to enter India on humanitarian grounds.

Refugees in India

Statistics

- As per the database of UNHCR, India is home to 2.44 lakh refugees and asylum seekers.
 - Of these, 2,03,235 refugees are from Sri Lanka and Tibet and 40,859 refugees and asylum seekers of other nationalities.
- There are nearly half a million Nepali immigrants residing in India, according to the International Labour Organization.

India's Response

- India ensures that refugees can access protection services that are on a par with their fellow Indian hosts.
- For those refugees registered directly by the Government such as those from Sri Lanka, they are entitled to Aadhaar cards and PAN cards to enable their economic and financial inclusion.
 - They can have access to national welfare schemes and contribute effectively to the Indian economy.
- However, for those registered with UNHCR, such as refugees from Afghanistan, Myanmar and other countries, while they have access to protection and limited assistance services, they do not possess government-issued documentation.
 - Thus, they are **unable to** open bank accounts, benefit from all government welfare schemes, and are thus inadvertently left behind.

Laws And Regulations Dealing With Refugees In India

- India does not have a national policy or a law to deal with refugees.
- India is **not a signatory** to international laws such as the **1951 UN Convention and the 1967 Protocol**.
 - These laws secure the rights of refugees to seek asylum and protect them from being sent back to life-threatening places.
- Furthermore, India **does not acknowledge** the administrative role of the **UNHCR within its territory** and chooses to handle refugee crises unilaterally.
- Those entering India without a visa are treated as **illegal immigrants** under the **Foreigners Act or the Indian Passport Act**.
 - The only protection they have is the right to life under Article 21 and protection against arbitrary abuse of power under Article 14 of the constitution.

GEOGRAPHY AND ENVIRONMENT

Rhino Horns Are Shrinking

According to a recent study, the horns of rhinoceroses may have **become smaller** over time due to the impact of hunting. The study was published in the latest edition of *People and Nature* by the British Ecological Society. It relied on a repository of images maintained by the Netherlands-based Rhino Research Center (RRC).

Key Findings of The Study

- Evidence for declining horn length over time across species, perhaps related to **selective pressure of hunting**.
- The rate of decline in horn length is **highest** in the critically endangered Sumatran rhino and **lowest** in the white rhino of Africa.
- This observation follows patterns seen in other animals, such as tusk size in elephants and horn length in wild sheep.

Five Species of Rhino

White Rhino	<ul style="list-style-type: none">• Africa's largest species of rhino, also known as the 'square-lipped' rhino.• IUCN Status: Near Threatened• Distribution: South Africa, Namibia, Botswana, Zimbabwe, Zambia, Kenya, Uganda
Black Rhino	<ul style="list-style-type: none">• IUCN Status: Critically endangered• Distribution: South Africa, Namibia, Zimbabwe, Tanzania, Kenya
Greater one Horned Rhino	<ul style="list-style-type: none">• Asia's largest species of rhino, also known as the Indian rhino.• IUCN Status: Vulnerable and Wildlife Protection Act, 1972: Schedule 1• Distribution: India, Nepal• Assam is home to the largest population of around 2,640 greater-one horned rhinos in four protected areas, i.e. Pabitora Wildlife Reserve, Rajiv Gandhi Orang National Park, Kaziranga National Park, and Manas National Park, with more than 90% in Kaziranga National Park.
Sumatran Rhino	<ul style="list-style-type: none">• IUCN Status: Critically Endangered• Distribution: Indonesian islands of Sumatra and Borneo.
Javan Rhino	<ul style="list-style-type: none">• IUCN Status: Critically Endangered• Live only in Ujung Kulon National Park in Java, Indonesia.

Conservation Efforts to Protect Rhino

- **New Delhi Declaration on Asian Rhinos 2019** - India, Bhutan, Nepal, Indonesia, and Malaysia have signed the declaration for the preservation and protection of the Rhino.
- **DNA profiles of all rhinos** - The Ministry of Environment, Forest and Climate Change (MoEFCC) launched a project in 2019 to generate DNA profiles of all rhinos in the country.
 - ✓ 2021 was the project deadline, the Indian rhino was the first wild animal species in India to have all its members DNA-sequenced.
- **The Indian Rhino Vision 2020** - Launched in 2005, it aimed to achieve a wild population of at least 3,000 greater one-horned rhinos spread across seven protected areas in the Indian state of Assam by 2020.

Panamaram Heronry

Due to the intervention of the **Kerala State Biodiversity Board (KSBB)** and the Panamaram grama panchayat to plant bamboo and vetiver grass saplings, Panamaram heronry is set to get a fresh lease of life. Earlier destruction of bamboo groves and the extensive sand mining was posing a serious threat to the heronry.

About Panamaram Heronry

- It is the **largest breeding ground of different species of herons in the Malabar region.**
- It is an elevated sandbank covered with vegetation, predominantly bamboo grove.
- The heronry formed on a sandbank on the **Panamaram River.**
 - Panamaram River is a tributary of the **Kabani River.**
- It is a haven for globally threatened waterfowls, including the black headed-ibis, purple heron, large egret, median egret, little egret, pond heron, night heron, and little cormorant.

Kabini River (also called Kapila river)

- It is the major tributaries of the **Kaveri River.**
- It originates in the Wayanad District of Kerala, by the confluence of the **Panamaram River** and the **Mananthavady River.**
- Other tributaries are Babali, Noolpuzha and Nugu Rivers.
- The Kabani dam was built on the river Kabini in 1974.
- The backwaters of the Kabani reservoir are very rich in wildlife.



Carbon Emissions of World's Richest People

- A report has said the world's richest people emit unsustainable amounts of carbon, as compared with an ordinary person.
- The report is titled "**Carbon Billionaires: The investment emissions of the world's richest people**", released by Oxfam.
- Every human on Earth has a carbon footprint, which can be broken down into personal consumption emissions, emissions through government spending, and investment-linked emissions.
- Types of Carbon Emission analyzed in the report
 - ✓ Scope 1 emissions: These are a direct result of the company's operations.
 - ✓ Scope 2 emissions: They constitute indirect emissions, e.g. energy to operate machines.
 - ✓ Scope 3 emissions: other indirect emissions E.g. company's supply chains.

Key Finding Of The Report

- On an average, billionaires are responsible for emitting 3 million tons of carbon annually, a million times more than the average for someone in the bottom 90% of humanity.
- 125 billionaires taken as a sample, fund about 393 million tonnes of CO₂e (carbon dioxide equivalent) per year.
 - This is equivalent to the annual carbon emissions of France, which is a nation of 67 million people.
- In comparison, it said, it would take 1.8 million cows to emit the same levels of CO₂e as each of the 125 billionaires.
- Polluting Investment: Billionaires had an average of 14% of their investments in polluting industries such as non-renewable energy and materials like cement.

Significance Of This Report

- It takes a critical look at the relationship between economic inequality and the climate crisis.
 - The report comes at a time when discussions are underway in Egypt to meet the globally agreed target of limiting world temperatures to below 1.5°C at COP 27.
- Billionaires hold significant wealth and stakes in globally recognised corporations, however, corporations are non-adherent to Paris Climatic Deal
 - The decisions made by the investors whether to invest in business corporations failing to reduce carbon emissions, or to fund fossil fuel can further determine the intensity of future emissions.
- One can also gauge the ways in which the conduct of investors in the global economy impacts our environment.

Why Are Corporations Failing To Cut Emissions?

- To make the 2050 climate change plans of **net-zero total carbon emissions**, corporations are heavily relying on using land in low-income countries to plant trees, but the report points out some flaws in that plan.
- According to the Oxfam, using land alone to achieve net zero by 2050 would require at least 1.6bn hectares of new forests, an area equivalent to five times the size of India.
- No state in the world compels corporations to reduce their carbon footprints.

Way Forward

- We should aim to set strong and binding science based GHG reduction targets and demand greater transparency.
- Governments should also include workers' rights, protection of their livelihoods and that of marginalised communities who are adversely affected by climate change in policy decisions.
- A wealth tax on the richest could aid the urgent climate finance needs of developing countries.

Beaver Blood Moon

- A total lunar eclipse is sometimes called a **Blood Moon**, because of the reddish tinge the **Full Moon** takes on when fully eclipsed.
 - A total lunar eclipse occurs when the Moon and the Sun are on **exact opposite sides of Earth**.
- The reason why the Moon takes on a reddish colour during totality is a phenomenon called **Rayleigh scattering**. It is because of the way light travels through the Earth's atmosphere. Sunlight is made of several colours and they all have different wavelengths.
- Blues and purples have shorter wavelengths and scatter in our atmosphere, giving the sky its blue colour, but **reds and oranges have the highest wavelengths** and pass through our atmosphere before it is bent or refracted around Earth, hitting the surface of the Moon and making it red.
- It is the same mechanism responsible for causing colourful sunrises and sunsets.
- While it has no special astronomical significance, the view in the sky is striking as the usually whitish moon becomes red or ruddy brown.
- Each of the year's full moon gets a nickname. Any full moon within the month of November is called a Beaver Moon. Thus, this particular lunar event has earned the nickname "Beaver Blood Moon Eclipse."

{For solar eclipse, refer The Recitals –October 22}

Global Carbon Budget 2022 Report

The 17th version of the global carbon budget 2022 report was released.

Key Highlight Of This Report

- The world is projected to spew (eject) 40.6 billion tons of CO₂ into the atmosphere in 2022, with no sign of the decrease that is urgently needed to limit warming to 1.5 °C.
- If current emissions levels persist, there is a 50% chance that warming of 1.5 °C will be exceeded in nine years.
 - 1.5 °C is the preferred warming limit set by the 2015 Paris Agreement, a limit that countries hope will be sufficient to avoid the worst impacts of climate change.
- Earth's global surface temperature has increased by around 1.1°C as compared to the average in the pre-industrial (1850-1900) levels.
 - This warming is considered the reason behind record droughts, wildfires & floods worldwide.
- In 2021, more than half of the world's carbon emissions were from three places that is China (31%), the US (14%) and the European Union (8%).

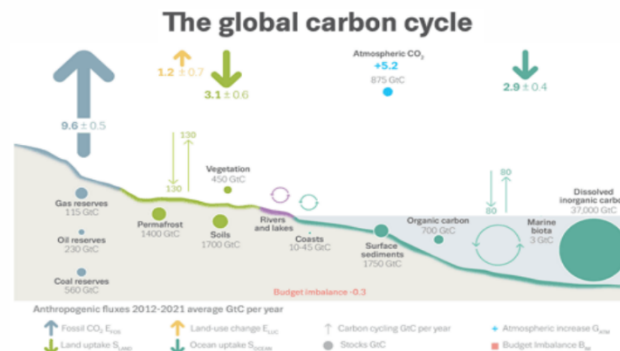
- India accounted for 7% of the global CO₂ emissions.

- Emissions in 2022 are to increase by 6%, driven mostly by a 5% increase in coal emissions and oil emissions 10% increase

- Emissions from natural gas in India are

projected to decline 4% but contribute little to the total change as gas is a small part of the energy mix in the country.

GLOBAL CARBON BUDGET (GCB) REPORT



- It is released by the Global Carbon Project (GCP).

- GCP is a group of scientists that integrates knowledge of greenhouse gases for human activities and the Earth system.

- A global carbon budget determines the input of CO₂ to the atmosphere by emissions from human activities, balanced by output (storage) in the carbon reservoirs on land or in the ocean.
- The report refers to the mean, variations, and trends of CO₂ in the environment, referenced to the beginning of the Industrial Era.
- It describes the components of the **global carbon cycle** over the historical period with a stronger focus on the recent period.
- It provides cumulative emissions from fossil fuels and land-use change since the year 1750 (the pre-industrial period)
 - Year 1850 is the reference year for historical simulations in IPCC AR6(Sixth Assessment Report).

Climate Performance Index 2023

- In the latest report of Climate Change Performance Index (CCPI) 2023 India moves two spots when compared with the previous edition of the index. In 2022 India stood at 10th position.

About Climate Performance Index

- It is released by Germanwatch, an independent development organisation.
- It has been released every year at the UN Climate Change Conference since 2005.
- It is an instrument to enable transparency in national and international climate politics.
- It currently tracks the countries' progress towards the goals set by the **Paris Agreement**.

- The index assesses climate protection performance of 63 countries and the European Union using 14 indicators in **four categories**:

GHG Emissions

Renewable Energy

Energy Use

Climate Policy

Key Finding of the Report

- India, with the score of 67.35 points, was ranked at **8th position**.
- India earned a high rating in the GHG Emissions and Energy Use categories, while it got a medium rating in Climate Policy and Renewable Energy sections.
- **None of the countries made it to the 1st three ranks.**
- Denmark was ranked at fourth position. It is followed by Sweden.
- UK has been ranked 11, Germany (16), while China (51) and United States (52)
 - China has dropped 13 places in the ratings this year, mainly because of the country's continued reliance on coal and lack of clarity on long-term climate policies.
 - United States has risen three ranks in the ratings because of the recent climate measures announced by the Joe Biden administration.
- The weakest performers were Iran (63rd), Saudi Arabia (62nd), and Kazakhstan (61st).

Infrastructure Resilience Accelerator Fund (IRAF)

The **Coalition for Disaster Resilient Infrastructure (CDRI)** announced **Infrastructure Resilience Accelerator Fund (IRAF)**, a CDRI Multi-Partner Trust Fund, at the India Pavilion, COP27.

About IRAF

- It is a *multi-donor trust fund*, established with the support of the *United Nations Development Programme (UNDP)* and the *United Nations Office for Disaster Risk Reduction (UNDRR)*.
- It will be managed by the **United Nation Multi-Partner Trust Fund Office (UN MPTFO)**, New York and supported by India, UK, Australia and European Union.
- It supports global action on “disaster resilience” of infrastructure systems, especially in developing countries and Small Island Developing States (SIDS).
- **Over 50 million USD of financial commitments** have already been announced for this trust fund for an initial duration of 5 years.

Significance of IRAF

- It will enable CDRI to achieve its mandate of resilience through risk informed investments and infrastructure development.
 - It is resulting in reduced vulnerability of populations and reduced impact of extreme events and disasters on infrastructure systems.
- It will play a crucial role in equipping the coalition to deliver on improved infrastructure governance, inclusive infrastructure services, diversified knowledge, and financing for resilient infrastructure globally.
- This Fund's early focus on supporting island states will be particularly critical for the Pacific region which is at the forefront of dealing with the effects of climate change.

Coalition for Disaster Resilient Infrastructure (CDRI)

- It is an international coalition of countries, United Nations agencies, multilateral development banks, and the private sector.
- It was launched by India at the 2019 UN Climate Action Summit.

- Headquarters: New Delhi, India.
- It aims to promote disaster-resilient infrastructure.
- It will *not create any new infrastructure*, rather, it will serve as a knowledge centre for member countries to share and learn best practices with respect to disaster-proofing of infra.

Mangrove Alliance for Climate

At the 27th Session of Conference of Parties (COP27), the Mangrove Alliance for Climate (MAC) was launched.

About Mangrove Alliance for Climate (MAC)

- It is an intergovernmental alliance that seeks to expand and hasten the progress towards the conservation and restoration of mangrove ecosystems.
- **Led by the United Arab Emirates (UAE) and Indonesia**, MAC includes India, Sri Lanka, Australia, Japan, and Spain.
- This alliance works on a **voluntary basis** which means that there are no real checks and balances to hold members accountable.
 - Instead, the parties will decide their own commitments and deadlines regarding planting and restoring mangroves.
 - The members will also share expertise and support each other in researching, managing and protecting coastal areas.

What Has India Pledged In MAC?

- As part of its NDCs, India has committed to creating an additional carbon sink of 2.5 to 3 billion tons of CO₂ equivalent through additional forest and tree cover by 2030.
- India has demonstrated expertise in mangrove restoration activities for nearly five decades and restored different types of mangrove ecosystems both on its east and west coasts.

Mangrove Cover in India

- According to the India State of Forest Report, 2021, the mangrove cover in India is 4,992 sq. km, which is 0.15% of the country's total geographical area
- About 40% of the world's mangrove cover is found in South East Asia and South Asia. India has about 3% of the total Mangrove cover in South Asia.
- West Bengal accounts for the highest 42.45% of India's mangrove cover, followed by Gujarat at 23.66% and Andaman and Nicobar Islands at 12.39%.
- Sundarbans in West Bengal is the largest mangrove forest region in the world.
- The 2nd largest mangrove forest in India is Bhitarkanika in Odisha.

About Mangroves

- These are a group of shrubs or trees that grow in coastal saline or brackish water.
- It occurs worldwide, mainly between latitudes 30° N and 30° S.
- They can survive under extreme hostile environments such as high salt and low oxygen conditions.
- Viviparous: Their seeds germinate while still attached to the parent tree. Once germinated, the seedling grows into a propagule.
 - A propagule is a vegetative structure that can become detached from a plant and give rise to a new plant.

Significance of Mangroves	Major Threats to Mangroves
<ul style="list-style-type: none"> • Natural Barriers against storm surge, coastal flooding and sea-level rise. • Habitat Provider for a diverse array of terrestrial organisms. Many species of coastal and offshore fish rely exclusively on mangroves. • Carbon Sequester - It can sequester greater amounts of carbon than other trees in the peat soil beneath. They store this carbon for thousands of years. • Sources of Livelihood - Many people living in and around mangroves depend on them for their livelihood. The ecosystem also supports tourism. 	<ul style="list-style-type: none"> • Development activity - Coastal development, including the construction of hotels, and other structures, is the primary threat to mangroves. • Increasing demand of land - Mangrove forests are cleared to make room for agricultural land and human settlements. • Pollution - Pollution, and rising sea levels are the other threats to mangrove forests and their ecosystem.

Conservation Steps to Protect Mangroves

- **National Mangrove Committee** - This committee was established in 1976 to advise the government on the conservation and development of mangroves.
- **International Day for the Conservation of the Mangrove Ecosystem** - UNESCO celebrates this day on July 26 with the aim of raising awareness about mangrove ecosystems.
- **Mangroves for the Future Initiative** - IUCN and UNDP have developed this initiative to promote investment in the conservation of coastal ecosystems.

Methane Alert and Response System (MARS)

The United Nation has announced a new **satellite-based monitoring system** called Methane Alert and Response System (MARS) to detect emissions of methane. It was launched at the 27th United Nations Climate Change Conference (COP 27)

About MARS

- It is a **data-to-action platform** set up as part of the UNEP's **International Methane Emissions Observatory (IMEO) strategy** to get policy-relevant data into the right hands for emissions mitigation.
- It will use data from global mapping satellites to ***identify very large methane plumes and methane hot spots*** (large point emission sources).
 - UNEP will then notify governments and companies about emissions, either directly or through partners, so that the responsible entity can take appropriate action.
- If requested, MARS partners will provide technical or advisory services such as help in assessing mitigation opportunities.
- Data on coal, waste, livestock and rice will be added gradually to MARS.

Significance of MARS

- It will scale up global efforts to detect and act on major emissions sources in a transparent manner and accelerate the implementation of the **Global Methane Pledge**.
- It will be the 1st publicly available global system capable of transparently connecting methane detection to notification processes.
- It will integrate data from the rapidly expanding system of methane-detecting satellites to include lower-emitting area sources and more frequent detection.

Global Methane Pledge

- The Global Methane Pledge was launched at the UN COP26 climate conference in **Glasgow**.
- It is an agreement to reduce global methane emissions.
- This pledge was announced with the aim of reducing methane emissions by **30% by the year 2030, as compared to 2020 levels**.

About Methane

- It is the simplest hydrocarbon, consisting of one carbon atom and four hydrogen atoms.
- It is a powerful greenhouse gas, contributing at least a quarter of today's climate warming.
- Approximately 40% of methane emitted is from natural sources, about **60% comes from human-influenced sources**, including livestock farming, rice agriculture, biomass burning and so forth.
- As per Intergovernmental Panel on Climate Change report, it accounts for around half of the 1°C net increase in global average temperature as compared to pre-industrial era.

United Nations Environment Programme (UNEP)

- It is a leading global environmental authority established in **June 1972**.
- It is engaged in establishing a global environmental agenda and promoting the efficient implementation of the environmental dimension of the United Nations Sustainable Development Programme.
- **Major Programmes:** Earth Hour, clean up the World, Billion Tree Campaign, Seal the Deal etc.
- **Major Reports:** Emission Gap Report, Adaptation Gap Report, Global Environment Outlook, Frontiers, Invest into Healthy Planet.

Boreal Forest

- It is also called taiga, which is the world's largest land biome.
- From a biological perspective, it is defined as forests growing in high-latitude environments where freezing temperatures occur for 6 to 8 months.
- Here trees are capable of reaching a minimum height of 5 m and a canopy cover of 10%.
- The boreal ecozone principally spans 8 countries
 - Canada, China, Finland, Japan, Norway, Russia, Sweden and United States.
- It is typically composed of coniferous tree species such as pine, spruce and fir with some broadleaf species such as poplar and birch.

Significance of Boreal Forest

- The circumboreal belt of forest represents about 30% of the global forest area, containing more surface freshwater than any other biome.
- It is second only to the Amazon in terms of its vital role in ensuring the future of the planet.
- It holds twice as much carbon as all tropical forests combined.
- In addition, more than 33% of lumber and 25% of paper on the export market originate from boreal regions.

Climate Change Impacts on Boreal Forest

- During its relatively brief history since deglaciation, the boreal forest has experienced many fluctuations of its climatic environment.
- The increase in temperature enhanced the soil respiration and accelerated carbon emission from the vast stored pool of the boreal forest.

- Changes in temperature and precipitation will also have an impact on disturbance mechanisms such as insects, drought, and fire.
- The boreal forests of eastern North America and Europe have been severely impacted by acid rain.
 - Acid rain acidifies the soil which makes it toxic to plant roots, leaving the trees more susceptible to damage from insects and disease.

Tamil Nadu's 1st Biodiversity Heritage Site

The Tamil Nadu Government issued a notification declaring the **Arittapatti village** in Madurai district, as a Biodiversity Heritage Site (BHS).

- It is Tamil Nadu's 1st and India's 35th Biodiversity Heritage Site.
- **Nallur Tamarind Grove** in Bengaluru, Karnataka was the 1st Biodiversity Heritage Site of India declared in 2007.

About Biodiversity Heritage Site

- It is a rich biodiversity area and an important component of the local ecosystem which is being protected and managed by society.
- The State Government may notify areas of BHS in consultation with local bodies under Section 37(1) of the '**Biological Diversity Act, 2002**'.
- It aims to prevent the loss of biodiversity and preserve the cultural and architectural heritage.
- The creation of a BHS cannot impose any restrictions on the prevailing practices and uses of local communities, except those voluntarily decided by them.

Champions of the Earth Award

Indian wildlife biologist Dr Purnima Devi Barman has been honoured with the Champions of the Earth award in the Entrepreneurial Vision category

About Champions of the Earth Award

- It is the United Nations' highest environmental honour.
 - United Nation Environment Programme (UNEP) coordinates and hosts the Champions of the Earth award.
- The award celebrates individuals and groups whose actions have a transformative impact on the environment.
- The award celebrated visionaries in three categories -

Inspiration and action

Entrepreneurial vision

Science and innovation

Earliest Receiver of the Award

- Prime Minister Narendra Modi was honoured with the United Nations Champions of the Earth Award 2018.
- PM Modi is the 3rd Indian to receive the award after Suzlon Group Chairman Tulsi Tanti and lawyer Afroz Alam, who led the clean-up at Mumbai's Versova beach.

CITES COP19

The 19th Conference of Parties (COP19) to the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)** was held in Panama City.

Key Highlights of CITES COP19

- 52 proposals have been put forward that would affect the regulations on international trade for: sharks, reptiles, hippos, songbirds, rhinos, 200 tree species, orchids, elephants, turtles and more.
- It urged parties and non-parties alike to adopt and implement comprehensive national legislation and review existing ones.
- It also urged to submit annual reports to the Secretariat with vital information that will help in understanding the legal and illegal pangolin trade, its market, seizures and breeding operations.
- It suggested applying anti-money laundering measures, forensic analytical techniques, intelligence-led enforcement and creating robust systems in border regions to bring about effective regional enforcement.
- The Conference has accepted a proposal to include **sea cucumber** in Appendix II of the Convention.
- **India's Shisham** is included in Appendix II of the convention, thereby requiring it to follow CITES regulations for the trade of the species. A relief was provided by easing the CITES rules for export of **India's Shisham** based products. This is expected to boost Indian handicraft exports.

North Indian Rosewood

- It is often known as sheesham, a deciduous rosewood tree native to the Indian subcontinent and southern Iran.
- It grows predominantly along river banks over 200 metres elevation, but it can naturally reach 1,400 metres. It is listed as Least Concern in the IUCN Red List.

India at Cop19 of CITES

- India decided not to vote against a proposal to **re-open the international trade in ivory.**
 - It was proposed by Namibia, Botswana, South Africa and Zimbabwe, with the aim of regularizing trade in ivory.
- At CITES CoP 19, India reiterated its commitment regarding conserving tortoises and freshwater turtles in the country.
 - India also highlighted that many species of turtles and tortoises which are in danger are already included in Wildlife Protection Act 1972 and given high degree of protection.
- India's proposal for transferring **Leith's Softshell Turtle** from Appendix II to Appendix I of the CITES was adopted.
- India's proposal for inclusion of **Jeypore Hill Gecko** in Appendix II and the transfer of Red-Crowned Roofed Turtles from Appendix II to Appendix I of CITES have also been adopted.

About CITES

- It is a global agreement among governments to regulate or ban international trade in species under threat.
- It is administered by the **United Nations Environment Programme (UNEP)**
- It is **legally binding** on the Parties.
- CITES was conceptualised in 1963 at a meeting of the (IUCN) International Union for Conservation of Nature. **It came into force in 1975. India joins CITES in 1976.**
- It has three appendices -
 - **Appendix I** – It lists species that are the most endangered among CITES-listed animals and plants.
 - **Appendix II** - It lists species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled.

- **Appendix III** - It is a list of species included at the request of a Party that already regulates trade in the species and that needs the cooperation of other countries to prevent unsustainable or illegal exploitation.

- India hosted CITES CoP-3rd in 1981.

Illegal Wildlife Trade and Climate Change: Joining The Dots

- A paper “Illegal Wildlife Trade and Climate Change: Joining the dots” released by the United Nations Office on Drugs and Crime (UNODC).
 - It was released at a side event during COP27 to the United Nations Framework Convention on Climate Change (UNFCCC).

Key Highlights of This Report

- It highlighted **five types** of relationships between illegal wildlife trade and climate change.
 - It showed that it had implications for ecosystem function and resilience, including the persistence of carbon stocks.
- The paper also highlighted **three instances** of animals that offer highly specialized ecosystem services related to climate change but are hunted for illegal wildlife trade.
 - The three animals – **elephants, white rhinos, and pangolins** – were termed as “Ecosystem Engineers” since they shape the fundamental abiotic processes
 - For example, the African Forest Elephants have declined by 86% in the last 30 years due to habitat loss and poaching for their ivory.
- Southeast Asia’s tigers, pangolins, Asian elephants, and several rosewood tree species are heavily trafficked.
- Illegal wildlife trade was also a reflection of weak environmental governance, and an exacerbating factor to it.

Suggestions Given In Paper

- Illegal wildlife trade has wide-ranging impacts on ecosystem functions and processes affecting climate, so it should not be viewed only through the lens of conservation.
- The reforms should not only mean reducing illegal wildlife trade but also improving overall environmental and social outcomes.

United Nations Office on Drugs and Crime (UNODC)

- It was established in 1997 to make the world a place free from the menace of drug abuse and the crimes that follow.
- It also works to improve crime prevention and assist in criminal justice reform in many countries.
- It releases the **World Drug Report** every year, which gives valuable information on trends in drug abuse, production and use of illicit drugs around the world.

Tokhu Emong Bird Count (TEBC)

- It is Nagaland's 1st bird documentation event to celebrate the birds of the state.
- The basic activity during this event is to go outdoors, spend at least 15 minutes watching birds, and upload your birdlist(s) to eBird.
- This will prove to be a great opportunity to get kids connected to birds and nature.
- The event has been dubbed after Tokhu Emong, a post-harvest festival of the Lotha Nagas.

Glyphosate

- It is a non-selective systemic **herbicide** that is applied directly to plant leaves.
- In India, it has been approved for use only in tea plantations and non-plantation areas accompanying the tea crop. Use of the substance anywhere else is illegal.
- Illegally it is highly used in many crops like sugarcane, maize and many fruit crops including mango, banana, grapes, pomegranate and citrus
- It has some negative health impacts like cancer, reproductive and developmental toxicity to neurotoxicity and immunotoxicity.

Energy Transition Accelerator

- It is a carbon offset plan that will allow companies to fund clean energy projects in developing countries.
- It helps to gain carbon credits that companies can then use to meet their own climate goals.
- The plan will be developed by the US along with the Bezos Earth Fund and the Rockefeller Foundation.
- It would receive inputs from public and private.

Tyre Pyrolysis Oil

- Tyre pyrolysis refers to a technique of breaking down used tyres in the absence of oxygen at temperatures between 250° C and 500° C, producing liquid oil and gases.
- It was considered a safer technique than burning tyres but pyrolysis leaves fine carbon matter, pyro-gas, oil as residue.

UN Climate Technology Centre and Network

- It is the implementation arm of the Technology Mechanism of the UNFCCC.
- It is hosted by the United Nation Environment Programme (UNEP).
- The Centre promotes the accelerated transfer of environmentally sound technologies for low carbon and climate resilient development at the request of developing countries.






Atmospheric Rivers Over Asia Vs Arctic Oscillation







Atmospheric Rivers	<ul style="list-style-type: none">• These are relatively long, narrow regions in the atmosphere, like rivers in the sky that transport most of the <u>water vapour outside of the tropics</u>.• These columns of vapour move with the weather, carrying an amount of water vapour roughly equal to the average flow of water at the mouth of the Mississippi River.• When atmospheric rivers make landfall, they often release this water vapour in the form of rain or snow.
Arctic Oscillation	<ul style="list-style-type: none">• It is a back-and-forth transfer of atmospheric pressure between the Arctic and the mid-latitudes of the North Pacific and North Atlantic.• When it is strongly positive, a strong mid-latitude jet stream steers storms northward, <u>reducing cold air outbreaks in the mid-latitudes</u>.• When it is strongly negative, a weaker, meandering jet dips farther south, allowing Arctic air to spill into the mid-latitudes.

Koronivia Joint Work on Agriculture (KJWA)

- It is a landmark decision under the United Nations Framework Convention on Climate Change (UNFCCC) that recognizes the unique potential of agriculture in tackling climate change.
- It was established at the 23rd Conference of the Parties (COP) in Fiji in 2017.
- It addresses 6 interrelated topics on soils, nutrient use, water, livestock, methods for assessing adaptation, and socio-economic & food security dimensions of climate change across the agricultural sectors.
- Under this, countries agreed to work together to make sure that agricultural development ensures both increased food security in the face of climate change and a reduction in emissions.

Species In The News

<p>Baleen Whale</p> 	<ul style="list-style-type: none"> • It is also called toothless whale. • <i>Some</i> baleen whales are coastal, they stay near shore. • They forage along the productive continental shelf area. • Most baleen whales are highly migratory, moving toward high-latitude feeding areas in the summer and toward low-latitude calving areas in the winter. • There are currently 16 species of baleen whales.
<p>Amur falcon</p> 	<ul style="list-style-type: none"> • It is the world's longest travelling raptors. Approximately 22,000 km journey start travelling with the onset of winters. • It gets its name from Amur River that forms the border between Russia & China. • In Nagaland, Doyang Lake is known as a stopover for the Amur falcons during their annual migration. Nagaland is also known as the Falcon Capital of the World. • It is listed as least concern in the IUCN Red List.
<p>Bellairsia gracilis</p> 	<ul style="list-style-type: none"> • A study in Nature finds a near-complete skeleton of an early reptile from the Middle Jurassic period of Scotland. • The skeleton is of Bellairsia gracilis, a primitive squamate. • Squamates are a group of reptiles that includes more than 10,000 living species descended from a shared common ancestor that lived 240 million years ago. • The fossil may improve our understanding of the anatomical transformations that led to the establishment of the body plan of reptiles such as modern lizards.
<p>Apis karinjodian</p> 	<ul style="list-style-type: none"> • A new species of endemic Honeybee has been discovered in the Western Ghats. • It has given the common name Indian Black Honeybee. • It has evolved from Apis cerana morphotypes that got acclimatised to the hot and humid environment of the Western Ghats. • It is listed as Near Threatened in the IUCN Red List. • The new find has increased the species of honeybees in the world to 11.
<p>Pseudohelice Annamalai</p> 	<ul style="list-style-type: none"> • Researchers have discovered a new species of Estuarine Crab at the Mangroves of Parangipettai in Cuddalore, Tamil Nadu. • It has been named in recognition of Annamalai University's 100 years.

<p>Harlequin Frog</p> 	<ul style="list-style-type: none"> • Researchers confirmed that many harlequin frogs once believed to be extinct are persisting. • They were hit hardest by a skin-eating chytrid fungus that rapidly spread around the globe in the 1980s. • It is small, generally brightly coloured, and diurnal. • It occurs in a diverse array of habitats-
<p>Himalayan Grey Langur</p> 	<ul style="list-style-type: none"> • It is also called the Chamban Langur or Chamba Sacred Langur. • It is a colobine, meaning leaf-eating monkey. • Population is mostly concentrated in the subtropical, tropical moist, temperate, alpine, coniferous and broadleaf forests. • It changes locality during different seasons, depending upon the availability of food and environmental conditions. • It is listed as Endangered in the IUCN Red List and Schedule II in Wildlife (Protection), Act 1972.
<p>Flame Lily</p> 	<ul style="list-style-type: none"> • It is a perennial tuberous climbing herb. • It is commonly found in scrubland, forests, thickets and even sand dunes. • It occupies a special place in Tamil literature. • It is the Tamil Nadu's State flower. • Both the roots and the seeds are important pharmaceutical ingredients in indigenous Indian and African medicine.
<p>Indian Skimmer</p> 	<ul style="list-style-type: none"> • It is a waterbird species. • It was formerly widely distributed across the Indian Subcontinent but it is presently confined only to India, Pakistan, Bangladesh, Nepal and Myanmar. • In India, the species can be sighted near the Chambal River, in few parts of Odisha and in Andhra Pradesh. • It is listed as Endangered in the IUCN Red List.
<p>Siberian rubythroat</p> 	<ul style="list-style-type: none"> • A rare winter migrant, it has been recorded in the Nilgiris. • It is a ground-loving songbird of Asia. It nests near the ground. • It primarily breeds in Siberia, while wintering in southern and south-eastern Asia. • The male has a red throat edged with a narrow black border and a broad white border. • It is listed as least concern in the IUCN Red List.
<p>Muli Bamboo</p> 	<ul style="list-style-type: none"> • It is the tropical evergreen species of bamboo, native to the northeast India-Myanmar region. • It is the largest fruit-producing bamboo and also grown as an ornamental • It accounts for 90% of the bamboo forests found in the north-eastern state. • A strange ecological phenomenon associated with Muli Bamboo is Mautam, the cyclical, mass bamboo flowering that occurs once in 48 years.

Myositis

- It is a rare condition that causes muscles to become weak, painful and tired.
- It is usually caused by a problem with the immune system, where it mistakenly attacks healthy tissue.
- In most cases, the exact cause of myositis is unknown (therefore considered **idiopathic**).
- It usually affects arms, shoulders, legs, hips, abdomen and spinal muscles. In advanced stages it may affect muscles of esophagus (food pipe), diaphragm and eyes.
- The general symptoms may include muscle pain and soreness, fatigue, trouble swallowing, and difficulty breathing.

Treatment

- It is usually treated with steroids and immunosuppressive drugs.
- There is no one medical treatment that fits all, so physical therapy along with the drug are recommended that can help keep muscles strong and prevent muscle atrophy (thinning).

Aceclofenac

- Indian Veterinary Research Institute (IVRI) has demanded a ban on using aceclofenac in cattle after a new study showed that the drug metabolized into diclofenac in water buffaloes.
- Such metabolisms pose a threat to vulture populations in the country.
 - Diclofenac (an anti-inflammatory drug) was banned for veterinary use by the Government of India in 2006. It was found to be the main cause of a dramatic decline of the vulture population across Asia.

About Aceclofenac

- It is a nonsteroidal anti-inflammatory drug (NSAID).
- It is used for the treatment of pain and inflammation in osteoarthritis, rheumatoid arthritis, and ankylosing spondylitis.

EMIT Mission

NASA's **Earth Surface Mineral Dust Source Investigation (EMIT)** mission detects more than 50 methane **super-emitters**.

About EMIT Mission

- It is an **Earth Ventures-Instrument (EVI-4) Mission** to map the **mineral composition of arid dust source regions** via imaging spectroscopy in the visible and short-wave infrared range.
- It was originally designed to examine how dust impacts climate.
 - But it has demonstrated another crucial capability, detecting the presence of methane.
- It was developed at **NASA's Jet Propulsion Laboratory** and installed on the **International Space Station (ISS) in July 2022**
- **Since then, it has been mapping the chemical composition of dust throughout the Earth's deserts**
- It will help researchers better pinpoint methane leaks and provide insight on how they can be addressed quickly.

Findings of EMIT Mission

- It identified a plume in the Permian Basin, New Mexico. It was roughly 3.3 kilometers long.

- In Turkmenistan, it identified 12 plumes from oil and gas infrastructure in the Caspian Sea port of Hazar. Some plumes spanned more than 32 kilometers.

About Methane

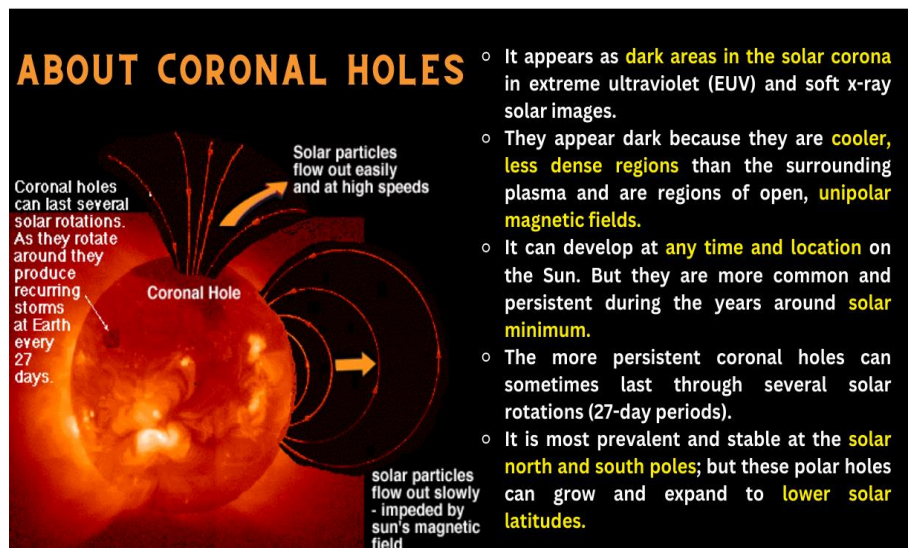
- It is the simplest hydrocarbon, consisting of one carbon atom and four hydrogen atoms.
- It is the 2nd most abundant greenhouse gas (GHG) in the atmosphere, after carbon dioxide. But is **80 times more potent** GHG than carbon dioxide.
- It stays in atmosphere for only ten years, unlike CO₂, which persists for hundreds or thousands of years.
- As per Intergovernmental Panel on Climate Change (IPCC) report, it accounts for around half of the 1°C net increase in global average temperature as compared to pre-industrial era.

Coronal Holes

NASA Solar Dynamics Observatory captured an image that has dark patches on the sun's surface resembling eyes and a smile. These patches are called Coronal holes.

Significance of Coronal Holes

- As per NASA, these are important to understanding the space environment around the earth through which our technology and astronauts travel.
- **Persistent coronal holes are long-lasting sources for high-speed solar wind streams.**
- Scientists study these fast solar wind streams because they sometimes interact with earth's magnetic field, creating what's called a **geomagnetic storm**.



About Geomagnetic Storm

- It is a major disturbance of Earth's magnetosphere that occurs when there is a very efficient exchange of energy from the solar wind into the space environment surrounding Earth.
- These storms result from variations in the solar wind that produce major changes in the currents, plasmas, and fields in Earth's magnetosphere.

Effect of Geomagnetic Storm

- It can hit operations of space-dependent services like global positioning systems (GPS), radio, and satellite communications.
- Astronauts on spacewalks face health risks from possible exposure to solar radiation outside the Earth's protective atmosphere.

Xenotransplantation

Researchers have said that the **genetically modified** pig heart took longer to generate a heartbeat than hearts of pigs or humans usually do.

- Genetically engineered hearts are transplanted into humans using the xenotransplantation process.

About Xenotransplantation

- It is a process that involves the transplantation (works on active tissue), implantation (mechanical support) or infusion into a human recipient of either:



live cells, tissues, or organs from a nonhuman animal source

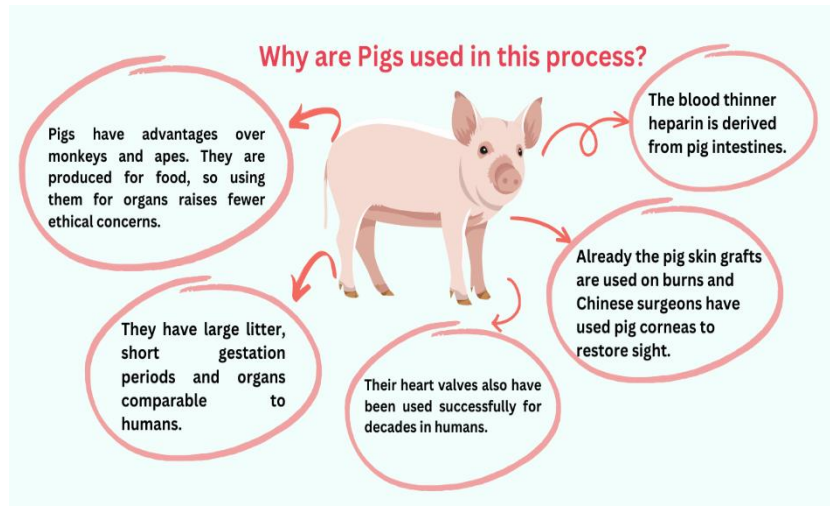


human body fluids, cells, tissues or organs that have had ex vivo contact with live nonhuman animal cells, tissues or organs

- It could provide an alternative and additional supply of organs for people facing life-threatening diseases.

Concerns

- Animals, such as Pigs, have a shorter lifespan than humans, meaning that their tissues age at a quicker rate and due to this may die prematurely.
- Disease transmission and permanent alteration to the genetic code of animals are also causes for concern.
- Animal rights activists have also objected to xenotransplantation on ethical grounds.

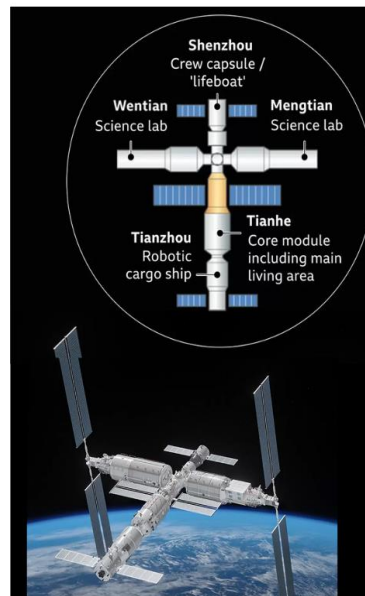


Long March 5B rocket

Large fragments of China's Long March 5B rocket plunged uncontrolled into the south-central Pacific Ocean. The fragments were stages of the rocket used to deliver the third and final module of the Tiangong space station of China.

About Long March 5B Rocket

- It is a Chinese heavy lift launch system developed by the China Academy of Launch Vehicle Technology (CALT).
- It is the 1st Chinese launch vehicle designed from the ground up to focus on non-hypergolic liquid rocket propellants.
- It is specially designed to carry the Tiangong space station modules.
- The maximum payload capacities of the base variant are 25,000 kilograms to Low Earth Orbit (LEO) and 14,000 kilograms to Geosynchronous Transfer Orbit (GTO).



TIANGONG SPACE STATION

- It is being built in low earth orbit between 340 and 450 kilometers above the earth.
- The programme is independent and unconnected to other international space activities.
- China was banned from the International Space Station since the year 2011.
- It has a core module named Tianhe and two laboratory cabin modules **Wentian** and **Mengtian**.

{For more about Tiangong, Refer The Recitals-August 2022}

Falcon Heavy Rocket

SpaceX launched the Falcon Heavy rocket into a geosynchronous Earth orbit from the Launch Complex 39A at the Kennedy Space Center in Florida, U.S. The rocket is carrying satellites to space for the U.S. military in a mission named **U.S. Space Force (USSF)-44**.

About Falcon Heavy Rocket

- It is a **partially reusable** heavy lift launch vehicle that is produced by **SpaceX**.
- SpaceX claims it to be the **most powerful rocket** in the world today.
- It has 27 Merlin engines which together generate more than five million pounds of thrust at lift-off.
 - ✓ Merlin is a family of rocket engines developed by SpaceX for use on its Falcon 1, Falcon 9 and Falcon Heavy launch vehicles.
- It has a lifting capacity of around 64 metric tonnes in orbit.

Cordy Gold Nanoparticles (Cor-AuNPs)

A collaborative experiment by scientists from four Indian institutions has earned an international patent from Germany for developing Cordy Gold Nanoparticles (Cor-AuNPs)

About Cordy Gold Nanoparticles

These nanoparticles are derived from the synthesis of the extracts of *Cordyceps militaris* and gold salts.

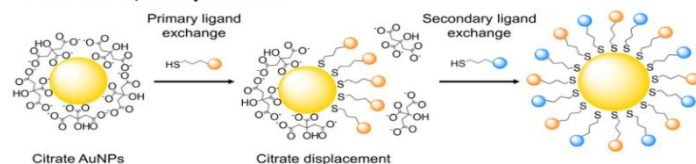
- **Gold salts** are ionic chemical compounds of gold generally used in medicine.
- **Cordyceps militaris** is a high-value **lab-grown parasitic fungus**. It is also called **super mushroom** because of its tremendous medicinal properties. Wild Cordyceps mushrooms are found in the eastern Himalayan belt.

Significance Of Cordy Gold Nanoparticles

- It indicates a new application of nanoparticles in the development of therapeutic drugs which can be delivered as ointments, tablets, capsules, and in other forms.
- It is able to interact with the skin barrier, enhancing delivery and improving the skin permeability of high-molecular-weight active agents.

Gold nanoparticles (AuNPs)

- These are small gold particles with a diameter of **1 to 100 nm** which, once dispersed in water, are also known as **colloidal gold**.
- It has been widely applied in **bio nanotechnology** due to their **unique properties and multiple surface functionalities**.
- The ease of AuNP functionalization provides a versatile platform for **nano biological assemblies** with oligonucleotides, antibodies, and proteins.



Vikram-S

India's 1st privately developed **launch vehicle** Vikram-S took off on its first flight from ISRO's Sriharikota spaceport.

About Vikram-S

- It is India's 1st Privately developed single-stage sub-orbital launch vehicle.
 - Suborbital flight travels slower than orbital velocity, meaning it is fast enough to reach outer space but not fast enough to stay in orbit around Earth.
- It is being developed by Hyderabad-based Skyroot Aerospace with support from ISRO and IN-SPaCe.
 - The skyroot has named the mission as '**Prarambh**' (the beginning) since it is the 1st mission for the company.
- The engine used in the launch vehicle - **Kalam-80**, is named after former president Dr A P J Abdul Kalam.

- It will carry 3 payloads, including a 2.5-kilogram payload that has been developed by students from several countries, including India, under the aegis of **SpaceKidzIndia**.

Other Variants Of The Vikram Rocket

Skyroot has been developing 3 variants of the Vikram rocket that will use various solid and cryogenic fuels and have their core structure built using **carbon composites**. The thrusters used for spin stability in the vehicle have been **3D printed**.

- Vikram-I can carry 480 kilograms of payload to Low Earth Orbit (LEO).
- Vikram-II is equipped to lift off with 595 kilograms of cargo to 500 km Low Inclination Orbit (LIO), 400 kg to 500 km SSPO (sun-synchronous polar orbits)
- Vikram-III can launch with **815 kg** to 500 km LIO; 560 kg to 500 km SSPO

Significance Of Privatization In Indian Space Sector

- The private industry will free up ISRO to concentrate on science, R&D, interplanetary exploration and strategic launches.
- In private companies there is a quick decision-making process whereas in public enterprise the same process has to go through several stages.
- It also provides employment to millions of people all over the world.
- An increase in the number of private space companies fosters competition among them and encourages continuous improvement and progress.
- The private sector often converts government-developed technologies into technologies and products that are attractive or affordable to the general public.

Measles

The Ministry of Health and Family Welfare has deputed a high-level team to Mumbai to manage Measles cases.

About Measles

- It is a very contagious **respiratory infection** caused by the measles virus.
- It is transmitted via droplets from the nose, mouth or throat of infected persons.
 - Initial symptoms usually occur 10–12 days after infection and comprise high fever, runny nose, bloodshot eyes and **Koplik's spots** (tiny white spots on the inside of the mouth).
 - It spreads easily and can be serious and even fatal for small children.

Treatment of Measles

- There is no specific treatment for measles, so it is recommended that you take all necessary precautions to avoid contracting the disease.
 - Children should be immunised within 12 months of birth, with the 2nd dose administered between the ages of 4-6.
 - MMR (Mumps, Measles, and Rubella) is a vaccine that protects against 3 diseases

India and Measles

- According to WHO India stood 4th among 194 countries in the number of measles cases registered between July 2018- June 2019.
- India has adopted the National Strategic Plan for Achieving and Sustaining Measles and Rubella Elimination.

- India vaccinated over 324 mn children between 2017-2020 through the MR vaccination campaign.

Challenger Spaceship Disaster

NASA has announced the recovery of debris from the **Challenger spaceship** that exploded 73 seconds after liftoff killing all seven astronauts aboard 37 years ago (Jan' 1986).

About The Mission

- The mission designated STS-51-L.
- It was NASA's 10th flight for the orbiter and the 25th flight of the Space Shuttle fleet.
- It was supposed to be a six-day mission wherein, the crew was to deploy a large communications satellite, deploy and retrieve an astronomy payload to study Halley's Comet.
- The primary objective was to launch the 2nd Tracking and Data Relay System (TDRS) satellite into orbit.

How This Mission Failed?

- The spacecraft broke apart after it suffered a major malfunction less than 2 minutes into its flight.
- The severe cold reduced the resiliency of two rubber O-rings that sealed the joint between the two lower segments of the solid rocket booster.
 - The O-ring seals are used to keep fluids from leaking and components sealed.
- The challenger broke up in the explosion, but the forward section with the crew cabin was severed in one piece.
- It was believed that the crew survived the initial breakup, but that loss of cabin pressure rendered them unconscious within seconds.
- They did not wear pressure suits. Death probably resulted from oxygen deficiency minutes before impact.

Columbia Space Shuttle Accident

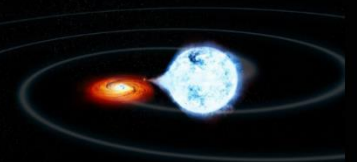
- It occurred in Feb, 2003, when NASA's space shuttle Columbia broke up as it returned to Earth, killing India-born Kalpana Chawla and six other astronauts on board.
- An investigation board determined that a large piece of foam fell from the shuttle's external tank and breached the spacecraft wing.
- NASA suspended space shuttle flights for more than two years as it investigated the cause of the Columbia disaster.

Polluted White Dwarf Stars

- New research on polluted white dwarfs adds to evidence which suggests that the building blocks of planets like Jupiter and Saturn start forming when a young star is growing.
- It was generally believed that stars formed millions of years before the planets that orbit them. The material leftover from star formation accumulates to form planets.
- The new study could potentially help solve a major puzzle in astronomy by changing scientific

About white dwarf

- It is a dim, **dense**, planet-sized star that marks the evolutionary endpoint for all but the most massive stars.
- The closest white dwarf to the Sun is Sirius B located at 8.6 light years.
- It forms from the collapse of stellar cores in which nuclear fusion has stopped and are exposed to space following the loss of the old star's bloated outer envelope.
- Approximately 97% of the stars in the Milky Way will eventually become white dwarfs.
- Eventually over hundreds of billions of years a white dwarf cools until it becomes a black dwarf, which emits no energy.
- Because the universe's oldest stars are only 10 billion to 20 billion years old there are no known black dwarfs.



understanding of how planetary systems are formed.

About Polluted White Dwarf Stars

These are white dwarf stars that have recently consumed a planet or asteroid that was orbiting around them. Usually, telescopes cannot learn much about the interior of planets but polluted white dwarf systems are an exception.

Google's 1,000 Language AI Model

Google is developing a 1,000 Language AI Model that can support the 1,000 most spoken languages of the world.

About 1,000 Language AI Model

- Google's plan is to build one gigantic model for the 1,000 languages so that both widely used and rarer languages can co-exist, interact, and grow together
- It will be used to decode foreign languages instantly using massive amounts of user data and content on their servers.
- It will aim to reduce reliance on human labour for areas such as translation, customer service or computation.

Other Language Models

- **Generative Pre-trained Transformer 3 (GPT-3)**
 - It was introduced by Open AI, an AI research firm.
 - It is a language model that leverages deep learning to generate human-like text.
 - Not only can it produce text, but it can also generate code, stories, poems, etc.
- **M2M-100 model**
 - Meta claims it to be the 1st multilingual translation model that does not use English as the default language when it translates directly between 100 languages. It is also open source.

Narco Test

A Delhi Court recently ordered a narco test for Aftab Amin Poonawala in the Shradha Walkar killing case.

About Narco Test

- In a narco or narcoanalysis test, a drug called **sodium pentothal and sodium amytal** is injected into the body of the accused, which transports them to a hypnotic or sedated state.
 - A hypnotic or sedated state is a state in which their imagination is neutralised.
- In the hypnotic stage, the person becomes less inhibited and is more likely to divulge information, which would usually not be revealed in the conscious state.

Notable Example of Narco Test in India

- In the 2002 Gujarat riots case.
- Abdul Karim Telgi fake stamp paper scam.
- The Nithari killings case in 2007
- The 26/11 Mumbai terror attack case on captured terrorist Ajmal Kasab.

Rules Related to Narcos Test

- In the Selvi vs State of Karnataka & Anr case (2010), the Supreme Court ruled that no lie detector tests should be administered without the consent of the accused.

- It includes narco tests, brain mapping and polygraph tests.
- However, statements made during narco analysis test are not admissible in the court except under certain circumstances when the court thinks that the facts & nature of the case permit it.

Polygraph Test

- This test is based on the assumption that physiological responses that are triggered when a person is lying are different from what they would be otherwise.
- It does not involve injecting drugs into the body like narco test.
- Instruments are attached to the suspect, and indicators such as blood pressure, pulse, respiration, change in sweat gland activity, blood flow, etc., are measured as questions are put to them.
- A numerical value is assigned to each response to conclude whether the person is telling the truth, is deceiving, or is uncertain.

Brain Mapping Test or P-300 test:

In this test, the activity of the brain of a suspect is measured during interrogation to find out whether he is concealing any information.

Tzield

US Food and Drug Administration (FDA) approved a new drug called Tzield (teplizumab), to delay the onset of **type 1 diabetes**.

About Tzield

- It is a **monoclonal antibody** injection that can prevent body's immune system from *mistakenly attacking cells in the pancreas that make insulin.*
- It could push back the onset of **type 1 diabetes** in adults at stage 3 and children aged eight years or more at stage 2.

Diabetes

- It is a disease that occurs when your blood glucose, also called blood sugar, is too high.
- Insulin, a hormone made by the pancreas, helps glucose from food get into your cells to be used for energy.

Types of Diabetes

- **Type 1 Diabetes:** It is also known as juvenile diabetes (as it **mostly** affects children of age 14-16 years), this type occurs when the body **fails to produce** sufficient insulin. It is predominantly diagnosed in children and adolescents. Although the prevalence is less, it is much **more severe than type 2**.
- **Type 2 diabetes** – In type 2 diabetes, the body does not use insulin well (while the body still makes insulin). It can happen at any age, even during childhood. It is the most common type of diabetes.
- It is caused by an **autoimmune attack** on the insulin-producing cells within the pancreas.
- People with type 1 diabetes need to take a diabetes medicine called insulin to control their blood sugar.
- **Gestational diabetes** - It develops in some women when they are pregnant. Most of the time, this type of diabetes goes away after the baby is born.

Gram-negative Bacteria

A multi-centre survey carried out by the ICMR to spot the trend in antibiotic resistance across the country. Study showed that *Acinetobacter baumannii*, a *gram-negative bacteria* known to cause infection in the blood, urinary tract and lungs among others, was resistant to high-end antibiotics.

About Gram-negative Bacteria

- It is a group of aerobic bacteria which does not retain the crystal violet dye during the procedure of Gram staining.
 - Gram staining is a common technique used to differentiate two large groups (Gram-positive and Gram-negative groups) of bacteria based on their different cell wall constituents.
- It appears pink in colour when examined under the microscope.
- These bacteria are resistant to multiple drugs and are increasingly resistant to most available antibiotics.
- These are enclosed in a protective capsule. This capsule helps prevent white blood cells, which fight infection from ingesting the bacteria.
- It causes infections including pneumonia, bloodstream infections, wound or surgical site infections, and meningitis in healthcare settings.

Antimicrobial Resistance

- It occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines making infections harder to treat.
- It increases the risk of disease spread, severe illness and death.
- WHO has declared that AMR is one of the top 10 global public health threats facing humanity.
- Misuse and overuse of antimicrobials are the main drivers in the development of drug-resistant pathogens.
- A new study by The Lancet shows that antimicrobial-resistant bacteria may be directly responsible for 1.27 million deaths in 2019, based on estimates from 204 countries and territories.

OCEANSAT-3 Earth Observation Satellite-6 (EOS-6)

ISRO successfully launched the **PSLV-C54/ EOS-06** mission with **Oceansat-3** and eight nano satellites in partnership with the Ministry of Earth Sciences (MoES).

About Oceansat-3 (EOS-06)

- It is the 3rd-generation satellite in OceanSat series, designed and developed for ocean studies.
- It is a follow up to OceanSat-1 or IRS-P4 and OceanSat-2 launched in 1999 and 2009, respectively.

Objectives of EOS-06

- To ensure the data continuity of Ocean colour and wind vector data to sustain the operational applications.
- To improve the applications, some additional datasets such as Sea Surface Temperature (SST) and number of bands in Optical region for fluorescence and in Infrared region for atmospheric corrections are accommodated.
- To develop / improve related algorithms and data products to serve in well- established application areas and to enhance the mission utility.

Key Payloads Include

- **Ocean Color Monitor (OCM-3)** - Expected to provide improved accuracy in daily monitoring of phytoplankton.
- **Sea Surface Temperature Monitor (SSTM)** - Provide various forecasts ranging from fish aggregation to cyclone genesis and movement.
- **Ku-Band scatterometer (SCAT-3)** - Provide a high-resolution wind vector (speed and direction) at the ocean surface.

- **ARGOS** – A communication payload that is used for low-power communications including marine robotic floats, fish tags, drifters, and distress alert devices useful for conducting effective search and rescue operations.

Significance of EOS-6

- This is the 1st major ocean satellite launch coming from India since the initiation of the UN Decade of Ocean Science for Sustainable Development (UNDOSSD, 2021-2030).
- It will have the capability to make concurrent measurements of Ocean Colour, SST and Sea Surface Winds.
- Ocean observations will serve as a strong foundation for India's blue economy and polar region policies.

Bluebugging

- It is a technique hackers employ to worm their way easily into a device when its Bluetooth is on discovery mode.
- Hackers use it to access calls, read and send text messages, steal sensitive information stored on the device, and even divert calls to their own numbers, among other things.
- Initially, it was used to target laptops, but hackers later developed methods to target all Bluetooth-enabled devices.

CPaaS

- CPaaS is an acronym for **Communications Platform as a Service**.
- It is a cloud-based delivery model that lets you add voice, video, and messaging features to your existing business software using application program interfaces (APIs).
- It allows you to cherry-pick real-time communications features and embed them into your apps and services.
- It can be used in multiple industries, like healthcare, education, FinTech and Entertainment.

Why Does The Moon Turn Red During A Lunar Eclipse?

- During a lunar eclipse, the Moon turns red because the only sunlight reaching the Moon passes through Earth's atmosphere.
- This phenomenon is called Rayleigh scattering.
- It is the same mechanism responsible for causing colorful sunrises and sunsets, and for the sky to look blue.
- The more dust or clouds in Earth's atmosphere during the eclipse, the redder the Moon will appear.

Photonic Crystals

- These are optical nanostructures in which the refractive index changes periodically.
- Refractive index is the measure of the bending of a ray of light when passing from one medium into another.
- It occurs in nature in the form of structural coloration and animal reflectors.
- Examples found in nature include opal, butterfly wings, peacock feathers, etc., exhibiting distinct iridescent colours (bright colours that seem to change in different lights).
- It promises to be useful in a range of applications ranging from reflection coatings to optical computers when artificially produced or engineered in laboratories.

Baliyatra

In his address to the Indian diaspora in Bali on the sidelines of the G20 summit, the Indian Prime Minister mentioned the annual Baliyatra on the **banks of the Mahanadi** in Cuttack.

Historical Significance of Baliyatra

- **Baliyatra**, literally means **voyage to Bali** and is one of the country's largest open-air fairs.
- The festival is organised by the Cuttack district administration and Cuttack Municipal Corporation in association with several other government agencies.
- It is organised every year to commemorate the 2,000-year-old maritime and cultural links between ancient Kalinga (today's Odisha) and Bali and other South and Southeast Asian regions like Java, Sumatra, Borneo, Burma (Myanmar) and Ceylon (Sri Lanka).
- The origins of the festival, which **begins on Kartik Purnima** (full moon night in the month of Kartik) can be traced back more than 1,000 years.
- The Bay of Bengal region had several ports, and **sadhavas (traders)** traditionally began their voyage across the sea on this auspicious day, when the winds were favourable for the boats, known as boita to sail.
- **Popular items of trade** between Kalinga and Southeast Asia included pepper, cinnamon, cardamom, silk, camphor, gold, and jewellery.
- Even today, thousands of people across Odisha sail decorative miniature boats made of banana stems, paper, or thermocol to celebrate **boita bandana**, or the worshipping of the boats.

Commercial Dimension

- Besides the cultural and historical aspects, Baliyatra has an important commercial dimension.
- It is a time when people purchase everything from automobiles and electronic devices to local artisanal products at prices that are comparatively low.
- The district administration allots more than 1,500 stalls to traders through an auction, and the fair is estimated to see business worth more than Rs 100 crore over its nine days.

Kalinga's Maritime Prowess

- The Kalinga Empire (present-day Odisha) is known for its glorious maritime history.
- Due to the geographical location of Kalinga, this area saw the growth of ports as early as the 4th and the 5th century BC.
- Some of the famous ports, **Tamralipti, Manikpatna, Chelitalo, Palur, Pithunda** allowed India to connect with other countries via the sea.
- The Kalingas had **trade links with Srilanka, Java, Borneo, Sumatra, Bali and Burma**. Bali formed a part of the four islands that were collectively called the **Suvarnavdipa**, today known as Indonesia.
- The dominance of the Kalingas over the sea routes can be understood from the fact that **Kalidasa** in his **Raghuvamsa** referred to the King of Kalinga as **The Lord of the Sea**.
- The trade in commodities also led to the interchange of ideas and beliefs. Odia merchants formed settlements in Bali and influenced its culture and ethics. This led to the growth of Hinduism in the region.
- The **Masakapan ke Tukad** festival celebrated in Bali is similar to the Bali Yatra festival in Odisha. Both festivals are celebrated in the memory of their maritime ancestors.

Wangala Festival

- The renowned Wangala festival, was recently celebrated in Meghalaya. Celebrated by the **Garo Community**, it is also known as the **100 drums festival**.
- Wangala depicts the onset of winter and is a **harvest festival** held in honour of **Saljong, the Sun-God of fertility**.
- The festival is a way to preserve and promote the cultural identity of Garos in Meghalaya. It is also a way to exhibit the culture and tradition of the region.
- The occasion includes two important events – “**Rugala**” and “**Kakkat**”. Here, residents dressed in colorful attires with feathered headgears dance to the rhythm played through long oval-shaped drums.
- A distinctive feature of this dance deals with a queue of two parallel lines – one of the men and the other of women clad in their festive attires. While the men beat the drums, the line moves forward in rhythm.
- The orchestra of men includes drums, gong, and flutes, along with a primitive flute made of buffalo horn.

Tirupati’s Megalithic Burial Sites

- Most of the megalithic burial sites in Tirupati have been found in a state of neglect. Tirupati district is dotted with anthropomorphic burial sites, said to be the largest as a collection in Andhra Pradesh.
 - Anthropomorphic sites are those marked by a representation of human form above the megalithic burials.
 - A **megalith** is a large stone that has been used to construct a prehistoric structure or monument, either alone or together with other stones.
- The most prominent one is the ‘pillared dolmen’ of the megalithic era, found at Mallayagaripalle, on a hillock between Chandragiri and Dornakambala, 20 km from Tirupati.
- The structure locally referred to as **Pandava Gullu** or **Pandavula Banda** in memory of the Pandavas, is estimated to be 2,500 years old.
- There is another endangered megalith monument in Palem village near Kallur, which resembles a **bull’s horn**.
- Called locally as **Devara Yeddhu**, the site has suffered repeated damage due to secret excavation by treasure hunters.
- Compared to other districts, the erstwhile combined Chittoor district [Tirupati district was carved out of it in April 2022] has an array of such structures, found almost in every mandal.
- This could be an indication to the presence of humans living in groups during the megalithic period (300–500 BC) in this region.

Janaki Ammal

- The 125th birth anniversary of **Edavalath Kakkat Janaki Ammal** was celebrated.
- Born in Thalassery in Kannur district of Kerala in 1897, Janaki Ammal, was pioneering botanist and the **first Indian woman to be awarded a PhD in the botanical sciences**.
- She is known widely for her contributions to science – in the field of **genetics, cytology, evolution**, and more.
- She worked on making several intergeneric and interspecific hybrids involving sugarcane and related grass species **that yielded sweeter sugar**.

- After her return to India in 1950s, she was invited by the then Prime Minister Jawaharlal Nehru to **reorganise the Botanical Survey of India in 1951**, which explores the plant resources of the country and identifies plant species with economic virtue.
- She was also associated with the **Save the Silent Valley movement** – a campaign to stop a hydroelectric project from flooding the Silent Valley forest in Palakkad district of Kerala.

Lachit Borphukan

- A 3-day celebration of the 400th birth anniversary of Lachit Borphukan was held in New Delhi.
- Through the celebration, the Assam government is pushing for his national recognition as a hero along the lines of Shivaji, and as an important counter to the Mughals.
- Born in 1622, Lachit Borphukan is best known for leading the Ahom troops which **fought and defeated advancing Mughal troops** at the **Battle of Saraighat** on the outskirts of Guwahati in 1671.
 - The Battle of Saraighat was a naval battle fought between the Mughal Empire (led by the Kachwaha raja, Ram Singh I) and the Ahom Kingdom (led by Lachit Borphukan).
 - Although weaker, the Ahom army defeated the Mughal army by guerrilla tactics, psychological warfare, military intelligence and by exploiting the weakness of the Mughal navy.
- Borphukan is also considered as the inspiration behind strengthening India's naval force and revitalising inland water transport and creating infrastructure associated with it.
- Since 1999, the Lachit Borphukan gold medal is awarded to the best cadet from the National Defence Academy.

Ahom kingdom

- The Ahom kings ruled large parts of what is now known as Assam for nearly 600 years, from the early 13th century to the early 19th century.
- It was a prosperous, multi-ethnic kingdom which spread across the upper and lower reaches of the Brahmaputra valley, surviving on rice cultivation in its fertile lands.
- The Ahoms engaged in a series of conflicts with the Mughals from 1615-1682, starting from the reign of Jahangir till the reign of Aurangzeb.

Statue of Prosperity

- A bronze statue of **Nadaprabhu Kempegowda**, was unveiled at the premises of the Kempegowda International Airport (KIA) in Bengaluru.
- Referred to as the Statue of Prosperity, it weighs 220 tonne and has a sword weighing 4 tonne.
- Nadaprabhu Kempegowda, a 16th century chieftain of the Vijayanagara empire, is credited as the founder of Bengaluru.
- He was from the **dominant agricultural Vokkaliga community** in south Karnataka.
- It is said that he conceived the idea of a new city while hunting with his minister, and later marked its territory by erecting towers in four corners of the proposed city.
- Kempegowda's initial plan for the city was to have temples, a fort, water tanks, and a cantonment. After receiving permission from emperor Achyutharaya, he **built the Bangalore Fort and town in AD 1537**.
- Kempegowda is also known to have **developed around 1,000 lakes in the city** to cater to drinking and agricultural needs.
- He is also credited for abolishing the practice of cutting the fingers of the left hand of an unmarried woman during a custom known as **Bandi Devaru**.

- Kempegowda knew multiple languages, besides Kannada, and even authored a Yakshagana play in Telugu named **Gangagaurivilasa**.

Cultural Gifts at G20 Summit

- At the G20 summit, the Indian Prime Minister gifted heads of states, curated craft pieces from India.
- US President Joe Biden was presented with **miniature paintings from Kangra**, based on the theme of love as a means of devotion.
- UK Prime Minister Rishi Sunak received **Mata Ni Pachedi**, a sacred textile piece made by nomadic communities in **Gujarat**.
- Indonesian President Joko Widodo was presented with a Kinnauri shawl, with designs influences from Central Asia and Tibet.
- **Agate bowls from Kutch** were presented to the leaders of France, Germany and Singapore.
 - The semi-precious stone is found in underground mines of Rajpipla and Ratanpur in riverbeds, and extracted to produce a variety of ornamental objects.
- A tribal art piece, **Pithora**, was gifted to Australian Prime Minister Anthony Albanese.
 - Pithora paintings, ritualistic tribal folk art by the Rathwa artisans from Chhota Udaipur in Gujarat, are based on the cave paintings that tribal people used to make, reflecting their social, cultural and mythological life and beliefs.
 - These paintings resemble the aboriginal dot paintings of the indigenous communities of Australia.
- Italian Prime Minister Giorgia Meloni was presented a **Patan Patola scarf**, a colourful dupatta woven in the northern part of **Gujarat**, which was encased in a decorative sadeli box, a wooden craft native to Surat.
 - The motifs weaved on scarf were inspired from the Rani Ki Vav, a stepwell in Patan, built in the 11th century AD. The double ikat scarf can be worn on both sides.
 - The ancient art of double ikat or Patola woven in pure silk dates back to the 11th century. The Patola fabrics have an equal intensity of colours and design on both sides.
 - This peculiar quality has its origins in a difficult technique of dyeing or knot dyeing, known as '**bandhani**', on the warp and weft separately before weaving.