



VAJIRAM & RAVI

Institute for IAS Examination

THE RECITALS

Current Affairs (March 2023)



Editor's Cut

- Digital Public Infrastructure (DPI)
- Crypto under PMLA
- Panel of PM, CJI and LoP to pick CEC, ECs
- Right Against Self-Incrimination
- Foreign Law Firms Allowed in India
- Rahul Gandhi Disqualified as MP
- Sealed-Cover Jurisprudence
- National Security Act
- Windsor Framework
- State Visit of PM of Italy to India
- Visit of PM of Japan to India
- ICC issues arrest warrant against Putin

INDEX

EDITOR'S CUT.....(3-27)

- Digital Public Infrastructure (DPI)
- Crypto under PMLA
- Panel of PM, CJI and LoP to pick CEC, ECs
- Right Against Self-Incrimination
- Foreign Law Firms Allowed in India
- Rahul Gandhi Disqualified as MP
- Sealed-Cover Jurisprudence
- National Security Act
- Windsor Framework
- State Visit of PM of Italy to India
- Visit of PM of Japan to India
- ICC issues arrest warrant against Putin

MAPS: PLACES IN NEWS.....(28-32)

SOCIAL ISSUES.....(33-40)

- e-Pharmacies: On Regulating Online Sale Of Drugs In India
- India's Stand On Same-Sex Marriage
- Recurring Migrant Workers' Issues
- Review Panel Red-Flags How NAAC Grades Colleges And Universities
- NCST Upset With Environment Ministry Over Forest Rights
- Women, Business And The Law Report 2023
- PM-ABHIM

ECONOMY AND INFRASTRUCTURE.....(41-54)

- SWAMIH Fund
- Har Payment Digital Mission
- Fugitive Economic Offenders (FEO)
- Frozen Semen Station
- SWAYATT
- CoEs under Mission for Integrated Development of Horticulture
- National Flagship Programmes for Fisheries
- Animal Husbandry Statistics
- International Intellectual Property Index
- International Arms Transfers 2022
- Sagar Manthan
- Electronics Manufacturing Cluster (EMC)
- City Finance Rankings 2022
- PM MITRA Parks
- Samarth (Scheme for Capacity Building in Textile Sector)

POLITY AND GOVERNANCE.....(55-66)

- Swachh Sujal Shakti Samman 2023
- Whip

- Grievance Appellate Committee (GAC) Portal
- Punchhi Commission
- Norms Eased for Selection of Consumer Court Presidents, Members
- Hallmark Unique Identification Number (HUID)
- ATL Sarthi
- Right To Health Bill

INTERNATIONAL RELATIONS.....(67-76)

- Bhutan's Graduation From UN List of Least Developed Countries
- Saudi Arabia and Iran Agree to Restore Ties
- AUKUS Partnership
- Turmoil in Israel
- Japan-South Korea Summit
- Xi - Putin Meeting
- State Visit of Prime Minister of Australia to India
- India-Bangladesh Friendship Pipeline
- India-US Commercial Dialogue 2023
- Migration And Mobility Agreement Between India And Austria

SUMMITS AND ORGANISATION.....(77-79)

- Quad Ministerial Meeting
- SCO Chief Justices' Meet
- Summit for Democracy

DEFENCE AND SECURITY.....(80-87)

- Protocols To Tackle Threat Of Spy Balloons
- Amendments To The Rules On Money Laundering
- AFSPA Lifted From More Areas In Northeast States
- Unlawful Activities Prevention Act (UAPA): SC Changes Stand
- Court Martials In Armed Forces
- Manipur Govt Ends Its Peace Pact With 2 Insurgent Groups
- Exercise TROPEX
- First IAF Woman Officer to Head Frontline Unit
- Naval Commanders' Conference 2023
- Vayulink System
- Exercise Shinyuu Maitri

GEOGRAPHY AND ENVIRONMENT.....(88-104)

- World Wildlife Day 2023 (and 50th Anniversary of first signing of CITES)
- World's 1st Bamboo Crash Barrier
- Wildlife Sanctuaries (WLS) In The News
- Multi-Angle Imager for Aerosols Mission
- Cyclone Freddy
- Committee To Oversee Transfer And Import Of Captive Wild Animals In India

INDEX

- Batrachochytrium Dendrobatidis
- Zealandia
- Intergovernmental Panel On Climate Change (IPCC) Published Its Synthesis Report
- Earth Hour
- Green Tug Transition Programme
- Gandak River
- Aravalli Green Wall Project
- Vembanad and Ashtamudi Lake
- Forest Certification in India
- New Anglerfish Species Named After Abdul Kalam
- Galathea Bay
- National Chambal Sanctuary
- UN 2023 Water Conference
- ICOMOS ISC (International Council on Monuments and Sites & International Scientific Committee)
- Bauxite Mining in India
- Sulphur Coated Urea
- Salar de Uyuni
- DAP and nano DAP
- Plastic Rocks and Trindade Island
- Species In News

SCIENCE AND TECHNOLOGY.....(105-116)

- PoTS
- NASA's Imaging X-ray Polarimetry Explorer (IXPE)
- Lewis Super Acids
- Megha-Tropiques-1
- Fumarate Hydratase

- Nancy Grace Roman Space Telescope
- IITR 00693
- Fluorescence Microscope
- Terran 1
- MQ 9 Reaper
- Starberry-Sense
- Low-temperature Thermal Desalination Technology
- Ceramic Radome Technology
- Oumuamua
- Arudhra Radar
- OSIRIS-REx Mission
- PALM 400 Drones
- TRAPPIST-1 b
- Piezoelectric Effect
- Role Of Sodium In Human Body
- H3N2 Virus (Hong Kong flu & subtype of the Influenza A virus)
- Whole Genome Amplification (WGA)
- JANUS-1
- Mission Daksha for 360- Degree Watch Of Skies
- Biotransformation technology in Plastics
- API (Application Programming Interface)

CULTURE.....(117-119)

- Matua Maha Mela
- Bumchu Festival
- Pritzker Architecture Prize
- Vedic Heritage Portal
- ASI Discovers 1300-Year-Old Buddhist Stupa



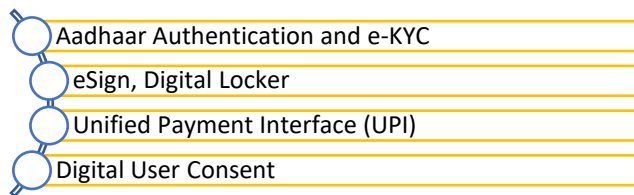
Digital Public Infrastructure (DPI)

DPI is an **open-source identity platform** that can be used to access a wide variety of government and private services by building applications and products on a set of application programming interfaces (APIs) like **India Stack**.

- It includes **digital forms** of ID and verification, civil registration, payment (digital transactions and money transfers), data exchange, and information systems.
- It is customisable, localisable, interoperable and leverage public data for open innovation models.
- India is seen as a **global trendsetter** with **multiple large-scale DPIs** like JAM trinity which links Aadhaar, mobiles and bank accounts, Digi Locker, Bharat Bill Pay, UPI, Aadhaar Enabled Payment Systems (AePS) and Immediate Payment Service (IMPS), CoWin (for vaccination), etc.

About India Stack

- It is a set of APIs that allows governments, businesses, startups and developers to **utilise a unique digital infrastructure** to solve India's hard problems towards presence-less, paperless, and cashless service delivery.
- The following APIs are considered to be a core part of the India Stack:



- It brings a **paradigm shift in the way government** services are delivered, i.e., in a transparent, accountable and leakage free model.

Aadhar as Bedrock of India's DPI

- India's DPI began as a foundation with **Aadhaar** in 2009.
- Its rebirth happened in **2014** when PM Modi envisaged a far wider and bigger canvas than what was originally envisioned, to become the rocket ship to launch good governance on.
 - Today, over 1,700 Union and States government schemes ride atop it.
- Thus, **Aadhaar** was made a **superstructure** which delivers consistent, affordable, and across-the-board value to citizens, government and the corporate sector.

Aadhaar And Its Extended Usage In Private Sector

- The SC's privacy judgment (2017 Puttaswamy judgement) had affirmed **privacy** to be **sacrosanct**. As a result, the process of making Aadhaar available to the private sector was slowed down.
- However, the **rapid adoption** and **ease of doing business** in day-to-day transactions for citizens, has now led to a gradual opening of Aadhaar, beginning with voluntary usage, for various private sector applications.
 - The Aadhaar holders can voluntarily use their Aadhaar for private sector purposes, and private sector entities also need not seek special permission for such usage.
- However, the **Aadhaar Act was amended in 2019** to **bar private entities from storing individuals' data** and that Unique Identification Authority of India (UIDAI) could give directions to any entity in the Aadhaar ecosystem.
- Between **government departments** (intra and inter-State) too, **Aadhaar data can be shared**, but with the prior informed consent (**PIC**) of the citizen.
- **Banks** and other **regulated entities** can **store Aadhaar numbers** as long as they protect it using vault and other similar means, as in UIDAI security regulations.
- All the above changes could lead to the **next leap frogging of the India Stack** as a whole.

- It is evident as the work in progress with Aadhaar authentications being shot up to 2.2 billion per month, and cumulative number over the past 12 years has crossed 100 bn.
- Also, the Goods and Service Tax Network (**GSTN**) could not have happened without an existing Aadhaar number and Permanent Account Number (**PAN**) database.

DigiLocker: One of the Least Known DPIs

- **About DigiLocker:** It is a secure **public cloud-based platform for storage**, sharing and verification of documents & certificates
 - It has **150 million users, six billion stored documents**, done with a tiny budget of ₹50 crore over seven years.
 - Plans are afoot to expand it to many countries around the world with this microscopic budget.
- **Application:** While applying for a passport nowadays, one need not even upload any portable document format (PDF) any more or submit some notarised papers.
 - A simple consent on the passport application form allowing it to fetch the relevant data from DigiLocker can do the meaningful task.
 - Without the DigiLocker APIs (that enable instant KYC), many insurance and fintech companies like Zerodha, Upstox, RazorPay, Equal, would not be around today.
 - Also recently, when DigiLocker was used in a Karnataka Police recruitment drive to verify the academic credentials of candidates, it led to the process being cut down by about six months.

Success of DigiYatra

- DigiYatra is a **Biometric Enabled Seamless Travel (BEST)** experience based on a facial recognition system (FRS).
- Its success lies in the fact that about two lakh passengers have utilized this biometric boarding system successfully.
- Air passenger traffic in India was estimated to be over 188 million in airports across India in the financial year 2022, out of whom over 22 million were international passengers.
- When Digi Yatra reaches a third of them, it will lead to further innovation.

UPI's Groundbreaking Impact

- The UPI is breaking records under the visionary leadership at the National Payments Corporation of India (**NPCI**) as evident by the following -
 - It has now crossed **eight billion transactions per month** and transacts a value of **\$180 billion a month**, or about a staggering **65% of India's GDP per annum**.

Way Forward

- Despite India's leapfrogging DPI, **there is no single portal** where industry can see all the necessary compliances, whether at the Union or the State level.
 - Thus, an **Enterprise DigiLocker** can be created, which could lead to as many downloads of PAN, GSTN and the other documents as needed by multiple departments across many States.
- Also, while prioritizing investments in DPI, **effort** should be made for **inclusivity** focusing on equity, good governance, and regulatory frameworks to ensure that no one is left behind.



Crypto Under PMLA

The government has recently issued a notification bringing transactions involving crypto assets under the Prevention of Money Laundering Act.

Is Cryptocurrency Similar To Blockchain?

- Although these terms are used together quite frequently, they are not similar. Blockchain is the technology that enables the existence of cryptocurrency.
- A blockchain is a **digital ledger of transactions** that is distributed across the entire network of computer systems. It is like a ledger that shows the entire history of that piece of currency.
- To put it simply, it is a system of recording information that makes it impossible to hack the system.
- Each block in the blockchain contains several transactions, and every time a new transaction occurs on it, a record of that transaction is added to every participant's ledger.
- A blockchain database can store a large quantity of information that can be utilised and accessed by many users at the same time. But what makes Blockchain unique is that it is not owned by a single person or entity— making it more secure and trustworthy.
- The idea is that because no one controls the blockchain, they cannot take over and rewrite the records.
- Today, blockchains have applications in diverse fields like video and audio streaming, supply chain management, social media, real estate documentation, etc.

Cryptocurrencies

- Cryptocurrencies are **virtual or digital assets**— that can be used as a form of **investment** and even as a **medium of exchange** to purchase goods and services.
- Each **coin/token** of cryptocurrency is a digital file, that consists of a **unique line of program or code**. This means that it **can't be copied**, which makes them easy to track and identify as they're traded.
- Usually, the files are created using the methods of **cryptography** (the science of hiding information).
- Cryptocurrencies are **decentralized**—which means *no government or bank manages how they're made, what their value is, or how they will be exchanged*.
- These tasks are broadly distributed across a large number of users (computers) via the internet and are exchanged from **peer-to-peer** on the web without a middleman.

Cryptocurrency Trading

- Bitcoin is the topmost traded cryptocurrency, but it's not the only kind of cryptocurrency. Currently, there are more than 22,000 cryptocurrencies like Ethereum, Polkadot, Solana, Dogecoin etc.
- Just like the stock market, the crypto market has exchanges or brokers which act as facilitators. These exchanges often charge a fee or commission for each transaction.
- Crypto exchanges rely on investors for the possession of cryptocurrency. This happens when users deposit crypto to sell and some new users come to the exchange to buy it—thereby, facilitating trading.

Advantages Of Cryptocurrencies	Concerns Associated With Cryptocurrencies
<ul style="list-style-type: none"> • The primary advantage of cryptocurrencies is the <u>mathematically designed blockchain network with finite supply</u>. The main problem with the current monetary set-up is that when the government starts printing more money, the value of money gets wiped out due to high inflation. • Traditionally, gold has been one of the options for investors to hedge against inflation, but the supply of gold is not mathematically designed. Cryptocurrencies like Bitcoin give a better hedge against inflation compared to gold by ensuring a limited supply. Thus, it can act as a store of value. • Further, there are systems and processes that can be developed around the blockchain network, such as 	<ul style="list-style-type: none"> • Transaction records of cryptocurrencies are publicly available in an open ledger (blockchain) for record keeping in an anonymous (unnamed) and an encrypted form. • Though each transaction is recorded in a public log, names of buyers and sellers are never revealed and only their wallet IDs are revealed. • This keeps cryptocurrency users' transactions private, but it also lets them buy or sell anything without easily tracing it back to them. That's why it has become the preferred currency for buying drugs online

<p>decentralised finance systems, which can provide greater efficiency compared to the traditional finance systems.</p> <ul style="list-style-type: none"> • For example, international payments through cryptocurrencies are easy and cheap as they are not tied to any country or banking institution. Moreover, cryptographic techniques provide enhanced security. • Blockchain technology itself has great potential to reform financial record-keeping and keeping track of asset transactions. • Furthermore, entry barriers for new players to create new protocols and applications are significantly lower than traditional financial institutions like banks. 	<p>or other illicit activities like terror financing.</p> <ul style="list-style-type: none"> • Further, the anonymous nature of cryptocurrencies goes against the global money laundering rules. • Moreover, investments in cryptocurrencies are highly volatile, which leads to significant investment risks. • Central banks are concerned that if acceptance of cryptocurrencies as a medium of exchange grows, it can potentially <u>undermine their control on monetary policies</u>.
--	--

Transactions To Be Covered Under PMLA

- Exchange between virtual digital assets (VDAs) and fiat currencies;
- Exchange between one or more forms of VDAs;
- Transfer of VDAs;
- Safekeeping or administration of VDAs or instruments enabling control over VDAs; Participation in and provision of financial services related to an issuer's offer and sale of a VDA.

Reasons For The Current Move

- A July 2021 report had estimated India as being the country with the highest number of crypto owners, at **10.07 crore**, which was more than threefold the number of owners of crypto assets in the second-ranked U.S.
- Disclosures by the government indicate that the volume of trade in unregulated virtual assets has grown sizeably in recent years.
- Last month, Ministry of Finance informed the Lok Sabha that the Enforcement Directorate was investigating several cases related to cryptocurrency frauds wherein a few crypto exchanges had been found involved in money laundering.
- As much as **₹936 crore had been attached or frozen** as on January 31, deemed to be proceeds of crime.
- Bringing VDAs under PMLA now lays the responsibility of highlighting the origin of all activity, including safekeeping, in such assets upon individuals and businesses participating in or facilitating these transactions.

Legal Status Of Crypto In India

- In the Union Budget last year, even though the government brought in a **tax for cryptocurrencies**, it did not proceed with framing regulations.
- Earlier, the Reserve Bank of India had proposed a ban that was set aside by a court order. In July last year, flagging the RBI's concerns, the finance minister told the Parliament that international collaboration would be needed for any effective regulation or ban on cryptocurrency.
- From April 2022, India introduced a 30 per cent income tax on gains made from cryptocurrencies.
- In July 2022, rules regarding 1 per cent tax deducted at source on cryptocurrency came into effect.

IMF Guidelines On Crypto

Recently, the **International Monetary Fund** has also laid out a **nine-point action plan** for countries to treat crypto assets: The nine elements—or policy actions—are:

- (i) Safeguard *monetary sovereignty* and stability by strengthening monetary policy frameworks and **do not** grant crypto assets official currency or legal tender status.
- (ii) Guard against excessive capital flow volatility and maintain effectiveness of capital flow management measures.
- (iii) Analyze and disclose fiscal risks and adopt unambiguous tax treatment of crypto assets.
- (iv) Establish legal certainty of crypto assets and address legal risks.
- (v) Develop and enforce prudential, conduct, and oversight requirements to all crypto market actors.
- (vi) Establish a joint monitoring framework across different domestic agencies and authorities.
- (vii) Establish international collaborative arrangements to enhance supervision and enforcement of crypto asset regulations.
- (viii) Monitor the impact of crypto assets on the stability of the international monetary system.
- (ix) Strengthen global cooperation to develop digital infrastructures and alternative solutions for cross-border payments and finance.

By adopting the framework, policy makers can better mitigate the risks posed by crypto assets while also harnessing the potential benefits of the technological innovation associated with it.



Panel of PM, CJI and LoP to Pick CEC, ECs

A five-judge **Constitution Bench**, ruling on petitions seeking an independent mechanism to appoint the CEC and ECs, has ordered that the Chief Election Commissioner (CEC) & the ECs will be appointed on the advice of a committee comprising the Prime Minister (PM), Leader of Opposition in Lok Sabha (LoP) and Chief Justice of India (CJI).

Background

- Several PILs seeking a law governing the appointment of the CEC and ECs have been filed since 2015. All of them were referred to a Constitution Bench.
- The appointment of EC in November last year carried out with a “lightning speed”, with the procedure taking less than 24 hours from start to finish made the SC take up the matter.

Key Points

Current Process of Appointment	New Process of Appointment
<p>Article 324 (2) empowers the President to appoint the CEC and ECs on the advice of the Union Council of Ministers headed by the Prime Minister, till Parliament enacts a law fixing the criteria for selection, conditions of service and tenure.</p>	<p>The appointment of the CEC and the ECs shall be made by the President on the advice of a Committee consisting of the - (PM + LoP + CJI)</p> <p>Note: if no Leader of Opposition (LoP) is available, then the committee will include the leader of the largest Opposition party in Lok Sabha in terms of numerical strength.</p>
<p>Things Which Are Unchanged</p>	
<p>With Respect To Removal:</p> <ul style="list-style-type: none"> • The bench rejected the request to grant the same protection as is available to the CEC in the matter of removal from office to the ECs too. <ul style="list-style-type: none"> ✓ CEC enjoys the same security against removal as a judge of the Supreme Court. ✓ ECs can be removed from office on the recommendation of the CEC to the President under Article 324(5). 	

About Offices of CEC & ECs

- The Constitution does not prescribe any qualifications, academic or otherwise, for appointment to these offices.
- The tenure of office and the conditions of service of all the commissioners is determined by the President.
- The tenure of CEC & ECs is 6 years or up to the age of 65, whichever is earlier.
- The CEC and the two other ECs have the same powers and emoluments, including salaries, which are the same as a Supreme Court judge.
- All three Commissioners have equal decision-making powers. That means the CEC and the ECs would act unanimously and, in case there was a difference of opinion on any issue, the majority view would prevail.
- The Constitution has ***not debarred the retiring Election Commissioners from any further appointment by the Government.***

Need For This Reform	Outcome
<ul style="list-style-type: none"> • Democratic Legitimacy & Transparency: Elections are the bedrock of democracy and the Commission’s credibility is central to democratic legitimacy. • Silence of Legislators: None of the political parties in the last seven decades have passed a law for appointments to the ECI. • Reform in Constitutional Provision: This was a “lacuna” and making of law under Article 324 of the Constitution is an unavoidable necessity. • Worldwide Practice: Nowhere in the world does the executive unilaterally appoint an election commission without wider consultation. 	<ul style="list-style-type: none"> • Bring greater credibility, neutrality and impartiality to the institution. • Bring a certain uniformity in appointment procedures across institutions and statutory bodies responsible (CVC, CIC, CBI, etc.) for independently maintaining democratic governance and institutional autonomy.

Criticism

- **Violates The Concept Of Separation Of Powers**
 - ✓ The SC (in the Golak Nath case 1967) held that **the Constitution is supreme and all authorities function under this supreme law of the land.**
 - ✓ The apex court is empowered to judge the validity of legislation itself.
- **Some Have Accused The Court Of Judicial Activism**
 - ✓ **The Court has not acted on Suo motu** or on a PIL or an appeal or representation on a postcard. It has adjudicated on **four civil writ petitions.**
 - ✓ Despite having the power to issue a writ of mandamus, it has refrained from doing so.

Unresolved Issues

- Request to grant the same protection as is available to the CEC in the matter of removal from office to the ECs too.
 - ✓ The protection from removal is essential for the **independence** of the ECs and the protection granted to the CEC was not meant for an individual but for an institution.
- Issues like the **criminalization of politics, the role of money power** and the role of the **media**, though important, draw less attention from the judiciary.

{For more information on Election Commission of India, please refer to The Recitals - December 2022}



Right Against Self-Incrimination

The Supreme Court refused to hear a plea filed by the Deputy Chief Minister of Delhi under **Article 32** of the Constitution in an excise policy case as he did not seek a remedy in the High Court first under Section 482 of the CrPC.

- **Article 32-** It grants the right to approach the Supreme Court for the enforcement of fundamental rights. The Supreme Court has original jurisdiction in such cases. It does not apply to rights other than fundamental rights.
- **Section 482-** It states that no provision can limit or affect the inherent powers of the High Court to make orders as may be necessary to give effect to any order, or to prevent abuse of the process of any Court to secure the ends of justice.

Background

A CBI court, while rejecting Sisodia's arguments that he had a right against self-incrimination, granted his custody to the CBI on the grounds that he had failed to provide satisfactory answers during investigation.

About the Right Against Self-incrimination

- It is one of the provisions of fundamental rights protected under Article 20 of the Indian Constitution.
 - Article 20 contains three provisions that protect an accused person from unfair treatment by the legal system.
 - **No Ex-post-facto Law-** It means that no person shall be punished for an act that was not a crime when it was committed.
 - **No Double Jeopardy-** It means that a person cannot be punished for the same offense twice.
 - **Right Against Self-incrimination-** It means that no person accused of an offense shall be compelled to be a witness against himself.
 - The right to be presumed innocent until proven guilty, and the right to remain silent in an interrogation essentially flow from this constitutionally guaranteed right against self-incrimination.
- When an individual invokes the right against self-incrimination, they are refusing to answer questions (to remain silent) or provide evidence that could be used against them in a criminal case.
- This principle is often referred to as the "right to remain silent," and it applies not only to criminal defendants but also to witnesses in a criminal case.
- This right can be asserted at any stage of a criminal proceeding, including during questioning by law enforcement, at trial or during a judicial proceeding.
- The right against self-incrimination in India also intersects with other important legal principles, such as the right to a fair trial, the right to privacy, and the right to due process of law.

Applicability Of Right

Applicable to	Not Applicable to
<ul style="list-style-type: none"> • It provides protection to an accused person against any arbitrary and excessive punishment, whether <u>the person is a citizen, foreigner, or a legal entity such as a company or corporation.</u> • This protection extends to both oral and documentary evidence, and it is a crucial safeguard against forced confessions and the use of torture to extract evidence from suspects. 	<ul style="list-style-type: none"> • It does not extend to the compulsory production of material objects like <u>documents, weapons, or other physical evidence relevant to a criminal investigation.</u> • It does not protect a person from providing a thumb impression, specimen signature, blood specimen, or exhibiting the body. • This right is limited to only criminal proceedings and does not apply to civil proceedings or proceedings that are not of a criminal nature.

Related Judgements

- **State of Bombay versus Kathi Kalu Oghad, 1961-** In this landmark judgement, an eleven-judge SC Bench ruled that obtaining photographs, fingerprints, signatures, and thumb impressions would not violate the right against self-incrimination of an accused. It distinguished “to be a witness” from “furnishing evidence”.
- **Selvi v State of Karnataka, 2010-** The SC in this case held that a **narcoanalysis test** without the consent of the accused would amount to violation of the right against self-incrimination. It however allowed obtaining DNA samples from an accused person and held that if an accused person refuses to give a DNA sample, the Court can draw adverse inferences against him under Section 114 of the Evidence Act.
 - ✓ **Narcoanalysis-** Process of administering a drug to the accused person to elicit information about the case.
- **Ritesh Sinha versus State of Uttar Pradesh, 2019-** The Supreme Court in this ruling broadened the parameters of handwriting samples to include voice samples, adding that this would not violate the right against self-incrimination.

In recent years, there has been increasing concern about the use of custodial torture and coercion by law enforcement officials in India, which can often violate an individual's right against self-incrimination and other fundamental rights.



Foreign Law Firms Allowed in India

The **Bar Council of India (BCI)** recently released a set of rules allowing foreign law firms and lawyers to practice in India, but they won't be allowed to appear in the court. They can only advise clients on foreign law and work on corporate transactions.

Background

- **2009:** In ‘**Lawyers Collective v Union of India**’ case, the issue of foreign law firms came up in the Bombay High Court in 2009. The HC essentially held that **only Indians holding Indian law degrees** can practice law in India but later while interpreting Section 29 of the Advocates Act, it held that ‘practice’ would include both litigious and non-litigious practice, so foreign firms can neither advise their clients in India nor appear in court.
 - ✓ Section 29 of the Advocates Act states that only advocates enrolled with BCI can practice law.
- **2012:** In ‘**AK Balaji v Union of India**’ case, 2012 the same issue came up in front of Madras High Court. It held that foreign firms cannot practice either on the litigation or non-litigation side unless they meet the requirements and rules laid down by the **Advocates Act and the BCI rules**.
 - ✓ But while creating an exception, the court said that there would be no ban on temporary visits or advising clients on a “fly in and fly out” basis.
 - ✓ Taking into consideration the **Arbitration and Conciliation Act, 1996**, it held that foreign lawyers cannot be debarred to come to India and conduct arbitration proceedings in respect of disputes arising out of a contract relating to international commercial arbitration.

Both these judgments were challenged by the BCI and Lawyer’s Collective before the Supreme Court (SC). The SC upheld the judgments with some modifications which are as follows:

- The modifications included holding the expression “fly in and fly out” to cover only “casual visit not amounting to practice” i.e., no regular visits. The SC also asked the BCI to frame rules in this matter.
- The SC however did not give any decision on the issue of **Legal Process Outsourcing (LPO)**.

About BCI & its Powers

- BCI is a statutory body established under the Advocates Act, 1961, which regulates legal practice and legal education in India.

Powers:

- Foreign lawyers and firms are required to mandatorily register with the BCI. This registration must be renewed every five years.
- The BCI has the right to refuse to register any foreign lawyer or law firm if it is likely to become disproportionate to the number of Indian lawyers or law firms registered or allowed to practice law in the corresponding foreign country.
- It also conducts the All India Bar Examination to grant 'Certificate of Practice' to advocates practicing law in India.
- BCI also funds welfare schemes for economically weaker and physically handicapped advocates.

- ✓ LPO's are firms like Business Process Outsourcing (BPO) in the legal profession which carry support operations for lawyers.
- ✓ They manage secretarial support, transcription services, proofreading services, travel desk support services, etc. which technically do not come within the purview of the Advocates Act or the BCI Rules.

The New Rules Of BCI

It notified the specific areas of practice of law by foreign lawyers and foreign law firms in India.

Restrictions to Foreign Lawyers or Foreign Law Firm	Permitted Activities
<ul style="list-style-type: none"> • They are restricted from appearing before any Court, Tribunal, Board, Statutory or Regulatory Authority or any forum legally entitled for taking evidence on oath or having trappings of a Court and they will have to submit an undertaking regarding the same. • They shall be restricted from doing any work pertaining to conveyancing of property, title investigation or other similar works. • The BCI latest notification also provides for the disciplinary issues and penalties against foreign lawyers and law firms securing registration by misrepresentation. 	<ul style="list-style-type: none"> • They shall be allowed to advise their clients only regarding foreign laws and international laws. • They shall be allowed to practice on <i>transactional corporate work</i> such as joint ventures, intellectual property matters, mergers and acquisitions, contract drafting, and other related matters on a reciprocal basis. • They shall be entitled to practice law in India in non-litigious matters only (subject to exceptions, conditions and limitations laid down in Madras HC ruling) and he/it shall be deemed to be an 'advocate' in accordance with the Indian law.

Why Did BCI Come Up With These Rules?

- These rules have been introduced to address concerns about the flow of **Foreign Direct Investment** in the country and make India a hub of **International Commercial Arbitration** as the rules bring legal clarity to foreign law firms that currently operate in a very limited way in India.
- The rules resolve to enable the foreign lawyers and Foreign Law Firms to practice foreign law and diverse international law and international arbitration matters in India on the principle of reciprocity in a well-defined, regulated and controlled manner.

Various Sections Of Advocates Act, 1961

- **Section 7(1):** It lays down the **principle of reciprocity** i.e., a national of another country may be admitted as an advocate in India if Indians nationals are allowed in the other country. But this Act prohibits foreign nationals from practicing the legal profession in India.
- **Section 24:** It provides the conditions required to be fulfilled for enrolment of advocates in State Bar Councils.
- **Section 47(1):** It states that a foreign national cannot practice law in India if there is no reciprocal arrangement in the foreign national's country.
- **Section 49:** It empowers the BCI to make appropriate rules with regards to enrolment of non-Indian citizens with a foreign law degree.

Pros vs Cons of This Move

Pros	Cons
Foreign law firms would be huge for the corporate legal practice in India as competition will lead to improvement in legal services.	Some clarity is required about the meaning of 'reciprocity' before we see foreign law firms registering in India.
Foreign law firms will now be allowed to hire Indian lawyers and advocates registered as	It will add to the "corporatization" of law practice.

foreign lawyers, expanding the legal job market.	
AI (artificial intelligence) based technology will be introduced into legal service delivery, pushing the Indian law firms to adopt.	More Indian lawyers will go to abroad, deserting the real need in India — defending and fighting for the rights of the poor.



Rahul Gandhi Disqualified as MP

Following the conviction and **two-year sentence** in a defamation case, Mr. Rahul Gandhi was disqualified as an MP. His disqualification was in accordance with the provisions of **Article 102(1)(e)** of the Constitution of India along with **Section 8** of the Representation of the People Act (RPA), 1951

Reason Behind Conviction

The Congress leader was convicted by the Surat Court in a defamation case for his remarks about the “Modi” surname.

Court’s Ruling

- The Surat Court sentenced MP Rahul Gandhi to two years imprisonment and imposed a fine of Rs.15000 after convicting him for the offence of **criminal defamation** under Sections 499 and 500 of IPC.
- The court also approved Gandhi’s bail on a surety of Rs 15,000 and suspended the sentence for 30 days to allow him to appeal.
- ✓ **Section 499 of IPC**- It states that any words spoken, read, or gestured with the intention of harming a person’s reputation is to be considered defamation and can attract legal punishments.

Exceptions to Section 499 of IPC:

- Attribution of any truth made for public good.
- Any opinion is made in good faith with respect to the conduct of a person.
- Publication of true reports of the proceedings of the Courts or the result of the proceedings.
- Cautions conveyed to one person against another.

- ✓ **Section 500 of IPC**- It states that a person found guilty of defamation shall be punished with simple imprisonment for a term which may extend to two years, or with fine, or with both.

Grounds for Disqualification in Present Case

- **Section 8(3) of RPA, 1951** states that if a person is convicted for any offence and is sentenced to imprisonment for not less than two years then he/she shall be disqualified from the date of such conviction and will continue to be disqualified for a further period of six years since his release.
- Thus, the two-year conviction itself disqualifies Mr. Gandhi from being a Member of parliament.

Existing Laws/Provisions on Disqualification

- **Section 8 of the Representation of People Act, 1951**- It contains provisions for disqualification of MPs/MLAs for conviction in criminal cases and in cases of offences like rape, terrorism, communal disharmony etc. In such cases, a mere conviction is enough to disqualify a legislator from Parliament.
 - **Section 8(1) of RPA, 1951**: This includes specific offences such as **promoting enmity** between two groups, bribery, and undue influence or personation at an election.
 - **Section 8(2) of RPA, 1951**: lists offences that deal with hoarding or profiteering, adulteration of food or drugs and for conviction and sentence of at least six months for an offence under any provisions of the Dowry Prohibition Act.

- **Section 8 (3) of RPA**- It states that a mere conviction will not result in disqualification but if the court announces a sentence of at least two years then it will result in disqualification and will continue to be disqualified for a further period of 6 years since his release
- **Section 8 (4) of RPA**- It exempted sitting members from instant disqualification for “**three months**” to enable them to appeal against the conviction.
- This clause was struck down in **Lily Thomas vs Union of India, 2013** (later in *Lok Prahari vs UoI, 2018* also) as ultra vires the Constitution by the Supreme Court on the ground that Parliament has no power to enact such an exemption for sitting members of the legislature
- The effect of this judgment is that there is an **instant disqualification** of a sitting legislator as soon as he is convicted. However, the Court made it clear that in the event of the appellate Court staying the conviction and sentence, the disqualification will be lifted, and the membership will be restored to him.
- 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 Parliament or a member Legislature of a State becomes subject to any of the disqualification according to Article 102 and Article 191.
- **Section 9**: Disqualification for dismissal for corruption or disloyalty.
 - Section 9(A): Disqualification for Government contracts, etc.
- **Section 10**: Disqualification for office under Government company.
 - Section 10(A). Disqualification for failure to lodge account of election expenses.
- **Section 11**: Removal or reduction of period of disqualification.
 - Section 11(A): Disqualification arising out of conviction and corrupt practices.
 - Section 11(B): Removal of disqualifications.
- **Article 102(1) of the Constitution**- It states that a Member of Parliament can be disqualified under five circumstances: 1) Holding an office of profit, 2) Insanity, 3) Insolvency 4) Citizenship and 5) Disqualification by law.
 - Article 103 states that the President of India is the authority who decides that a sitting member has become subject to disqualification in all cases which come under Article 102(1). Before giving any decision on any such question, the President shall obtain the opinion of the Election Commission and shall act according to such opinion.
- **Tenth Schedule of the Constitution**: Article 102(2) also states that a person shall be disqualified for being a member of either House of Parliament if s/he is so disqualified under the 10th Schedule.

Plea in Supreme Court [Aabha Muralidharan vs Union of India]

- Consequent upon Rahul Gandhi’s conviction, a plea has been filed before the Supreme Court challenging the constitutional validity of Section 8(3) of the Representation of the People Act, 1951 (RPA).
- The plea mentions that Section 8(3) is ultra vires of the Constitution since it curtails **free speech** of an elected MP or MLA and restrains law makers from freely discharging their duties.
- The petitioner has stated that factors such as nature, gravity, moral turpitude and the role of the accused, ought to be examined while considering disqualification under RPA 1951.

Final Authority on Disqualification

- In the case Lok Prahari v Union of India (2018), the SC clarified that a disqualification because of a conviction will be reversed if a court stays that conviction.

- It held that **once a conviction has been stayed** during the pendency of an appeal, the disqualification because of the conviction cannot take or remain in effect.
- Therefore, in this case if SC puts a stay on the disqualification, then the disqualification notification by the Lok Sabha will cease to be in effect.

Amenities Lost Due To Disqualification

- MPs are entitled to certain perks and benefits governed by the Salary, Allowances and Pension of Members of Parliament Act, 1954 and the rules made there under.
- Losing the membership comes with losing all the amenities that MPs receive.
- Some of these perks and benefits are Salary and Allowance For ‘Period of Residence on Duty’, Travelling Allowance and Free Rail Transit, Constituency Allowance, Telephone & Medical Charges etc.

What Happens To The Vacant Seat?

The election commission can announce a by-election for the vacant seat if the conviction is not suspended or the disqualification is not stayed by the court.

Implications

- The sentence could have a chilling effect on those who dare to question the state or those who run it.
- It may violate the right of free speech.
- It shows how the judgement given in the **Lily Thomas V. Union of India** case which was blindly celebrated as a revolutionary verdict against “criminalization of politics” can be misused. The verdict lacked a sense of ground realities in an electoral democracy.
- This disqualification has created a dilemma in legal circles on how **Article 103** of the Constitution will impact the disqualification process as in this case, disqualification has been initiated without even a formal order by the President or without resorting to the procedure as stated in Article 103.
- It poses serious questions on the constitutional validity of Section 499 and 500 of the IPC dealing with criminal defamation.

Way Forward: Reflecting Upon The Criminal Defamation Law

- The criminal defamation law needs an urgent review as many countries like UK, U.S and India’s neighbour Sri Lanka have scrapped it.
- The SC also highlighted the need for a liberal approach to rhetorical, hyperbolic or metaphoric words used by politicians in election speeches (**Kultar Singh vs Mukhtiar Singh case, 1965**).
- **Article 19** grants freedom of speech and expression with reasonable restrictions. Thus, need of balance between constitutional right and defamation

Extra Mile

Defamation

It is an act of communicating any false statement by publishing or speaking deliberately with the intention to damage someone's reputation. This act is punishable under law.

There are two Types of defamation which are as follows:

Civil Defamation	Criminal Defamation
1) Civil defamation is a <u>non-criminal offense</u> where the aggrieved party seeks compensation for harm caused to their reputation.	1) It is a criminal offense under the Indian Penal Code (IPC) that is punishable with imprisonment, fine, or both.
2) The statements made need to be false and must be made without the consent of the	2) It must be proved beyond reasonable doubt that the act was being done to lower the reputation of another.

alleged defamed person.

{For more about Disqualification of Convicted MLA, refer The Recitals-Nov 22}

Sealed-Cover Jurisprudence

The Supreme Court declined a sealed cover note submitted by the Centre in the case of disbursal of arrears to retired defence personnel under the One Rank One Pension (OROP) scheme.

- The Chief Justice of India (CJI) also rejected the government's proposal for the formation of a committee to investigate the Hindenburg report on the Adani group, which was submitted in a sealed cover.

About Sealed Cover Jurisprudence

- It is a practice followed by the Supreme Court and sometimes lower courts to seek and accept information from government agencies in sealed envelopes that can only be perused by judges.
- The court accepts information in a sealed cover in two cases-
 - ✓ When the information is related to an ongoing investigation which could be impeded by disclosure.
 - ✓ When the information is personal or confidential in nature and could affect an individual's privacy.
- The purpose of sealed cover jurisprudence is to balance the need for transparency in court proceedings with the need to protect sensitive information from public disclosure.
- However, the use of sealed covers has been criticized as it creates an opaque system, which can be misused to hide inconvenient facts or shield powerful interests.

Does Specific Statute Define The Doctrine Of Sealed Cover Jurisprudence

There is **no specific law** that defines the doctrine of sealed cover. The Supreme Court derives its power to use it from Rule 7 of order XIII of the Supreme Court Rules and Section 123 of the Indian Evidence Act of 1872.

Rule 7 of order XIII of the Supreme Court Rules- It states that if the Chief Justice or court directs certain information to be kept under sealed cover or considers it of confidential nature, no party would be allowed access to the contents of such information. It also mentions that information can be kept confidential if its publication is not considered to be in the interest of the public.

Section 123 of the Indian Evidence Act 1872- It states that no one will be permitted to give any evidence derived from unpublished official records relating to any affairs of State, except with the permission of the officer at the head of the concerned department, who may or may not allow it.

Exceptional Cases where Sealed Covers can be accepted

- The Supreme Court in its judgment in the *Cdr Amit Kumar Sharma v Union of India case, 2022* stated that sensitive information affecting the privacy of individuals such as the identity of a sexual harassment victim can be submitted in a sealed cover.
- But it also underlined that the measure of nondisclosure of sensitive information in exceptional circumstances must be proportionate to the purpose that the non-disclosure seeks to serve, and these exceptions should not become the norm.

Sealed Cover Jurisprudence In The Past - Previous Cases

Court Accepting Sealed Covers	Court Denying/Objecting Sealed Covers
1. Rafale Aircraft Case - The court accepted the government's argument that the matter pertained to the Official Secrets Act.	1. Media One Telecast Ban - The court stated that the burden would lie on the government to prove that even sharing redacted copies of the

<p>2. Bhima Koregaon Case- While refusing to stay the arrest of activists held in this case, the court relied on the “evidence” submitted by the Maharashtra police in a sealed envelope.</p> <p>3. NRC Exercise in Assam- The apex court sought details from the NRC coordinator in a sealed cover with neither the government nor the affected parties being allowed to look at them.</p> <p>4. Case of Former CBI Director Alok Verma- In the case involving corruption allegations against former CBI director, the court insisted that the Central Vigilance Commission submit its report in a sealed cover, ostensibly to maintain public confidence in the agency.</p> <p>5. BCCI Reforms Case- The probe committee of the cricket body submitted a report to the Supreme Court in a sealed envelope requesting that the names of nine cricketers suspected of involvement in a match and spot fixing scam not be made public.</p>	<p>records would prove detrimental to national security and public order. The court made it clear that sealed covers could be used only in a “small exception” of cases.</p> <p>2. S.P. Velumani Case Verdict, 2022- The Supreme Court criticized the Madras High Court’s decision to permit a report to remain “shrouded in sealed cover” when the State had not even claimed any specific privilege.</p> <p>3. Muzaffarpur Shelter Case- The court admonished the Bihar government for attempting to give information in sealed cover.</p> <p>4. Pegasus Case Judgment- The court stated that the Union of India must necessarily plead and prove the facts which indicate that the information sought must be kept secret as their divulgence would affect national security concerns.</p>
---	--

Supreme Court Outlook on Sealed Cover Jurisprudence

- In 2019 judgement in the case of **P. Gopalakrishnan vs The State of Kerala**, the SC has said that disclosure of documents to the accused is constitutionally mandated, even if the investigation is ongoing and documents may lead to a breakthrough in the investigation.
- In **Modern Dental College vs State of Madhya Pradesh (2016)**, the apex court adopted the proportionality test proposed by former Chief Justice, Supreme Court of Israel, “a limitation of a constitutional right will be constitutionally permissible if:
 - ✓ It is designated for a proper purpose.
 - ✓ The measures undertaken to effectuate such a limitation are rationally connected to the fulfilment of that purpose.
 - ✓ There are no alternative measures that may similarly achieve that same purpose with a lesser degree of limitation.
 - ✓ There needs to be a proper relation (balancing) between the importance of achieving the proper purpose & the social importance of preventing the limitation on constitutional right

Critical Analysis of Sealed Cover Jurisprudence

Arguments in Favour	Arguments Against
<p>1. Protects Sensitive Information: Sensitive information such as national security or trade secrets could have adverse effects on the country or businesses involved, thus it needs to be kept secret.</p>	<p>1. Lack of Transparency: Sealed covers are against the idea of an open court and a transparent justice system as secrecy could prevent a party from having a full overview of the charges against them.</p>
<p>2. Avoiding Prejudice: By submitting it in a sealed cover, the court can ensure that the information does not influence public opinion or unfairly affect the case.</p>	<p>2. Violation of Principle of Natural Justice: It denies the aggrieved party their legal right to effectively challenge an order as the proceedings take place based on unshared material provided in a sealed cover.</p>
<p>3. Maintaining Integrity: It ensures that the investigation is not compromised by making sensitive information public. This can help</p>	<p>3. Imbalance of Power: It bestows absolute power in the hands of the adjudicating authority and tilts the balance of power in favour of the dominant party which has</p>

maintain the integrity of the investigation and ensure that justice is served.	control over information.
4. Expert Assessment: By seeking information in a sealed cover, the court can seek the advice of experts in matters where it lacks expertise and make a more informed decision.	4. Abuse of Power: Sensitive information may be withheld from the parties involved or the public to protect those in power or to avoid embarrassment.

Way Forward

- **Use Judiciously:** Judges should use sealed covers judiciously and only in cases where there is a compelling need to protect sensitive information.
- **Establish Clear Guidelines:** There should be clear guidelines on when and how sealed covers can be used which should be developed through a consultative process involving all stakeholders, including the judiciary, the legal community, civil society, and the media.
- **Ensuring Accountability and Oversight:** By regular reporting to higher authorities, periodic review by an independent body, or public disclosure of the reasons for using a sealed cover.
- **Striking a balance between transparency and confidentiality:** By partial disclosure of information in a sealed cover or the appointment of an amicus curiae to review the information and provide an independent assessment.

Overall, the use of sealed cover jurisprudence should be guided by the principles of transparency, accountability, and due process. By adopting these principles and developing clear guidelines and mechanisms for their implementation, the use of sealed covers can be made more effective, fair, and transparent.



National Security Act

The National Security Act (NSA) was recently invoked against Waris Punjab De Chief Amritpal Singh.

About NSA

What Is The National Security Act (NSA)

- NSA is a preventive detention law.
- Passed in 1980, this act empowers the state to detain a person without a formal charge and without trial.
- Under this Act, a person can be taken into custody to prevent them from acting in any manner prejudicial to “the security of the state” or for “maintenance of public order”.

Who is Competent Authority to pass order under NSA?

- Either the Divisional Commissioner or the District Magistrate (DM) passes the administrative order of detention and not the police.
- The District Magistrate can slap NSA against a person-
 - If he is already in police custody.
 - If a person has been granted bail by a trial court.
 - If the person has been acquitted by the court.

Implications of invoking NSA

- It takes away an individual’s constitutional right to be produced before the magistrate within 24 hours.
- It takes away the right of a detained person to move a bail application before a criminal court.

History – Evolution of NSA

Pre- Independence	Post-Independence
<ul style="list-style-type: none"> It started in the colonial era. The Bengal regulation III enacted by the East India Company in 1818 empowered the company officials to arrest any individual for criminal intent. The Rowlatt Acts, 1919 allowed imprisonment of a suspect without trial. 	<ul style="list-style-type: none"> Preventive Detention Act 1950- under this act persons could be detained in instances involving state conditions, such as national defence, maintenance of peace and public order, and foreign affairs. It expired in 1969. Maintenance of Internal Security Act (MISA)- introduced by former PM Indira Gandhi in the year 1971 provided similar powers to the government as in the Preventive Detention Act. It was repealed in 1977 when the Janta Party came to power. The National Security Act was again introduced in 1980 by Indira Gandhi Government. The NSA is a close iteration of the 1950 Act.

Procedural Safeguard To Detainee Against The NSA: Related Constitutional Provisions

The Indian Constitution allows both preventive detention and the right of protection against arrest and detention in certain cases, enshrined under Article 22 of the Constitution. However, Article 22(3) provides that the rights available to an arrested person will not be applicable in case of preventive detention.

One crucial procedural safeguard under the NSA is granted under Article 22(5). The details of these related constitutional provisions are given in following table:

Article 22(3)- Denied rights	Article 22(4)- Period of detention	Article 22(5)- Protection	Article 22(7)
Under preventive detention, the detained person will be devoid of the rights available to an arrested person, i.e., right to be informed about the grounds for arrest, right to consult a lawyer, right to be defended.	No law providing for preventive detention shall authorize the detention for a period longer than three months unless the Advisory board reports before the expiration of the three-month period that there is sufficient cause for detention. ✓ Advisory Board : consists of three members; and the board is chaired by a member who is, or has been, a judge of a high court.	Under preventive detention, the authority making the order shall communicate to such person the grounds on which he has been detained and afford him the earliest opportunity of representing his case before an advisory board.	Parliament may by law prescribe (a) the circumstances under which, a person may be detained for a period longer than three months under any law providing for preventive detention without obtaining the opinion of an Advisory Board

Grounds for Detention under NSA	Period of Detention under NSA
<ul style="list-style-type: none"> A person can be detained if the central/state government is satisfied - <ul style="list-style-type: none"> ➤ That the person may act in any manner prejudicial to the defense of India, the relations of India with foreign powers, or the security of India. When any order is made or approved by the State Government, the State Government shall, within seven days, report the fact to the Central Government together with the 	<ul style="list-style-type: none"> An individual can be detained without a charge for a maximum period of 12 months, which can be extended if there is fresh evidence against the detainee by the government. The detained person can be held for 10 to 12 days in special circumstances without being informed about the charges against them. Appeal: During this time, he can appeal to the high court advisory board but won't be allowed a lawyer during the trial.

Protection To Officials

The DM who passes the detention order is protected under NSA which states that no prosecution or any legal proceeding can be initiated against the official who carries out the orders.

Criticism Against NSA

- Article 22(1) of the Constitution allows the detainee to seek legal advice from a legal practitioner.
- Sections 56 and 76 of the Criminal Procedure Code (CrPC) guarantee the detained person to be produced before a court within 24 hours.

However, under the NSA, none of these above-mentioned basic rights is permitted to the suspect.

- No Record of Detentions under the NSA: The National Crime Records Bureau (NCRB) gathers and examines crime-related information throughout the nation, but it does not incorporate cases that involve the NSA since no First Information Reports (FIRs) are filed.

NSA has come under wide criticism for its misuse by the authorities. Experts describe the validity of the Act even during peacetime as an 'anachronism'. The Act has seen criticism for its misuse by agencies, with some saying that governments use the act as an extra-judicial tool.



Windsor Framework

- The UK government under PM Rishi Sunak reached a landmark deal with the European Union (EU) on post-Brexit trade rules that will govern Northern Ireland.
- This deal will replace the **Northern Ireland Protocol**.

The Northern Ireland Protocol

Background

- After the UK left the European Union, Northern Ireland remained its only constituent that shared a 310 mile land border with an EU-member, the Republic of Ireland.



- Since the EU and the UK have different product standards, border checks would be necessary before goods could move from **Northern Ireland to Ireland**.
- However, the two Irelands have had a long history of conflict. They secured peace only in **1998** under the **Belfast Agreement**, also called the **Good Friday agreement**.
 - An open border between the two was a key component of Good Friday agreement.
- Keeping this in mind, Northern Ireland Protocol was negotiated in 2020 between U.K. & E.U.

About The Protocol

- It is a trading agreement that was negotiated in 2020 between the U.K. and the E.U.
- Under this agreement both the U.K. and E.U. agreed that the inspection of goods would be conducted between Great Britain and Northern Ireland.
 - This agreement effectively created a **de facto border in the Irish Sea** between Northern Ireland and the rest of U.K.
- Northern Ireland continued to follow many of the EU's rules, meaning that lorries can continue to drive

across the border without having to be inspected.

- The protocol was signed as part of the Brexit withdrawal agreement, which is now ratified under international law.

Why Has The Protocol Been A Source Of Tension?

• Political Division

- The protocol has led to political division in Northern Ireland and created rifts within the U.K.'s Conservative Party over what it means for Brexit.
- Any kind of border in the Irish Sea irked those who want a united U.K.

• Intra-UK Trade Affected (Trade between Great Britain and Northern Island)

- The checks made trade between Great Britain and Northern Ireland cumbersome, with food products, especially, losing out on shelf life while they waited for clearance.
- Some taxation and spending policies of the UK government could not be implemented in Northern Ireland because of EU rules.
- The sale of medicines, too, was caught between different British and EU rules.

Key Highlights Of The Windsor Framework

• The framework has two crucial aspects -

- the introduction of a green lane and red lane system for goods that will stay in Northern Ireland and those that will go to the EU respectively;
- the 'Stormont Brake', which allows Northern Ireland lawmakers and London to veto any EU regulation they believe affects the region adversely.

• The two lanes

- British goods meant for Northern Ireland will use the **Green lane** at the ports, and will be allowed to pass with minimal paperwork and checks.

- This is significant for **meat products**, such as sausages, travelling between the two parts of the UK, as the EU has stricter rules about animal products.

- Also, people in Northern Ireland can order goods online from

A new deal to cool off trade disruptions
On February 27, the United Kingdom and the European Union struck a landmark agreement – the Windsor Framework – to replace the contentious Northern Ireland Protocol and end a bitter post-Brexit trade dispute

Lowering trade barriers
NORTHERN IRELAND
Green lane for U.K. goods – traders to complete single certificate per truck, rather than multiple forms per load

IRELAND
EU-destined goods go via red lane with full customs procedures

European Court of Justice
The ECJ will continue to be the final arbiter on matters of EU law affecting Northern Ireland

Stormont Brake
A “veto” which decides whether amended EU laws will apply in Northern Ireland. It requires 30 members of the 90-member **Northern Ireland Assembly** to stop any new EU single market rules

European Commission: Insists ECJ will remain sole, ultimate arbiter of EU law and single market disputes

Taxation and state aid
The U.K. government is to set rules in areas such as value-added tax and state aid in Northern Ireland – **rules rejected by the Commission in previous negotiations with the U.K.**

Ending Protocol restrictions
Medicines: To be available throughout the U.K. – not possible under old Protocol
Plants: Previously banned plants like seed potatoes and other plant products will now ship to Northern Ireland
Pets: Barriers removed for owners, who can now take their pets into Northern Ireland

Britain easily now.

- The same medicines, in the same packs, with the same labels, will be available across the UK, without the need for barcode scanning requirements under the old Protocol.
- Goods destined for Ireland or the rest of the EU will have to take the Red lane, with the attendant customs and other checks.
- **Stormont Brake**
 - The new Stormont Brake means the democratically elected Northern Ireland Assembly can oppose new EU goods rules that would have significant and lasting effects on everyday lives in Northern Ireland.
 - For this, they will need the support of 30 members from at least two parties.
 - The **British government can then veto the law**.



State Visit of Prime Minister of Italy to India

- President of the Council of Ministers (Prime Minister) of the Italian Republic, Giorgia Meloni, paid a State visit to India.
- This was the first bilateral VVIP visit from Italy to India after **5 years**; the last Prime Ministerial visit from Italy to India took place in October 2018.
- PM Meloni was also the Chief Guest and Keynote Speaker at the **8th Raisina Dialogue, 2023**.
 - Raisina Dialogue is India's flagship conference on geopolitics and geo-strategy.
 - It is organized by the *Ministry of External Affairs* in collaboration with Observer Research Foundation.
 - The theme of the 2023 Edition of Dialogue is ***Provocation, Uncertainty, Turbulence: Lighthouse in the Tempest***.

List Of Outcomes: State Visit Of Prime Minister Of Italy To India

- Elevation of India-Italy bilateral ties to "**Strategic Partnership**".
- **Italy joining the Indo-Pacific Oceans Initiative (IPOI)** under *Science, Technology and Academics cooperation pillar*.
 - In November 2019, while participating in 14th EAS, PM Modi launched the Indo-Pacific Oceans Initiative (IPOI).
 - IPOI seeks to ensure security and stability of the regional maritime domain.
 - It is an open, non-treaty-based initiative for countries to work together for cooperative and collaborative solutions to common challenges in the region.
- **Declaration of Intent (DoI) on Migration and Mobility**.
- **Announcement of India – Italy Start Up Bridge**.
- **MoU on defence cooperation**
 - Both the countries have also decided to organise the joint military exercises and training courses on a regular basis. It also includes maritime cooperation.
 - This cooperation will also promote co-production, co-design, and co-innovation in defence manufacturing.

India-Italy Bilateral Relation

Political Relation

- Political relations between India and Italy were established in 1947. India and Italy are celebrating 75 years of establishment of diplomatic relations this year.
- PM Modi and then PM Conte co-chaired a Virtual Summit between India and Italy in November 2020.
 - During the visit, **2020-2025 Action Plan** was adopted that set an ambitious agenda for an enhanced Partnership between the countries.
- PM Modi paid his first official visit to Italy in October 2021 to attend the G20 Summit.
 - During this visit, PM Modi held bilateral meeting with then PM Draghi. A Joint Statement announcing a **Strategic Partnership on Energy Transition** was issued and a Statement of Intent on Textiles cooperation was released.

Economic Relations

- Bilateral trade between the countries has reached USD 13.229 bn in 2021-22, with the balance in India's favour. It has reached an all-time high of \$15bn in calendar year 2022.
 - India's primary exports to Italy comprise metals such as iron and steel, leather, chemicals, gems, and jewellery.
 - Certain Indian exports like steel are increasing against the backdrop of Russia-Ukraine war.
 - Ukrainian steel industries were Europe's main steel exporters.
 - Machinery equipment comprise 36% of total Italian exports to India, and both economies are structured around SMEs.
- Italy is **India's 4th largest trading partner** in EU, after Germany, Belgium and Netherlands.
- **India ranks 15th as country of origin of Italian imports**, accounting for 1.5% of Italian imports.
- **Italy ranks 17th in FDI inflows in India** during April 2000 -June 2022 with US \$ 3.20 bn
- India's "Make in India" initiative and modernisation drive can be complemented by Italian expertise in areas like manufacturing, green tech and defence.
- India also intends to focus more on food processing and sustainable farming, sectors where Italy has substantial knowhow.

Defence

- The Chief of Army Staff (COAS), General M.M. Naravane, visited Italy in July 2021. The visit of COAS took place after 14 years.
- India and Italy are also exploring joint productions in defence and aerospace sectors as well as technology transfers. India and Italy also have a Joint Working Group on Counter Terrorism.

Energy Cooperation

- In 2021, the two countries inked a Strategic Partnership on Energy Transition to advance collaboration on areas like green hydrogen and bio-fuels.

Cooperation in the Indo-Pacific

- So far, Italy's commitment to ensuring stability in the Indo-Pacific region is through the framework of the common EU strategy that was released in 2021.
- In 2021, the India-Italy-Japan trilateral partnership was launched. However, it has not been operationalised yet.

Cooperation in Science & Technology

- The first India-Italy Innovation Day was held virtually on 14th July 2021. Since then, both the countries are celebrating this event every year.

Indian Community

- The Indian community in Italy (estimated at 180,000 including PIOs) is the third largest community of Indians in Europe after UK and Netherlands.

Challenges In The Bilateral Relationship

- **2012 Enrica Lexie case**
 - Indian authorities had arrested two Italian marines who were aboard the Italian-flagged commercial oil tanker MB Enrica Lexie, accusing them of the killing of two Kerala fishermen.
 - The case sparked a conflict over legal jurisdiction and functional immunity, which ended only in 2020 with the verdict of the Permanent Court of Arbitration.
- **The AgustaWestland chopper deal controversy**
 - The AgustaWestland VVIP helicopter scandal, saw the defence firm – owned by Italian company Leonardo – accused of bribery.
 - This resulted in India cancelling the procurement deal and banning Leonardo from the Indian defence market in 2015. This ban was lifted in November 2021.
- **Low level of bilateral trade**
 - India and Italy have been trading partners since the ancient times. However, the volume of bilateral trade is low compared to its potential.

Conclusion

India's partnership with Italy is gaining strength on all levels—political, economic, and strategic. PM Meloni's recent visit to India further boosted ties while adding fodder to re-energise EU-India partnership.



Visit Of Prime Minister Of Japan To India

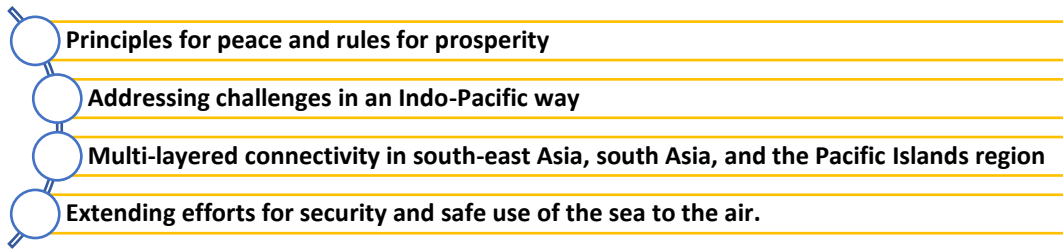
- Japanese Prime Minister Fumio Kishida paid an official visit to India. During this visit, he invited PM Modi to **G7 summit** in May as Japan holds the presidency of this year's G7 Summit.
- The centre-piece of Kishida's visit was the Sapru House Lecture, in which he laid out Japan's Plans for **Free and Open Indo-Pacific (FOIP)**.
- He laid out these plans while delivering a lecture on the topic - **"New plan for a free and open Indo-Pacific – Together with India as an indispensable partner"**.
 - This address was built on the historic speech by late former premier Shinzo Abe in India's Parliament in 2007.
 - In this, Abe spoke of India and Japan nurturing the coupling of the Indian and Pacific Oceans to ensure freedom and prosperity.

List of Outcomes: Visit of Prime Minister of Japan to India

- Exchange of Notes of tranche - IV JICA (Japan International Cooperation Agency) Official Development Assistance (ODA) Loan of JPY 300 billion for Mumbai Ahmedabad High Speed Rail (MAHSR).
 - MAHSR is being developed as a joint venture between India & Japan, using Japanese Shinkansen technology.
- Memorandum of Cooperation in the field of Japanese Language Education in India

Key Highlights of Japan's Plans for Free and Open Indo-Pacific (FOIP)

- **Four new pillars for cooperation for FOIP**



- **India 'indispensable' in ensuring free Indo-Pacific**

- Japanese PM emphasised that India is indispensable in Tokyo’s plan for a Free and Open Indo-Pacific (FOIP).
- India and Japan have a great responsibility towards maintaining and strengthening a free and open international order based on the rule of law.

- **Bay of Bengal-Northeast India industrial value chain concept**

- Japan will promote the “*Bay of Bengal-Northeast India industrial value chain concept*” with India and Bangladesh for the growth of the entire region.
 - Tokyo will look at projects to improve connectivity between the Indian and Bangladeshi economies and work on getting more Japanese companies to invest in the region.

- **Japan will coordinate with other major countries**

- In order to achieve the objectives of FOIP, Japan will also strengthen coordination with the US, Australia, UK, Canada, Europe and elsewhere.

- **Expanded scope of FOIP**

- FOIP's scope would expand to include new areas like climate change, cybersecurity, and food security.

- **Financial commitment**

- Japanese PM highlighted that Japan would also direct public and private capital worth \$75 billion towards Indo-Pacific infrastructure by 2030.

- **Proposed the idea of working together with ASEAN to bring prosperity in the region**

- This year, Japan holds the G7 presidency and India holds the G20 presidency.
- In this context, he said that through working together with ASEAN and many other countries, peace and prosperity can be ensured in the region.
- He stressed that the principles for peace and rules for prosperity form the backbone of FOIP.

India – Japan Bilateral Relations

Background

- India and Japan share ‘Special Strategic and Global Partnership’.

Economic Relation

- **Comprehensive Economic Partnership (CEPA)**

- India-Japan CEPA came into effect from 1 August 2011.

- **Bilateral trade**

- India was the **18th largest trading partner for Japan**, and Japan was the **12th largest trading partner for India** in 2020.
- Bilateral trade totalled US\$ 20.57 billion during FY 2021-22. Exports from Japan to India during this period were US\$ 14.39 billion and imports were US\$ 6.18 billion.

- **Investment**

- Cumulatively, from 2000 until March 2022, the Japanese investments to India have been around US\$ 36.94 billion ranking Japan fifth among source country for FDI.
- **Currency swap**
 - In October 2018, India and Japan signed a deal for a **USD 75-billion bilateral swap arrangement**.
- **Supply Chain Resilience Initiative (SCRI)**
 - The Trade Ministers of India, Japan and Australia formally launched the SCRI in April 2021.

Official Development Assistance (ODA)

- The Mumbai-Ahmedabad High Speed Rail, Western Dedicated Freight Corridor (DFC), Delhi-Mumbai Industrial Corridor (DMIC) with twelve industrial townships, Chennai-Bengaluru Industrial Corridor (CBIC) are some mega projects with Japanese cooperation on the anvil.
- Japan's ODA disbursement to India in 2020-21 stood at about JPY 264 billion (approx USD 2.3 billion).

Defence & Security Cooperation

- There are also various frameworks of security and defense dialogue between Japan and India including Foreign and Defense Ministerial Meeting ("2+2" meeting), annual Defense Ministerial Dialogue and Coast Guard-to-Coast Guard dialogue.
- In November 2019, the first **"2+2" meeting was held in New Delhi**.
- In September 2020, the Agreement between the Japan and India Concerning **Reciprocal Provision of Supplies and Services** (so-called **"Acquisition and Cross-Servicing Agreement"** or ACSA) between the Self-Defense Forces of Japan and the Indian Armed Forces was signed.
 - India is **only the second country after Australia** with which Japan has such an agreement.
- Japan became a permanent member of the **Malabar exercise** in 2015. India and Japan also conduct joint military exercise named **"Dharma Guardian"** since 2018.
- Air forces of both countries conducted first fighter jet exercise **'Veer Guardian'** in Japan in Jan' 2023.

Clean Energy Partnership

- It was launched during the annual summit last year.
- This partnership aims to promote energy cooperation through diverse and realistic energy transitions utilising all energy sources and technologies to ensure energy security, carbon neutrality and economic growth.

Civil Nuclear Agreement

- In November 2016, India and Japan signed a deal on nuclear energy. This was the first time that Japan signed such deal with a non-signatory of Non-Proliferation Treaty (NPT).
- The deal gives Japan the right to supply nuclear reactors, fuel and technology, to India.

Issues in India-Japan Relationship

- Despite the Comprehensive Economic Partnership Agreement (CEPA) between India and Japan, trade between the two countries has been far below its potential.
 - Both countries face challenges in the form of non-tariff barriers, complex regulations, and different business cultures.
 - India also has a trade deficit with Japan, which has been a point of concern for India.
- While India can emerge as a large market for Japanese infrastructure system exports, there have been incredible delays in the commencement of the projects.
- Japanese companies face considerable logistics challenges and non-availability of uninterrupted power supply, constraints their plans for establishing manufacturing plants in India.

- The two-country seems to have different opinion on the current Ukraine crisis. While Japan openly criticised Russia for invading Ukraine, India has not done so publicly.

Conclusion

- The India-Japan bilateral relationship has evolved into a strategic and comprehensive partnership based on shared democratic values, mutual respect, and economic cooperation.
- The two nations have strengthened ties through high-level visits, defense cooperation, and joint initiatives in areas such as technology, infrastructure, and energy, paving the way for a bright and promising future.



International Criminal Court Issues Arrest Warrant Against Putin

- The International Criminal Court (ICC) has issued **an arrest warrant** for Russian President Putin for war crimes because of his alleged involvement in **abductions of children** from Ukraine.
 - It is alleged that more than 16,000 Ukrainian children have been deported to Russia since the February 24, 2022 invasion.
- The arrest warrant for Mr. Putin, a sitting head of state of a U.N. Security Council (UNSC) member, is an unprecedented step for the ICC.
- Moscow dismissed the orders as void as Russia is not a party to the ICC.

How Does The ICC Function?

Judges & Prosecutors

- The court carries out its investigations through the Office of the Prosecutor and has 18 judges.
- Both the judges and prosecutors hold **non-renewable 9-year terms**.

Process

- There are pre-trial, trial, and appellate benches in the ICC.
- The prosecutor conducts a *preliminary examination* in a matter, before seeking permission from pre-trial judges to open a full investigation.
 - The initial examination must conclude that the crimes in question are of sufficient gravity.

Ways to open investigations

- The prosecutor can open an investigation in three ways:



International Criminal Court (ICC)

- It is a permanent court to prosecute serious international crimes committed by individuals.
- It tries crimes such as genocide, war crimes, crimes against humanity, and aggression.
- The court was established to fight global impunity and bring to justice criminals under international law, regardless of their rank or stature.
 - It is different from UNs' **International Court of Justice (ICJ)**, also at The Hague.
 - The ICC was established to prosecute the most heinous offenses only when a country's *own legal machinery* fails to act. Unlike the ICJ, which deals with countries and inter-state disputes, the *ICC prosecutes individuals*.
 - Unlike ICJ, the *ICC is not part of the UN system*. The UN-ICC relationship being governed by a separate agreement.
 - ICJ is among the UN's 6 principal organs

HQ

- The Hague, The Netherlands



Statute

- Before the ICC became functional in 2002, its founding treaty was adopted by the UN General Assembly in 1998 in Rome, Italy, thereby making it the Rome Statute.

Membership

- To become a member of the ICC or State party to the Rome Statute, countries have to **sign the statute and ratify it under their respective legislatures**.
- **123 countries** are currently members of the ICC, with African countries making up the largest bloc.
- Notably, countries including **India, China, Iraq, North Korea and Turkey never signed the Rome Statute**.
- Others including the US, **Russia**, Israel and Syria signed, but never ratified it.

- when a case is referred by a **member country** in its own territory
- when a case is **referred by the UNSC**
- when the prosecutor takes up a case proprio motu or **on his own**

○ **Non-member** states can also be investigated in three ways:

- if alleged crimes were perpetrated by **non-members in member states**
- if the **non-members accept the court's jurisdiction (Article 12(3))**
- when the Security Council authorises it

Ukraine is also **not a State Party** to the Rome Statute, but it has twice exercised its options to accept ICC's jurisdiction over alleged crimes under the Rome Statute, occurring on its territory, under Article 12(3) of the Statute.

If Putin travels to a state party to the ICC, then that country must arrest him according to its obligations under international law.

Criticisms Of The ICC

- **Pace Of Investigation And Judgements**

- After 19 years of being active, the court has convicted 10 persons accused in a small number of cases and acquitted four individuals.
- Hence, some experts question whether the time, efforts and financial resources invested in the court by member countries is worth the outcome.
 - The court's annual budget for 2021 was over \$160 million.

- **Afraid to take actions against Western powers**

- This was pointed out first, when the court denied permission to start an investigation into Afghanistan in 2019, and second, when the current prosecutor wanted to restart the investigation after the Taliban takeover.

- **Bias against African countries**

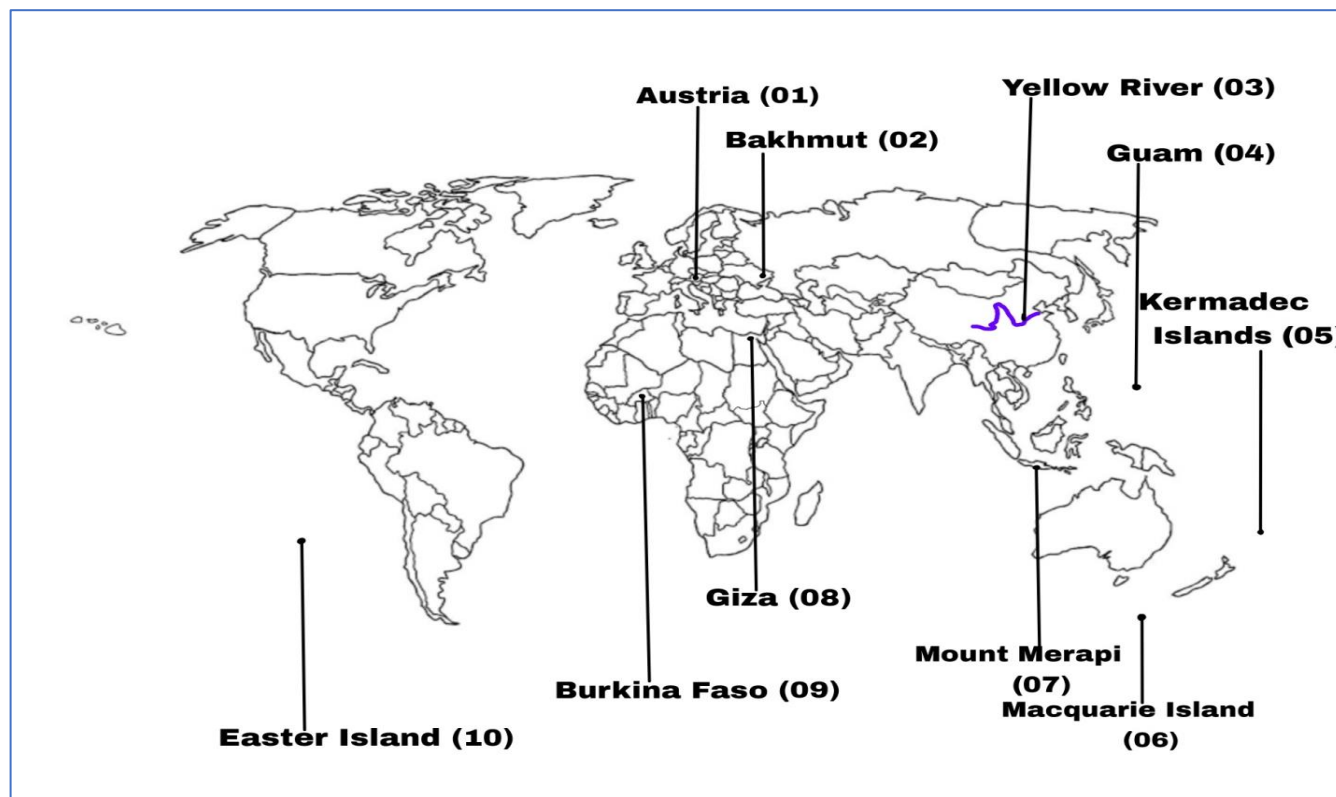
- Another point of contention is that barring recent years, the court, since its formation, largely took up investigations into alleged crimes committed in African countries.
- All of the nearly 30 cases currently in the trial stage before the court are from African countries.
 - The African Union in 2016 had endorsed a proposal led by Kenya for a mass withdrawal from the Rome Statute.
 - The vote on this proposal, however, was symbolic.

- **Limited jurisdiction**

- ICC's jurisdiction is limited to offences occurring after it came into effect on July 1, 2002.
- The offences should be committed either in a country that ratified the agreement or by a national of a ratifying country.
- The court has no power to arrest **sitting heads of state** or bring them to trial, and instead must **rely on other leaders and governments**.

MAPS: PLACES IN NEWS

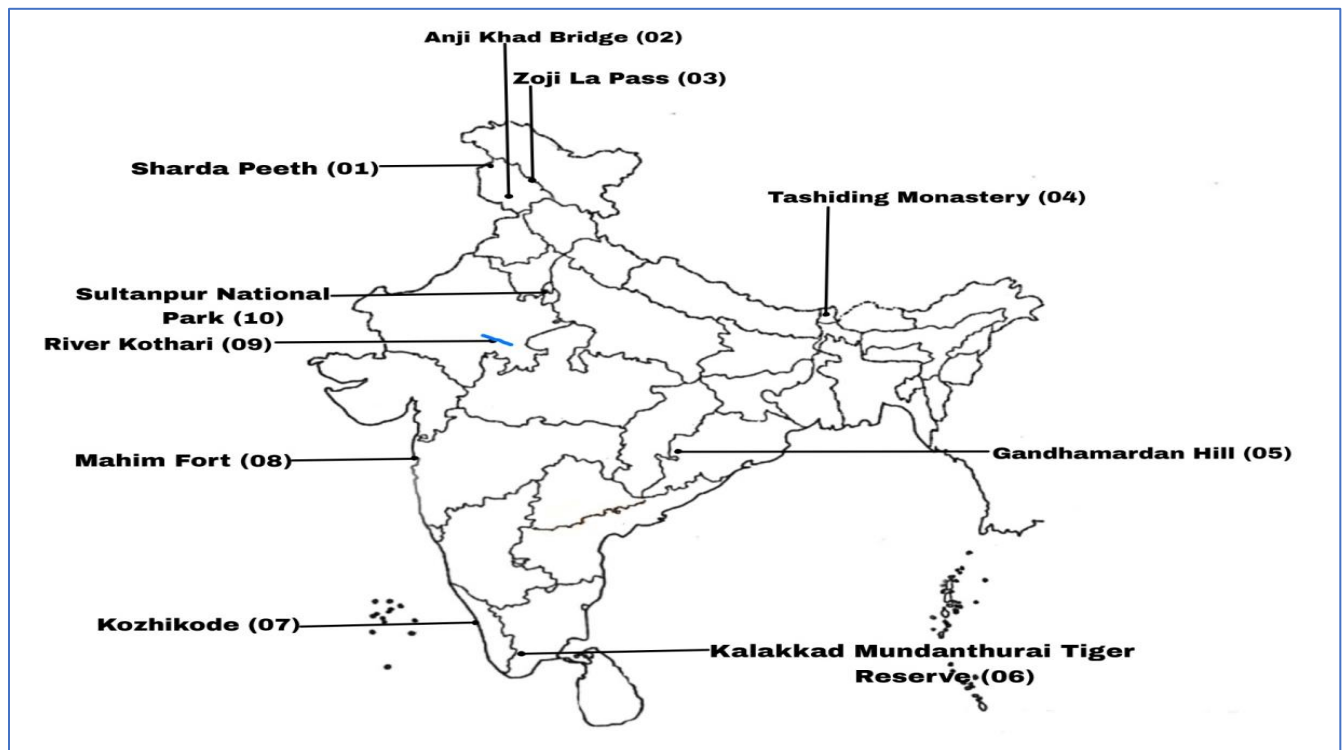
International Places In News



01	Austria	Austria and India exchanged views on technologies and innovations in road infrastructure development and green technologies. It is a landlocked country in the southern part of Central Europe, lying in the Eastern Alps. It is bordered by Germany, the Czech Republic, Slovakia, Hungary, Slovenia, Italy, Switzerland and Liechtenstein.
02	Bakhmut	The Ukrainian military might decide to pull troops back from the key stronghold of Bakhmut. It is a city in eastern Ukraine. It is located on the Bakhmutka River. It was designated a city of regional significance until 2020 when the designation was abolished.
03	Yellow River	A study has noted that the Chinese practice of building embankments is one of the reasons to blame for devastating floods occurring in Yellow river. It is the 2nd longest river in China after the Yangtze. Its source is Bayankala Mountains. Its major tributaries are Black River, White River, Tao River, Huangshui, Fen River, Luo River, Wei River. The name Yellow River comes from the huge amounts of yellow loess sediment it carries.
04	Guam	Indian Navy is participating in SEA DRAGON 23 exercise in waters off Guam. It is an island and unincorporated territory of United States in the North Pacific Ocean. Its capital is Hagatna. It is the southernmost and largest island in the Mariana Island archipelago . It is much closer to China in the East than to the US mainland in the West, making it an ideal US military strategic outpost for Indo-Pacific operations.
05	Kermadec Islands	An earthquake of magnitude 6.9 struck the Kermadec Islands region in New Zealand. They are volcanic island group in the South Pacific Ocean. They are prone to earthquakes as it is located on the boundary of two of the world's major tectonic plates (convergent boundary) - the Pacific Plate and the Australian Plate. They are

		uninhabited, except for Raoul Island.
06	Macquarie Island	The Federal government of Australia proposed the expansion of marine park covering Macquarie Island's Economic Exclusion Zone. It is an oceanic island in the Southern Ocean , lying south-east of Tasmania. It is the exposed crest of the 1,600 km-long undersea Macquarie Ridge . This is the only piece of land in the world formed entirely of oceanic crust. It is also designated as a World Heritage Area.
07	Mount Merapi	Mount Merapi erupted with avalanches of searing gas clouds and lava. It is the most active of Indonesia's 130 active volcanoes. It rises to 2,911 metres and has steep slopes with dense vegetation on its lower sides. It is located near the center of the island of Java and Indonesia's cultural capital, Yogyakarta.
08	Giza	Scientists have discovered a hidden passage inside Egypt's Great Pyramid of Giza. Located on the west bank of Nile, Giza is the 3 rd largest city in Egypt by area after Alexandria and Cairo . It has always been a focal point in Egypt's history due to its location close to Memphis, the ancient pharaonic capital of the Old Kingdom.
09	Burkina faso	Burkina faso, a former French colony, announced an end to operations led by France (against militant groups) in the country. It is a landlocked country in western Africa. Its capital is Ouagadougou. It is bordered by Mali, Niger, Benin, Togo, Ghana and the Ivory Coast. Since 2015, the country has been fighting an Islamist insurgency that spilled over from neighbouring Mali. It is one of West Africa's poorest countries despite being a gold producer.
10	Easter Island	Scientists have found a previously undiscovered moai statue on Easter Island. Also called Rapa Nui, it is a remote Chilean territory located in the Pacific Ocean, roughly 2,200 miles from mainland Chile. It is a part of the Polynesian Triangle of Oceania. It is protected as a national park and a UNESCO World Heritage site.

National Places In News

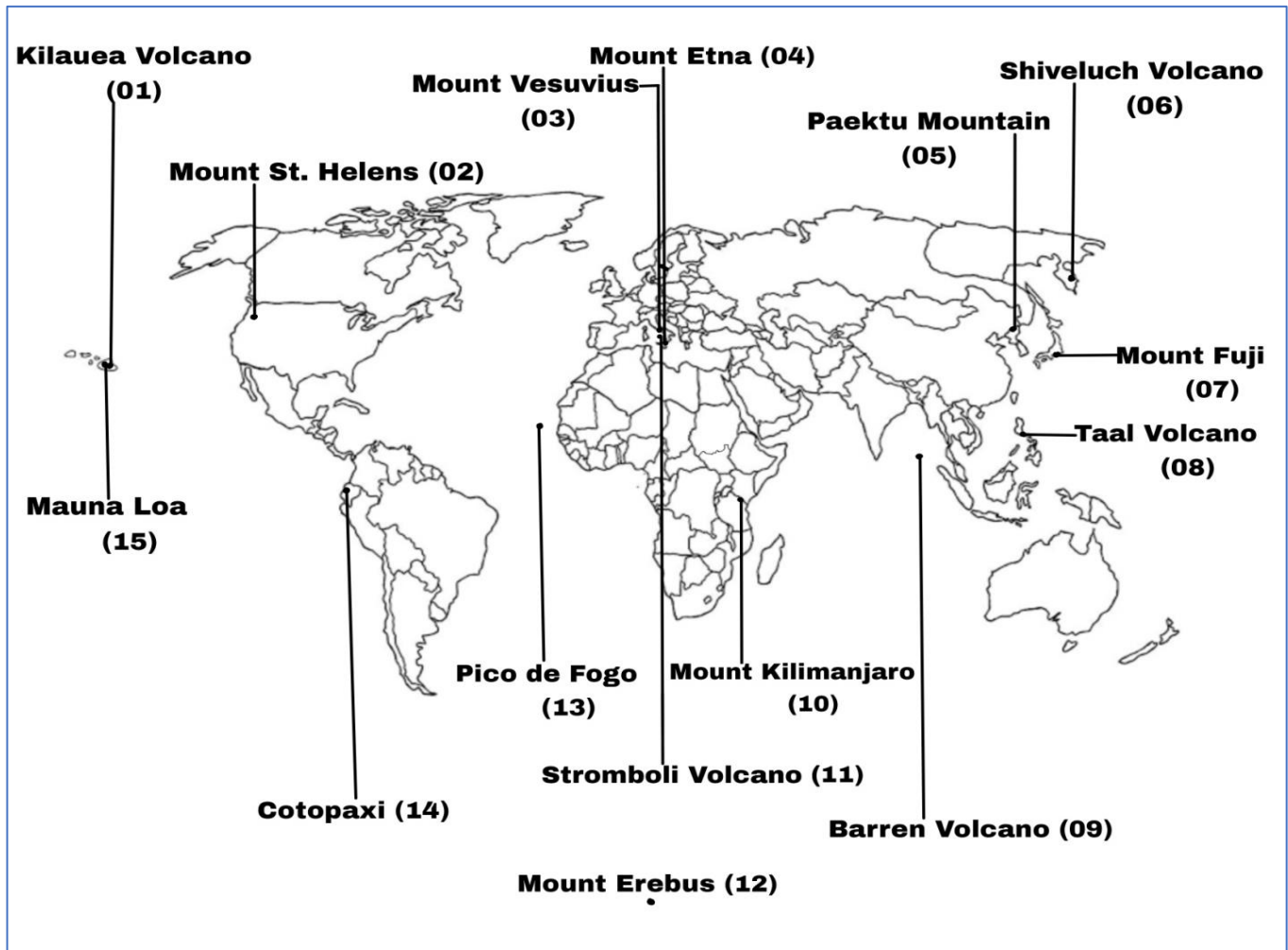


01	Sharda Peeth	Union Home Minister said that the government will move forward to open Sharda
----	---------------------	---

		Peeth on the lines of Kartarpur corridor. It is an abandoned Hindu temple. It is located in Sharda village in the valley of Mount Harmukh, along the Neelam River in the Pakistan-occupied Kashmir. It lies 16 miles to the northwest of the Line of Control. It is said to be where Panini and Hemachandra completed and stored their writings on Sanskrit grammar.
02	Anji Khad Bridge	According to officials, the last deck portion of the Anji Khad bridge is expected to be completed soon. It is an under-construction railway bridge in Reasi, Jammu and Kashmir. It will be the 1st cable-stayed railway bridge in India. It stands at the height of 331 metres above the Anji river bed.
03	Zojila Pass	The Border Roads Organisation (BRO) reopened the strategic Zojila Pass. Also known as The Mountain Pass of Blizzards , it is a strategic pass that connects Kashmir Valley to Ladakh. It is located on the Srinagar-Kargil-Leh highway (NH-1). The pass remains closed for almost half of the year due to heavy snowfall. The pass was captured by the Indian Army on November 1948 in an assault codenamed Operation Bison .
04	Tashiding Monastery	The Bumchu Festival was celebrated in the Tashiding Monastery. It is a Buddhist monastery of the Nyingma sect of Tibetan Buddhism in Western Sikkim. It is located on top of the hill rising between the Rathong chu and the Rangeet River. Bumchu Festival is the Tashiding holy water vase ritual which commemorates a supernatural occurrence that took place in the 18th century under Chogyal Chakdor Namgya.
05	Gandhamardan Hill	The Odisha govt declared the Gandhamardan Hill Range in Bargarh and Balangir district as a Biodiversity Heritage Site (BHS) . This hill consists of medicinal plants, the hill system is considered the ' Ayurvedic paradise ' of Odisha. The hills have 2 historical monuments - Nrusinghanath temple is located on the northern slope and Harishankar temple on the southern side.
06	Kalakkad–Mundanthurai Tiger Reserve	A rare moth species was seen for the 1 st time in the buffer zone of Kalakkad–Mundanthurai Tiger Reserve. It was declared as the 1st Tiger Reserve of Tamil Nadu and the 17th Tiger Reserve of the country. It consists of the Kanyakumari Wildlife sanctuary in the south and the Nellai Wildlife Sanctuary in the North. The river Thamirabarani originates from this tiger reserve. It is also known as the <i>River Sanctuary</i> with as many as 14 rivers originating from this Tiger Reserve.
07	Kozhikode	The Kerala government recently announced the State's first Waste-To-Energy project in Kozhikode. It is a city along the Malabar Coast in the state of Kerala. Vasco Da Gama first set foot here in 1498 after which it became one of the most important ports in the Malabar region for the trade of spices, silk and other goods between European countries and India.
08	Mahim Fort	The Brihanmumbai Municipal Corporation (BMC) demolished more than 250 slums that had encroached inside the Mahim Fort. It is a fort in Mahim in Mumbai, Maharashtra. It was built by Maharaja Pratapbimb of Rajput dynasty in the 11th century AD. The fort was the site of frequent skirmishes between the Portuguese and the Ali Shah.
09	River Kothari	The NGT directed the Rajasthan State Pollution Control Board to recover environmental compensation for its failure to take action to remedy the pollution of River Kothari. It raises from the Aravalli hills near Devgarh in Rajsamand, Rajasthan. This river joins the river Banas at Nandrai in Kotri tehsil. The Meja dam on the Kothari river provides drinking water to the Bhilwara district.

10	Sultanpur National Park	The G20 delegates recently visited the Sultanpur National Park, located in the Gurgaon, Haryana. It is spread over 1.42 sq km, comprising mainly wetlands. It is a major habitat for aquatic birds, including migratory and resident birds. It was notified as a Ramsar site , a wetland of international importance, in 2021.
----	--------------------------------	---

Important Volcanoes In World



01	Kilauea volcano	It is an active shield volcano, with a cinder cone in Hawaiian Islands. Kilauea's constant lava eruptions have built up the volcano and given it a shield-like form that is still growing. Its slopes merge with the nearby volcano Mauna Loa on the west and north.
02	Mount St. Helens	It is an active volcano located in Washington State, USA. It is part of the Cascade Range , a mountain range running along the western side of North America from British Columbia in Canada to northern California, USA.
03	Mount Vesuvius	It is located in southern Italy near the coastal city of Naples. It is the active volcano of Europe. It has been classified as a complex stratovolcano, one that consists of a complex of two or more vents. In 79 AD, the Roman Empire-era sister cities of Pompeii and Herculaneum were destroyed during a catastrophic eruption of Vesuvius.
04	Mount Etna	It is the tallest active volcano in Europe. It is located on Italian island of Sicily, which lies in the Mediterranean Sea to the south west of mainland Italy with a height of 11,014 ft. It is a UNESCO World Heritage Site . The United Nations has

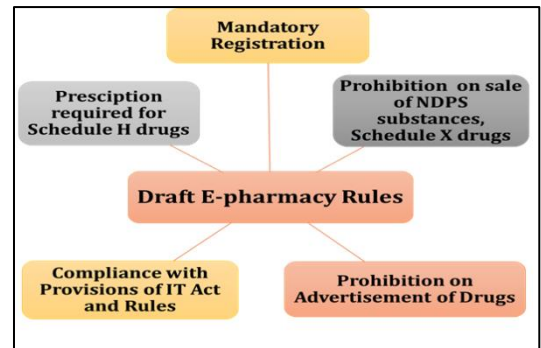
		also designated it a Decade Volcano due to the recent activities.
05	Paektu Mountain	It is also known as Baekdu Mountain. It is an active stratovolcano on the Chinese–North Korean border. A large crater lake, called Heaven Lake , is in the caldera on top of the mountain.
06	Shiveluch Volcano	It is one of the largest and most active northernmost volcanoes in Kamchatka Krai , Russia. It lies within an ancient caldera – a large crater-like basin that likely formed when the older part underwent a catastrophic eruption at least 10,000 years ago.
07	Mount Fuji	It is located on the island of Honshu and is the highest mountain in Japan . Considered a strato volcano that last erupted from 1707 to 1708, it was added to the World Heritage List as a Cultural site in 2013.
08	Taal Volcano	It is a complex strato volcano in the province of Batangas, Philippines . It is a caldera filled by Taal Lake. It is situated at the boundaries of two tectonic plates the <i>Philippines Sea Plate and the Eurasian plate</i> and is particularly susceptible to earthquakes and volcanism.
09	Barren Volcano	It is the only confirmed active volcano in South Asia . It is home to India's only live volcano. The island, part of the Andaman and Nicobar chain of islands, is located in the Andaman Sea, around 140 kilometers northeast of Port Blair, the capital of the Union Territory.
10	Mount Kilimanjaro	It is a dormant volcano located in Tanzania . It is the highest mountain in Africa , the highest single free-standing mountain above sea level in the world. It is part of Kilimanjaro National Park.
11	Stromboli Volcano	It is located off the coast of southern Italy . It is widely known for its spectacular eruptions which jet fountains of molten rock from its lava-filled central crater. Its eruptions are visible for long distances at night, it is known as the " Lighthouse of the Mediterranean ".
12	Mount Erebus	It is the 2nd-highest volcano in Antarctica after Mount Sidley , and the southernmost active volcano on Earth. It is located in the Ross Island, which is also home to three inactive volcanoes: Mount Terror, Mount Bird, and Mount Terra Nova.
13	Pico de Fogo	It is located on the Island of Fogo , and is a hotspot volcanic island in Cape Verde in the Atlantic Ocean. It is an active stratovolcano. People use Pico de Fogo slopes to grow coffee and its magma as a building material.
14	Cotopaxi	It is an active stratovolcano in the Andes Mountains located in Ecuador . It is part of a chain of volcanoes around the Pacific Plate known as the Pacific Ring of Fire. As a result of several eruptions, several valleys were formed by mudflows around the volcano.
15	Mauna Loa	It is among the five volcanoes that form the Island of Hawaii, in the Pacific Ocean. The characteristics of the super volcano include non-explosive magma eruptions and relatively shallow slopes. It is the largest subaerial volcano in both mass and volume.

e-Pharmacies: On Regulating Online Sale Of Drugs In India

Union Ministry of Health and Family Welfare (MoH&FW) **pulled up at least twenty companies** including Tata-1mg, Flipkart, Apollo, PharmEasy, **for selling medicines online**. This happened after the All-India Organisation of Chemists and Druggists (AIOCD), a powerful lobby of over 12 lakh pharmacists, threatened to launch a country-wide agitation if the government didn't act.

Legislative Framework For e-Pharmacies In India

- As of now, **no exact rules are in place for E-drug stores in India**, and this is a significant inhibitor to the online drug store market in India.
- At present, E-pharmacies in India follow the **Drugs and Cosmetics Act 1940, the Drugs and Cosmetics Rules 1945, the Pharmacy Act 1948, and the Indian Medical Act 1956**.
- However, the electronic sale of physician-prescribed drugs from online drug store sites is expressed under the **IT Act, 2000**.
- E-pharmacies are managed by **state drug controllers** and approvals for E-pharmacies should be given by the **Drug Controller General of India (DCGI)**.
- The MoH&FW in **2018** came out with **draft rules** to control the online offer of medications and availability of genuine drugs from certifiable online sites. But, after being sent to a group of ministers, the proposal was immediately put on hold.
- Since then, **multiple court orders** and the 172nd Parliamentary Standing Committee report have called for regulating e-pharmacies.
- **An administrative structure** to oversee/regulate e-pharmacy sector is necessary when antimicrobial resistance (AMR), criminal and risky movement of drugs etc is on the rise.



How Are e-Pharmacies Competing With Chemist Shops

- Flushed with billions of dollars of private equity, e-pharmacies started offering hefty discounts on medicines in a bid to garner more market share.
- Companies like PharmEasy are building a supply chain from the ground up by buying out big and small wholesale drug distributors like Ascent Health, Desai Pharma, etc.
- **But this aggressive growth is coming at a cost**. Since 2015, e-pharmacies have recorded losses year-on-year. For example, Tata-1 Mg posted a loss of ₹146 crore in FY22.

Is Banning e-Pharmacies A Viable Option?

- The demand for online delivery of drugs is burgeoning. The year 2020 marked a watershed moment for the growth of e-pharmacies as it saw nearly 8.8 million households using home delivery services during lockdown.
- There is a possibility that some of these businesses **will go underground if banned**.

What Lies Ahead - A hybrid Model of e-Pharmacies and Brick and Mortar Stores

- In a climate where drug delivery is driven by consumer sentiments, it is futile to stick to any one way of doing business.
- For acute care and emergency, patients still rely on their neighbourhood pharmacy stores. This has led e-pharmacy players to now open capital-intensive brick and mortar stores.

- Stiff competition has forced chemist shops to also offer home delivery options over their own store apps/Whatsapp.
- In an ecosystem that is moving towards a **hybrid mode**, all eyes are on the government which will have to effectively regulate the new way of doing e-commerce in the drug space.

India's Stand On Same-Sex Marriage

Recently, a Bench led by Chief Justice of India D.Y. Chandrachud referred petitions to legally recognise same-sex marriages to a Constitution Bench of five judges of the Supreme Court.

Why Does The Community Want This Right

- Even if LGBTQIA+ couples may live together, legally, they are on a slippery slope.
 - In **Navtej Singh Johar case (2018)** homosexuality was **decriminalised**.
- They do not enjoy the rights married couples do.
 - For example, LGBTQIA+ couples cannot adopt children or have a child by surrogacy;
 - They do not have automatic rights to inheritance, maintenance and tax benefits;
 - After a partner passes away, they cannot avail of benefits like pension or compensation.
- Most of all, since marriage is a social institution - that is created by and highly regulated by law - without this social sanction, same-sex couples struggle to make a life together.

About the case

- The Court has been hearing multiple petitioners' requests for *legal recognition of same-sex marriages under a special law*.
- SC took up the case as petitioners claimed that the *non-recognition of same-sex marriage* amounted to discrimination that strikes at the root of dignity and self-fulfillment of LGBTQIA+ couples.
- The petitioners cited the **Special Marriage Act, 1954** and appealed to the Court to extend the right to the LGBTQIA+ community, by making the *marriage between any two persons gender neutral*.
- Special Marriage Act, 1954 provides a civil marriage for couples who cannot marry under their personal law.

Centre's Stand

- The Centre has opposed same-sex marriage.
- It said that the judicial interference will cause complete havoc with the delicate balance of personal laws and in accepted societal values.
- While filing a counter-affidavit during this hearing, the government said that decriminalisation of Section 377 IPC does not give rise to a claim to seek recognition for same-sex marriage.

Arguments Forwarded By The Government

- **Notion of Marriage**
 - The notion of marriage itself necessarily and inevitably presupposes a union between two persons of the opposite sex.
 - This definition is socially, culturally and legally ingrained into the very idea and concept of marriage and ought not to be disturbed or diluted by judicial interpretation.
- **Marriage Laws Governed By The Personal Laws/Codified Laws**
 - Parliament has designed and framed the marriage laws in the country to recognise only the union of a man and a woman to be capable of legal sanction, and thereby claim legal and statutory rights and consequences.
- **Reasonable Restriction**
 - Even if such a right is claimed under Article 21, the right can be curtailed by competent legislature on permissible constitutional grounds including legitimate state interest.

Way Ahead

- The Court is leaning towards granting equal rights, including marriage of same-sex couples, citing the Constitution and changing norms.
- Even if the Court rules in its favour, the march towards equality for the LGBTQIA+ community will be hard.
- Enforcing something like same-sex marriage in a diverse country with well-entrenched traditions will not be easy.
- Rights activists are calling for awareness on sex, gender and constitutional rights from the school level to change things on the ground.

Recurring Migrant Workers' Issues

Rumours of migrant workers being assaulted in Tamil Nadu have triggered concern among manufacturers in the state. Officials have rejected the reports as fake news, and political leaders and the administration have appealed to workers to not pay heed to the rumours.

Different Problems That Migrant Workers Continue To Face

- **Exploitation:** Often paid less than their local counterparts, poor working conditions and no job security.
- **Lack of Legal Protection:** They are not covered by many labour laws.
- **Poor Living Conditions:** They often live in crowded and unhygienic conditions with inadequate facilities for sanitation, clean water, and healthcare.
- **Discrimination** based on their ethnicity, language, and place of origin, which can lead to social exclusion and marginalization.
- **Lack of Documentation** makes it difficult for them to access government services, open bank accounts.
- **Forced Labour and Debt Bondage**
- **Lack of Social Security** schemes such as pensions, insurance, and healthcare.
- **Lack of Awareness** of their rights and entitlements makes them vulnerable to exploitation and abuse.
- **Inadequate Coordination Among States** on a formal exchange of information on migrant workers.
- **Absence of data**, it is difficult to track labourers during times of crisis.

What Is The Legal Framework For Migrant Welfare?

- The **Inter-State Migrant Workmen Act, 1979** looks into the welfare of the labourers.
 - The Act mandates that the establishment which proposes to employ migrant workers be required to be registered with destination states.
 - Contractors will also have to obtain a **licence** from the concerned authority of the home states as well as the host states.
 - However, in practice, this Act has not been fully implemented.
- This Act has been subsumed into the four broad labour codes notified by the Centre:
 - **The Code on Wages, 2019;**
 - **The Industrial Relations Code, 2020;**
 - **The Code on Social Security, 2020; and**
 - **The Occupational Safety, Health and Working Conditions Code, 2020.**
- These have not been implemented yet.
- Also, the registration under the inter-state migrant workers' act is negligible. This is due to:
 - **Lack of awareness** about the rights and the benefits of registration
 - **Complex registration process**

- **Lack of enforcement** reduces the incentive for migrant workers to register.
- **Inadequate infrastructure** to register and monitor the movement of migrant workers.
- **Fear of losing jobs:** Migrant workers often fear that registering under the Act will lead to loss of employment, as employers may prefer to hire workers who are not registered.
- **Informal nature of work:** Many migrants work in the informal sector, which is not covered by the Act, and hence, they are not required to register.

Are There Any States Which Have Tried To Implement The Inter-State Act?

- In 2012, an MoU was signed between Odisha and Andhra Pradesh to track labourers migrating from 11 districts of Odisha to work in brick kilns in then-merged Andhra Pradesh.
 - It was signed with the help of the International Labour Organisation (ILO).
- Kerala has set up facilitation centers for migrant workers whom the state refers to as “guest workers.”
 - These facilitation centers maintain data regarding migrant workers arriving in Kerala as well as help migrant workers navigate any problems they might face.
 - However, there is no data sharing between Kerala and the migrant workers’ home states.

New Initiative Of Jharkhand To Generate Migration Data

- Jharkhand has started the **Safe and Responsible Migration Initiative (SRMI) in 2021.**
- It aims at enabling systemic registration of migrant workers for monitoring and analysis in the source as well as the destination districts.
- The priority of SRMI is to generate data and then map the labourers who move out to several states for work.

Review Panel Red-Flags How NAAC Grades Colleges And Universities

Lack of action on the report, which was submitted to the University Grants Commission (UGC), was flagged by NAAC executive committee chairperson in the days before he recently announced his resignation.

What Circumstances Led To Resignation Of The Chair Of NAAC Executive Committee

- Based on various complaints, the NAAC executive committee chairperson suggested the **need for an independent inquiry by appropriate high-level national agencies.**
- **The review panel** was set up by NAAC executive committee chairperson **to review the functioning of the NAAC.**
- **A report was submitted** (to the UGC last year) by the panel, with **major findings** -
 - The possibility of a compromised IT system;
 - Presence of multiple “**super admins**” who have full access to the NAAC’s internal system and the



National Assessment and Accreditation Council
 An Autonomous Institution of the University Grants Commission
राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्
 विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

- It is a **government organization** (HQ in Bangalore) in India established in **1994** in response to recommendations of **National Policy in Education (1986).**
- It is an **autonomous body** that **assesses and accredits** Higher Education Institutions (HEIs) such as colleges, universities/other recognised institutions to derive an understanding of the ‘Quality Status’ of the institution.
- It is **funded by the UGC** and evaluates the institutions in terms of their performance related to the teaching-learning processes, faculty, research, infrastructure, governance, financial wellbeing, student services, etc.

NAAC’s Accreditation Process

- The first step involves an applicant institution submitting a **self-study report (SSR)** based on quantitative and qualitative metrics.
- The **data is subjected to validation** by expert teams of NAAC, with quality reviewed during site visits by peer teams.
- According to the Government of India, of the 1,113 universities and 43,796 colleges in the All-India Survey on Higher Education Report 2020-21, **NAAC accredited 418 universities and 9,062 colleges as on January 31, 2023.**

- power to allot experts;
- Non-maintenance of logs which may have adverse fall outs;
- Arbitrary allocation of experts raising questions of conflict of interest;
- **Vested interests, malpractices** are manipulating processes in the accreditation system;
- The **process of selection of experts** who comprise peer teams that are sent to assess applications for accreditation is **neither random nor sequential**;
- **Nearly 70% of experts** from the pool of assessors do not appear to have received any opportunity to conduct site visits while some others have had multiple such visits.
- **Lack of action on the report** was flagged by NAAC executive committee chairperson.

NCST Upset With Environment Ministry Over Forest Rights

- The National Commission for Scheduled Tribes (NCST) is caught in a row with the Ministry of Environment, Forest and Climate Change over the latest **Forest Conservation Rules (FCR), 2022**.
- The row is over the potential violation of provisions enshrined in the **Scheduled Tribes and Other Forest Dwellers (Recognition of Forest Rights) Act, 2006** dubbed as Forest Rights Act (FRA).

Role of Forest Advisory Committee (FAC)

- The FAC is a **statutory body** established under the Forest Conservation Act (FCA), 1980.
- The FAC considers questions on the diversion of forest land for non-forest uses such as mining, industrial projects, townships and advises the state government on the *issue of granting forest clearances*.
- Once the FAC is convinced and approves (or rejects a proposal), it is forwarded to the concerned State government where the land is located, who then has to ensure that provisions of the **Forest Right Act, 2006**, a separate Act that protects the rights of forest dwellers and tribals over their land, are complied with.
- The FAC approval also means that the future users of the land must **provide compensatory land** for afforestation as well as **pay the net present value** (ranging between Rs 10-15 lakh per hectare.)

Forest Conservation Act, 2022 Rules

- The latest version of the rules, which consolidates changes to the Forest Conservation Act over the years from various amendments and court ruling, was made public in June, 2022.
- The new rules make a provision for private parties to cultivate plantations and sell them as land to companies who need to meet compensatory forestation targets.
 - This, according to the Central government, will help India increase forest cover as well as solve the problems of the States of not finding land within their jurisdiction for compensatory purposes.
 - In the earlier rules, there was no such provision.

FOREST CONSERVATION RULES

- The Forest Conservation Rules deal with the implementation of the **Forest Conservation Act (FCA), 1980**.
- They prescribe the procedure to be followed for forest land to be diverted for non-forestry uses such as road construction, highway development, railway lines, and mining.
- The **broad objectives of the Forest Conservation Act** are to –
 - Protect forest and wildlife,
 - Put brakes on State governments’ attempts to hive off forest land for commercial projects and
 - Strive to increase the area under forests.
- For forest land beyond five hectares, approval for diverting land must be given by the Central government.
- This is via a specially constituted committee, called the Forest Advisory Committee (FAC).

- Also, in the new rules, there is no mention about what happens to tribals and forest-dwelling communities whose land would be hived off for developmental work.
 - Prior to the updated rules, state bodies would forward documents to the FAC that would also include information on the status of whether the forest rights of locals in the area were settled.
- The opposition parties have alleged that the amended rules would disempower crores of tribals and others living in forest areas.

NCST on FCA Rules 2022

- Within two months of the FCR, 2022 coming into force, the National Commission for Scheduled Tribe (NCST) constituted a “Working Group on the Forest Rights Act 2006.”
- It was constituted to monitor the implementation of the FRA and “make recommendations to the Union government and State governments”.
- The NCST concluded that the ***new FCR infringed on the rights of STs and other traditional forest dwellers (OTFDs) by violating the FRA.***
- According to the **FRA 2006**, in case of a dispute over forest land, precedence has to be given to the rights of STs and OTFDs, who live in the forest and its resources, over any other party.
- The NCST argued that the previous versions of the Rules provided a legal space for “ensuring completion of the processes for recognition and vesting of rights under the FRA in areas where forests are being diverted.”

Environment Ministry’s Response

- ***FCR, 2022 does not violate any provisions granting land rights to STs and OTFDs.***
- It said that the FCR has been issued in accordance with the Forest (Conservation) Act, 1980, which will run “parallel” to the provisions of the FRA, 2006.
- It also said that there was “***no legal basis***” for the NCST’s concerns about the FCR’s impact on the FRA.

Women, Business And The Law Report 2023

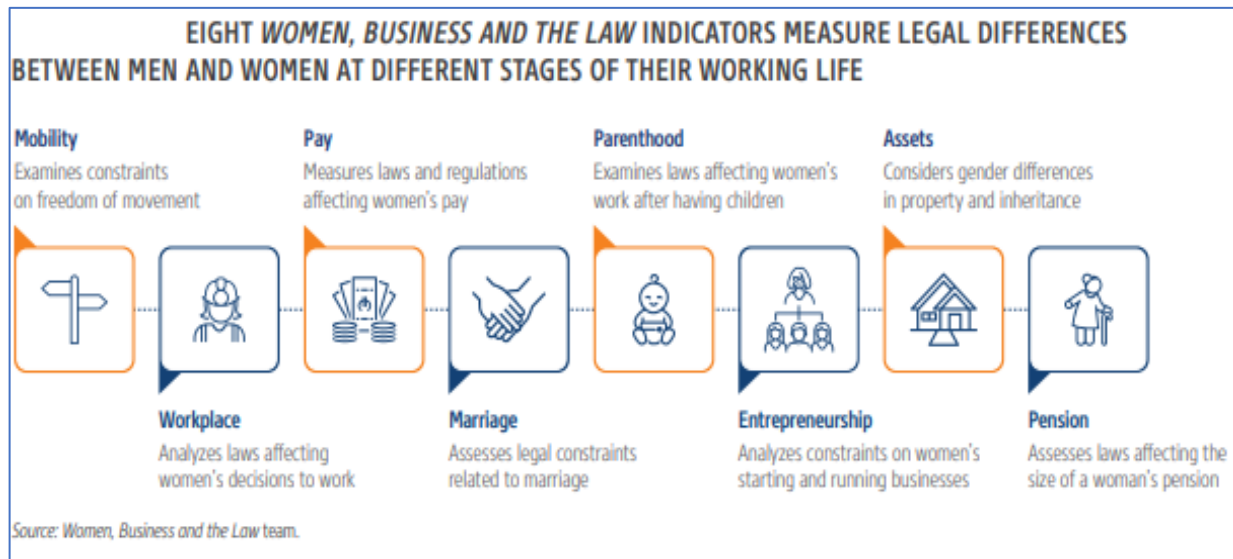
According to **World Bank’s (WB) Women, Business and Law report 2023** - an index on the life cycle of a working woman - India's score dropped to 74.4 out of 100.

Women, Business and The Law (WBL) Project

- It is a **World Bank Group project** collecting data on the **laws and regulations** that affect women’s economic opportunity.
- It is committed to **informing research and policy discussions** about the state of women’s economic opportunities and empowerment.
- It demonstrates the progress made while emphasising the work still to be done **to ensure economic empowerment for all.**
- **Since 2009**, the project has aided economies to **achieve gender equality and hence become more resilient.**
- It covers **190 economies and eight topics** relevant to women's economic participation and the **2023 report** measures the legal differences on access to economic opportunities between men and women.
- **A score of 100** on the Index means that women are on an equal standing with men on all the eight indicators being measured.



- In the 2023 index **only 14** (Belgium, Canada, Denmark, etc) economies scored a perfect 100.



India Specific Findings in the WBL Report 2023

- The Index used data on the laws and regulations applicable in **Mumbai**, viewed as the country's main business city.
- The laws affecting the Indian working **woman's pay, pension, work after having children, starting and running a business, property and inheritance**, do not provide for equality with Indian men, dragging India's score down to 74.4.
- **India scored higher than the 63.7** (average for the South Asian region), **though lower than Nepal** which had the region's highest score of 80.6.
- **India gets a perfect score**, when it comes to constraints on freedom of movement, laws affecting women's decisions to work and constraints related to marriage.
- **Reforms needed:** To improve on the Pay indicator, India may wish to consider -
 - Mandating **equal remuneration for work of equal value**,
 - Allowing women to work at night in the same way as men, and
 - Allowing women to work in an industrial job in the same way as men.

PM-ABHIM

The World Bank (WB) is lending up to **\$1 billion** (divided into two complementary loans of \$500 million under PHSP and EHSPP each) to help India with preparedness for future pandemics as well as to strengthen its health infrastructure.

- Through this combined financing, the bank will support India's flagship Pradhan Mantri-Ayushman Bharat Health Infrastructure Mission (**PM-ABHIM**).

PM-ABHIM

- The PM Atmanirbhar Swasth Bharat Yojana (PMASBY), which has now been renamed as PM-ABHIM, was announced in the **Union Budget 2021-22**.
- The PM-ABHIM scheme was launched in October 2021 by the Union **Ministry of Health and Family Welfare**, and will run in addition to the National Health Mission (NHM).
- It is one of the largest Pan-India health schemes **for strengthening healthcare infrastructure** to accomplish the vision of comprehensive healthcare across the country.
- **Objectives:**

- To strengthen grass root public health institutions.
- To expand and build an IT enabled disease surveillance system.
- To expand research on COVID-19 and other infectious diseases and to develop the core capacity to deliver the **One Health Approach**.
- **Components:** It consists of Centrally Sponsored Scheme Components [like Ayushman Bharat - Health & Wellness Centres (**AB-HWCs**) in rural and urban areas] and some Central Sector Components (like Critical Care Hospital Blocks).

What Is PHSP And EHSDP?

- The \$500-million **Public Health Systems for Pandemic Preparedness Program** (PHSPP) will support the government's efforts to prepare India's surveillance system to detect and report epidemics of potential international concern.
- Another \$500 million **Enhanced Health Service Delivery Program** (EHSDP) will support government's efforts to strengthen service delivery through a redesigned primary healthcare model, which includes -
 - Improved household access to primary healthcare facilities,
 - Stronger links between each household and its primary care facility through regular household visits
 - **Risk assessment of noncommunicable diseases.**
- Both the PHSPP and the EHSDP utilise the **Program-for-Results financing instrument** that focuses on achievement of results rather than inputs.
- Both the PHSPP and EHSDP loans from the International Bank for Reconstruction and Development (IBRD) of WB have a final maturity of 18.5 years including a grace period of five years.
- **PHSPP and EHSDP will leverage** the unique strengths of both the Center and the States to support the development of more accessible, high-quality, and affordable health services.

Regarding WB Lending

- **India's performance in health has improved over time.**
 - According to WB, India's life expectancy has increased from 58 in 1990 to 69.8 in 2020.
 - The under-five mortality rate, infant mortality rate and maternal mortality ratio are all close to the average for India's income level.
- Despite these advances in the health of the Indian population, **COVID-19 brought to the fore the urgent need** for pandemic preparedness (a global public good) and health system strengthening around the world.
- The current WB loans will prioritise health service delivery in seven States including Andhra Pradesh, Kerala, Meghalaya, Odisha, Punjab, TN and UP.

ECONOMY AND INFRASTRUCTURE

SWAMIH Fund

- The **Special Window for Affordable and Mid-Income Housing (SWAMIH)** Investment Fund has completed 20,557 homes since its inception in 2019.
- The SWAMIH Fund is **India's largest social impact fund**, specifically formed for completing stressed and stalled (brownfield) residential projects. The Fund is **sponsored by the Ministry of Finance**.
- It has so far raised Rs. **15,530 crore** to provide relief to real estate developers that require funding to complete their unfinished projects and ensure the timely delivery of homes to homebuyers.
- The **Investment Manager** of the fund is **SBICAP Ventures**, a wholly owned subsidiary of SBI Capital Markets, which in turn is a wholly owned subsidiary of the State Bank of India (SBI).
- The fund has been set up as a **Category-II AIF** (Alternate Investment Fund) **debt fund registered with SEBI**.
- The Fund is considered as the **lender of last resort for distressed projects**.
 - This is because it considers first time developers, established developers with troubled projects, developers with a poor track record of stalled projects, customer complaints and NPA accounts, even projects where there are litigation issues.

Alternative Investment Fund (AIF)

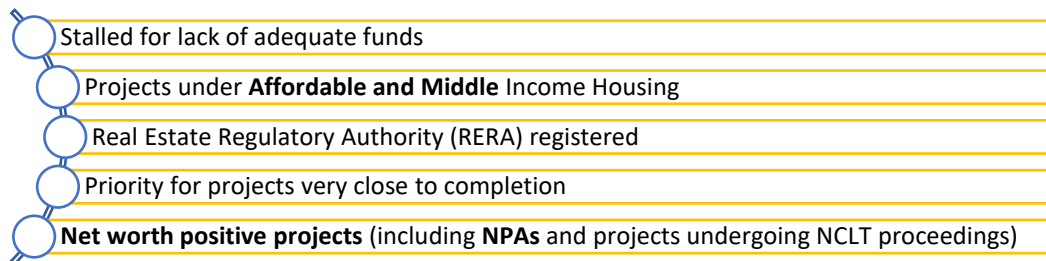
- As per SEBI (Alternative Investment Funds) Regulations, 2012, AIF is any fund incorporated in India which is a **privately pooled investment vehicle**.
- It collects funds from both Indian and foreign investors. Generally, high net worth individuals and institutions invest in AIFs as it requires a 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.
 - **Category I AIF:** Funds are mainly invested in start-ups, SMEs or any other sector which Govt. considers economically and socially viable. Examples include venture capital funds, social venture funds, infrastructure funds.
 - **Category-II AIF** are funds that *do not borrow money other than to meet day-to-day operational requirements*. Real estate funds, private equity funds (PE funds), funds for distressed assets are all Category-II AIF funds.
 - **Category III AIF:** Funds are invested with a view to make short term return. Examples include hedge funds.

Real Estate Regulatory Authority (RERA)

- RERA was established, under Real Estate (Regulation and Development) Act, 2016 to *enhance accountability and transparency with respect to housing transactions* and real estate.
- The Act *establishes RERA* in each state for regulation of the real estate sector and also acts as an *adjudicating body for speedy dispute redressal*.

Criteria for Project Selection

- Funding is provided to the projects that meet the following criteria:



- **Net-worth positive projects** are projects for which the value of their receivables (debts owed to them by buyers), plus the value of their unsold inventories is greater than their completion costs and outstanding liabilities.
- Affordable or Mid-income Housing units is defined as any housing units that do not exceed **200sqm** RERA carpet area and are priced as following (as applicable):
 - Less than INR 2cr in Mumbai Metropolitan Region;
 - Less than INR 1.5cr in NCR, Chennai, Kolkata, Pune, Hyderabad, Bangalore and Ahmedabad;

- Less than INR 1cr in the rest of India

Impact

- SWAMIH has so far provided final approval to about **130 projects** with sanctions worth over Rs 12,000 crore. Due to strong controls, the Fund has been able to complete construction in 26 projects and generate returns for its investors.
- It aims to complete over 81,000 homes in the next three years across 30 tier 1 and 2 cities.
- Once these homes are constructed and completed, a large amount of capital locked up in these projects will be released. For instance, it has successfully **unlocked liquidity of more than Rs 35,000 crore** till now.
- Besides, it will provide employment to construction workers as well as a boost to the allied industries such as steel and cement.
- Further, it will improve portfolios of banks and NBFCs, and significantly improve the economic sentiment in the nation.

Har Payment Digital Mission

- RBI has launched the '**Har Payment Digital**' Mission on the occasion of **Digital Payments Awareness Week (DPAW) 2023**.
- The campaign theme is "*Digital Payment Apnao, Auro ko bhi Sikhao*" (Adopt digital payments and also teach others).
- The Mission is aimed at reinforcing the ease and convenience of digital payments and facilitating onboarding of new consumers into the digital fold.

75 Digital Villages Programme

- As part of this Mission, the RBI has launched **75 Digital Villages programme** under which 75 villages across the country will be adopted to convert them into digital payment enabled villages.
- Under it, **Payment System Operators (PSOs)** will adopt these villages and conduct two camps in each of these villages with an aim to improve awareness and onboard merchants for digital payments.
- **PSOs are entities authorised by RBI to set up and operate a payment system.**
- As of February 2023, there are 67 PSOs including NPCI, Mastercard, Visa, SBI, Punjab National Bank, Amazon Pay (India), PhonePe, Muthoot Finserv USA, Ola Financial Services, PayU Payments etc.
- The PSOs are under various categories such as retail payments organisations, card payment networks, ATM networks, prepaid payment instruments, etc.

Fugitive Economic Offenders (FEO)

- India has called upon G20 countries to adopt multilateral action for faster **extradition** of *fugitive economic offenders (FEOs)* and recovery of assets both on domestic front as well as from abroad.
 - The call was made at the **first anti-corruption working group (ACWG) meeting** of G20 Nations held in Gurugram, which was chaired by India.
- India has been fighting cases in UK courts for extradition of Nirav Modi and Vijay Mallya for several years now. Similarly, many countries are facing the problem of economic offences and it becomes difficult to prosecute such offenders when the person flees overseas.
- India has called for better coordination, streamlining of judicial processes, and timely disposal of cases for multilateral action rather than bilateral coordination.

- The reason being that bilateral coordination proves to be more complex and presents obstacles in making progress on cases related to economic offenders.
- Due to India's legislative initiative, the Enforcement Directorate has been able to **transfer assets worth \$180 billion to public sector banks** that suffered losses of around \$272 billion due to frauds committed by high-net worth individuals.

Fugitive Economic Offender (FEO)

- A Fugitive Economic Offender is defined under The Fugitive Economic Offenders (FEO) Act, 2018.
- As per the act an FEO is any individual against whom a warrant for arrest in relation to a scheduled offence has been issued by any court in India and:
 - The person has left India to avoid criminal prosecution or
 - While being abroad, refuses to return to India to face criminal prosecution
- It may be noted that 'Scheduled Offence' means an offence specified in the Schedule of the Act, if the total value involved in such offence or offences is 100 crore rupees or more.

Need For FEO Law


- In 2017, Finance Ministry released a draft Bill to address cases of high-value economic offenders fleeing the country to avoid prosecution.
- It observed that existing civil and criminal laws did not contain specific provisions to deal with such offenders, and that a new legal framework was needed to prosecute them.
- The Ministry also argued that procedures under these laws were time-consuming, and led to roadblocks in investigation and impacted the financial health of banks.
- In March 2018, the *Ministry of External Affairs* stated that over 30 businessmen, under investigation by the CBI and the ED, had fled the country to avoid facing prosecution before Indian courts.

Fugitive Economic Offenders (FEO) Act, 2018

- The Act replaced **The Fugitive Economic Offenders Ordinance, 2018**, which was promulgated in April 2018.
- The FEO Act aims to **provide for measures to discourage FEOs from escaping the process of law in India** by staying outside the jurisdiction of Indian courts.
- In doing so, it intends to **preserve the sanctity of the rule of law in India** for matters specified in the act.
- **Process For Declaring An Individual an FEO**
 - Under the Act, **an application must be filed in special court** asking that a particular individual may be declared an FEO.
 - The application must be accompanied by:
 - ✓ **Reasons for the belief** that an individual is an FEO;
 - ✓ Any information available regarding the whereabouts of the FEO;
 - ✓ A list of properties or the value of such properties believed to be the proceeds of crime.
 - The special court may then issue notice to the individual to appear at a specified place and drop the proceedings if the individual complies.
 - If, however, the special court is satisfied that an individual is an FEO, it may, declare the person an FEO. The court may then **order the confiscation of the properties** of the accused individual in India or abroad.

Other Provisions For Economic Offences

- Economic offences relate to fraud, counterfeiting, money-laundering, tax evasion, etc.
- Among the laws available for prosecuting these offences are The Prevention of Money-Laundering Act (PMLA), 2002, The Benami



**ENFORCEMENT
DIRECTORATE**

- The Enforcement Directorate (ED) is a law enforcement agency and economic intelligence agency responsible for enforcing economic laws and fighting economic crime in India.
- It comes under the Department of Revenue, Ministry of Finance.
- The prime objective of the ED is the enforcement of two key Acts namely, the Foreign Exchange Management Act 1999 (FEMA) and the Prevention of Money Laundering Act 2002.

Properties Transactions Act, 1988, and The Companies Act, 2013.

- Sections of The Indian Penal Code, 1860 and The Code of Criminal Procedure, 1973, also cover offences such as forgery and cheating.

Frozen Semen Station

- The Ministry of Fisheries, Animal Husbandry & Dairying has laid the foundation stone of the Frozen Semen station in **Ranbir bagh, Jammu & Kashmir (J&K)**.
- The semen station has been sanctioned a sum of Rs. 2163.57 lakhs under the **Rashtriya Gokul Mission**.
- It will enable Kashmir province to be self-sufficient in the **production of high quality and disease free-germ plasm** to be used for **Artificial Insemination (AI) coverage**.
- Increased AI coverage will be a great step towards increasing productivity of dairy animals in the UT of J&K.
- The project will strengthen Frozen Semen Bull Station, Ranbir Bagh to realise production of over **10 Lac frozen semen straws (FSSs)** annually.



Rashtriya Gokul Mission (RGM)

- RGM, launched in December 2014, is a focussed project under National Programme for Bovine Breeding and Dairy Development.
- It aims to conserve and develop indigenous breeds in a focused and scientific manner.
- Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture has been implementing the Mission through the State Implementing Agencies (SIA viz Livestock Development Boards).

OBJECTIVES

- Undertake *breed improvement programmes* for indigenous cattle breeds to improve the genetic makeup and increase the stock.
- Enhance milk production and productivity.

Provisions

- Establishment of integrated indigenous cattle centres - *Gokul Gram*.
- Establishment of breeder's societies - *Gopalan Sangh*.
- Distribution of disease free high genetic merit bulls for natural service.
- Incentive to farmers maintaining elite animals of indigenous breeds.
- Organization of training programme for technical and non-technical personnel working at the Institute/Institutions engaged in indigenous cattle development.
- Strengthening of bull mother farms to conserve high genetic merit indigenous breeds.
- Assistance to Institutions/Institutes which are repositories of best germplasm.

Other initiatives under RGM

- Establishment of **National Kamdhenu Breeding Centre (NKBC)** as a centre of excellence for the development and conservation of indigenous breeds in a scientific way
- Developing an e-market portal for connecting the breeders and farmers. This e-market portal was named as '**E-Pashu Haat – Nakul Prajnan Bazaar**'.
- **Pashu Sanjivani**: An animal wellness program with the provision of animal health cards.
- Use of advanced reproductive technology like In-vitro Fertilization (IVF) and Multiple Ovulation Embryo Transfer (MOET) for a disease-free female bovine.
- Establishment of National Bovine Genomic Center for Indigenous Breeds (NBGC-IB)

SWAYATT

- The Government e-Marketplace (GeM) recently commemorated the success of "**Start-ups, Women, and Youth Advantage Through e-Transactions**" (SWAYATT).
- SWAYATT was launched in **2019 by the Ministry of Commerce and Industry**.
- Its goal is to stimulate the inclusion of diverse categories of sellers and service providers on the portal.
- This is done by taking measures to simplify training and registrations of such specialised categories of manufacturers and sellers, encourage female entrepreneurship, and boost MSME sector and Start-up participation in public procurement.

Progress Under SWAYATT

- More than **8.5 lakh Micro and Small Businesses** (MSEs) have been registered on GeM platform. They have been able to **receive approximately** Rs. 1.87 lakh crore distributed across **68 lakh+ orders**.
- Additionally, approximately **43000 SC/ST MSEs** have delivered **1.35 lakh+ orders worth** Rs 2,592 Crore on the GeM platform.
- More than **1.45 lakh women MSEs** had completed **7.32 lakh orders totalling** Rs 15, 922 Crore.
- It has enabled more than 105 Farmer Producer Organizations (FPOs) to sell more than 200 agri-goods to the government.

{For more about GeM, refer The Recitals-June 2022}

CoEs under Mission for Integrated Development of Horticulture

- The Ministry of Agriculture and Farmers Welfare recently approved three Centers of Excellence (CoE) under the **Mission for Integrated Development of Horticulture (MIDH)**.
- The ministry has approved 49 CoEs till now. The CoEs are being established in various states through Bilateral Cooperation or Research Institutes.
- These CoEs serve as demonstration and training centres for latest technologies in the field of horticulture.
- The CoEs also serve as source of planting material for fruits and vegetable seedlings for protected cultivation.
- They are used for transfer of technology and knowhow in diverse areas, viz., post-harvest management, irrigation and fertigation, plant protection, introduction of new varieties, pollination etc.
- The three CoEs currently approved are:
 - CoE for **Kamlam (Dragon Fruit)** will be set up by the Indian Institute of Horticultural Research (IIHR) in Bengaluru.
 - CoE for **mango and vegetables** will be set up under the Indo-Israel Action Plan at Jajpur.
 - CoE for **vegetables and flowers** under the Indo-Israel Action Plan will be established at a government agricultural farm in Ponda, South Goa.

Mission for Integrated Development of Horticulture

- MIDH is a **Centrally Sponsored Scheme** launched in 2014-15, for the **holistic growth of the horticulture sector**.
- MIDH covers fruits, vegetables, root & tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa and bamboo.

HORTICULTURE

- Horticulture is a branch of plant agriculture *dealing with garden crops, generally fruits, vegetables, and ornamental plants*.
- It is the science of development, sustainable production, marketing and use of high-value, intensively cultivated food and ornamental plants.
- The word is derived from the Latin *hortus*, “garden,” and *colere*, “to cultivate”.

Significance of Horticulture

- Horticulture crops are a **source of variability in farm produce and diets**. These crops have **aesthetic value and protect the environment**. The crops are useful for cultivation in wasteland or poor quality soil.
- These crops are of **high value, labour intensive and generate employment** throughout the year.
- Horticultural produce serves as **raw material for various industries**, such as processing, pharmaceutical, perfumery and cosmetics, chemical, confectionery, oils and paints, etc
- They have national and international demand and are a **good source of foreign exchange**.



- The **Central Government contributes 85% of total outlay** for developmental programmes in all the states except the states in Northeast and Himalayas and 15% share is contributed by State Governments.

Objectives of MIDH

- Promote holistic growth of horticulture sector, based on regionally differentiated strategies, which include research, technology promotion, post-harvest management, processing and marketing.
- Encourage farmers to form farmer groups like Farmer Producer Organizations (FPOs) to bring economy of scale.
- Enhance horticulture production, increase farmers income and strengthen nutritional security.
- Support skill development and create employment generation opportunities for rural youth in horticulture and post-harvest management, especially in the cold chain sector.

Impact of MIDH

- MIDH has played a significant role in increasing the area under horticulture crops. **Area and production** during the years 2014 – 15 to 2019 – 20 has increased by 9% and 14% respectively.
- Government intervention in the horticulture sector has led to a situation where horticulture production has surpassed the agriculture production in the country.
- During the year 2021-22, the country recorded the highest ever production of 342.33 million tonne.
- Moreover, the mission has led to significant improvement in the quality of produce and productivity of farmland.
- It has not only led to India's self-sufficiency in the horticulture sector but also contributed towards achieving sustainable development goals of zero hunger, good health and wellbeing, no poverty, gender equality etc.

Way Ahead

- However, the horticulture sector is still facing a lot of **challenges** in terms of high post-harvest loss and gaps in post-harvest management and supply chain infrastructure.
- There is tremendous scope for enhancing the productivity of Indian horticulture which is necessary to address the country's estimated demand of 650 Million MT of fruits and vegetables by the year 2050.
- Some of the new initiatives like focus on planting material production, cluster development programme, credit push through Agri Infra Fund, formation and promotion of FPOs will help to address the issues in the sector.

National Flagship Programmes for Fisheries

The Ministry of Fisheries, Animal Husbandry and Dairying has launched **three National Flagship Programmes** for the development of fisheries sector.

National Surveillance Programme for Aquatic Animal Diseases Phase II

- India is the **third-largest fish-producing country** with a fish production of **14.73 million metric tonnes**. Further, it is one of the largest exporters of farmed shrimp at around 7 lakh tonnes.
- However, fish diseases cost the country approximately 7,200 crores per year. Therefore, early detection and managing the spread of diseases are considered crucial for controlling the diseases.
- For this, the government has implemented the National Surveillance Programme for Aquatic Animal Diseases (NSPAAD) **since 2013**, with a focus on **strengthening the farmer-based disease surveillance system**.
- The objective is to ensure that **disease cases are reported immediately, investigated, and farmers receive scientific assistance**.

- The results of the first phase proved the reduction in revenue losses due to diseases, **increased farmers' income and exports**.
- To continue the efforts, **NSPAAD: Phase-II** has been launched under the **Pradhan Mantri Matsya Sampada Yojana**.
- Phase II will be implemented across India, and all the state fisheries departments, along with the **Marine Products Export Development Authority (MPEDA)** are expected to play an important role in this nationally important surveillance programme.

Genetic Improvement Programme of Indian White Shrimp

- Farmed **shrimp** accounts for approximately **70% of India's seafood exports worth Rs. 42000 crores**.
- However, the shrimp farming sector mostly depends on **one exotic specific pathogen free stock of pacific white shrimp** (*Penaeus vannamei*).
- It is highly risky to depend on one species for the production of 10 lakh tonnes with huge investments on farming infrastructure and the livelihoods of two lakh farm families directly and around ten lakh families indirectly associated in the ancillary sectors.
- Therefore, to break this single species dependence and to promote indigenous species the government has taken up the '**Genetic Improvement Program of *Penaeus indicus* (Indian White Shrimp)-Phase-I**', as a national priority under the Make in India program.
- The program has an outlay of Rs. 25 crore under PMMSY, to establish a **National Genetic Improvement Facility** for shrimp breeding.

Shrimp Crop Insurance Product

- Similarly, shrimp farming is labelled as a risky venture and due to this, the banking and insurance institutions are cautious about taking up business in the shrimp sector.
- However, India has achieved about 430% growth in shrimp production during the last decade, which highlights the overall profitability, growth and stability of the shrimp farming sector.
- Majority of the aquaculture farmers are small farmers who own 2–3 ponds and face huge obstacles to raise working capital for the crop due to a lack of access to institutional credit and insurance.
- The loss of one crop due to natural calamities or viral diseases makes the farmers fall into deep debt.
- It is estimated that Rs 1000 to Rs 1500 crores is the business potential of shrimp crop insurance per year and a microcredit requirement of over Rs 8,000 to 10,000 crores per annum, which is now being serviced by informal creditors at higher interest rates.
- Therefore, a Shrimp Crop Insurance product has been developed, which charges differential premium based on location and requirements of the individual farmer from 3.7 to 7.7 % of input costs.
- The farmer will be compensated up to 80% loss of input cost in the event of total crop loss. i.e., more than 70% crop loss.

Animal Husbandry Statistics

- The Ministry of Fisheries, Animal Husbandry and Dairying recently released its annual publication '**Basic Animal Husbandry Statistics 2022**'.
- The publication gives an overview of animal husbandry sector briefly in terms of important livestock statistics.
- It is the primary source of data on production estimates of **four Major Livestock Products (MLPs)** like milk, egg, meat and wool for the year 2021-22.

- The information will be useful for all stakeholders for planning and policy making purposes as well as for research and academicians across the globe.

Major Highlights

- In 2020-21, the share of Livestock at **constant prices** in **Agriculture Sector** and **total GVA** was 30.13% and 4.9% respectively.
- During 2014-15 and 2020-21, the value addition of sector grew at a **compound annual growth** rate of 7.93%.

Milk Production

- Total milk production in the country during 2021-22 is **221.06 million tonnes**. In 2021-22, the milk production registered an annual growth rate of **5.29%**.
- Top **five major milk producing States** are **Rajasthan** (15.05%), Uttar Pradesh (14.93%), Madhya Pradesh (8.06%), Gujarat (7.56%) and Andhra Pradesh (6.97%).
- The per-capita availability of milk is **444 gram/day** during 2021-22 increased by 17 gram/day over previous year.

Egg Production

- In 2021-22, the total egg production in the country was **129.60 billion numbers** which has increased by **6.19%** as compared to previous year.
- Total **five major egg producing States** are Andhra Pradesh (20.41%), Tamil Nadu (16.08%), Telangana (12.86%), West Bengal (8.84%) and Karnataka (6.38%).
- In 2021-22, the per-capita availability of egg is **95 numbers/annum** increased by 5 numbers/annum over previous year.

Meat Production

- The total **meat production** in the country is **9.29 million tonnes** for the year 2021-22 with an annual growth rate of **5.62%**.
- The total **five major meat producing States** are Maharashtra (12.25%), Uttar Pradesh (12.14%), West Bengal (11.63%), Andhra Pradesh (11.04%), and Telangana (10.82%).
- The per-capita availability of meat is **6.82 kg/annum** during 2021-22 increased by 0.30 kg/annum over previous year.

Wool Production

- The total wool production in the country during 2021-22 is **33.13 thousand tonnes** which has decline by 10.30% as compared to previous year.
- The top **five major wool producing States** are Rajasthan (45.91%), Jammu and Kashmir (23.19%), Gujarat (6.12%), Maharashtra (4.78%) and Himachal Pradesh (4.33%).

Animal Husbandry

- It refers to livestock raising and selective breeding. It is the management and care of animals by which the genetic qualities and behaviour of animals are further developed for profit.
- The total Livestock population in the country is 535.78 million which is an increase of 4.6% over Livestock Census 2012.

International Intellectual Property Index

- The **US Chambers of Commerce** recently released the 11th edition of the **International Intellectual Property (IP) Index**.
- The annual index evaluates the protection of IP rights in **55 of the world's leading economies**, together representing around **90% of global GDP**. The evaluation is done across **50 unique indicators**.
- The report covers everything from patent and copyright laws to the ability to monetise IP assets and the ratification of international agreements.
- By analyzing the IP landscape in global markets, the index aims to help nations navigate towards a brighter economic future marked by greater innovation, creativity, and competitiveness.

Intellectual Property (IP)

- IP refers to creations of the mind, such as **inventions; literary and artistic works; designs; and symbols, names and images** used in commerce.
- IP is protected in law by, for example, patents, copyright and trademarks, which enable people to earn recognition or financial benefit from what they invent or create.
- By striking the right balance between the interests of innovators and the wider public interest, the IP system aims to create an environment in which creativity and innovation can flourish.

Key Findings

- Following a decade of steady, incremental improvement in IP systems worldwide, several proposals under consideration by US and international policy leaders, including at multilateral organisations, *threaten to compromise hard-won economic gains*.
- **India has been ranked 42nd** out of 55 countries in the index. As India's size and economic influence grows on the world stage, India is ripe to become a leader for emerging markets seeking to transform their economy through IP-driven innovation.
- India has taken steps to improve enforcement against copyright-infringing content and provides a best-in-class framework to promote better understanding and utilisation of IP assets.
- India has maintained continued strong efforts in copyright piracy through the issuing of **"dynamic" injunction orders**.
- It is a global leader on targeted administrative incentives for the creation and use of IP assets for SMEs. It provides generous R&D and IP-based tax incentives.
- It has also taken strong awareness-raising efforts regarding the negative impact of piracy and counterfeiting.

Gaps In India's IP Framework

- However, addressing various gaps in its IP framework will be critical to India's ability to creating a new model for the region and India's continued economic growth.
- Among India's key areas of weakness are the **2021 dissolution of the IP Appellate Board**.
- Furthermore, there is a longstanding issue of an **under-resourced and overstretched judiciary**, which raises serious concerns about rights holders' ability to enforce their IP rights in India and to resolve IP-related disputes.
- Limited framework for the protection of **biopharmaceutical IP rights** and patentability requirements which are outside international standards are the other weaknesses.

International Arms Transfers 2022

Stockholm International Peace Research Institute (SIPRI) recently released Trends in International Arms Transfers 2022.

Key Findings

- SIPRI identified **India, Saudi Arabia, Qatar, Australia and China** as the top five arms importers during 2018-2022, accounting for **36 per cent of global arms imports** during the period.
- **India's share globally was 11%** followed by Saudi Arabia with 9.6% and Qatar with 6.4%
- The **US, Russia, France, China, and Germany** were the **five biggest arms exporters**. The five countries alone **accounted for 76 per cent of global arms transfers** between 2018 and 2022.
- Of this, the US had a lion's share (40 per cent) with countries in the middle east receiving 41 per cent of the arms exported by it in the said period.
- Imports of major arms by European states increased by 47 per cent between 2013-17 and 2018-22 in the backdrop of the war in Ukraine even as the global volume of international arms transfers fell by 5.1 per cent.
- The report highlighted the all-weather friendship between Pakistan and China. China accounted for 77 per cent of Pakistan's arms imports between 2018-2022. This reflects the extent to which Pakistan is dependent on China for its military needs.

Findings From India

- India remained the world's largest arms importer during 2018-2022 even though its arms imports dropped by 11% between 2013-2017 and 2018-2022.
- The decrease can be attributed to several factors including India's slow and complex arms procurement process, efforts to diversify its arms suppliers, and attempts to replace imports with major arms that are designed and produced domestically.
- *Russia was the largest supplier of arms to India from 2013 to 2022*, but its share of total imports fell from 64% to 45%, between 2013-2017 and 2018-2022. Russia was followed by France (29%) and the U.S. (11%).
- India also imported arms during this five-year period from Israel, South Korea, and South Africa which are among the top arms exporters globally.
- Russia's position as India's main arms supplier is under pressure due to strong competition from other supplier states, increased Indian arms production and, since 2022, also the impact of war in Ukraine.
- India's arms **import from France**, which included 62 combat aircraft and four submarines, **increased by 489%** between 2013-2017 and 2018-2022.
- France therefore displaced the U.S. to become the 2nd largest supplier to India in 2018 to 2022.
- Also, India was the third largest arms supplier to Myanmar after Russia and China accounting for 14% of its imports.

SIPRI

- SIPRI is an **independent international institute** dedicated to **research into conflict, armaments, arms control and disarmament**.
- Established in 1966, SIPRI provides data, analysis and recommendations, to policymakers, researchers and media.
- It has a vision of a world, in which sources of insecurity are identified and understood, conflicts are prevented or resolved, and peace is sustained.
- **Based in Stockholm**, SIPRI is regularly ranked among the most respected think tanks worldwide.

Sagar Manthan

- The Ministry of Ports, Shipping and Waterways (MoPSW) has launched the Real-Time Performance Monitoring Dashboard called **Sagar Manthan**.
- Developed in-house by the MoPSW, the platform will have all the integrated data related to the ministry and other subsidiaries.

- It will enable organizations to monitor and track the progress of their projects and key performance indicators (KPIs).
- In addition to **real-time project tracking** it also promotes risk management, resource allocation and progress reporting.

Features Of The Dashboard

- Data visualization
- Real-time monitoring
- Improved communication
- Data-driven decision making
- Increased accountability
- In future, the dashboard would further be integrated with input from CCTV camera, live streaming from drones, AI based algorithm to map actual progress.

Significance

- It is a significant step towards digitalization and transparency in the **maritime transport sector**.
- The dashboard will transform the workings of various departments by improving well-coordinated real time information.
- Effective project monitoring will ensure timely completion of projects, informed decision-making, increased efficiency & effectiveness of projects.

Electronics Manufacturing Cluster (EMC)

- The Ministry of Electronics and IT (MeitY) has announced the approval for setting up a Rs 180 crore worth Electronics Manufacturing Cluster (EMC) at Dharwad.
- The project will be set up at Kotur-Balur Industrial Area in **Dharwad District of Karnataka** under EMC 2.0 scheme.
- It is expected to create over 18,000 jobs and catalyse investments of over Rs 1,500 crore soon.
- The EMC has strategic locational advantage and will be well connected with NH -48 and Hubli Domestic Airport which will reduce the logistics/ transportation cost of the industry in the EMC.
- The Centre has already approved a Common Facility Centre (CFC) for development of an advanced testing facility in Mysore, Karnataka that will meet the various testing requirement of the industry.

Electronics Manufacturing Cluster (EMC) Scheme

- **EMC scheme** was launched in **2012**, to make India a global player in the field of electronics manufacturing and to offset disabilities faced by industries for reliable infrastructure.
- It provided support for creation of world-class infrastructure for attracting investments in the Electronics System Design and Manufacturing (ESDM) sector.
- EMC provided grant assistance:
 - **Greenfield EMC** - 50% of project cost subject to a ceiling of Rs. 50 crores per every 100 acres of land
 - **Brownfield EMC** - 75% of the project cost subject to a ceiling of Rs. 50 crores per project

EMC 2.0

- The Modified Electronics Manufacturing Cluster (EMC 2.0) scheme was introduced in **2020**.

- Its **objective** is to create world class infrastructure along with common testing facilities, including Ready Built Factory sheds/Plug & Play infrastructure for attracting Anchor unit along with their supply chain to set up their manufacturing facility in the country.
- Under it, three EMCs over an area of 1,337 acres with project cost of Rs 1,903 crore, including Central financial assistance of Rs 889 crore have been approved which projected investment target of Rs 20,910 crore.

City Finance Rankings 2022

- The **Ministry of Housing and Urban Affairs** recently launched the City Finance Rankings 2022 under which urban local bodies in the country will be evaluated on the basis of their financial health.
- The urban local bodies will be evaluated on 15 indicators across **three key parameters**:

resource mobilisation

expenditure performance

fiscal governance

- The **objective** is to evaluate, recognise and reward municipal bodies across the country based on the quality of their current financial health and improvement over time in financial performance.
- The cities will be ranked based on their scores under **four population categories** — above 40 lakh, 10 lakh-40 lakh, one lakh to 10 lakh and below one lakh. Awards would be given to the top three cities in each category.

Significance

- At a state- and national-level, the rankings will highlight the outcomes achieved by municipalities and provide critical insights to key policy makers into the state of finances of urban local bodies.
- Thus, the rankings will serve as a constant motivation for city/state officials to continue to implement municipal finance reforms.
- It will help the ULBs in identifying areas in their financial performance where they can make further improvements and enable them to deliver quality infrastructure and services to its citizens.
- It would create a conducive environment for developing a robust municipal finance ecosystem for promoting financially healthy, transparent and sustainable cities.

PM MITRA Parks

The government recently announced that **seven mega textile parks** under the ₹4,445-crore **PM Mega Integrated Textile Regions and Apparel (PM MITRA)** scheme will be set up in the first phase.

Background

- Currently, the entire value chain of textiles is scattered and fragmented in different parts of the country. Cotton is made in Maharashtra and Gujarat. It is then processed in Tamil Nadu before it is shipped to Bengaluru or Noida after which it is sent to the port.
- This leads to high logistics costs, which is a key hurdle to India's goal of boosting textile exports.

Details of PM MITRA

- First announced in Union Budget 2021, PM MITRA is designed to make the textile industry globally competitive.
- It is inspired by the **5F vision of Farm to Fibre to Factory to Fashion to Foreign**. It aims to create an **integrated textiles value chain** from spinning, weaving, processing/dyeing and printing to garment manufacturing at one location.

- Under the first phase of the PM MITRA scheme, large textile parks, spread across at least 1,000 acres, will come up in 7 States —Tamil Nadu, Karnataka, Telangana, Madhya Pradesh, Maharashtra, Gujarat, and Uttar Pradesh.
- The parks will have **plug-and-play manufacturing facilities** and all the common amenities required.
- **Special purpose vehicles (SPVs)**, with a 51% equity shareholding of the State government and 49% of the Centre, will be formed for each park.
- Each park will have an incubation centre, common processing house, a common effluent treatment plant, design and testing centres, skill training centres and warehouses too.
- It is designed to attract investment from companies that are looking to scale up, and require integrated manufacturing facilities in one location.

Support Under The Scheme

- The centre will provide **Development Capital Support** for the development of common infrastructure (@30% of the project cost) with a cap of Rs 500 crore for each greenfield MITRA park and up to Rs 200 crore for each brownfield park.
- A **greenfield** project refers to a completely new project and **brownfield** projects are pre-existing projects that are modified or upgraded.
- An additional Rs 300 crore will be provided as **Competitiveness Incentive Support (CIS)** for the early establishment of textiles manufacturing units in each of these parks.
 - Under CIS, a maximum support of Rs 10 crore per year for a maximum of three years will be provided to such anchor (early) investors.
- State Government support will include provision of **1,000 Acre land** for development of a world class industrial estate.

Benefits

- Convergence with other Central Government and State Government Schemes is also available under the scheme. This will **enhance competitiveness** of the textiles industry, by helping it **achieve economies of scale**.
- It will help in setting up world-class industrial infrastructure that would attract new age technology, boost FDI and local investment (expected to generate investments worth ₹70,000 crore) and help Indian companies to emerge as **global champions**.
- The value chain at one location will **reduce logistics cost** and each park is expected to directly generate around **20 lakh jobs**.

Samarth (Scheme for Capacity Building in Textile Sector)

- In order to broad base the panel of implementing partners of **Samarth**, Ministry of Textiles has invited proposals for **empanelment** from textile industry and industry associations related to textile sector.
- Samarth is a **demand driven and placement-oriented umbrella skilling programme** of Ministry of Textiles.
- The scheme was formulated under the broad skilling policy framework adopted by Ministry of Skill Development & Entrepreneurship. Its implementation period is **up to March 2024**.
- The scheme is **implemented through** Implementing Partners (IPs) comprising of Textile Industry/ Industry Associations, State government agencies and Sectoral Organizations of Ministry of Textiles like DC/ Handloom, DC/Handicrafts and Central Silk Board.
- Samarth **aims to** incentivize and supplement the efforts of the industry in creating jobs in the organized textile and related sectors, covering the entire value chain of textiles, **excluding spinning and weaving**.

- The training programme and course curriculum have been rationalized keeping in view the technological and market demand of the domestic and international economies.
- In addition to the entry level skilling, a special provision for upskilling/re-skilling programme has also been operationalized towards improving the productivity of the existing workers.
 - It also caters to the upskilling/ re-skilling requirement of traditional textile sector such as handloom, handicraft, silk and jute.
- Furthermore, a total of 184 courses aligned with **National Skill Qualification Framework (NSQF)** have been adopted under the scheme.
- **Employment linkage** is mandated in the courses under organized textile sector with **mandatory placement 70% in entry level & 90% for Upskilling programmes.**

Impact

- The scheme has been penetrated across 28 States and 6 Union territories and caters to all sections of the society including SC, ST and other marginalized categories.
- Out of the skilling target of 3.47 lakh beneficiaries allocated so far, **1.5 lakh beneficiaries have been provided training.**
- More than **85% of the beneficiaries trained** so far are **women**. More than **70% of the beneficiaries** trained in organized sector courses have been **provided placement.**

POLITY AND GOVERNANCE

Swachh Sujal Shakti Samman 2023

Recently, **Ministry of Jal Shakti** organized an event named ‘Swachh Sujal Shakti Samman 2023’ to highlight contribution of women towards making of a ‘Swachh Sujal Bharat’.

About Swachh Sujal Shakti Samman

- Objective: To felicitate women who have done exemplary work at the grassroots level in the implementation of Swachh Bharat Mission – Grameen (SBM-G), Jal Jeevan Mission (JJM), Jal Shakti Abhiyan: Catch the Rain (JSA-CTR).
- 36 women WASH Champions were conferred with the ‘Swachh Sujal Shakti Samman 2023’ under following categories:

SBM - G	JJM	NWM
1) Making the village ODF Plus Model 2) GOBARdhan/Bio-degradable Waste and/or Plastic Waste Management 3) Greywater Management and/or Faecal Sludge Management	1) Women change-makers in the category of O&M of piped water supply	1) Jal Shakti Abhiyan – Catch the Rain 2) Water Warriors

About SBM-G, JJM & JSA

Mission & Objective	Features
Swachh Bharat Mission – Grameen (SBM-G) Objective: to stop Open Defecation	1) Launched on 2nd October 2014 2) All villages in the country declared themselves as Open Defecation Free (ODF) by 2019.
Jal Jeevan Mission (JJM) Objective: To involve each & every person in water conservation and recharge efforts.	1) Launched in 2019 2) It led to the creation and rejuvenation of more than 6 lakh water related structures.
Jal Shakti Abhiyan (JSA)- Catch the Rain Objective: To focus on rainwater harvesting of the monsoon season <ul style="list-style-type: none"> geo-tagging & making inventory of all water bodies Intensive afforestation. 	1) Launched in 2020 under National Water Mission (NWM) 2) It commences prior to the monsoon season and continues for the next six months. (Launched for 2023) 3) Tag line: Catch the rain, where it falls, when it falls. 4) Setting up of Jal Shakti Kendras in all districts

Whip

A five-judge bench while hearing petitions related to Maharashtra political crisis observed that Members of a House are bound by the ‘whip’ and if any section of MLAs from a political party that is part of a ruling coalition disagrees with the alliance, then the MLAs will attract disqualification.

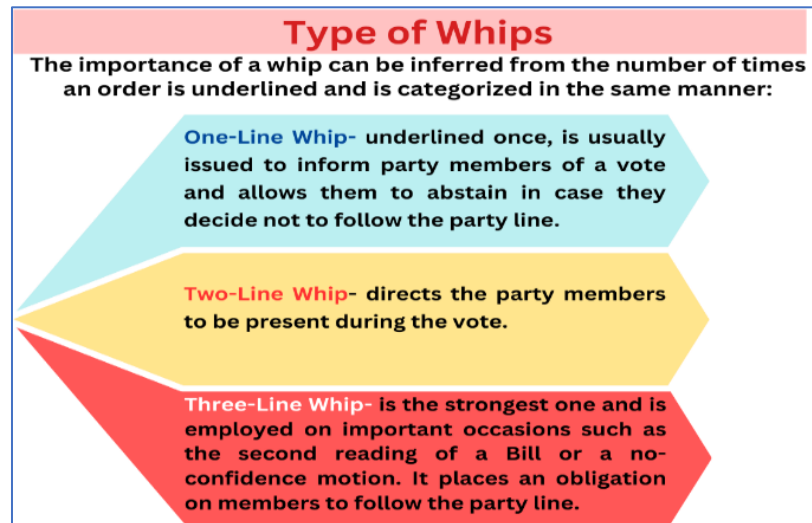
What Is A Whip?

- It refers both to a written order to members of a party in the House to abide by a certain direction, and to a **designated official of the party** who is authorized to issue such a direction.
- The term is derived from the old British practice of “whipping in” lawmakers to follow the party line.

- All parties can issue whips to their members in India. It requires party members to be present in the House for an important vote, or to vote only in a particular way.
- Parties appoint a senior member from among their House contingents to issue whips — this member is called a chief whip, and he/ she is assisted by additional whips.

Chief Whip:

- ✓ Appointed by a political party to serve as an assistant floor leader.
- ✓ His task is to ensure party discipline in a legislature.
- ✓ Ensures the members attend the meetings of the House of Legislature for their support on any important matter during division on the Floor of the House, as the party leadership desires.
- ✓ Are the party's "enforcers".



Related Constitutional Provision

- The office of 'whip' is mentioned neither in the Constitution of India nor in the Rules of the House nor in a Parliamentary Statute. It is based on the conventions of the parliamentary government.
- However, the **Tenth Schedule (anti-defection law)** allows a political party to issue a whip to its legislators.

Consequences of Defying a Whip

A member may face disqualification proceedings if she/he disobeys the party whip unless the number of lawmakers defying the whip is 2/3 of the party's strength in the house. The speaker takes the decision on the disqualification according to the anti-defection law.

Limitations of Whip

- Whips cannot direct a Member of Parliament (MP) or Member of Legislative Assembly (MLA) to vote in a particular fashion during Presidential elections.
- In the case of *Kihoto Hollohan vs Zachillhu* in 1992, the Supreme Court of India ruled that the Tenth Schedule is applicable only in situations where a vote of confidence or no-confidence is being taken in the government, or where the motion being considered is related to a policy or program that is central to the political party.

Anti Defection Law

- The Anti defection law under the Tenth Schedule of the Constitution punishes Members of Parliament/Members of Legislative Assemblies for defecting from their party by taking away their membership of the legislature. It gives the **Speaker of the legislature** the power to decide the outcome of defection proceedings.
- It was added to the Constitution through the Fifty-Second Constitutional (Amendment) Act, 1985.
- A legislator is deemed to have defected if s/he either voluntarily gives up the membership of her/his party or disobeys the directives of the party leadership on a vote.
 - If any independently elected member joins any political party.
 - If any nominated member joins any political party after the expiry of six months.
- This implies that a legislator defying (abstaining or voting against) the party whip on any issue can lose her/his membership of the House.
- The Constitution does not specify a **time-period for the Presiding Officer** to decide on a disqualification

plea.

- Given that courts can intervene only after the Presiding Officer has decided on the matter, the petitioner seeking disqualification has no option but to wait for this decision to be made.
- In 1992, the Supreme Court ruled that the decision of the Speaker in this regard is subject to **judicial review (Kihoto Hollohan Vs. Zachilhu)**.

Grievance Appellate Committee (GAC) Portal

The Ministry of Electronics and Information Technology (Meity) recently launched the **Grievance Appellate Committee (GAC)** portal under the **IT Rules, 2021**.

Background

- The Amendments were made to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (Comes under the ambit of IT Act, 2000).

Objectives Of This Portal

- This portal will allow users to **appeal online** to the Government *against decisions taken by social media platforms* to take down or retain content posted by users.
- This Portal will also ensure safe, trusted and Accountable internet for **Digital Nagarik's** (Digitally empowered Citizens).
- The amended rules expect social media intermediaries 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.

About GAC & Its Portal

- The Portal is Designed & developed by **NIC**.
- 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.

- There will be three GACs (Announced in Jan' 2023) to investigate users' complaints against social media giants.
- Each committee will consist of a chairperson (ex-officio) and two whole time (independent) members appointed by the Central Government.

	First Committee	Second Committee	Third Committee
Focus Area	To handle complaints against unlawful or criminal activity	To deal with false information or material	To focus on copyright issues and any other illegal activity that is not addressed in first two Committee
Under the purview of	The Ministry of Home Affairs	The Ministry of Information and Broadcasting	The Meity

- 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 appeals can be made on <https://www.gac.gov.in>
- 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.

Need

- The need for GAC was created due to large numbers of grievances being left unaddressed or unsatisfactorily addressed by Internet Intermediaries.
- It is expected to create a culture of responsiveness & Accountability amongst all Internet Platforms and Intermediaries towards their consumers.

{For more information on IT Rules 2021 amendments, please refer to The Recitals – November 2022 Issue}

Punchhi Commission

The Union Ministry of Home Affairs (MHA) has decided to start the process of seeking the states' comments on Punchhi commission's center-state relations report.

About Punchhi Commission

- It was constituted in **2007** under the chairmanship of **Justice Madan Mohan Punchhi**, former Chief Justice of India. It made 273 recommendations in its seven-volume report presented to the Government in 2010.
- It looked into the issues of Centre-State relations keeping in view the changes that took place in the polity and economy of India since the **Sarkaria Commission** had last looked at the issue of Centre-State relations over two decades ago.
 - ✓ The Sarkaria Commission was the first commission ever to be appointed to investigate Centre-State relations. It was set up in **1983** and was headed by Justice Ranjit Singh Sarkaria.
- **Major Responsibilities:** It examined and reviewed the working of the existing arrangements between the Union and States, various pronouncements of the Courts regarding powers, functions and responsibilities in all spheres including legislative relations, administrative relations, role of governors, emergency provisions, financial relations, economic and social planning, Panchayati Raj institutions, sharing of resources including inter-state river water etc.

Major Recommendations

Communal Violence Bill	<ul style="list-style-type: none"> • It proposed amending the communal violence bill and allowing the <u>Centre to deploy its forces in the State without the consent of the State.</u> • Such deployment of forces can last only for a week and after that week 'post-facto' consent should be taken from the state.
National Integration Council	<ul style="list-style-type: none"> • It recommended the creation of a superseding structure known as the 'National Integration Council' for matters relating to internal security (like the Homeland Security Department in the United States). • It recommended that this council should have at least one annual meeting and that a five-member delegation of the Council must, within a period of two days, visit any communally affected area.
Article 355 and Article 356	<ul style="list-style-type: none"> • It recommended amending the articles- <ul style="list-style-type: none"> ✓ Article 355- It deals with the duty of the Centre to protect the state against any external aggression. ✓ Article 356- It deals with the implementation of the President's rule in case of failure of the machinery of the state. • It specified that the Centre should, rather than bringing the whole state into emergency, bring only the <u>troubled area under its jurisdiction</u> and the period of an emergency should not be more than three months.
Subjects in the Concurrent List	<p>It recommended consulting the States through the inter-state council before introducing bills on matters falling under the concurrent list.</p> <ul style="list-style-type: none"> ✓ Concurrent List: One of the three lists present in the seventh schedule of the Indian Constitution i.e., Union, State and Concurrent lists. It contains the matters on which both the

	State and Centre can formulate laws.
Veto Power	It recommended making a provision according to which the President's decision to exercise his Pocket Veto Power is communicated within a period of six months to the respective State. <ul style="list-style-type: none"> ✓ Pocket Veto Power: If the President chooses to take no action indefinitely on a bill.
Appointment and Removal of Governors	<ul style="list-style-type: none"> • The incumbent should stay away from active politics (even at a local level) for at least two years prior to his appointment. • State's Chief Minister should be consulted while appointing the Governor. • A committee of the Prime Minister, the Home Minister, the Lok Sabha's Speaker and the concerned Chief Minister of the State should take decision on the appointment. • Deletion of the Doctrine of Pleasure from the Constitution. • Their tenure should be fixed for five years. • Removal should only be via a resolution by the State Legislature. There should be a provision for the Governor's impeachment by State Legislature. • The governor should have the right to sanction the prosecution of ministers against the advice of the State Government. • The convention of appointing governors as chancellors of universities should end.
Union's Power of Making Treaties	<ul style="list-style-type: none"> • It imposed restrictions on the union's power of making treaties. • It identified that the states need to be more involved in treaties that are formulated in reference to their internal issues. • This will ensure a peaceful co-existence between the different levels of the government.
Appointment of Chief Ministers	<ul style="list-style-type: none"> ✓ A pre-poll alliance is to be considered as a single political party. ✓ Given order of precedence to be followed while forming the State government: <ul style="list-style-type: none"> ✓ The group/alliance with the largest pre-poll alliance with absolute majority. ✓ The single largest party with support from others. ✓ The post-poll alliance with a few parties joining the government. ✓ The post-poll alliance with a few parties joining the government and remaining including independents giving outside support.
Finance Commission	<ul style="list-style-type: none"> • States should be included in the formulation of final terms of the contract. • Current cesses and surcharges should be reviewed to reduce contribution to gross tax income. • The Finance Commission Division should be turned into a full-fledged department.

Way Forward

The M.M. Punchhi Commission gave amazing recommendations for flawless working and cooperation between the Centre and the State. Although some recommendations have been put into practice, others can be considered too like the ones on the governor. A proper framework should be chosen to implement the remaining recommendations and get better results.

Norms Eased for Selection of Consumer Court Presidents, Members

Using its extraordinary powers under Article 142, the Supreme Court eased norms for selecting presidents and members for consumer courts to attract younger talent.

- ✓ **Article 142-** It empowers the SC to pass orders as necessary for doing complete justice in any matter pending before it. Such orders are enforceable throughout the country.

SC's Ruling

- The apex court **upheld** the judgement of Nagpur Bench. It said that Rule 6 lacked transparency and it conferred uncontrolled discretion and excessive power to the Selection Committee.
- The court agreed with the high court ruling and said that the provision of 20 years' experience under Rule 3(2)(b) is rightly held to be unconstitutional, arbitrary and violative of the Article 14 of the Constitution of India.
- It eased the norms for appointments and said that its orders will serve as a basis for appointment to the vacant posts until an amendment is introduced.

Background

- Last year, the Department of Consumer Affairs urged States/UTs Govts. to resort to **rule 6 of the Consumer Protection (Salary, allowances and conditions of service of President and Members of the State and District Commission) Model Rules, 2020** to fill the vacant posts. The intention was to not affect the proceedings of the consumer commission due to vacancies in the consumer commissions.
 - Rule 6 states that the State Government has the power to appoint the senior most Member to officiate as President in case a casual vacancy is created in the office of the President in the State Commission or District Commission.
 - *Transparency and selection criteria are absent under this rule.*
- The Nagpur Bench of Bombay High Court set aside some provisions of the Consumer Protection Rules, 2020 related to appointment of members.
- This was challenged by the Union Ministry of Consumer Affairs and State of Maharashtra before the Supreme Court.

Changes Introduced	Amendments Required	Eligibility	Selection Procedure
The mandatory professional experience for the post of President and members has been reduced to 10 years from 20 years and 15 years respectively.	The Central Government and the concerned State Governments need to amend the Consumer Protection (Qualification for appointment, method of recruitment, procedure of appointment, term of office, resignation and removal of president and members of state commission and district commission) Rules, 2020 within three months of this verdict.	A person having bachelor's degree from a recognized university and who is a person of ability, integrity and standing, and having special knowledge and professional experience of not less than 10 years in consumer affairs, law, public affairs, administration, economics, commerce, industry, finance, management, engineering, technology, public health or medicine, shall be treated as qualified for appointment of President and members of the State Commission.	It will consist of a written test and interview. The written test would have two papers on subjects like current affairs, the Constitution, consumer laws, drafting, etc.

About Consumer Commissions

- The Consumer Protection Act 2019 provides for protection of the interests of consumers and establishes authorities for timely and effective administration and settlement of consumers' disputes.
- It replaced the old Consumer Protection Act, 1986.
- It provides for the establishment of three tier Consumer Commissions-

District Commission	State Commission	National Commission
Each District has a District Commission.	Each state has one State Commission.	The National Commission is in Delhi.
It consists of one President, who is or has been or is qualified to be a District Judge and not less than two members.	It consists of a President, who is or has been a Judge of a High Court and at least four other members.	It consists of a President who is or has been a Judge of the Supreme Court and not less than four other members.
At least one of the members or	At least one of the members or	At least one of the members or the

the President shall be a woman.	the President shall be a woman.	President shall be a woman.
It entertains complaints where the value of goods or services paid for as consideration does not exceed rupees one crore.	<ul style="list-style-type: none"> It entertains complaint where the value of goods or services paid for as consideration exceeds rupees <u>one crore but does not exceed ten crore rupees.</u> Complaints against unfair contracts, where the value of goods or services paid as consideration does not exceed ten crore rupees can also be filed in SCDRC. 	<ul style="list-style-type: none"> Complaints where the value of goods or services paid as consideration exceeds rupees ten crore can be filed with the National Commission. Complaints against unfair contracts, where the value of goods or services paid as consideration exceeds rupees ten crore can also be filed in NCDRC.
Aggrieved by the Order issued by the District Commission, an appeal petition may be filed before the State Commission within 45 days from the date of receipt of Order.	Aggrieved by the Order issued by the State Commission, an appeal petition may be filed before the National Commission within 30 days from the date of receipt of Order.	Aggrieved by the Order issued by the National Commission, appeal petition may be filed before the Supreme Court of India within 30 days from the date of receipt of orders.

Hallmark Unique Identification Number (HUID)

The sale of gold jewelry and gold artefacts **hallmarked without 6-digit alphanumeric HUID** will not be allowed from 1st April 2023.

Objective

To safeguard and protect the consumers and enhance their confidence in purchase of hallmarked gold jewelry with traceability and assurance of quality.

Key Points

- Hallmarked jewelry lying with consumers as per old schemes will be valid.
- If the Hallmarked Jewelry bought by the consumer is of lesser purity than that marked on jewelry, then he/she will be entitled for compensation which shall be two times the amount of difference calculated based on shortage of purity for the weight of such article sold and the testing charges.
- A consumer can check and authenticate hallmarked gold jewelry items with HUID number using '**verify HUID**' in **BIS CARE app** which is available in both android as well as iOS.
- It provides information of the jeweler, their registration number, purity of the article, type of article as well as details of hallmarking center which test and hallmarked the article.

Which Metals Are Covered Hallmarking In India?

- The government, through a notification issued in 2018, notified two categories—gold jewellery and gold artefacts; and silver jewellery and silver artefacts—under the purview of hallmarking.

Background

- At present, the old, hallmarked jewellery with *four marks without HUID* was also permitted to be sold by the jewellers along with the 6-digit HUID to clear their stock of their 4-digit hallmarked articles.
- The simultaneous sale of two types of hallmarked jewellery was creating confusion in the mind of consumers.
- Therefore, after several rounds of consultations with all stakeholders including jewellers on the issue by BIS, it was decided that after 31st March 2023, sell, or offer to sell gold jewellery or gold artefacts unless it is hallmarked with of 6-digit Hallmark Unique Identification (HUID) number is prohibited.

BIS LOGO PURITY OF GOLD UNIQUE HALLMARKING ID (HUID IS A SIX-DIGIT ALPHA-NUMERIC CODE)

- So, hallmarking in India is available for jewellery of only two metals—gold and silver.

Exemptions

- A certain category of jewellery and items will be exempted from the mandatory requirement of hallmarking.
- Export and re-import of jewellery as per Trade Policy of Government of India — Jewellery for international exhibitions, jewellery for government-approved B2B domestic exhibitions will be exempted from mandatory Hallmarking.
- Watches, fountain pens and special types of jewellery such as Kundan, Polki and Jadau are exempted from hallmarking.

What Is Hallmarked Jewelry

- Hallmark is a mark to assure the fineness and purity of gold jewelry. There are three categories of hallmarked jewelry:
 1. 22K916- It is a 22-carat gold, and the piece of jewelry has 91.6 percent gold.
 2. 18K750 - It is an 18-carat gold, and the piece of jewelry has 75 percent gold.
 3. 14K585 - It is a 14-carat gold, and the piece of jewelry has 58.5 percent gold.

Before 6-digit HUID	After 6-digit HUID
consisted of 4 logos- <ol style="list-style-type: none"> 1. BIS logo, 2. purity, 3. logo of jeweler and 4. Assaying and Hallmarking Centre. 	consists of three symbols — <ol style="list-style-type: none"> 1. the BIS logo, 2. a symbol to indicate the purity and fineness of the jewelry, and 3. the HUID.

About HUID

- It is a six-digit alphanumeric code introduced from 01 July 2021 and is allotted to every piece of jewelry at the time of hallmarking.
- The jewelry is stamped with this unique number manually at the Assaying & Hallmarking Centre.
- It helps in tracing the individual piece of jewelry and provides a guarantee of its quality.
- Registration of jewelers while hallmarking with HUID is automatic with no human interference.

Need	Benefits
To safeguard and protect the consumer's interest.	The consumer is aware of the quality of the product she is buying and will not be cheated.
Enhance consumer confidence in purchase of hallmarked gold jewelry.	Enhances the confidence and trust of consumers in the authenticity of jewelry.
Allows traceability.	Gold jewelry with guaranteed quality will fetch a higher price when re-sold.
Assures quality.	Loans will be provided on better terms by banks on mortgaging hallmarked gold.

Process To Check Gold Purity

- Gold is a very soft metal and therefore it needs to be mixed with other metals to shape it into jewelry items. The more gold a piece of jewelry has, the purer and expensive the jewelry is.
- Its purity can be checked at any BIS-recognized Assaying and Hallmarking Centre by paying a fee of Rs 200.

How To Apply For Hallmarking

A consumer cannot directly apply to the Assaying and Hallmarking Centre to get a hallmark on her gold jewelry. This must be done through a **BIS-registered jeweler**.

ATL Sarthi

ATL Sarthi, a comprehensive self-monitoring framework to strengthen the ever-growing ecosystem of Atal Tinkering Labs (ATL) was recently launched by Atal Innovation Mission (AIM)- NITI Aayog.

Atal Innovation Mission (AIM) & Atal Tinkering Labs (ATL)

- AIM is set up by the Central Government in 2016 and implemented by NITI Aayog to act as an umbrella structure, encompassing and overseeing the entire innovation ecosystem of the country.
- AIM is establishing Atal Tinkering Laboratories (ATLs) in schools across India with a vision to ‘Cultivate one Million children in India as Neoteric Innovators’.
- ATL will provide young children with a chance to work with tools and equipment to understand the concepts of STEM (Science, Technology, Engineering and Math).
- Atal Innovation Mission (AIM) has established 10,000 ATLs and is continuously strengthening this ever-growing ecosystem.

Key Points of ATL Sarthi

- It provides:
 - Tools and support to schools to adopt a self-monitoring approach for better and continuous performance.
 - Necessary guidelines for local authorities like districts, states, innovation councils, private organizations etc. to help assess ATLs in their region and provide much-needed guidance and support to steer this ATL ecosystem to new heights.
- It will enable the ATLs to be efficient and effective.
- It has **four pillars (shown in figure)** for ensuring the performance enhancement of ATLs through regular process improvements like a self-reporting dashboard known as ‘MyATL Dashboard’ and development of SOPs for schools (ATL compliance guidelines).



Pillars of ATL Sarthi

1. ATL Cluster-based Approach

Objective:

- To help schools adopt best practices to run the ATLs, through co-learning, co-creating and co-adapting with other ATLs of the same region, it is advised to develop a cluster of schools for a region, district (s), area(s) with the support of local authorities/organizations, known as ATL clusters.
- Leverage the concept of competitive federalism to increase the efficiency of the ATLs which will enhance their performance.

The ATL cluster shall be overlooked by a committee called ‘**Cluster Guidance Committee (CGC)**’ which will consist of ATL in-charges, mentors, nodal officer appointed by Govt. and principals from the best performing schools

2. Performance Enablement Framework

- It has been developed to enable self-evaluation of the Atal Tinkering Labs.
- It will serve as an appropriate tool for clusters to identify lead and aspirant ATLs, initiate appropriate action, and conduct pre-post analysis of the cluster as a whole.
- It can be used by the state and

<p>in the cluster.</p>	<p>district authorities to identify the current state of ATLs in their jurisdiction and initiate suitable policy measures.</p>
<p>3. ATL Compliance Guidelines</p> <p>For successfully running the ATL in schools, it is mandatory for all selected ATL schools to follow the following ATL guidelines and compliance process:</p> <ul style="list-style-type: none"> • Lab Setup: establish the ATL lab in their school within 3 months of reception of the Tranche 1 • GEM Procurement: procure the equipment only through Government E-marketplace (GeM), via authentic vendors registered on GeM portal. • PFMS and Expenditure: use the Public Finance Management System (PFMS) to record all financial transactions (including online, offline, GeM transactions) pertaining to the ATL grant-in- aid. • Monitoring & Governance Dashboard: periodically update MyATL Dashboard with the details of the ATL activities and operations for monitoring and evaluation for subsequent tranches. • Utilization Certificate: The grant-in-aid being released should be exclusively spent on the specified purpose for which it has been sanctioned within the stipulated time. The school will be required to submit Fund Utilization Certificates (UCs) for the grant-in-aid at the end of each financial year as well as at the time of seeking further installments of the grant-in-aid, if any. • Non-Performance/ Inactive Schools: All the mandatory infrastructural facilities as well as confirming the actual availability of the equipment/ tools installed and the appointment and availability of staff and other records in the lab is required. If any ATL school is inactive for more than 12 months, it shall be liable for punitive action by AIM 	<p>4. MyATL Dashboard</p> <ul style="list-style-type: none"> • It enables ATLs to regularly report their tinkering activities online. • Using this dashboard, schools can report the number of students who were given access to the ATL, the number of tinkering sessions conducted, the number of innovations created, and the number of inter-school and intra- school competitions organized. This reporting activity assists AIM to keep up with the ATL ecosystem and identify new trends. <p>Features: two-step authentication for logging in & Mobile & User friendly</p>

Right To Health Bill

Recently, Rajasthan became the first state to introduce a Right to Health bill. This bill gives every resident of the state the right to avail free **Outpatient Department (OPD) services and In Patient Department (IPD) services** at all public health facilities and selected private facilities. It extends a total of 20 Rights to the citizens of the state.

Objective

- To provide protection and fulfilment of rights and equity in health and well-being under Article 47.
 - ✓ Article 47- It is one of the Directive Principles of State Policy which guides the state to raise the level of nutrition and the standard of living and to improve public health.
- To secure the Right to Health as per the expanded definition of Article 21 (Protection of life and personal liberty)".

Key Highlights of Bill

Obligations on Government

- To formulate a public health model with appropriate provisions in the state budget.
- Develop and institutionalize a Human Resource Policy to ensure the equitable distribution of health workers.

Health Authorities

- Independent bodies will be set up at the state and district levels, called the State Health Authority (SHA) and District Health Authority (DHA), respectively.
- They will formulate, implement, and monitor mechanisms for quality healthcare and management of public health emergencies.
- The State Health Authority will be chaired by an Indian Administrative Service officer not below the rank of Joint Secretary, appointed by the state government.
- The District Health Authority will be chaired by the district collector.

Right of Residents

- Avail free outdoor and indoor patient department services, medicines, diagnostics in public health institutions and free transport facility.
- The hospital can't delay treatment on grounds of police clearance if it is a medico-legal case.
- After emergency care, stabilisation and transfer of patient, if patient does not pay requisite charges, the healthcare provider shall be entitled to receive requisite fee and charges or proper reimbursement from the state government.
- Avail tertiary healthcare by referral from primary and secondary level institution.
- Informed consent & Confidentiality before specific tests or treatments.

Duties of Residents

- Provide relevant and important information to the healthcare provider & comply with prescribed healthcare.
- Refrain from misconduct with healthcare provider.

Rights of Healthcare Provider

- Protection from complaints relating to adverse consequences.
- To be treated with respect and dignity by patients and attendants.
- Decent working conditions
- Right to physical safety.

Duties of Healthcare Provider

- Follow standard treatment guidelines and protocol.
- Maintain confidentiality, privacy and dignity of residents.
- Respect residents' right to take a decision.
- Explain/inform patients/relatives about disease severity, progression and treatment.

Grievance Redressal

- A web portal and helpline centre will be established for filing complaints and the officer concerned will have 24 hours to respond to a complaint.
- The District Health Authority will take up unresolved complaints exceeding the above timeframe, take appropriate action and upload the action taken report on the web portal within 30 days.
- If the grievance remains unresolved within 30 days, the complaint will be forwarded to the State Health Authority who will then hear appeals against the District Authority's decisions.

Penalty

- Anyone found in contravention of the Act will be punishable with a fine of up to Rs 10,000 for the first contravention, and up to Rs 25,000 for the subsequent contraventions.

Bar of Jurisdiction

- No civil court shall have jurisdiction to entertain any suit with respect to any matter which an appellate authority constituted under the act is empowered.

Concerns In The Bill

Obligations on the Private Sector-

- It violates Article 19(1)(g) of the Constitution, which guarantees the right to practice any profession or carry on any occupation, trade or business as this bill will allow a resident avail free healthcare service from any clinical establishments including private ones.

Implications of Mandatory Free Healthcare-

- It will require incremental funds for deployment of human resources, infrastructure development, and public health functions for fulfilling all the obligations cast on the state.

Shortage of Healthcare Workers-

- There may be a shortage of workers in the state which may further affect the effective implementation of the right to health.

Concerns w.r.t Doctors

- **No Prepayment Option-** The Bill mandates that all hospitals, both public and private must offer emergency treatment without any prepayment.
- **Contentious emergency provision**
 - ✓ As per the bill, emergency treatment can be availed without prepayment of requisite fee or charges.
 - ✓ The Act does mention that the government will reimburse the hospitals, but the protesters say there is no clarity on how or when these funds will come.
 - ✓ Also, the bill has not defined what an emergency is. It could range from a heart attack to a delivery of a child coming in with stomach ache in the middle of the night.
 - ✓ The bill does not say who should treat what. If one runs an eye clinic, he/she cannot treat a heart attack case.
 - ✓ The govt has said that more clarification will be provided when the rules for the Bill are framed.
- **Futile and Over-regulation-** Doctors have argued that clinics and hospitals are required to abide by State regulations and norms.

Redressal mechanisms

- As per the bill, local politicians and government-nominated members would be a part of the district authority to look into patients' complaints.
- Protestors claim that if a doctor has a tiff with someone, they can lodge a complaint to impede the functioning of private hospitals.
- In such cases, it will just become another machine of corruption.

The right to health is a fundamental human right that is recognized by Indian constitution under article 21. Despite the recognition of this right, many people across India still face significant barriers to accessing essential healthcare services, particularly in low-income pockets of India.

Addressing these challenges requires a coordinated effort from governments, international organizations, and civil society groups. By working together to ensure that everyone has access to the resources they need to maintain good health, we can make significant progress towards realizing the right to health for all.

Existing Schemes

1. **Chiranjeevi Health Insurance Scheme-** provided free treatment of up to Rs. 10 Lakhs initially which has now been increased to Rs 25 lakh in the latest budget and will be implemented from this financial year.

2. **Nishulk Nirogi Rajasthan-** includes the Free Medicine scheme. Under this, all OPD and IPD services in

government hospitals, including the registration fee, are provided for free. It covers about 1,600 medicines, 928 surgical and 185 sutures.

INTERNATIONAL AFFAIRS

Bhutan's Graduation From UN List of Least Developed Countries

From December 2023, the landlocked Himalayan kingdom of Bhutan will no longer be on the list of LDCs. It will become only the **seventh country to graduate from the list**.

Criteria For Classification As LDC

- The CDP measures the **LDC category on the basis of**
 - **per capita income**;
 - **human assets index** (includes indicators of nutrition, health, school enrolment and literacy);
 - **economic vulnerability Index** (includes indicators of natural and trade-related shocks, physical and economic exposure to shocks, and smallness and remoteness).

What is an LDC?

- The LDC classification was introduced by the UN in 1971 to identify countries that are deemed highly disadvantaged in their development process, for structural, historical and also geographical reasons.
- LDC designated countries are those that are in **need of the highest degree of attention from the international community**.
- According to the **United Nations Committee on Development Policy (CDP)**, there are now **46 nations, including Bangladesh, Nepal and Laos on the LDC list**.
 - These countries comprise around 880 million people, representing 12% of the global population, but less than 2% of world GDP and around 1% of world trade.

How Does A Country Graduate Out Of LDC Category?

- Every three years, the CDP) review the list of LDCs. Based on rigorous assessment, it makes its recommendations for inclusion in and graduation from the category.
 - Decision in that regard is made by the **UN Economic and Social Council (ECOSOC)** and ultimately by the **General Assembly**.
- A country must exceed thresholds on **two of the three criteria** at two consecutive triennial reviews to be considered for graduation.
 - E.g., on GNI per capita, the inclusion threshold is set at a three-year average in keeping with the cut-off determined by the World Bank for identifying low-income countries. As of 2021, the threshold is USD 1,018.
 - ✓ To exit the LDC group, a country has to have this GNI per capita rise 20 per cent above the inclusion threshold, which in 2021 is USD 1,222.
 - On the human assets index, a country's score has to improve by 10 per cent (that is, it has to score 66) above the inclusion cut-off of 60.
 - On vulnerability index, its score has to come down by 10 % to 32 from the inclusion threshold of 36.

Advantages Associated With LDC Tag

- The LDC list is a means of giving a strong signal to the international community to the need of special concessions in support of LDCs.
- These cover the areas of development financing, like the **award of grants and loans, and special trade concessions like preferential market access**.
- Countries are also encouraged to provide **technical assistance to the LDCs**.

Drawbacks Of Being Out Of LDC Group

- Graduating countries stand to **lose preferential support, grants and subsidies**, etc. The loss of preferential market access can affect their export competitiveness, industrial production and jobs.
- These countries would see a shift from the **International Development Association (IDA)-type of concessional foreign aid** to the **International Bank for Reconstruction and Development (IBRD)-type of non-concessional finance** with a higher interest rate and stringent conditions.
- The graduation would also cause an **erosion of facilities and relaxations in relation to intellectual property rights** as well as other obligations in trade matters under the WTO

Saudi Arabia and Iran Agree to Restore Ties

Iran and Saudi Arabia agreed to re-establish diplomatic relations and reopen embassies after **7 years of tensions**. This major diplomatic breakthrough was negotiated after the talk between Iran and Saudi Arabia which was hosted by **China** in Beijing.

Key Highlights Of The Agreement

- The two countries agreed on a meeting between their top diplomats to implement the restoration of ties and organize the logistics of exchanging ambassadors.
 - The two countries plan to reopen their respective embassies in Tehran and Riyadh within two months.
- Both the countries also agreed to activate a **2001 Security Cooperation Agreement**, as well as a **General Economy, Trade And Investment Agreement signed in 1998**.
- They also confirmed their “respect for the sovereignty of states and non-interference in their internal affairs.

Significance Of This Agreement

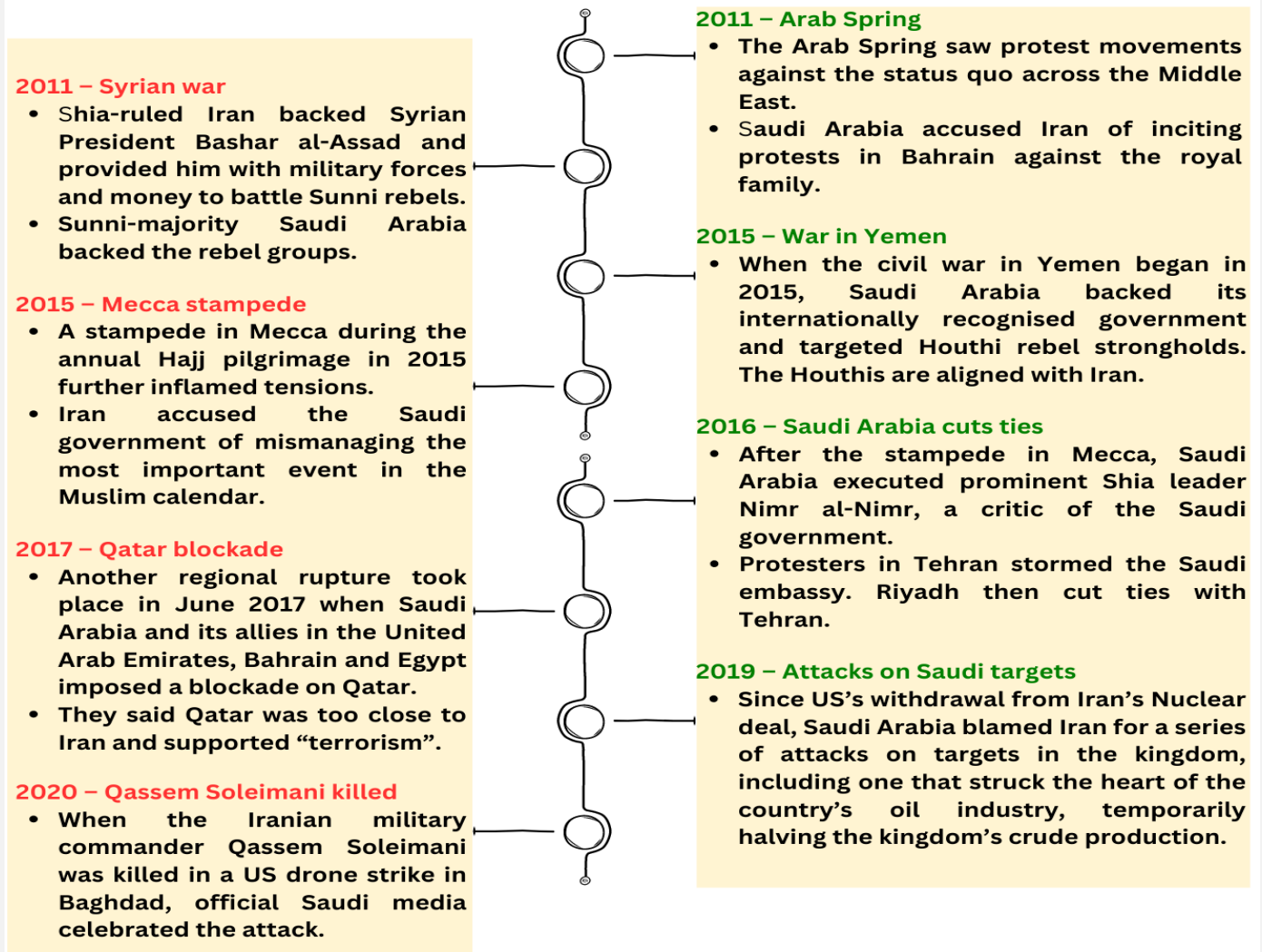
- **Peace And Stability In The Middle East**
 - Iran and Saudi Arabia had been engaged in many proxy wars in the region.
 - Against this backdrop, the recent agreement would help end the war in Yemen and de-escalate tensions in the Middle East region.
- **Highlights Beijing’s Growing Role**
 - China hosted the talks that led to the breakthrough, highlighting Beijing’s growing role as a global economic and political power, and counterbalance to Washington — particularly in the Middle East.
 - So far, middle east had been a region that long shaped by the military and diplomatic involvement of the United States.
- **For United States**, the agreement signals that USA cannot take for granted the pre-eminent influence it once wielded in Saudi Arabia.
- **For India**
 - So far, India had maintained a good relationship with both the countries. However, due to the rivalry between Iran and Saudi Arabia, India had to walk on a diplomatic tight rope.
 - Tension between the two major countries in the region often endangered India’s interests.
 - Hence, this agreement would provide much needed space for India to manoeuvre.
 - This could help stabilize **global oil prices** and ensure a consistent supply of oil to India.
 - Chinese mediation will create challenges for India as it will contribute to increasing Chinese influence in the region.

Iran - Saudi Arabia Rivalry

- **Struggle for regional dominance**
 - Saudi Arabia and Iran - two powerful neighbours - are locked in a fierce struggle for regional dominance.

- Historically Saudi Arabia, a monarchy and home to the birthplace of Islam, saw itself as the leader of the Muslim world.
- However, this was challenged in **1979** by the **Islamic revolution in Iran**.
 - The revolution created a new type of state in the region - a kind of revolutionary theocracy - that had an explicit goal of exporting this model beyond its own borders.
- **Religious differences**
 - The decades-old feud between them is exacerbated by religious differences.
 - They each follow one of the two main branches of Islam - **Iran is largely Shia Muslim**, while **Saudi Arabia** sees itself as the leading **Sunni Muslim** power.

SERIES OF EVENTS FURTHER INCREASED TENSION



As both countries face common challenges like COVID-19 pandemic, economic pressures, and security threats, therefore restoration of diplomatic ties could pave the way for greater cooperation & stability in the Middle East. While many obstacles still remain, the recent diplomatic efforts provide a positive sign for the future of Iran-Saudi Arabia relations.

AUKUS Partnership

- The United States, Australia and Britain unveiled details of a plan to provide Australia with **nuclear-powered** attack submarines from the early 2030s to counter China’s ambitions in the Indo-Pacific.

- This agreement was finalised under the **2021 AUKUS partnership**.
- Under the deal, the United States intends to sell Australia three US Virginia class nuclear-powered submarines, in the early 2030s, with an option for Australia to buy two more if needed.
- The multi-stage project would culminate with British and Australian production and operation of a **new submarine class – SSN-AUKUS**.
 - SSN (Submersible Ship Nuclear)-AUKUS will be a trilaterally developed vessel based on Britain’s next-generation design.
 - It would be built in Britain and Australia and include cutting edge U.S. technologies.
- Britain would take delivery of its first SSN-AUKUS submarine in the late 2030s, and Australia would receive its first in the early 2040s.

AUKUS partnership

- **Signed in September 2021, the new enhanced trilateral security partnership between Australia, United Kingdom, and United States is named as “AUKUS”.**
 - This is a trilateral defence deal for Indo-Pacific.
- **The first major initiative of AUKUS would be to deliver a nuclear-powered submarine fleet for Australia.**
- **These countries, however, made it clear that their aim is not to arm the new submarines with nuclear weapons.**
- **This is because Australia is a signatory to the Nuclear Non-proliferation Treaty (NPT) which bans it from acquiring or deploying nuclear weapons.**



What Is The Significance Of This Deal

- US has only shared nuclear submarine technology once before in 1958 with Great Britain.
- **For Indo-Pacific Region**
 - Under this partnership, technology, scientists, industries and defence forces of these three countries will work together to deliver a safer and more secure region.
 - Some analysts feel that this partnership will lead to intensified arms race in the region.
- **For Australia**
 - Australia has never had nuclear-powered submarines.
 - Hence, this step will give Australia naval heft in the Pacific, where China has been particularly aggressive.
 - Critics, on the other hand, claim that this **deal would antagonize Beijing** which will not be good for Australia.
 - Australia is now set to join **an elite group of only six countries** – India, US, UK, France, Russia and China – that operate nuclear-powered submarines.
 - It will also be the only country to have such submarines without having a civilian nuclear power industry.
- **For India**
 - The new pact will add to the global efforts to balance China in the region.
 - It should be noted that Australia and India are close strategic partners in the Indo-Pacific region.
 - Australia is also a member of **QUAD group**. A stronger Australia would lead to further strengthening

of QUAD.

- **For France**

- France is not happy with the deal and has termed this deal a “stab in the back”.
- Australia had signed a contract to buy 12 Attack-class submarines from France in 2016. The first submarine was expected to be operational around 2034.
- As a result of the current deal, Australia ditched the contract.

How China views this agreement?

- China denounced a new Indo-Pacific security alliance saying such partnerships should not target third countries.
- It claims that the current cooperation would gravely undermine regional peace and stability, aggravate arms race and hurt the international non-proliferation efforts.
- China claimed that western powers are using **nuclear exports for geopolitical gaming tools**.
 - Under this deal, highly-sensitive nuclear powered submarine technology will be exported to Australia.

Turmoil in Israel

- Tens of thousands of Israelis are in the streets, protesting Israeli government’s plans to **reform the judicial system**.
- The protesters say that these reforms will threaten democratic checks and balances on ministers by the courts.

What Are The Concerns Of The Protesters?

- The protesters say the future of Israeli democracy is at stake if the government succeeds in pushing through the plans.
- The proposed reform would:
 - tighten political control over judicial appointments;
 - limit the Supreme Court’s powers to overturn government decisions or declare Knesset laws unconstitutional.

What are the proposed judicial reforms against which Israelis are protesting?

The plan includes four major changes:

- The government wants to enable the 120-member parliament, or Knesset, to *override any Supreme Court judgement by a simple majority of 61 votes unless those rulings are unanimous*.
- Another bill *takes away the High Court’s determination* that it can strike down Basic Law in cases where the Knesset has misused its authority.
 - *Israel has no constitution*, and many of the rights and freedoms that its people enjoy are contained in **Basic Law**.
- Also, a law has been proposed that would give a *greater role to lawmakers* in the appointment of Supreme Court judges.
 - As of now, a committee comprising professionals, justices and lawmakers elevate judges to the top court.
 - The new change would provide lawmakers a majority in the committee.
- The government wants to allow ministers to choose their own legal advisors instead of using independent professionals.

- It would also empower the government to overrule the court’s decisions.
- It will undermine the rights of minorities and open the doors to more corruption.

Japan-South Korea Summit

- South Korean President Yoon Suk Yeol met Japan’s Prime Minister Fumio Kishida in Tokyo - **the first such meeting in 12 years**
- During this summit, both the countries agreed to resume regular visits between their leaders and take steps to resolve a trade dispute.

What Are The Issues Between Japan And South Korea?

- **Colonization of Korean Peninsula by Japan**

- Japan effectively colonized the Korean Peninsula between 1910 and 1945, in a regime that imposed Japanese names and language on Koreans.
- During this period, Japan conscripted many into forced labor or forced prostitution in military brothels.
- Japan paid \$800 million in reparations to South Korea's military-run government in 1965, but this money was never distributed to victims.
- Recently, Seoul has offered Tokyo concessions on South Korean demands for compensation over wartime forced labor.
- However, it remains to be seen whether the South Korean public will accept reconciliation.

- **Longstanding territorial dispute**

- The two sides also have a longstanding territorial dispute over a group of islands controlled by South Korea and claimed by Japan.
- Regular visits between top leaders of both the countries were ended in 2012 after South Korean President Lee Myung-bak visited the disputed islands.

- **Escalation of tensions in recent years**

- Tensions escalated in the past 10 years as conservative Japanese governments moved to rearm the country while stepping up attempts to whitewash Japan's wartime atrocities.
- In 2018 South Korea's Supreme Court ordered Japan's Nippon Steel and Mitsubishi Heavy Industries to compensate forced labour victims.
- In 2019, Japan placed export controls on chemicals used to make semiconductors and displays used in smartphones and other high-tech devices.

What Is The Significance Of This Summit?

- **Shared security concerns in the region**

- Improved ties between South Korea and Japan could pave the way for the two U.S. allies to cooperate more closely on shared security concerns related to China and North Korea.
- Japan increasingly bolstered defense ties with the U.K., Australia, India and the Philippines.
- Hence, an improved relation between Japan and South Korea will further increase the security in the region.

- **For South Korea**

- South Korea is putting efforts to strengthen alliances to counter North Korea.
 - North Korea has been expanding nuclear-capable missiles and issuing threats of pre-emptive nuclear strikes.
- For South Korea, stronger economic cooperation with Tokyo has become more crucial in the face of industrial supply chain disruptions and other global challenges.

- **For India**

- Improved ties between Japan and South Korea could potentially benefit India in various ways, especially in terms of economic and strategic relations.
 - Japan and South Korea are two of India's largest trading partners in Asia.
 - Both Japan and South Korea have significant technological expertise, and India has been trying to develop its technology sector as part of its "Make in India" campaign.
 - From a strategic standpoint, Japan and South Korea are important partners for India in the Asia-Pacific region.

Xi - Putin Meeting

- China's President Xi Jinping paid a state visit to Russia. He landed in Moscow days after the International Criminal Court issued warrants for the arrest of President Vladimir Putin for alleged war crimes.
 - This was his first trip to Russia since the country invaded Ukraine last year.
- His trip to Russia offers a symbolic shot in the arm to his increasingly isolated Russian counterpart, Vladimir Putin.
- It also highlights Xi's determination to push back against American power in the world.

Why China-Russia Relationship Matters To Beijing?

- **From security point of view**
 - It is imperative for Beijing to maintain both outreach and cordial relations with Moscow.
 - Despite the fall of the Soviet Union, Russia is still China's largest neighbour, a major source of military technology.
 - Russia continues to exercise influence in the former Soviet states that border China's troubled west.
- **Economic and energy security**
 - Russia is now a major source of hydrocarbon energy as well as a market for China's manufacturing and technology.
- **Strategic**
 - China sees in Russia an ally in the opposition to Western liberal ideas and a US-led global order.
 - The Chinese under Xi declared a partnership with no limits during Putin's visit to Beijing in early February 2022 on the eve of his invasion of Ukraine.
 - To the Chinese, Western sanctions against Russia are an example of what a new Chinese document on their Global Security Initiative calls "abusing unilateral sanctions and long-arm jurisdiction".
- **Message to non-western world**
 - Xi sees value in showing the non-Western world that there is an alternative to American power and ideas of how the world should be run.

Does China Want The War To End?

Experts believe Beijing is unlikely to want an end to the Russian war in Ukraine for several reasons.

- **Weak Russia is an opportunity for China**
 - Being tied down in Ukraine has the effect of weakening Russia militarily, economically, and politically.
 - This is a vacuum that China can step into, especially in Eurasia.
- **Diversion of the United States' attention and resources**
 - A prolonged conflict in Ukraine means that the West's, and in particular the United States', attention and resources are diverted.
- **Rising Chinese role**
 - A continuing crisis in Ukraine offers opportunities for international messaging about the relative rise in Chinese power in comparison to both the Russians and Americans.

State Visit of Prime Minister of Australia to India

The Prime Minister of Australia, Anthony Albanese, paid a State Visit to India. This was Albanese's first visit to India in his current role.

- During this visit, PM Albanese and PM Modi participated in the India-Australia Annual Summit.
 - This was the **1st Annual Summit between India and Australia** at the level of the Leaders.
 - The summit mechanism itself was established as an outcome of the 2nd Virtual Summit that was held in March 2022.

List of Outcomes

- Audio-visual Co-production Agreement between the two countries were signed.
- MoU on Cooperation in Sports.
- The two sides agreed on the **establishment of two task forces** one on solar (solar task force) and second on Green Hydrogen.
- Letter of Intent was signed between the India's Atal Innovation Mission (AIM) and Commonwealth Scientific & Industrial Research Organisation for Furthering Cooperation in Innovation.

Other Highlights Of This Visit

- **Cricket Diplomacy**
 - PM Modi and PM Albanese went to the Narendra Modi stadium in Ahmedabad, where India and Australia were playing the fourth test match of the Border-Gavaskar series.
- **Business Delegation**
 - The Australian prime minister brought with him a huge delegation of business leaders.
 - This assumes significance as the business relations between the two countries have not taken off fully.
 - Australian businesses have mainly concentrated on China, which buys about a **third of Australia's exports**.
- **First foreign leader to visit INS Vikrant**
 - During the current visit, PM Albanese became the first foreign leader to visit INS Vikrant, India's locally built aircraft carrier.
 - While visiting INS Vikrant, Albanese said: For Australia, India is a top security partner.
- **Comprehensive Economic Cooperation Agreement (CECA)**
 - India and Australia discussed the finalisation of CECA.
 - CECA is aimed at upgrading an interim trade deal finalised last year in the form of Economic Cooperation and Trade Agreement (ECTA).
 - The two also decided to move ahead with negotiations on a migration and mobility pact to benefit students and professionals.
 - India and Australia recently finalised a mechanism for **recognising each other's educational qualifications**.
 - In this context, the mobility agreement will benefit students, workers and professionals.
- **India was invited to join the Talisman Sabre exercises**
 - Australia invited India to join the **Talisman Sabre exercises** later this year, a major operation for the Australian Defence Force.
- **General Rawat Australia-India Young Defence Officers' Exchange Programme**
 - As part of General Rawat Australia-India Young Defence Officers' Exchange Programme, a 15-member Australian contingent, visited the Agra-based Military establishment.
 - This programme was instituted in honour of India's first Chief of Defence Staff, General Bipin Rawat.

Why Is There Growing Synergy Between India And Australia?

- **China Factor**
 - Ties between Australia and China were strained after Canberra in 2018 banned Chinese telecom firm Huawei from the 5G network.
 - Later, it called for an inquiry into the origins of Covid-19, and slammed China’s human rights record in Xinjiang.
 - China responded by imposing trade barriers on Australian exports, and by cutting off all ministerial contact.
 - On the other hand, India has been facing an aggressive Chinese military along the border.
- **Centrality of Indian Ocean for both the countries**
 - The Indian Ocean is central for the security and prosperity of both the countries.
 - Both the countries depend on free and open access to sea lanes in the Indo-Pacific for trade and economic well-being.
- **Economic imperative**
 - Australia is looking to diversify its economic relation which is heavily dependent on China.
 - India, being a fast growing economy with a large market, is an attractive destination for Australia.
 - India, on the other hand, wants to increase economic cooperation in the form of bilateral free trade agreements with countries across India-Pacific.
 - This is because, India has not joined the RCEP (Regional Comprehensive Economic Partnership).
 - It wants to compensate the loss of not joining the RCEP with signing multiple bilateral FTAs with countries in the region.

[For detailed discussion on the status of India-Australia relationship, refer the topic **“Australian Parliament clears way for India trade deal”** from The Recitals – November 2022 edition.]

India-Bangladesh Friendship Pipeline

- PM Modi and Bangladesh PM Sheikh Hasina jointly inaugurated the India – Bangladesh Friendship Pipeline via videoconferencing.
- This is the **first cross-border energy pipeline between India and Bangladesh.**

India-Bangladesh Friendship Pipeline (IBFPL)

- The IBFPL is a **131.5-kilometre-long** oil pipeline connecting **Siliguri** in North Bengal to **Parbatipur** in Bangladesh’s Dinajpur province.
 - The construction of the project started in 2018 with the help of India's grant funding.
- The pipeline will **carry one million tonnes of high-speed diesel** from Numaligarh refinery in Assam to Bangladesh Petroleum Corporation’s Parbatipur depot.
- The pipeline is part of energy sector cooperation between the two neighbouring countries through which **Bangladesh will import petroleum, especially diesel from India.**



Significance of IBFPL

- Bangladesh’s rising energy demands –

- Bangladesh faces a major energy crisis that threatens to hobble its growth.
- In early October last year, ***Bangladesh suffered a grid failure that left nearly 80 per cent of the country without power.***
- The energy crisis in Bangladesh, which is an energy-deficit country, was intensified by the **conflict between Russia and Ukraine.**
- **India's efforts to curtail China's influence –**
 - India's help is also ***aimed at offsetting dependence of Bangladesh on China.***
 - Chinese investments in Bangladesh's energy sector stand at US \$ 8.31 billion.
 - Beijing has offered to help Bangladesh's transition to renewable sources of energy. But Dhaka is wary of taking loans from China to set up power-generating plants.
- **Economic Benefits –**
 - India will send 2 lakh tonnes of oil annually in the first three years, 3 lakh tonnes per annum in the next three years, 5 lakh tonnes annually in the next four years and 10 lakh tonnes annually afterwards
 - The pipeline with India will cut the transportation cost of fuel oil for Bangladesh by 50%.
 - It will also reduce the transportation time to just one hour as compared to the current situation of taking several days to transport diesel via wagons and trawlers.
 - India will also benefit from it as it will earn revenue through this diesel export.

India-US Commercial Dialogue 2023

India-US bilateral Commercial Dialogue 2023 was co-chaired by India's Union Commerce and Industry Minister and US Secretary of Commerce.

Key Highlights Of The Dialogue

- **Semiconductor sub-committee was established**
 - This sub-committee will be led by the Department of Commerce for the US and the Ministry of Electronics and Information Technology (MeitY) and the Ministry of Commerce and Industry for the Indian side.
 - It is aimed at establishing semiconductor supply chain. It will help develop an ecosystem to reduce the dependency on China and Taiwan.
- **Welcomed the launch of the U.S.-India initiative of Critical and Emerging Technology (iCET)**
 - iCET aims to elevate and expand the strategic technology partnership and defence industrial cooperation between India and USA.
 - It seeks to build supply chains which increase co-production and co-development between the countries and increase linkages between the countries' start-up ecosystems.

[Also refer the topic "***India, U.S. step up strategic partnership with technology initiative***" from The Recitals – February 2023]

Migration And Mobility Agreement Between India And Austria

- India signed a "Comprehensive Migration and Mobility Partnership Agreement" (MMPA) with Austria.
- This is a much-needed agreement, especially in view of the sharp increase in illegal migration in Austria. This includes over 15,000 illegal migrants from India with practically no chance of asylum.
- This agreement is also seen as a stepping stone for India which has been keen to finalise these agreements with European countries in order to resolve issues over the long-pending India-European Union (EU) Free Trade Agreement.
- In addition, the agreement will also help Indian working professionals.

SUMMITS AND ORGANISATIONS

Quad Ministerial Meeting

- **India hosted** the Quad foreign ministers' meeting, which discussed the overall situation in the Indo-Pacific in the backdrop of increasing Chinese assertiveness in the region.
 - Quad is the grouping of **four democracies** (India, Australia, US and Japan). It is also known as the quadrilateral security dialogue.
 - The aim of this grouping is to **ensure a free and open international order based on the rule of law in the Indo-Pacific**.

Key Highlights Of The Joint Statement Issued At The End Of Quad Ministerial Meeting

- **Highlighted the situation in Ukraine**
 - The joint statement underscored the need for a comprehensive, just and lasting peace in Ukraine in accordance with international law.
 - This is the first reference to the Ukraine war in a joint statement of the Quad Foreign Ministers.
 - It means the grouping, which had so far been concentrating mostly on the aggressive Chinese behaviour in the Indo-Pacific, has broadened its scope to include Russia.
- **Called for greater Quad collaboration**
 - The statement called for greater Quad collaboration in support of the ASEAN Outlook on Indo-Pacific.
- **Mentioned South and East China Seas**
 - The joint statement expressed serious concern at the militarization of disputed features, the dangerous use of coast guard vessels and maritime militia, and efforts to disrupt other countries' offshore resource exploitation activities.
 - This was mentioned in reference to actions in the South and East China Seas.
 - It also hit out at China for blocking listing of terrorists at the UN.
- **Quad Maritime Security Working Group**
 - The statement announced that the **"Quad Maritime Security Working Group"** would meet in Washington later this month.
 - This Working Group is a collaborative effort between the members of Quad to ensure a **free and open Indo-Pacific** region by promoting security and stability in the maritime domain.
 - The group was established in 2020 as part of Quad.
 - It focuses on a range of issues related to maritime security, including maritime domain awareness, maritime security architecture, and interoperability among the four navies.
- **New working group on counter-terrorism**
 - The participating leaders also agreed to set up a new working group on counter-terrorism.
 - This working group will explore cooperation amongst the Quad, and with Indo-Pacific partners, to counter new and emerging forms of terrorism, radicalisation to violence and violent extremism.
 - Its first meeting is expected to be held in the United States in 2023.

SCO Chief Justices' Meet

- The 18th meeting of the Chief Justices of the Supreme Courts of the Shanghai Cooperation Organisation (SCO) Member States was hosted in New Delhi by the Supreme Court of India.
 - India assumed rotational presidency of the SCO for a year in September 2022 through the Samarkand declaration last year.
- During the meet, CJI Chandrachud shared the challenges faced by the judicial institution during the COVID-19 pandemic.
- He highlighted the measures taken by their judiciaries to minimize the impact of COVID-19 pandemic. These measures included: *the adoption of technology for virtual hearings; live-streaming of court proceedings, and e-filing undertaken by the Indian judiciary.*
- He also said technology must be used to bridge the gap between citizens and the justice system. In this context, he shared the recent initiatives taken by the Supreme Court of India.
- These include: *the launching e-version of Supreme Court reports; Artificial intelligence-based live transcription of court proceedings; and Translation of judgments in multiple regional languages.*

[For detailed discussion about SCO, refer the topic **"21st Meeting of SCO Council of Heads of Government"** from The Recital – November 2022]

Summit for Democracy

US President Biden co-hosted the **second Summit for Democracy** with the governments of Costa Rica, the Netherlands, Korea, and Zambia.

- 121 leaders across the world were invited to the three-day Summit.
 - India, Nepal and Maldives were invited while Bhutan, Bangladesh and Sri Lanka did not get the invitation.
 - Pakistan, which was invited, declined to attend for the second time, ostensibly due to the exclusion of China.
- The summit finalised the text for **Summit for Democracy Declaration.**

Summit for Democracy Declaration

- The Declaration affirms the endorsing parties' political commitments to:
 - Protect human rights, media freedom, and rule of law;
 - Ensure accountability for human rights violations and abuses;
 - Support people, including in Ukraine, who stand for freedom and reject aggression;
 - Combat all forms of discrimination and exclusion, including by strengthening women's rights;
 - Prevent and combat corruption;
 - Advance technology that works for, and not against democracy;
 - Defend against transnational threats, including foreign malign influence and foreign information manipulation;
 - Support free and fair elections; and
 - Address global challenges, including sustainable development, climate change, global health, and food security.

Summit for Democracy

Background

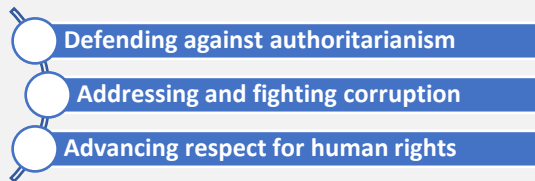
- In Dec' 2021, US President Biden hosted the first Summit for Democracy.
- This summit brought together leaders all over the world to set forth an affirmative agenda for democratic renewal and to tackle the greatest threats faced by democracies today through collective action.

Aim

- The summit aims to show how open, rights-respecting societies can work together to effectively tackle the challenges of our time such as the COVID-19 pandemic, the climate crisis, and inequality.

Principal themes

- The Summit is centred around three principal themes:



Criticism of this summit

- **Questions over some invitees' democratic credentials**
 - The first summit extended invitation to those countries whose leaders are accused by human rights groups of harbouring authoritarian tendencies.
 - E.g., Philippines, Poland and Brazil.
- **Invitation of Taiwan angered China**
 - The first summit included Taiwan, stoking anger from China, which considers the democratically governed island part of its territory.
- **Weaponising democracy**
 - Russia and China accused Washington of “weaponising democracy”.
 - They accused the Biden administration of exhibiting a Cold-War mentality.
 - This will stoke up ideological confrontation and a rift in the world.
 - They said that US is lecturing the world when its own democracy, particularly the conduct of elections at home, is ragged and inconsistent.
- **Summit was ill-advised**
 - Many analysts believe that the summit was ill-advised as:
 - US needs non-democracies to work with on regional & global challenges;
 - invite list filled with inconsistencies;
 - US is not in a position to preach or provide model.

Protocols To Tackle Threat Of Spy Balloons

- The Indian military has drafted a set of basic protocols to tackle newer threats like surveillance balloons or other unidentified objects in the sky.
- This was after a similar entity was spotted a year ago over the strategic Andaman and Nicobar Islands.

Key Highlights Of Draft Protocols To Tackle Newer Threats Like Surveillance Balloons

- **Detail the sequence of action**
 - The protocols detail the sequence of action in case an unidentified slow-moving aerial object is spotted.
 - This includes detection, positive identification, verification and targeting using a suitable platform and weapon system.
- **Process to be photographed**
 - The entire operation from the launch of the weapon system to destroying the target will be photographed and recorded in detail.
- **A detailed report will be prepared**
 - It includes the sighting time, size of target, its description recorded on the radars on ground, analysis of remnants, if recovered and this will be intimated through the chain of command.

Associated Challenges

- The primary challenge in such a sighting is the detection and identification of the object. The satellites or radars cannot detect balloons as they are slow-moving.
 - In India, several radars at key military sites are being upgraded to detect such aerial objects.
- Even the US, which possesses the most sophisticated military equipment, had earlier failed to detect the slow-moving Chinese balloons.

Need For A Protocol To Tackle Threat Of Spy Balloons

- **Increasing cases of spy balloons**
 - In February 2023, the United States shot down a giant Chinese balloon, which it accused of spying on its crucial military sites.
 - Days later, the US shot down a cylindrical-shaped object over Canada and another unidentified aerial object in its own airspace.
- **Aerial object was spotted over the Andamans Last year**
 - Even though its origin could not be ascertained at that time, as per media reports, the object had drifted away over the ocean before military authorities could take a decision on action to be taken.

What Is The Significance Of Andaman & Nicobar For India?

- The Andaman and Nicobar Islands house the tri-service Andaman and Nicobar military command.
- What makes these islands strategically important is their proximity to the Indo-Pacific as well as to major choke-points or sea lines of communication (SLOC) in the Bay of Bengal — the Malacca Strait, Sunda Strait, Lombok Strait and the Ombai-Wetar straits.
 - Most of the world's shipping trade passes through these choke-points.
- And, the islands offer India the potential to play a critical role towards enhancing its influence in the Indian Ocean region and support its military operations in the area.

[For detailed discussion on Spy balloons, refer the topic “*Chinese Spy Balloon shot down by USA*” from The Recitals – February 2023]

Amendments To The Rules On Money Laundering

- The Department of Revenue under the Ministry of Finance brought in *The Prevention of Money Laundering (Maintenance of Records) Amendment Rules, 2023*.
- These amendments have widened the ambit of reporting entities under money laundering provisions.
- These changes are in line with the recommendations of the Financial Action Task Force (FATF).

Key Highlights Of The Amendment

- **Rules related to Politically Exposed Persons (PEP)**

- The rules related to PEP covers individuals *working for a foreign country, senior politicians, functionaries of political parties, senior bureaucrats, judges, and military personnel*.
 - Earlier, these entities and individuals were not included in the PMLA.
- For these people, banks will need to maintain records on the nature and value of transactions.
- The new rule also lays down the procedure:

○	for how this information will be shared
○	time for which such data will be retained
○	manner in which identity records of such clients will be maintained by banking companies, financial institutions and intermediaries

- **For NGOs**

- The new rules add more data retention requirements:
 - Every banking company or financial institution shall register the details of such a client on the **DARPAN Portal** of Niti Aayog.
 - These records should be maintained for a period of 5 years.

- **For identifying beneficial owners by reporting entities**

- The term beneficial owner was defined to mean ownership of or entitlement to more than **25%** of shares or capital or profit of the company.
- The threshold of **25% is now reduced to 10%**, thereby bringing more indirect participants within the reporting net.

- **Regarding cryptocurrencies**

- The tweaks to the PMLA rules brought transactions involving crypto assets under the ambit of the money laundering watchdog.
 - The ED is the main agency probing allegations under PMLA.
- The notified activities included transactions between *fiat currencies and crypto*, between one crypto and *another*, safekeeping of such assets and participating or offering financial services based on these.
- In other words, this would cover those who carry out transactions as well as those that offer crypto-based financial services, such as some popular Web3 financial services.

Purpose Of Bringing These Amendments

- **Bringing uniformity in PEPs**

- The move to define PEPs under PMLA is to bring uniformity with a **2008 circular** of the RBI for KYC norms/anti-money laundering standards for banks and financial institutions.
 - RBI had already defined PEPs in line with **FATF norms**.
- With this amendment, the same definition will be applicable everywhere.
- **Proposed FATF assessment of India**
 - The amendments assume significance ahead of the proposed FATF assessment of India, which is expected to be undertaken later this year.
 - These amendments remove ambiguities before the FATF assessment.
 - Previously, in June 2010, the FATF conducted an evaluation for India.

Prevention of Money Laundering Act (PMLA)

- PMLA is a **criminal law** of the Parliament of India **passed in 2002** to prevent money laundering and confiscate property derived from the laundered money.
 - PMLA became law and came into force on **July 1, 2005**.
- The act has undergone various critical changes from time to time in order to give itself more strength and meaning.
 - E.g., the definition of Money Laundering under the act was broadened via amendments done in 2012 and again in 2019.
- The act gives blanket powers to the Enforcement Directorate (ED) for seizing, investing, searching and attaching assets.

Financial Action Task Force (FATF)

- It is an intergovernmental institution established in 1989 in the endeavour of the G7 to create policies to battle money laundering.
 - In 2001, its directive was expanded to include terrorism financing.
- FATF releases grey and black lists, in which few countries are mentioned.
 - A grey list is created to **check its nation's progress** on measures against money laundering and terrorism financing activities.
 - A black list includes **non-cooperative countries** against battling money laundering and terror financing.

AFSPA Lifted From More Areas In Northeast States

- The Centre has decided to further reduce the jurisdiction of 'disturbed areas' under the **Armed Forces (Special Powers) Act, 1958 (AFSPA)** in Assam, Nagaland and Manipur.
- With the latest decision, starting April 1, the Disturbed Areas notification will be lifted from:
 - 1 more district in Assam; 4 more police stations in Manipur & 3 more police stations in Nagaland.

Armed Forces (Special Powers) Act, 1958 [AFSPA]

- The Armed Forces (Special Powers) Act was enacted in 1958 to bring under control what the government of India considered **disturbed areas**.
 - AFSPA was first implemented in the Northeast, and then in Punjab.
- Under its provisions, the armed forces have been empowered to open fire; enter and search without warrant, and arrest any person who has committed a cognisable offence.
- **Prosecution of the officer on duty needs prior permission of the Central Government.**

- On the other hand, 1 police station in Arunachal Pradesh — Chowkham — was declared a Disturbed Area under the Act.

States Where AFSPA Is In Effect

- **AFSPA can be implemented in an area after it has been declared as disturbed.**
- Before the current (March 2023) notification, States/UT under AFSPA included:
 - Assam, Nagaland, Manipur (excluding seven assembly constituencies of Imphal),

- Arunachal Pradesh (only the Tirap, Changlang and Longding districts plus a 20-km belt bordering Assam), and Jammu and Kashmir.
- It was completely **lifted from Meghalaya** in April 2018. It was **repealed in Tripura** in 2015

Disturbed Area

- A disturbed area is one which is declared by notification under **Section 3** of the AFSPA.
 - Section (3) of the AFSPA Act empowers the **governor of the state** or the **Administrator of UT** to issue an official notification on The Gazette of India.
 - Following which the centre has the authority to send in armed forces for civilian aid.
- The state or central government considers those areas as disturbed by reason of differences or disputes between members of different religious, racial, language or regional groups or castes or communities.
- Once declared 'disturbed', the region has to maintain status quo for a minimum of **three months**, according to The Disturbed Areas (Special Courts) Act, 1976.
- The state governments can suggest whether the AFSPA is required to be enforced or not.
 - But under Section (3) of the APSPA, their opinion can still be overruled by the governor or the centre.

Controversial Provisions Of AFSPA

- **Section 3** – It empowers the Centre to declare any area as Disturb Area without taking consent of the concerned state.
- **Section 4** – Accords certain power to an authorised officer which also include power to open fire at any individual even if it results in death.
 - Under this section, the officer has also been given the power to (a) arrest without a warrant; and (b) seize and search any premise without any warrant.
- **Section 7** – It mandates prior executive permission from central or state authorities for prosecution of a member of the security forces.

Unlawful Activities Prevention Act (UAPA): SC Changes Stand

Recently, the Supreme Court ruled that **membership** of an unlawful organisation by itself would constitute an offence under the **Unlawful Activities (Prevention) Act, 1967.**

Key Highlights

- **Apex court had overruled its earlier judgment**
 - In 2011, the SC had held that mere membership of a banned organisation will not make a person a criminal unless he resorts to violence or incites people to violence or creates public disorder by violence or incitement to violence.
- **Upheld Section 10(a)(i) of UAPA**
 - The Supreme Court upheld Section 10(a)(i) of UAPA that makes membership of an association, which has been declared to be unlawful, to be an offence.
 - The court said that Section 10(a)(i) is in consonance with 19(1)(a) and 19(2) of the Constitution and accordingly, it is also in consonance with the objectives of the UAPA

Unlawful Activities (Prevention) Act (UAPA)

- Also known as the Anti-terror law, UAPA was enacted in 1967.
- It lays down the definitions and rules for designating an organisation as an "unlawful association" if it is engaged in certain types of activities directed against the integrity and sovereignty of India.
- Under the Act, the central government may designate an organisation as a terrorist organisation if it:

- commits or participates in acts of terrorism;
- prepares for terrorism;
- promotes terrorism;
- is otherwise involved in terrorism;
- The most recent amendment of the law, the Unlawful Activities (Prevention) Amendment Act, 2019 has made it possible for the Union Government to designate **individuals as terrorists** without following any formal judicial process.
- The law provides the government with wide-ranging powers to arrest, detain and prosecute individuals or groups who are suspected of being involved in terrorism or related activities.

Criticism Of UAPA

- **Extremely wide ambit**
 - This makes it possible to use them against not just criminals and terrorists, but even authors, academics, and human rights activist.
- **Undefined and vague terms**
 - The definition of unlawful activities includes terms which are vague and broad.
 - For instance, questioning the territorial integrity of India and activities to cause **“disaffection against India”** are an unlawful activity.
 - However, it has not defined what constitutes dissatisfaction against India.
- **No definition of membership**
 - There is no definition of membership (when should a person be called a member of banned organisation?) in the UAPA, making it susceptible to misuse.
- **Other controversial provisions**
 - Some of the provisions such as extended detention periods, no anticipatory bail, no bail if case seems prima facie true etc. have been termed as draconian.

Court Martials In Armed Forces

- An Army court has recommended life imprisonment for a Captain involved in the staged killings of three men at Amshipora in J&K’s Shopian district in 2020.
- The sentence will be final after it is confirmed by the Northern Army Commander.

What is Court Martial?

- A court martial is a type of military court that is empowered to try members of the armed forces for offenses committed under military law.
- The purpose of a court martial is to maintain discipline and order within the military by ensuring that members of the armed forces are held accountable for their actions.
- A court martial is typically composed of military officers who serve as both judge and jury.

What Is The Legal Recourse Available To The Accused?

- Under the Army Act, the accused can file a pre-confirmation petition as well as one post- confirmation.
 - A pre-confirmation petition will go to the Army Commander, who may look into its merits.
 - Post-confirmation petition must be filed with the government since the officer is cashiered — his ranks are removed and he is dismissed from service — after confirmation of the sentence by the Army commander.

- After these options have been exhausted, the accused can approach the Armed Forces Tribunal, which can suspend the sentence.
- The President of India, under **Article 72 of the Constitution**, can use his/her powers to pardon, reprieve, respite or remission of punishment or sentence given by a court martial.

Manipur Govt Ends Its Peace Pact With 2 Insurgent Groups

- The Manipur government withdrew from the **Suspension of Operations (SoO) agreement** with two hill-based tribal insurgent groups.
 - SoO pact was signed in August, 2008, with the primary objective of initiating political dialogue.
 - The important terms under the SoO are that security forces, including state and central forces, are not to launch any operations, nor can the underground groups (UG).
 - On the other hand, signatories groups shall abide by the Constitution of India, the laws of the land and the territorial integrity of Manipur.
 - As a rehabilitation package, the UG cadres living in the designated camps are given a monthly stipend of Rs 5000.
- The state government claimed that a protest rally organised recently, defying Section 144, was influenced by the two groups, *Kuki National Army (KNA) and Zomi Revolutionary Army (ZRA)*.

Insurgency in Manipur

- There is an ongoing armed conflict between India and a number of separatist rebel groups in Manipur.
- This insurgency in Manipur is part of the wider Insurgency in Northeast India which combines elements of a national liberation war as well as an ethnic conflict.

Historical background

- Following the brief **Anglo-Manipur War of 1891**, the Kingdom of Manipur was conquered by Britain.
 - After this war, Manipur kingdom became a British protectorate.
- Manipur became a part of India in October 1949 and became a **separate state in 1972**.

Rise of insurgency in Manipur

- Manipur's incorporation into the Indian state led to the formation of a number of insurgent organisations.
 - These groups demanded the creation of an independent state within the borders of Manipur, and dismissed the merger with India as involuntary.
- The insurgency problem in Manipur came into existence in the late 1960s and 1970s.
 - There was no problem of insurgency when Manipur merged into India.
- The first separatist faction, **United National Liberation Front (UNLF)**, was founded in November 1964.
 - Now, the region is infested with many insurgent groups.

Reasons for insurgency in Manipur

- **Merger with India**
 - **Meiteis** are the majority community of Manipur. Their influence declined after Indian Independence.
 - This led to resentment in a section of Meities about the merger of the State with the Indian Union, which led to the Meitei insurgency from the 1960s.
- **Ethnic conflict**
 - Manipur has a diverse ethnic population with Meitis controlling the Valley, Nagas on the

surrounding hills and Kukis interspersed in between.

- This leads to clashes between these communities.
 - Kukis and Nagas of Manipur have overlapping and conflicting territorial interests over almost all the hill districts of Manipur.
 - Similarly, there are competing interests between the Nagas and Meitis.
 - The demand for **Nagalim or Greater Nagaland** includes the Naga inhabited areas of Manipur. On the other hand, the Meitis want to preserve what has been a single geographic entity for centuries.
- **Lack of socio-economic development**
 - Owing to its topographical structure, the state has had problems of economic development and socio-economic transformation for a long period.
 - Over the years, endless corruption, mismanagement of funds and the failure to devolve power to common people have led to the rise of dissatisfaction.

Steps taken to address the issue of insurgency in NE

- The govt has negotiations with the Hill-based groups in the region.
 - NLFT Tripura Agreement, Bru Accord, Naga peace accord etc. are few examples.
 - Govt signed the Bodo agreement in January 2020 and the Karbi Anglong agreement in September 2021.
- The **Ministry of Development of North Eastern Region** has been created to provide an impetus to the socio-economic development of the region.
 - Also, the **North Eastern Council** was created as the nodal agency for the economic and social development of the North Eastern Region.

Exercise TROPEX

- The Indian Navy's major Operational level exercise TROPEX for the year 2023 was conducted across the expanse of the Indian Ocean.
- The overall exercise construct included **coastal defence exercise Sea Vigil** and the **amphibious exercise AMPHEX**.
- The exercise also saw significant participation from the Indian Army, the Indian Air Force and the Coast Guard.

First IAF Woman Officer to Head Frontline Unit

- The Indian Air Force selected **Group Captain Shaliza Dhama** to take command of a frontline combat unit in the Western sector.
- Group Captain Dhama will be the first woman officer in the IAF to command a missile squadron in the Western sector facing Pakistan.
- The Indian Army, being the largest of the three services, has the largest number of women officers at 1,705, followed by 1,640 women officers in the Indian Air Force, and 559 in the Indian Navy.

Naval Commanders' Conference 2023

- Naval Commanders' Conference 2023 was held at sea aboard indigenous aircraft carrier **INS Vikrant**.

- The conference reviewed major operational, material, logistics, human resource development, training and other administrative activities undertaken by the Navy in the last six months.
- The first edition of the conference served as a platform for the officers to discuss important security issues at the military-strategic level and interact with senior government functionaries.

Vayulink System

- The Indian armed forces are in the process of inducting a homegrown innovation along the country's northern and eastern borders which will help commanders identify friendly forces in a joint battlespace.
 - This is significant as after the Balakot air strikes in 2019, the IAF had shot down its own Mi-17 V5 helicopter at Budgam by mistake, killing six personnel on board.
- For this, **Vayulink, a data link communication system**, is being developed by the Indian Air Force (IAF).
- It uses the **Indian Regional Navigation Satellite System (IRNSS), also known as NAVIC**, to send radio communication to the base station when the signals are low.
- The important aspect of the Vayulink system is that it prevents fratricide or friendly fire.
 - When installed in an aircraft, the system gives position of other aircrafts close by, encrypts traffic data over secured channel.
 - When the planes are flying close to any friendly forces on grounds during a combat situation, the aircraft display gives the position of such forces on the ground including tanks and troops beneath.
- The Vayulink system also prevents aircraft collision, provides better combat teaming and helps plan real-time basis where multiple teams can get together and go towards the target coming from different areas.
- The system would help pilots with jammer-proof uninterrupted communication with the base station.

Exercise Shinyuu Maitri

- IAF participated in Exercise Shinyuu Maitri with the Japan Air Self Defence Force (JASDF).
- The exercise was organised on the side-lines of the Indo-Japan Joint Army Exercise, **Dharma Guardian**.
- The exercise gives an opportunity for the respective subject matter experts to interact and study each other's operational philosophies and best practices.

GEOGRAPHY AND ENVIRONMENT

World Wildlife Day 2023 (and 50th Anniversary of first signing of CITES)

- March 3 is World Wildlife Day. It is a United Nations International day (Adopted in 2013) to celebrate all the world's wild animals and plants and the contribution that they make to our lives and the health of the planet.
- Thus, for the first time, World Wildlife Day was celebrated in 2014.

Why March 3 for World Wildlife Day?

- The date chosen coincides with the day of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which was signed in 1973.
- This World Wildlife Day 2023 is also a celebration of CITES as it turns 50. The theme for World Wildlife Day this year is 'Partnerships for Wildlife Conservation'.
- Sustainable Development Goal 15 focuses on halting biodiversity loss.

Recent Reports Related to Environment

Reports (By)	Features/Key Findings
<p>CO2 Emissions in 2022 by International Energy Agency (IEA)</p> <p>About IEA Established in 1974 based in Paris as a response to physical disruptions in global oil supplies and to promote energy savings and conservation.</p>	<ul style="list-style-type: none"> • This report is the first in the IEA's new series, the Global Energy Transitions Stocktake. • The new tracker consolidates the IEA's latest analysis in one place, making it freely accessible in support of the first Global Stocktake in the lead-up to COP 28. • It also provides information on <u>methane and nitrous oxide</u> emissions related to energy. • The biggest sectoral increase in emissions in 2022 came from electricity and heat generation, whose emissions were up by 1.8%. • The use of clean energy technologies, including renewables, electric vehicles, and heat pumps, prevented an additional 550 Mt of CO2 emissions
<p>Global Methane Tracker 2023 (The International Energy Agency's (IEA))</p> <p>Key publications of IEA</p> <ul style="list-style-type: none"> ➤ World Energy Outlook (WEO) ➤ Net Zero by 2050: a roadmap for the global energy sector ➤ Energy Technology Perspectives (ETP) ➤ Global EV Outlook (GEVO) 	<ul style="list-style-type: none"> • It is an indispensable resource in the fight to bring down these emissions and implement the Global Methane Pledge. • Fossil fuel companies emitted 120 million metric tonnes of methane into the atmosphere in 2022, only slightly below the record highs seen in 2019. • These companies have done almost nothing to curb the emissions despite their pledges to find and fix leaking infrastructure. • The report said 75% of methane emissions from the energy sector can be reduced with the help of cheap and readily available technology. • The energy sector accounts for around 40% of the total average methane emissions from human activity. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Step taken to cut methane emission</p> <ul style="list-style-type: none"> • Around 150 countries have joined the Global Methane Pledge which aims to reduce methane emissions from human activity by 30% from 2020 levels by 2030. • In its part, India has committed to reducing the emissions intensity of its </div>

<ul style="list-style-type: none"> ➤ Oil Market Report ➤ World Energy Investment 	<p>GDP by 33-35% below 2005 levels by 2030.</p> <ul style="list-style-type: none"> • The UN has decided to set up a satellite-based monitoring system called The Methane Alert and Response System (MARS). <p>{For more About methane and global methane pledge refer The Recitals- November 2022}</p>
<p>World Air Quality Report 2022 (By Swiss organisation IQAir)</p> <p>The report is based on PM2.5 air quality data from 7,323 cities in 131 countries, regions and territories around the world.</p>	<ul style="list-style-type: none"> • India is the world's 8th most polluted country in 2022, dropping from the 5th spot the previous year. • A total of 39 Indian cities are on the list of 50 of the world's most polluted cities based on annual average PM2.5 levels in 2022. • Here nearly 60% of the population lives in areas where the concentration of PM2.5 particles is at least seven times higher than WHO's recommended levels. • Lahore is the most polluted city in the world, followed by Hotan in China, and Bhiwadi in Rajasthan. • New Delhi is the second most polluted capital city in the world, with N'Djamena in Chad topping the list. <p>(For more about Air pollution, refer The Recitals - December 2022, World Bank Report on Air Pollution)</p>

World's 1st Bamboo Crash Barrier

As part of Aatmanirbhar Bharat, India has developed the world's 1st bamboo crash barrier which has been installed on the Vani-Warora Highway, Vidarbha, Maharashtra.

- Crash barriers are installed on either side of a highway to prevent vehicles from moving out of the road network and also restrict movement of outside elements onto the highways.
- It is a 200m long Bamboo Crash Barrier, named Bahu Balli.
- This Bamboo Crash Barrier underwent rigorous testing at various government-run institutions such as the **National Automotive Test Tracks (NATRAX)** in Pithampur, Indore and was rated as Class 1 during the Fire Rating Test conducted at the Central Building Research Institute (CBRI) in Roorkee. It has also been accredited by the Indian Road Congress.
- It is made from Bambusa Balcoa species of bamboo, which has been treated with creosote oil and coated with recycled High-Density Polyethylene (HDPE).

Significance of Bamboo Crash Barrier

- It offers a perfect alternative to steel and addresses environmental concerns.
- The recycling value of the bamboo barrier is 50-70% whereas that of steel barriers is 30-50%.
- The tensile strength of bamboo is higher than that of steel due to the axial orientation of its fibers.
- Bamboo has a high resistance to fire, and it can tolerate temperatures of up to 400 degrees Celsius.
- Due to their lightweight nature, bamboos are easy to transport and install, making them highly convenient for both construction and transportation purposes.

About Bambusa Balcoa

- Bambusa Balcoa, also known as **Female Bamboo**, is a tropical clumping bamboo mainly grown in Northeast India and West Bengal.
- It is commonly used in building material for houses, bridges, fishing floats, scaffolding, baskets etc.

Wildlife Sanctuaries (WLS) In The News

Shendurney Wildlife Sanctuary

International Women's Day (8 March) was celebrated in Shendurni Wildlife Sanctuary under the aegis of the State Forest Development Agency working under the Forest Department.

About Shendurni Wildlife Sanctuary (WLS)

- It is a protected area located in the Western Ghat (a UNESCO World Heritage Site), Kerala.
- It comes under the control of Agasthyamalai Biosphere Reserve.
- It owes its name to the endemic tree species, *Gluta travancorica*, locally known as **Chenkurinnji**.
- It has an artificial lake and surrounded by the reservoir of **Thenmala Dam**.
- Tropical evergreen and semi-evergreen forests cover a major area of the sanctuary.
- The 1st eco-tourism project in India, the Thenmala Eco-Tourism Project has been developed in and around this sanctuary.

Thanthai Periyar Wildlife Sanctuary

The Tamil Nadu Government has announced the notification of Thanthai Periyar Wildlife Sanctuary, making it the 18th wildlife sanctuary in the state.

- It is situated at proximity with the Malai Mahadeshwara wildlife sanctuary, Biligiri Ranganatha Swamy Temple Wildlife Sanctuary, Cauvery wildlife sanctuary.
- It acts as the connecting point between Nilgiris Biosphere Reserve and Cauvery South Wildlife Sanctuary.
- This sanctuary is home to various wild animals including tigers, elephants, leopards, wild boars, gaurs and deer.

Mhadei / Mahadayi Wildlife Sanctuary

Under the banner of Save Mahadayi Save Goa, the activists reiterated their demand to notify Mahadayi Wildlife Sanctuary as a Tiger Reserve.

About Mhadei Wildlife Sanctuary

- It is located in the Northern Part of Goa.
- There are a number of picturesque waterfalls within the sanctuary boundaries. The most prominent are the Vazra Sakla Falls and the Viridi Falls.
- It is thickly forested with moist deciduous vegetation and some evergreen species too.
- The sanctuary is being considered for being elevated to the status of a Project Tiger Reserve because of the presence of Royal Bengal Tigers.
- The three highest peaks in Goa – Sonsogod, Talache Sada and Vageri are located in the hill ranges within the sanctuary.

Sunabeda Wildlife Sanctuary

A 65-year-old woman was killed in a suspected attack by a Royal Bengal Tiger in Sunabeda Wildlife Sanctuary.

About Sunabeda Wildlife Sanctuary

- It is a wildlife sanctuary and a proposed tiger reserve located in the Nuapada, Odisha, adjoining Chhattisgarh.
- It adjoins the Sitanadi and Udanti sanctuaries of Chhattisgarh.

- It harbors a great diversity of wildlife habitats with a vast plateau, canyons, and 11 waterfalls.
- The sanctuary forms the catchment area of the Jonk River, on which a dam has been constructed to facilitate irrigation.
- The Indra nullah and Udanti River lies to the south of the sanctuary.

Human-Animal Conflict

- It occurred when human beings take negative actions on wildlife and vice-versa.
- Such conflicts have been recorded throughout the world in terrestrial, aquatic, and aerial environments.

Cause of Human-Animal Conflict

- **Population overload** - Rapid population growth contributes for the destructions wildlife habitat that leads to competition for survival.
- **Minimum Food in Jungle** - Carnivores are attacking domestic livestock due to declining number of herbivorous in the wild due to prolonged droughts and habitat degradation.
- **Infrastructure** - Animals have been killed or injured in accidents on roads or railway tracks because of the expansion of road and rail networks through forest ranges.
- **Small area for Animals** - As the population increases, the demand for land also increases, people start cutting down the forest and sometimes animals move out of that small area.
 - Wildlife experts estimate that 29% of the tigers in India are outside the protected areas.

Impact of Human-Animal Conflict

- **On Food Security** - Huge amounts of crops were lost by wildlife in different countries.
 - **Health and disease**- Conflict arises due to human perception of public health risks from zoonotic pathogens transmissible to humans. E.g. Covid -19 pandemic
- **Livestock depredation** - The easier availability of domestic animal and other resources to a given species outside a protected area than inside, increase livestock depredation.
- **On Tourism** - Nature and wildlife tourism provides essential revenue to a country or region and tourists refuse to visit the region if conflict escalates.
- **On Conservation efforts** - Human wildlife conflict is hindering the implementation of conservation initiatives.

Measures Taken to tackle Human-Animal Conflict

- **Legal measure** - Wildlife management in India is carried out under the Wildlife Protection Act of 1972, which is strongly preservationist in its thrust.
 - The Act makes it virtually illegal to kill or capture wild animals even when problem animals are involved in severe conflict situations.
- **Technology** - High-tech surveillance equipment such as sensors can help in tracking animal movement and alerting the local population.
- **Biological measures** - We can build barriers and fences around animal territory, separate wildlife corridors and put-up beehive fencing around farms to deter elephants.
 - For example, in Mozambique, communities began growing chili pepper plants after discovering that elephants disliked and avoided plants containing capsaicin.
- **Infrastructure Measure** - Wildlife bridges corridors and underpass provide wildlife with a safe pathway as they travel between larger areas of intact habitat.
 - Some of the major wildlife corridors in India are the Kanha-Pench Corridor and the Kaziranga-Karbi Anglong Corridor.

- **Relocation of human settlements** - Relocation of human settlements is a proactive strategy that tries to alter the ecological setting, and thus prevent conflict.

Extra Mile

- WLS is notified under Wildlife (Protection) Act of 1972 and it is notified by the State Government.
- The Wildlife Protection Act of 1972 defines four categories of protected areas, namely 1) National Parks, 2) Wildlife Sanctuaries, 3) Community Reserves, and 4) Conservation Reserves.
- The main purpose of Wildlife Sanctuaries (WLS) is to safeguard and preserve a specific species or group of species.
- In India, there are currently 567 wildlife sanctuaries that amounting to 3.73% of the country's geographical area. (National Wildlife Database, Jan. 2023).
- Andaman & Nicobar Islands have the highest numbers of Wild life Sanctuaries.
- National Wildlife Database (NWD) (of Wildlife Institute of India (WII)) is providing information on the conservation status of animal species, biogeographic regions, administrative units, habitat types and the network of protected areas in India.

Multi-Angle Imager for Aerosols Mission

The NASA and Italian Space Agency ASI (Agenzia Spaziale Italiana) will build and launch the Multi-Angle Imager for Aerosols (MAIA) missions.

- The mission is set to launch before the end of 2024.

About Multi-Angle Imager for Aerosols Mission (MAIA)

- MAIA is the first mission by the agency whose primary goal is to benefit **societal health**. Epidemiologists and public health researchers will be directly working on the development of a satellite mission.
- It is a state-of-the-art satellite instrument producing data that will be used in health studies to examine the health effects of various types of air pollution.
- It will consist of the PLATiNO-2 satellite, which will be provided by ASI, and a science instrument that will be built at NASA's Jet Propulsion Laboratory (JPL).
- The 3-year mission will focus on 11 primary target areas: Los Angeles, Atlanta, Boston, Rome, Addis Ababa, Ethiopia, Barcelona, Spain, Beijing, Johannesburg, **New Delhi**, Taipei, Taiwan and Tel Aviv.
- Its measurements of sunlight reflecting off airborne particles will help researchers determine the abundance, size and optical properties of certain pollutants in the atmosphere.

Cyclone Freddy

The World Meteorological Organization (WMO) is setting up a committee to evaluate whether cyclone Freddy has broken the record as the longest-lasting tropical cyclone on record.

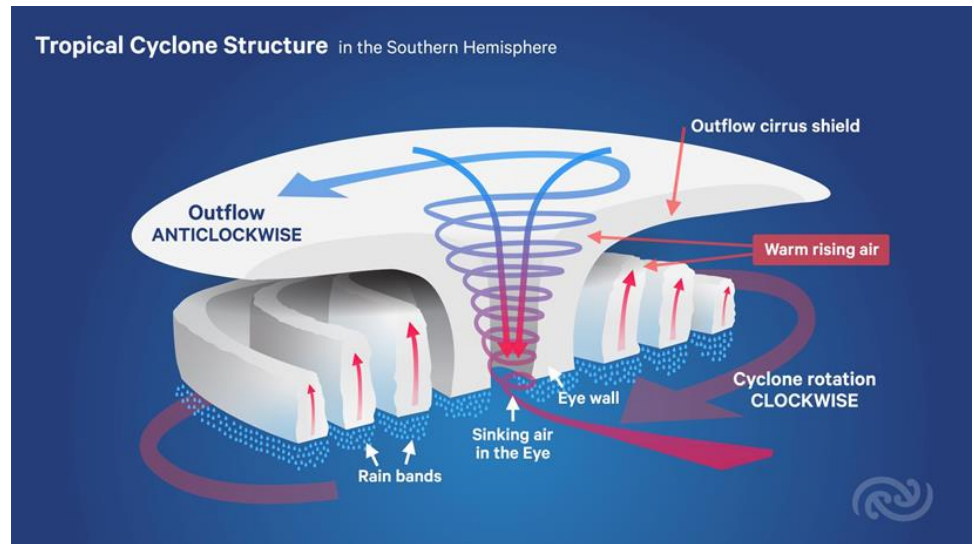
About Cyclone Freddy

- It originated off the northern coast of Australia. It has been a named tropical cyclone for 33 days, crossed the entire South Indian Ocean and travelled more than 8,000 kilometres.
- It affected Mauritius and La Reunion, before making landfalls in Madagascar two weeks later and then Mozambique.
- It is the 1st tropical cyclone in the Southern Hemisphere to undergo six separate rounds of rapid intensification.

Tropical Cyclones

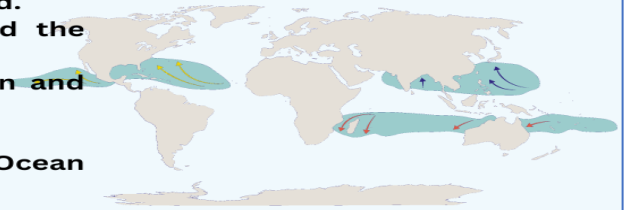
- These are low pressure systems that form when the sea surface temperature is above 26.5 °C.
- This may continue for several days, even weeks, and may follow quite erratic paths.
- Once developed, a tropical cyclone is like a giant, atmospheric heat engine. The moisture from the warm ocean acts as its fuel, generating huge amounts of energy as clouds form.

Tropical Cyclones are dangerous because they can produce extreme winds, heavy rainfall with flooding and damaging storm surge that can cause inundation of low-lying coastal areas. A cyclone will dissipate once it moves over land or over cooler oceans.



Different name of tropical Cyclone

- Tropical cyclones are referred to by different names depending on where they originate in the world.
- Hurricanes occur in the Atlantic Ocean and the eastern north Pacific Ocean.
- Typhoons occur in the western Pacific Ocean and the South China Sea.
- Willy-Willies occur in the Western Australia.
- Tropical cyclones occur in the south Pacific Ocean and Indian Ocean.



Committee To Oversee Transfer And Import Of Captive Wild Animals In India

The Supreme Court has increased the jurisdiction and powers of a high-powered committee.

What Changes Have Been Made In The Jurisdiction?

From Regional to National

- The ambit of the committee was earlier restricted to Tripura and Gujarat. It will now have a wider responsibility and will cater to all wild animals in need of rehabilitation or rescue anywhere in India.

Larger Role to the Committee

- The committee can consider requests for approval, dispute, or grievance regarding the welfare of wild animals by rescue centres or zoos across India.
- The Supreme Court ordered the Central and State authorities to report the seizure of wild animals or the release of captive wild animals to the committee.

Enlarging Committee

- State Chief Wildlife Wardens will also be part of the committee.

About the High-Powered Committee on Wild Animals

Composition

- It is set up under the chairmanship of former judge Justice Deepak Verma.
- The other members of the committee include the Director General of Forests, Head of Project Elephant Division (MoEF) and Member Secretary (Central Zoo Authority of India) and Chief Wildlife Warden(s) of the State(s) to which the issue relates will be co-opted as Members.

Mandate: To consider approval, dispute, or grievance concerning the **transfer or import of wild animals** into India or their procurement or welfare by any rescue or rehabilitation center or zoo.

Powers and Functions:

- All State and Central authorities shall report the seizure of wild animals or abandonment of captive wild animals to the Committee.
- The Committee shall be at liberty to recommend the transfer of ownership of captive animals or of seized wild animals to any willing rescue center or zoo for their immediate welfare, care, and rehabilitation.
- The Committee is free to conduct necessary checks and to undertake fact-finding exercises in any pending or future complaint.

Major Issues Related to Captive Wild Animals

- Many zoos and rescue centres are not equipped with the necessary resources to provide proper care for captive animals.
- Zoo animals also suffer due to lack of veterinary care for diseases.
 - In the last three years, the National Zoological Park located in the national capital has lost around 450 animals, including tigers, lions and others.
- Captive animals seldom learn crucial survival skills and often are too habituated to human contact.
- Lacking a natural fear of humans, they are vulnerable to poachers and ill equipped for life in the wild.

Batrachochytrium Dendrobatidis

A fungus named *Batrachochytrium dendrobatidis* is expanding across Africa and killing out or driving to the verge of extinction hundreds of amphibian species (Particularly Frogs).

About *Batrachochytrium dendrobatidis* (Bd)

- Bd is a species of chytrid fungus that is known to cause the disease chytridiomycosis in amphibians, particularly frogs. The disease has had devastating effects on amphibian populations worldwide, leading to declines and extinctions of numerous species.
- It affects (Via Water) the keratin in the skin of amphibians, resulting in skin infections and lesions.
- It infects the skin of amphibians, which is critical for respiration, osmoregulation, and other functions.
- Bd can disrupt the skin's permeability and cause electrolyte imbalances, leading to a range of symptoms, including lethargy, loss of appetite, and eventually death.
- It was initially discovered in Queensland, Australia, in the 1990s after several frog species were found dead.
- It is most prevalent in South and Central America, Australia, and North America.

Role Of Climate Change On This Fungus

- According to Nature World News, previous studies have found that climate change may be beneficial for the fungus (grows best in a range of 63 to 77 degrees Fahrenheit).
- Increased cloud cover may lead to cooler daytime temperatures and warmer night-time temperatures, which would be more conducive to the growth of the microscopic fungus.

Zealandia

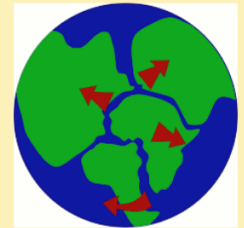
After 375 years of speculation and exploration, scientists have finally confirmed the existence of a missing continent known as Zealandia.

About Zealandia

- It is a long, narrow microcontinent that is mostly submerged in the South Pacific Ocean.
- It is approximately 1.89 million square miles in size, about half the size of Australia.
- It was once part of an ancient supercontinent called Gondwana, which also included Western Antarctica and Eastern Australia over 500 million years ago.
- It began to pull away from Gondwana for reasons that geologists are still trying to understand roughly 105 million years ago.
- As it did so, it gradually sank beneath the waves, with over 94% of the landmass remaining underwater for millennia.

Formation of Continents

- In 1912, German scientist Alfred Wegener proposed a theory he called continental drift theory.
- Wegener's theory was based on several lines of evidence, including the matching coastlines of South America and Africa, similar rock formations and fossils found on opposite sides of the Atlantic Ocean, and the distribution of plant and animal species.
- According to Wegener's theory, Earth's continents once formed a single, giant landmass, which he called Pangaea.
- Around 200 million years ago Pangaea started splitting and broke down into two large continental masses as Laurasia and Gondwanaland forming the northern and southern components respectively. This process was thought to have been driven by the movement of the Earth's crustal plates, which he referred to as "continental drift."
- Subsequently, Laurasia and Gondwanaland continued to break into various smaller continents that exist today.
- In total, there are 7 Continents in the World. They together occupy 29% of the surface area of the world.
- More than two third of this continental mass is located in Northern Hemisphere.



Despite the evidence he presented, Wegener's theory was met with skepticism by many geologists at the time. It wasn't until the 1960s, with the discovery of sea-floor spreading and the theory of plate tectonics, that Wegener's theory gained widespread acceptance.

- The part of Zealandia which is above water forms the foundation of New Zealand's north and south islands as well as the island of New Caledonia.

IPCC Published Its Synthesis Report

The 4th and final instalment of the sixth assessment report (AR6) by the Intergovernmental Panel on Climate Change (IPCC) was released.

About Synthesis Report

- It is supposed to be a relatively **non-technical summary** of the previous reports, aimed largely at policymakers around the world.
- This report is meant to address a wide range of policy-relevant scientific questions related to climate change, but, like all IPCC reports, in a non-prescriptive manner.
- This will bring an end to the Sixth Assessment Report, a collective work of thousands of scientists over a period of **eight years**, starting in February 2015.

Key Findings Of This Report	Recommendations In This Report
<ul style="list-style-type: none">• Human-induced global warming of 1.1 degrees C has spurred changes to the Earth's climate that are unprecedented	<ul style="list-style-type: none">• Deep systemic changes are needed across all economic sectors to reduce emissions. Some steps include:<ul style="list-style-type: none">➤ Widespread electrification

<p>in recent human history.</p> <ul style="list-style-type: none"> Adaptation measures can effectively build resilience, but more finance is needed to scale solutions. There is a more than 50% chance that global temperature rise will reach or surpass 1.5 degrees C (2.7 degrees F) between 2021 and 2040 	<ul style="list-style-type: none"> ➤ Diversifying energy generation to include more wind, solar, and small-scale hydropower ➤ Conserving and restoring forests while also reducing tropical deforestation. <ul style="list-style-type: none"> Accelerated financial support for developing countries from developed countries is a critical enabler, with a greater focus needed on public grant-based finance.
--	--

Extra Mile
<p>IPCC</p> <ul style="list-style-type: none"> It is an intergovernmental body established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). Headquarter is at Geneva, Switzerland. It serves to provide policy makers with a regular assessment of the scientific basis of climate change, its impacts and future risks, and adaptation and mitigation options. <i>IPCC does not conduct its own research, nor does it monitor climate related data or parameters.</i> Thousands of people from all over the world contribute to the work of the IPCC. <p>IPCC Assessment Reports (AR)</p> <ul style="list-style-type: none"> IPCC Assessment Reports (AR) cover the full scientific, technical and socio-economic assessment of climate Change. It is generally divided into following parts: IPCC Assessment Report = (Working Group (WG) I Report + WG II Report + WG III Report) + Three Special Reports + Methodology Reports + Synthesis Report Five Assessment Reports have been completed in 1990, 1995, 2001 and 2007, 2014. The IPCC is now in its sixth assessment cycle, in which it is producing the Sixth Assessment Report (AR6). For AR 6, Three Special reports have been published including: <ul style="list-style-type: none"> 1) Special Report on Global Warming of 1.5°C (2018) 2) Special Report on Climate Change and Land (2019) 3) Special Report on the Ocean and Cryosphere in a Changing Climate (2019) Methodology reports provide practical guidelines for the preparation of greenhouse gas inventories under the UNFCCC. The Synthesis report is the last of the AR6 publications to inform the 2023 Global Stocktake by UNFCCC.

Earth Hour

- It is a global grassroots movement organized by World Wildlife Fund (WWF) to unite people to act on environmental issues and protect the planet.
 - ✓ WWF is an international non-governmental organization (NGO) founded in 1961 in Morges, Switzerland with objective to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.
- It was started as a lights-off event in Sydney, Australia, in 2007 and takes place on the last Saturday of March every year.
- It encourages people to switch off all non-essential lights for an hour, from 8:30 pm to 9:30 pm local time.

Green Tug Transition Programme

The Union Minister of Ports, Shipping & Waterways (MoPSW) and Ayush announced the **Green Tug Transition Programme (GTPP)**.

About Green Tug

- A tugboat is a marine vessel that manoeuvres ships by pushing or pulling them, mostly using two lines.
- **Green Hybrid Tugs** will be powered by Green Hybrid Propulsion systems and subsequently adopt non-fossil fuel solutions like Methanol, Ammonia, and Hydrogen.

National Centre of Excellence in Green Port & Shipping (NCoEGPS)

- It works under the Ministry of Ports, Shipping and Waterways and is situated in Gurugram, Haryana.
- Its objective is to provide sustainable solutions for the shipping sector and to ensure the sector's shift towards carbon neutrality and circular economy (CE).
- The Energy and Resources Institute (TERI- Non-profit institution Established in 1974 with Headquarter at New Delhi) is the knowledge and implementation partner of the NCoEGPS.

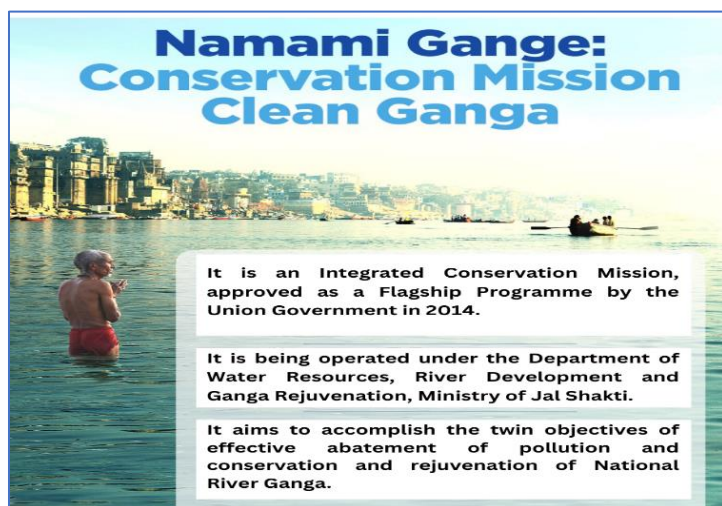
About Green Tug Transition Programme

- Its objective is to convert all tugboats working in the country into Green Hybrid Tugs in all major ports by 2025.
- National Centre of Excellence in Green Port & Shipping (NCoEGPS) will act as the nodal entity for this programme.
- India aims at becoming a Global Hub for Green Ship building by 2030 with the launch of this programme.

Gandak River

Under **Namami Gange Program**, the development of river front on Gandak River has been undertaken and two Ghats have been constructed.

About Gandak River



Origin	It originates in the north of Dhaulagiri in Tibet near Nepal border.
Course	<ul style="list-style-type: none"> • The river flows through the Bihar and Uttar Pradesh and joins the Ganges near Patna just downstream of Hajipur. • The entry point of the river at the Indo-Nepal border is at the convergence of Gandak, known as Triveni. • It is also known as the Kali Gandaki and Narayani after the confluence with Trisuli in Nepal.
Tributaries	<ul style="list-style-type: none"> • The major tributaries are Mayangadi, Bari, Trisuli, Panchand, Sarhad, Budhi Gandak.
Features	<ul style="list-style-type: none"> • Chitwan National Park of Nepal and Valmiki National Park of Bihar is located just beside each other in the area of Valmiki Nagar around the Gandak Barrage. • It is mentioned in the ancient Sanskrit epic Mahabharata. • It was declared as National Waterway (NW)-37 from Bhaisalotan Barrage to Gandak and Ganga River confluence at Hajipur, Bihar.

Aravalli Green Wall Project

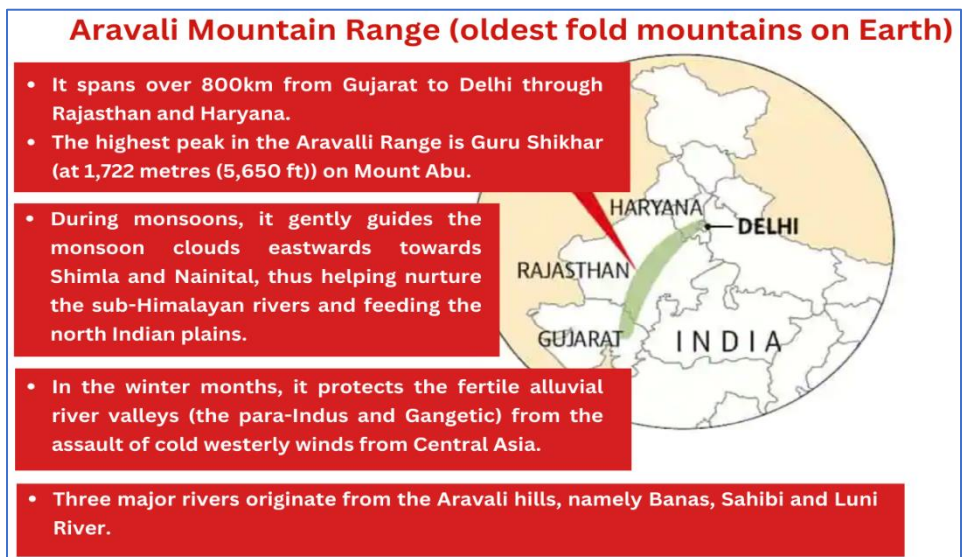
The Union Minister for Environment, Forest and Climate Change, unveiled the Aravalli Green Wall Project on the International Day of Forests (March 21).

About Aravalli Green Wall Project

- This project is part of the National Action Plan to Combat Desertification and Land Degradation Through Forestry Interventions to create green corridors across the country.
- It is a significant undertaking aimed at afforesting the 5 km buffer zone around the Aravalli Hill Range in Haryana, Rajasthan, Gujarat and Delhi.
- It will involve planting native species of trees and shrubs on wasteland, scrubland, and degraded forest land along with rejuvenating and restoring surface water bodies such as ponds, lakes and streams.
- The project will also focus on agroforestry and pasture development to enhance the livelihoods of local communities by providing them with employment opportunities.
- It is inspired by Africa's 'Great Green Wall' project, running from Senegal (West) to Djibouti (East), which came into effect in 2007.

Significance Of The Project

- It will prevent eastward expansion of Thar Desert (Great Indian desert) and reduce land degradation by creating green barriers (through afforestation) that will prevent soil erosion, desertification and dust storms.
- Benefits: Increase Soil fertility, enhance Ground Water Table, Climate Resilience, Income Generation to regional community etc.
- This project will help to achieve the national goal of creating an additional 2.5 billion tonnes of carbon sink by 2030.



Extra Mile

Other Initiatives/Bodies/Rules in India to combat Desertification

1) National Action Plan to Combat Desertification (NAPCD)

- It is a comprehensive plan launched by the Government of India in 2010 to address desertification, land degradation, and drought in the country.
- The plan is part of India's efforts to implement the United Nations Convention to Combat Desertification (UNCCD), of which India is a signatory.

2) National Afforestation and Eco-Development Board (NAEB)

- NAEB is a national level organization established in India in 1992 with aim of promoting afforestation and eco-development activities in degraded and desert areas of the country.

3) National Bamboo Mission

- This Mission (Launched in 2006) has the potential to contribute to the conservation of forests and the reduction of desertification in India.

4) The Green India Mission (GIM)

- GIM is launched in 2015 as part of the National Action Plan on Climate Change (NAPCCC) with prominent objectives to increase the forest cover in the country from the current 24% to 33% by the year 2030.

5) National Land Use and Conservation Board:

- This Board is responsible for promoting sustainable land use practices and combating desertification in India.

6) Delhi Declaration:

- India hosted the COP 14 to UNCCD and adopted new targets under Delhi Declaration with aim to raise its total area that would be restored from its land degradation status, from 21 million hectares to 26 million hectares till 2030.
- India also set up a Centre of Excellence at the Forest Research Institute, Dehradun, for providing technical assistance to meet the challenges.

Best Practices Around the world to reverse Desertification

1) Green Belt Movement (GBM)

- The Green Belt Movement is a non-governmental organization (NGO) founded in Kenya in 1977 by environmental and political activist Wangari Maathai.
- GBM works at the grassroots, national, and international levels to promote environmental conservation

2) Miyawaki Method

- It is a form of urban forestry to restore degraded urban landscapes, while also enhancing the resilience of urban environments to the impacts of climate change.
- It involves planting a mixture of native tree species at high densities in compact plots, which allows the forest to develop quickly and naturally.

3) Sustainable Development Goal- 15 (SDG-15, Life on Land):

- SDG-15 is part of the United Nations' 2030 Agenda for Sustainable Development.
- The goal is to "protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss."

4) The Bonn Challenge

- The Bonn Challenge seeks to restore degraded and deforested lands to contribute to climate change mitigation, biodiversity conservation.
- It was launched in 2011 by the International Union for Conservation of Nature (IUCN) and the German government.
- This Challenge aims to bring 150 million hectares of degraded and deforested lands into restoration by 2020 and 350 million hectares by 2030.
- To achieve the above goals, it relies on a flexible approach to restoration called forest landscape restoration (FLR).

Vembanad and Ashtamudi Lake

The National Green Tribunal (NGT) imposed a penalty of Rs 10 crore on the Kerala government for failing to protect the Vembanad and Ashtamudi lakes

Vemband Lake	Ashtamudi Lake
<ul style="list-style-type: none"> It is the largest lake in Kerala and the longest Lake in India. It has its source in four rivers, Meenachil, Achankovil, Pampa and Manimala. It is separated from the Arabian Sea by a narrow barrier island and is a popular backwater stretch in Kerala. It is the 2nd-largest Ramsar site in India, only after the Sunderbans in West Bengal. 	<ul style="list-style-type: none"> It is 2nd only in size to the Vembanad estuary ecosystem. Kallada River which originates near Ponmudi from the Kulathupuzha hills Western Ghats is a major river discharging into the Ashtamudi Lake. The lake is also called the gateway to the backwaters of Kerala and is well known for its houseboat and backwater resorts.
<ul style="list-style-type: none"> In 2002, both lakes were included in the list of wetlands of international importance, as defined by the Ramsar Convention. 	

Forest Certification in India

- Forest Certification offers a **multi-layer audit system** that seeks to authenticate the origin, legality, and sustainability of forest-based products.
- It is a process by which independent third-party organizations verify that a forest or forest product has been managed in accordance with certain environmental, social, and economic standards.
- The certification is done to avoid consumption of any product that might be the result of deforestation or illegal logging.
- Currently, forests in only one state **Uttar Pradesh** are certified.
- The standards have been developed by the New Delhi-based non-profit *Network for Certification and Conservation of Forests (NCCF)*.

New Anglerfish Species Named After Abdul Kalam

- New anglerfish species named as *Himantolophus kalami* (named after Dr APJ Abdul Kalam) discovered from the Andaman Sea.
- It is a species with a fishing lure on front of its head bearing symbiotic bacteria that produce light to catch prey.

Galathea Bay

- It is situated on the **Great Nicobar Island** and is part of the Great Nicobar Biosphere Reserve.
- It is included in Coastal Regulation Zone (CRZ)-I, the zone with maximum protection.
- It is home to the indigenous **Shompen community**.
- It is the prime nesting habitat of the Nicobar Megapode, Species of bird.
- In January 2021, the Standing Committee of the National Board for Wildlife (NBWL) **declassified** the entire Galathea Bay Wildlife Sanctuary to allow the port.

National Chambal Sanctuary

- It is also known as National Chambal Gharial Wildlife Sanctuary
- It was founded over the Chambal River in 1979 under the **crocodile conservation project** to protect Indian Gharials as a riverine sanctuary.

- It is called a tri-state sanctuary due to its diverse area in three states, Madhya Pradesh, Uttar Pradesh and Rajasthan.
- It is listed as an Important Bird Area (IBA) and is a proposed Ramsar site.

UN 2023 Water Conference

- The conference took place in March 2023 at the United Nations Headquarters in New York.
- It was co-hosted by the Government of Tajikistan and the Kingdom of the Netherlands.
- It marks the halfway point through the International Decade (2018-2028) for Action “Water for Sustainable Development”, adopted by the UN General Assembly on World Water Day – 22 March 2018 – to help put a greater focus on water.
- This was the 2nd UN conference dedicated to water, after the 1977 conference in Mar del Plata, Argentina.
- It aims to urgently tackle the water crisis and get the world back on track on Sustainable Development Goal 6 - Clean Water and Sanitation.

ICOMOS ISC (International Council on Monuments and Sites & International Scientific Committee)

- It is a non-governmental international organisation (founded in 1965) aims to promote the conservation of heritage sites and encourage research and education in this field.
- The **Water and Heritage Shield** award is given by the ICOMOS ISC.
- The award recognizes the work to raise public awareness of the significance of water and indigenous sacred sites worldwide.
- ICOMOS provides the World Heritage Committee with evaluations of properties with cultural values proposed for inscription on the World Heritage List

Bauxite Mining in India

- The raw material of aluminium is known as bauxite ore.
- It is generally found in the region close to laterite rocks.
- It is mainly found in the peninsular, coastal and hill ranges, such as Odisha, Gujarat, Jharkhand, Maharashtra, Chhattisgarh, Tamil Nadu and Madhya Pradesh etc.
- Odisha is the largest bauxite ore-producing state.

Sulphur Coated Urea

- It is a fertilizer that is made by coating urea with sulphur.
- It helps in slow release of nitrogen, therefore it reduces nitrogen losses and increases nitrogen availability and uptake.
- Sulfur is a low-cost plant macronutrient and is suitable for fertilizer coating because of its ability to melt at a high temperature (at about 156°C).
- Sulfur is also chosen due to its degradability and improved dry matter production.

Salar de Uyuni

- It is the world’s largest salt flat, located in southwest Bolivia.
- A salt flat is a natural landscape in which a large area of flat land is covered by salt.
- It contains over 45% of known global lithium reserves.

- It was formed as a result of transformations between several prehistoric lakes that existed around 40 thousand years ago but had all evaporated over time.

DAP and nano DAP

DAP (Diammonium phosphate)	Nano DAP
1) world's most widely used phosphorus fertilizer 2) excellent source of phosphorus and nitrogen for plant nutrition 3) highly soluble and thus dissolves quickly in soil to release plant-available phosphate and ammonium	1) unique liquid fertilizer product that contains nanoparticles of DAP 2) One bottle will be equivalent to one bag of DAP 3) jointly manufactured by Indian Farmers Fertiliser Cooperative (IFFCO) in association with a private player Coromandel

Plastic Rocks and Trindade Island




Plastic rocks (**plastiglomerates**) been found on the easternmost remote Brazilian island of Trindade






- These are made of a mixture of sedimentary granules and other debris held together by plastic.
- When the temperature rises, this plastic melts and embeds with the beach's natural material.



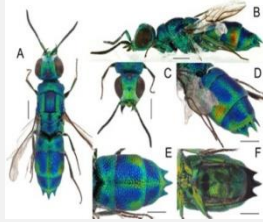
Trindade Island

- It was exposed about 3 million years ago due to volcanic activity under the Atlantic Ocean.
- It is known for being one of the most important conservation and nesting spots for green sea turtles.

Species In News

Aztec hummingbird 	<ul style="list-style-type: none"> • It is native to the American continent. • It can beat their wings up to 50 times per second creating a humming sound. • It can fly backward. • The purple sunbird, one of its types is commonly found in India.
Uperodon montanus 	<ul style="list-style-type: none"> • It is also known as Jerdon's narrow-mouthed frog or Malabar Hill frog. • It is endemic to the Western Ghats. • It is considered a montane species and is restricted to higher altitude ranges of 800-1,700 metres. • It is listed as Near Threatened on the IUCN Red list. • They are found near Wayanad south across the Palghat and the Shencottah gaps to the Agasthyamalai hills.
Great Seahorse 	<ul style="list-style-type: none"> • It is a type of tiny fish named after the shape of their head resembling a tiny horse. • These are ovoviviparous and the males give birth to live young. • There are 46 species of seahorses worldwide, and India is home to 9 out of 12 species found in the Indo-Pacific. • It is found in shallow coastal waters between latitudes of about 52° N to 45° S.

	<ul style="list-style-type: none"> • It is listed as vulnerable on the IUCN Red list. • They are Mentioned in Appendix II of CITES
<p>Mugger crocodile</p> 	<ul style="list-style-type: none"> • According to a recent study, anthropogenic threats like illegal fishing and sand mining pose a threat to the mugger crocodiles. • It is one of the 24 extant species of crocodylians found globally. • It is native to freshwater and inhabits marshes, lakes, rivers and artificial ponds. • It is found all over south Asia India, Pakistan, Sri Lanka, Nepal and Bangladesh as well as south-eastern Iran. • It is listed as Vulnerable on the IUCN Red List. • Mentioned in Appendix I of CITES
<p>Indian Black Turtle</p> 	<ul style="list-style-type: none"> • It is a medium sized fresh water turtle found in South Asia. • It is an omnivore, consuming both aquatic macrophytes and invertebrates. • It inhabits a variety of water bodies including ponds, marshes streams, rivers and artificial water bodies like rice-paddies, watering holes etc. • It is found in the hill ranges of the Western Ghats, south of Gujarat, and the southeast coast, and then is distributed in northern and northeastern India. • It is listed as Least concern on IUCN Red list.
<p>Eurasian Otter</p> 	<ul style="list-style-type: none"> • It is a semi-aquatic carnivorous mammal. • It has one of the widest distributions of all Palearctic mammals. • Its range covers parts of three continents: Europe, Asia, and Africa. • In India, it occurs in northern, northeast, and southern India. • It is classified as Near Threatened on the IUCN Red List and Schedule II in Wildlife Protection Act, 1972. Mentioned in Appendix I of CITES • Its populations have declined due to hunting for food and pelt, habitat loss, pollution and climate change.
<p>Kappaphycus Alvarezii</p> 	<ul style="list-style-type: none"> • It is seaweed (alga) which is native to the Indo-Pacific region. • The International Union for Conservation of Nature lists it as one of the world's 100 most invasive species. • It is one of the prime threats that killed the corals near Kurusadai which was deliberately introduced in Ramanathapuram for commercial cultivation some two decades ago. • It is a major source of carrageenan, which is an additive used for thickening and preserving foods and drinks.
<p>Horseshoe crab</p> 	<ul style="list-style-type: none"> • It is a marine chelicerate arthropod living in shallow coastal waters on soft sandy or muddy bottoms. • Chelicerata is a division within the Arthropoda, containing animals such as spiders, scorpions, harvestmen, mites and ticks. • It is known as a marine living fossil. • Odisha is the largest habitat of horseshoe crabs in India. • It is listed as Schedule IV in Wildlife Protection Act 1972.

<p>Thiania indica</p> 	<ul style="list-style-type: none"> • It is a newly discovered species of jumping spider from the Western Ghats. • It has been distributed across China, Myanmar, Thailand, Laos, and Indonesia. • Males have four patches of white hairs on their green-yellow abdomen. • Females have a wide transverse black band anteriorly and posteriorly on their creamy yellow abdomen.
<p>Cyrtopodion Vindhya</p> 	<ul style="list-style-type: none"> • The newly discovered naked-toed gecko in Gujarat has been named Cyrtopodion Vindhya. • The new species is named after the Vindhya hill ranges. • The newly discovered reptile is a nocturnal species, associated with granite boulders. • Mostly rupicolous (living among rocks) in its habits but can be found on the ground as well. • It is distributed across the arid regions of north Africa, Arabia, and Central Asia to northwestern India.
<p>Trichrysis poseidonia</p> 	<ul style="list-style-type: none"> • A research team discovered new species of cuckoo wasp has been named Trichrysis poseidonia. • It derived its name from Poseidon, the Greek God of the Sea, for the three sharp and pointed apical abdominal teeth, recalling the Poseidon's trident. • It known as cuckoo wasp because it steals food from other wasp and bee as the cuckoo bird. • The laterite plateau of Madayipara is well known for its rich biodiversity and is suitable for these wasps.

PoTS

PoTS or Postural orthostatic tachycardia syndrome has affected around three million Americans before Covid-19 and at least one million new patients after the pandemic.

About PoTS

- It is a condition when your heart rate increases very quickly after getting up from sitting or lying down.
- Each word of “postural orthostatic tachycardia syndrome” has a meaning –
 - Postural: Related to the position of your body.
 - Orthostatic: Related to standing upright.
 - Tachycardia: A heart rate over 100 beats per minute.
 - Syndrome: A group of symptoms that happen together.

Causes	Symptoms	Treatment
It is not yet clear what are the causes of POTS disease. It can develop suddenly or maybe over time.	Symptoms may include dizziness or light-headedness, noticeable heartbeats (heart palpitations), chest pain, shortness of breath, shaking and sweating, diarrhea, constipation, bloating, tummy pain, etc.	It can get better with changes to your lifestyle, but some people may need treatment with medicines.

NASA's Imaging X-ray Polarimetry Explorer (IXPE)

A team of researchers has unveiled new light on the explosion of a star in a supernova which occurred more than 450 years ago by using Imaging X-ray Polarimetry Explorer (IXPE).

- The explosion, called **Tycho**, was visible to people on Earth in 1572. The Tycho supernova is classified as a Type Ia supernova, which occurs when a white dwarf star in a binary system shreds its companion star.

About Imaging X-ray Polarimetry Explorer (IXPE)

- It is a joint effort of NASA and the Italian Space Agency.
- It's the **first satellite** to take X-ray polarimetry measurements since the **Eighth Orbiting Solar Observatory (OSO-8)** mission in 1975 and will be 100 times more sensitive.
- IXPE exploits the polarization state of light from astrophysical sources to provide insight into our understanding of X-ray production in objects such as neutron stars and pulsar wind nebulae, as well as stellar and supermassive black holes.
- This new mission will complement other X-ray telescopes such as the Chandra X-ray Observatory and the European Space Agency's X-ray observatory, XMM-Newton.
- The mission's primary length is two years (launched in 2021 with plans for 3 or more years), and the observatory will be at 600 kilometre's altitude (a low-Earth orbit), orbiting around Earth's equator.

Objective of IXPE

According to NASA, IXPE's polarization measurements will help scientists answer questions such as:

- How do black holes spin?
- Was the black hole at the centre of the Milky Way actively feeding on surrounding material in the past?
- How do pulsars shine so brightly in X-rays?

- What powers the jets of energetic particles that are ejected from the region around the supermassive black holes at the centers of galaxies?

Significance & Mechanism (Working) of IXPE

- IXPE will provide new insights into the physical processes that occur in extreme environments and help us better understand the behavior of matter and energy in the universe.
- IXPE carries 3 state-of-the-art space telescopes. The telescopes will be arranged such that they can observe the same astrophysical source simultaneously from different angles, allowing for more precise measurements of the polarization.
- By measuring the polarization of these X-rays, we can study where the light came from and understand the geometry and inner workings of the light source.

Lewis Super Acids

Researchers at the Paderborn University, Germany have reported being able to make a unique class of catalysts called Lewis super-acids.

About Lewis Super Acids (Properties)

- It is derived from Lewis acids, named after the chemist, G N Lewis.
- It can be used to split strong chemical bonds and accelerate reactions.
- It is highly reactive reagents, thus difficult to produce and use.
- It is stronger than **antimony pentafluoride**, the strongest Lewis acid and can break even the toughest bonds.
- One of the most well-known Lewis **super acids** is the compound fluoroantimonic acid, which is considered the strongest acid known to science.
 - It is formed by mixing hydrogen fluoride (HF) and antimony pentafluoride (SbF₅).

Application of Lewis Super Acids

- It enables non-biodegradable fluorinated hydrocarbons (similar to Teflon) to be converted back into sustainable chemicals.
- It can also convert climate-damaging greenhouse gases, such as sulfur hexafluoride, into sustainable gases.

Lewis Acid: Compounds that add pairs of electrons are called Lewis acids.

Lewis Base: It is any substance, such as OH⁻ ion, that can donate a pair of nonbonding electrons. Therefore, it is an electron-pair donor.

Megha-Tropiques-1

ISRO has successfully carried out the controlled Re-Entry experiment for the decommissioned Megha-Tropiques-1 (MT-1) Satellite in an uninhabited area in the Pacific Ocean.

ISRO is crashing the satellite as part of its commitment UNIADC (Inter-Agency Space Debris Coordination Committee).

Ways To Crash Satellite

UN IADC space debris mitigation guidelines recommend deorbiting a Low Earth Orbit object at its end-of-life.

- It can be done preferably through controlled re-entry to a safe impact zone, or by bringing it to an orbit where the orbital lifetime is less than 25 years.
- It is also recommended to carry out passivation of on-board energy sources to minimise the risk of any post-mission accidental break-up.


ISRO **System for Safe and Sustainable Space Operations Management (IS4OM)** has been established to spearhead such activities.

What is Controlled Re-entry?

- Controlled re-entry refers to the deliberate and planned descent of a spacecraft or satellite from orbit back to Earth's atmosphere, in a way that ensures the object is destroyed during re-entry and does not pose a risk to human life or property on the ground.
- The process involves adjusting the spacecraft's trajectory and speed in order to achieve a controlled descent.

ABOUT MEGHA-TROPIQUES-1

- It was launched into Low Earth Orbit (LEO) in 2011 as a joint satellite venture of ISRO and the French space agency (CNES) for tropical weather (Clouds & Precipitation) and climate studies (Water Cycle).
- The mission life was originally 3 years, with the satellite continuing to provide valuable data services for over a decade, supporting regional and global climate models through 2021.
- It had day, night and all-weather viewing capabilities; it passes over India almost a dozen times every day, giving scientists an almost real-time assessment of the evolution of clouds.



Fumarate Hydratase

Scientists have found that Fumarate hydratase is repressed in macrophages, a frontline inflammatory cell type implicated in a range of diseases including Lupus, Arthritis, Sepsis and Covid-19.

- Scientists also have made an important link between Fumarate Hydratase and immune proteins called **cytokines** that mediate inflammatory diseases.

Fumarate hydratase (FH)	Mutated or Repressed Fumarate hydratase (FH)
<ul style="list-style-type: none"> It is a gene that makes an enzyme that helps cells in the body use oxygen and make energy. FH plays an important role in the citric acid cycle (also known as the Krebs cycle or TCA cycle), which is a series of biochemical reactions that occur in the <i>mitochondria of cells</i>. 	<ul style="list-style-type: none"> Mutated form of FH may cause cells to lose the ability to use oxygen. This may increase the growth of some cells, including abnormal cells and cancer cells. The mutated gene has been found in an inherited condition called <i>hereditary leiomyomatosis and renal cell cancer (HLRCC)</i>. This condition is characterized by the development of benign smooth muscle tumours (leiomyomas) in the skin and uterus, as well as an increased risk of developing kidney cancer. When Fumarate Hydratase is repressed, RNA is released from mitochondria which can bind to key proteins 'MDA5' and 'TLR7' and trigger the release of cytokines, there by worsening inflammation. <ul style="list-style-type: none"> ➤ Cytokines are small proteins that are crucial in controlling the growth and activity of other immune system cells and blood cells.

Nancy Grace Roman Space Telescope

Scientists have created synthetic survey that shows what we can expect from the Nancy Grace Roman Space Telescope's future observations.

About Nancy Grace Roman Space Telescope or Roman Space Telescope (RST)

- It is NASA's future infrared deep space observatory.
- Though originally referred to as the Wide Field Infrared Space Telescope (WFIRST), NASA renamed the mission in 2020 after Nancy Grace Roman, NASA's first chief astronomer.
- It is set to launch around 2026 or 2027 and is projected to last for five years.

- It will be situated at Lagrange point 2, a stable gravitational point between Earth and the sun located around 1.5 million kilometres from our planet.

Objective of Roman Space Telescope (RST)

- To know essential astrophysics questions about **dark energy**, **dark matter**, exoplanets, the formation, evolution of galaxies and infrared astrophysics.
- To study the distribution and properties of dark energy. As NASA points out that dark energy accounts for around 68% of the universe's total energy/matter content yet have little idea what it actually is.

Features of the RST

- The primary mirror of the RST has a diameter of 2.4 meters, the same size as the mirror of the Hubble Space Telescope.
- It will have a field of view that is 100 times greater than the Hubble infrared instrument, capturing more of the sky with less observing time.
- It has two other instruments: the Wide Field Instrument and the Coronagraph Instrument.
- The Wide Field Instrument performs **microlensing surveys** to find exoplanets, and the Coronagraph Instrument performs high-contrast imaging and spectroscopy of nearby exoplanets.

IITR 00693

The researchers at the IIT Roorkee have discovered a new molecule named IITR00693 that has the potential to fight against drug-resistant infections.

About IITR00693

- It is a novel antibacterial small molecule.
- It has shown potent antibacterial activity against a wide range of Gram-positive and Gram-negative bacteria, including some of the most problematic drug-resistant strains.
- In single stage infections of lungs, intestines, joints and skin infections, these molecules will also give better results when combined with other anti-gity drugs.

Extra Mile	
Gram-positive bacteria	Gram-negative bacteria
<ul style="list-style-type: none"> • Show blue or purple after gram-staining in a laboratory test • They do not have a protective outer membrane. 	<ul style="list-style-type: none"> • show pink or red on staining • They have an outer membrane. The outer membrane makes them more resistant to certain antibiotics.

Fluorescence Microscope

Researchers at Winona State University, Minnesota have designed a cost-effective device named **Glowscope** (Based on Fluorescence Microscopy) which could be used to study an object and how it reemits light.

About Glowscopes

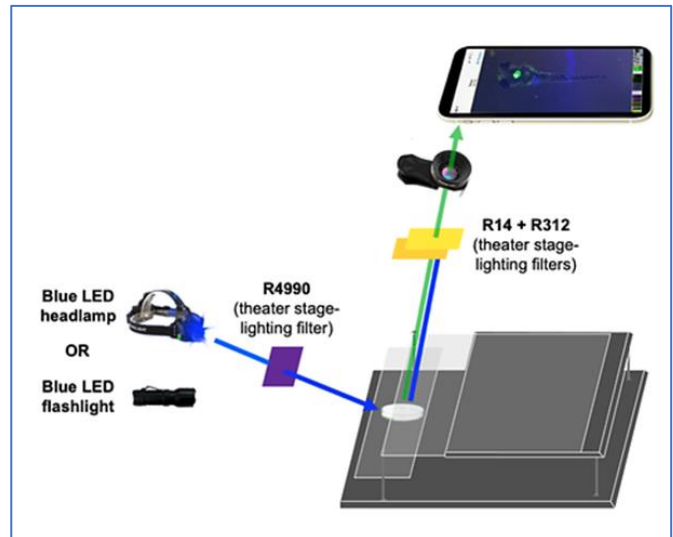
- It does not use scientific components. Instead, it combines our smartphone with a few inexpensive components, thereby converting it into a basic fluorescence microscope.
- It may be useful for some research applications, but we expect their primary use will be for STEM education and outreach.
- It could make learning genetics more interesting for young kids as they count the number of glowing and non-glowing animals.

About Fluorescence Microscope

- It is a type of microscope that uses fluorescence to study biological samples.
- Fluorescence occurs when a molecule absorbs light at one wavelength and then emits light at a longer wavelength, which can be detected by the microscope.
- Fluorescence microscopes use *specific dyes or fluorescent proteins* that can bind to specific molecules or structures within a sample.
- When excited by a light source, these fluorescent molecules emit light of a specific color, allowing researchers to visualize specific structures or molecules within the sample.

Advantages of Fluorescence Microscope

- One major advantage of fluorescence microscopy is its ability to distinguish between different structures or molecules within a sample.
- Different molecules can now be stained with different colours, allowing multiple types of molecules to be tracked simultaneously within the same sample.
- Fluorescence microscopy is commonly used in the study of cell biology, immunology, and neuroscience, as it allows researchers to visualize specific structures within cells, such as organelles, proteins, or DNA, in real-time.
- It is also used in medical diagnostics, such as the detection of infectious diseases or cancer cells.



Terran 1

The launch of the world's first 3D-printed rocket named Terran 1 was cancelled at the last second due to fuel temperature concerns.

About Terran 1

- It is the world's 1st 3D-printed rocket which is expendable two-stage small-lift launch vehicle.
 - An expendable launch vehicle can be launched only once, after which its components are either destroyed during re-entry or discarded in space.
- It is built by California aerospace startup 'Relativity Space'.
- 85% of its mass is 3D printed with metal alloys, including the engines.
- It is powered by Aeon engines using liquid oxygen and liquid natural gas as propellants.
- It is ultimately capable of sending

3D Printing:

- 3D printing or additive manufacturing is a process of making three-dimensional solid objects from a digital file.
- 3D printing enables you to produce complex shapes using less material than traditional manufacturing methods.

4D Printing:

- 4D printing is an emerging technology that builds on the concepts of 3D printing by adding the dimension of time.
- While 3D printing allows objects to be created layer by layer in a static form, 4D printing enables objects to self-assemble or transform into different shapes over time in response to a specific stimulus, such as heat, moisture, or light.
- For example, 4D printing can be used to create *self-folding structures, such as medical implants or packaging materials that can assemble themselves upon contact with water or heat.*
- In the construction industry, 4D printing can be used to create self-assembling buildings that can adapt to changing environmental conditions or to repair themselves when damaged.

satellites up to 1,250 kg into low Earth orbit.

MQ 9 Reaper

The US military said its MQ-9 Reaper drone crashed in the Black Sea after a Russian Su-27 fighter jet damaged its propeller.

About MQ-9 Reaper (Predator B)

- It is an **unmanned aerial vehicle (UAV)** capable of remotely controlled or autonomous flight operations. It is engineered to meet and exceed manned aircraft reliability standards.
- It is developed by General Atomics Aeronautical Systems (GA-ASI), primarily for the United States Air Force (USAF).
- They have previously been used by the US military in Iraq and Afghanistan and though they are known for precision strikes.
- MQ-9s have also been purchased by NASA and the air forces of the UK, Spain and France.

Features

- It is designed for long-endurance, high-altitude Intelligence, Surveillance and Reconnaissance (ISR) missions with Top speed 275 mph.
- It can fly at an altitude of 15 km and can loiter over targets for over 27 hours.
- It can carry as many as 16 Hellfire missiles, equivalent to the payload capacity of an Apache helicopter.

Extra Mile

MQ 9 Reaper & India

- In November 2020, the Indian Navy inducted two Sea Guardian MQ9B Reapers (maritime variant of the Predator MQ9).
- The Navy has for the first time inducted two surveillance drones using the emergency powers granted by the Centre to the Armed forces amid the China standoff.
- Amidst the intensifying border conflict with China, the government under Defence Acquisition Procedure (DAP) 2020 has allocated emergency funds of up to Rs. 500 crore per procurement project to the three-armed services for the purchase of weaponry and ammunition.
- The **Basic Exchange and Cooperation Agreement for Geo-Spatial Cooperation (BECA)** has simplified such high- technology cooperation.
 - BECA will provide Indian military systems with a high-quality GPS to navigate missiles with real-time intelligence to precisely target the adversary. This could be a key to Air Force-to-Air Force cooperation between India and the US.

Starberry-Sense

Researchers at the Indian Institute of Astrophysics (IIA) have developed a low-cost star sensor named **Starberry-Sense** for astronomy and small CubeSat class satellite missions.

Star Sensor	Starberry-Sense
<ul style="list-style-type: none"> • It is an instrument (a celestial compass) that is used by any satellite that needs to know where it is pointed in space. • The position of stars in the sky is fixed relative to each other and can be used as a stable reference 	<ul style="list-style-type: none"> • It is a cost-effective star sensor. • It can help small CubeSat class satellite (Type of nanosatellite with weight less than 1.33 kg) missions find their orientation in space. • Based on commercial/off-the-shelf (COTS)

<p>frame to calculate the orientation of a satellite in orbit.</p> <ul style="list-style-type: none"> This is done by correctly identifying the stars in the sky towards which the star sensor is pointed. 	<p>components, it costs less than 10% of those available in the market.</p> <ul style="list-style-type: none"> The brain of the instrument is a single-board Linux computer called Raspberry Pi, which is widely used among electronics hobby enthusiasts.
---	---

Low-temperature Thermal Desalination Technology

The National Institute of Ocean Technology (NIOT) is providing **potable water** in six islands of Lakshadweep using Low Temperature Thermal Desalination technology.

About Low-temperature thermal desalination Technology (LTTD)

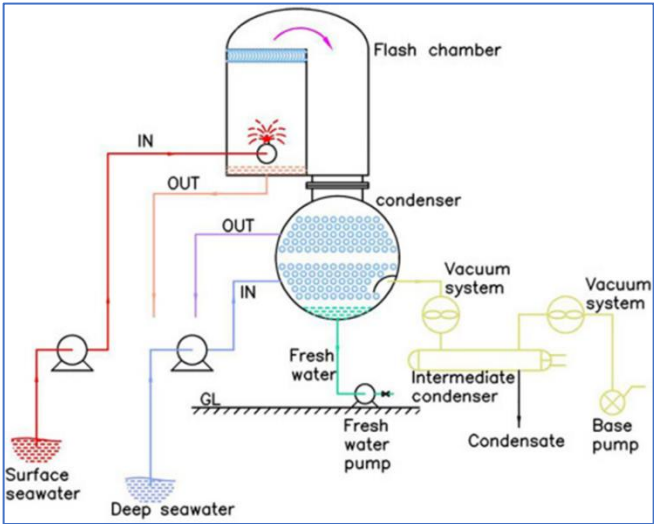
- LTTD is a technique that turns seawater (Brackish/Saline water) into drinkable water.
- It uses the difference in temperature between surface seawater and deep seawater to evaporate and condense water, thus separating the salt and other impurities from the water to produce fresh water.

How It Works?

- The LTTD process works by pumping cold water from a depth of several hundred meters and passing it through a heat exchanger.
- The cooled water is then used to evaporate the feed water in a vacuum chamber, which reduces the boiling point of water and requires less energy to produce steam.
- The steam is then condensed on a heat exchanger, producing fresh water that is collected and stored for use.

Significance Of This Technology

- LTTD has a lower environmental impact compared to other desalination technologies as this technology does not require any chemical pre- and post-treatment of seawater and thus the pollution problems are minimal and suitable for island territories.
- LTTD uses low-grade waste heat, such as solar or geothermal energy, to drive the process, making it energy-efficient and cost-effective.
- It has applications in areas where there is a shortage of fresh water, such as islands, coastal regions, and arid regions.



However, LTTD has its limitations, including the requirement for deep, cold water, which is not always available, and the relatively low production rate compared to other desalination technologies.

LTTD has been successfully used in several pilot projects in India, Japan, and the United Arab Emirates.

National Institute of Ocean Technology (NIOT)

- It was established in November 1993 as an autonomous society under the Ministry of Earth Sciences.
- Major aim is to develop reliable technologies to solve the various engineering problems associated with harvesting of non-living and living resources in the Indian Exclusive Economic Zone (EEZ).

{For more about Portable Device that Turns Seawater into Drinking Water, refer The Recitals - May 2022}

Ceramic Radome Technology

Carborundum Universal Limited (CUMI- a private sector pioneer in material sciences) has signed a Licensing Agreement for Transfer of Technology with the DRDO for manufacturing ceramic radomes used in aerospace and missile systems.

About Ceramics Radome

A ceramic radome is a type of protective cover that is used to protect radar equipment and antennas from environmental factors such as rain, snow, UV light, and strong wind.

- **Ceramics:** They are inorganic and non-metallic materials that are essential to our daily lifestyle. Ceramics are corrosion-resistant, hard, and brittle. The majority of ceramics are also excellent insulators and can withstand high temperatures.
- Ceramic radomes also play an important role in signal transmission and reception. They help to reduce signal loss and distortion, improving radar performance and accuracy.
- Ceramic radomes are used in various industries, including aerospace, defense, and telecommunications, where high-performance radars are required.

About Ceramic Radome Technology

- It is regarded as an essential, state-of-the-art technology for ballistic and tactical missiles and high-performance aircraft.
- Missiles undergo extremely high surface temperatures while travelling through the atmosphere, and while re-entering it from space.
- To withstand those temperatures, radomes located at the tip of a missile are made of ceramic.
- It has been developed indigenously by Research Centre Imarat (RCI), one of the premier DRDO labs in the Dr APJ Abdul Kalam Missile Complex.

Oumuamua

Scientists think they have explained the unexpected behaviour of Oumuamua (1st known interstellar object).

About Oumuamua

- It is the first confirmed object from another star (interstellar object) to visit our solar system.
- It was discovered in 2017, by the NASA's Near-Earth Object Observations (NEOO) Program funded Pan-STARRS1 telescope.
- Two of NASA's space telescopes (Hubble and Spitzer) tracked the object traveling about 85,700 miles per hour.
- The object was dubbed as 'Oumuamua' which means "a messenger that reaches out from the distant past" in Hawaiian.

Features

- It was Initially assumed to be a comet, then it was reclassified as an asteroid.
- Oumuamua is dense, composed of rock and possibly metals, has no water or ice, and that its surface was reddened due to the effects of irradiation from cosmic rays over hundreds of millions of years.
- Its trajectory (hyperbolic orbit) indicated that it had come from another solar system, traveling through the Milky Way galaxy for hundreds of millions of years before encountering our sun.

Arudhra Radar

The Defence Ministry signed two contracts with Bharat Electronics Limited (BEL) for Arudhra radar for the Indian Air Force (IAF).

About Arudhra Radar

- It is a **Medium Power Radar (MPR)** designed and developed by DRDO.
- It will be manufactured by Bharat Electronics Limited (BEL).

Features

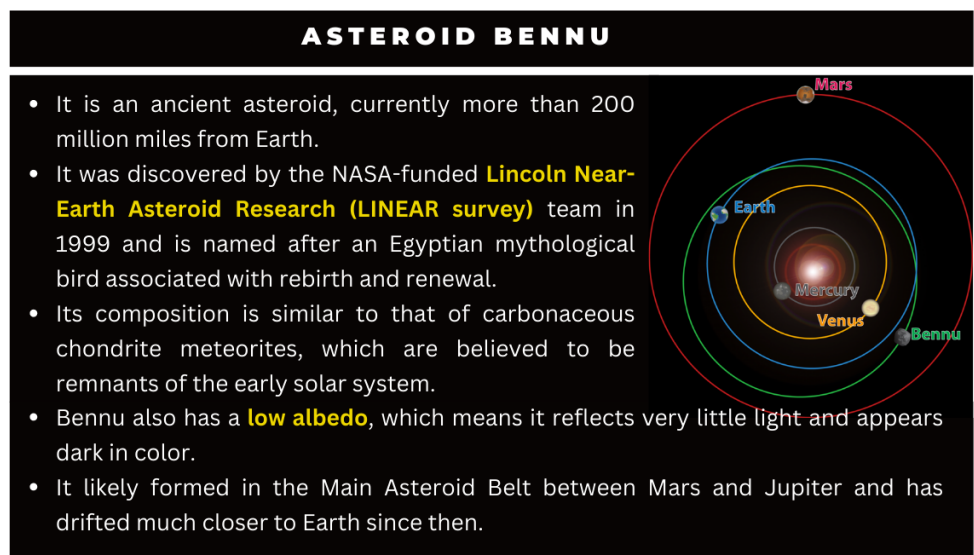
- Arudhra being a 4D multifunction radar, can determine the following four parameters:
 - ✓ range (straight distance from radar),
 - ✓ azimuth (angular position from a reference direction),
 - ✓ altitude (distance from the ground) and
 - ✓ velocity vector (representation of the direction of motion) of a target.
- The system has an instrumented range of 400 Km and have range with the altitude coverage from 100 meters to 30 Kms.
- The transceiver modules (TRM) are based on the antenna array itself, leading to high receiver sensitivity, enabling the radar to detect low observable targets at a long range.
- MPR technology can be to be used for any ship borne radar applications. The technology will be used for mountain radar. Presently MPR technology is used for similar class of radars for Indian Army.

OSIRIS-REx Mission

NASA is preparing for the finale of the OSIRIS-REx mission, it will reach on earth in September 2023.

About OSIRIS-REx Mission

- It stands for Origins, Spectral Interpretation, Resource Identification, Security-Regolith Explorer.
- It was launched in 2016, as the 1st-ever return-sample mission by NASA to collect surface and dust particles (extra-terrestrial material) from asteroid Benu.
- In October 2020, the spacecraft successfully completed a "Touch-And-Go" (TAG) manoeuvre, where it briefly touched down on the asteroid's surface to collect a sample of regolith, the loose surface material on the asteroid.
 - Regolith is a mixture of rocky debris and dust.
- It will help scientists investigate how planets formed and how life began, as well as improve our understanding of asteroids that could impact Earth.



PALM 400 Drones

The Indian army has tested the prototype version of the PALM-400 drones successfully.

About PALM 400 Drones

- It is a long-range, high-precision loitering munition system acronym for '**Precision Attack Loitering Munition**'. The system is broadly defined as the armed Remotely piloted vehicle (RPV).
- It is the result of a joint venture between AVision Systems (Israel), UVision Air Ltd, and Aditya Precitech Private Ltd (APPL).
- It is built to fly over areas where armoured vehicles are concentrated or are anticipated.

Features

- It has a range of more than 100 km and travels at a speed 90 to 260 km/h.
- It has been equipped with next-generation dual electro-optical and infrared cameras to detect and engage targets both during the day and at night.
- It uses complex navigational techniques that enable it to function even in environments where the GPS has been disabled.
- It can loiter above a target in stealth mode, collect information, and immediately strike at time-sensitive threats.
- In addition to their intelligence, surveillance, target acquisition, and reconnaissance (**ISTAR**) capabilities, the RPVs can also play a critical role in providing military logistic support.

TRAPPIST-1 b

James Webb Space Telescope has found that TRAPPIST-1 b does not have any significant atmosphere as most observations were predicting that it may have a substantial atmosphere.

About TRAPPIST-1 b

- TRAPPIST-1 b is one of the **seven exoplanets** that orbit the ultra-cool **dwarf star TRAPPIST-1**, located about 40 light-years away from Earth in the constellation **Aquarius**.
- TRAPPIST-1 b was the first exoplanet to be discovered in the TRAPPIST-1 system.
- It has 1.4 times the mass and 1.1 times the radius of Earth. This means TRAPPIST-1 b has a radius similar to Earth's, but it is much denser, suggesting that it may have a large iron core.
- It receives about four times the amount of energy that Earth gets from the Sun.
- It is tidally locked, meaning that one side of the planet always faces the star, and one side looks away.

Piezoelectric Effect

A pair of chemists at Michigan State University has observed the **piezoelectric effect in liquids** for the 1st time.

About Piezoelectric Effect (Conversion Of Kinetic Or Mechanical Energy Into Electrical Energy)

- It is a phenomenon where specific types of material (Piezoelectric Materials) e.g., quartz, topaz, etc. produce an electric charge proportional to the mechanical stress applied to them.
 - Piezoelectric Materials are materials that can produce electricity due to mechanical stress, such as compression. All piezoelectric materials are non-conductive in order for the piezoelectric effect to occur and work.
- This effect has only been expected in solids thus far because the body being squeezed needs to have an organised structure, like pyramids of quartz.
- Liquids don't have such structure. Instead, they take shape of their container.

Applications of Piezoelectric Effect

- The sonar device is the first practical application for piezoelectric devices.
- High voltage generators, electronic frequency generators, microbalances, inkjet printers are using piezoelectric technology.
- Piezoelectric sensors can be used to measure pressure, force, acceleration, and temperature, and are commonly found in devices such as microphones, accelerometers, and ultrasound machines.
- Piezoelectric actuators, which can convert electrical energy into mechanical energy, are used in precision positioning and control systems.
- It is also the basis of several scientific instrumental techniques with atomic resolution, such as scanning tunnelling microscopes.

Significance Of This Discovery

- The researchers suggest that liquid piezoelectric materials could prove to be useful because they would be more environmentally friendly than solid materials.
- They also note that liquid piezoelectric materials could allow more variety in device shape, opening wider design opportunities.

Role Of Sodium In Human Body

Sodium is one of the body's electrolytes, which are minerals that the body needs in relatively large amounts. Electrolytes carry an electric charge when dissolved in body fluids such as blood.

Effects of Sodium Deficiency	Importance if taken Within Limit (about 500 mg of sodium daily)	Adverse effects if consumed Beyond Limit
Hyponatremia: when there are low sodium levels in the blood. It can lead to lethargy, confusion, fatigue, and other symptoms.	1) Maintains fluid levels in the body, and maintain blood pressure by attracting and retaining water and minerals. 2) Conducts nerve impulses, contract and relax muscles.	Too much sodium in the diet can lead to high blood pressure, heart disease, and stroke. It can also cause calcium losses, some of which may be pulled from bone.

H3N2 Virus (Hong Kong flu & subtype of the Influenza A virus)

H3N2 and H1N1 Virus Differences

H1N1 (Swine Flu)

It originally emerged in pigs and was transmitted to humans.

H1N1 tends to affect younger people

H1N1 has been associated with more severe respiratory symptoms, such as cough and shortness of breath

H3N2 (Hong Kong Flu)

It is believed to have originated in birds, Swines and was later transmitted to humans.

while H3N2 is more common in older adults. However, the current one is commonly seen in younger populations

H3N2, on the other hand, may cause more severe muscle aches and fever.

Both can be treated by antiviral medications. H1N1 and H3N2 both can be fatal if immunity is compromised, especially in uncontrolled diabetes and those who have undergone an organ transplant.

Whole Genome Amplification (WGA)

- It is a technology for **non-selective amplification** of the **whole genome sequence** in order to generate enough material for downstream applications such as sequencing, genotyping, or microarray analysis along with comprehensive genome research.

- Genome is the complete set of genes or genetic material present in a cell or organism.
- It is especially suitable for forensic identification and genetic disease and cancer research.
- WGA can be used to **amplify DNA** from small amounts of tissue, such as single cells, which is useful in studying rare mutations or genetic heterogeneity within a tissue sample.
- WGA can also be used to amplify DNA from degraded or ancient samples, which can help in understanding evolutionary relationships or ancient human migrations.

JANUS-1

- World's 1st **Cloud-Built Demonstration Satellite** called JANUS-1 launched successfully.
- It was fully conceived, designed, and manufactured with Antaris' end-to-end **cloud platform**.
- It was launched from the Satish Dhawan Space Centre under a commercial arrangement with New Space India Limited (NSIL).
- The first cloud-based satellite means one can access the data of JANUS-1 satellite from the **cloud of Antaris (Indian company)**.
- It will perform internet of things (IoT) communications, advanced experimental laser communications, radio communications, and machine learning (ML) during orbit.

Mission Daksha for 360- Degree Watch Of Skies

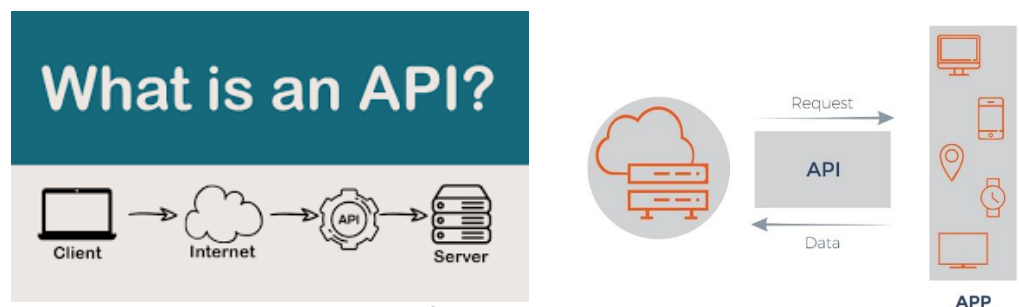
- Physical Research Laboratory, Tata Institute of Fundamental Research, Raman Research Institute and the other scientific institutions involved in the mission known as Daksha.
- It will comprise two broadband satellites orbiting opposite sides of Earth to provide continuous coverage of the entire sky.
- It will study for five years high-energy counterparts to gravitational wave sources, earth occultation imaging, and gamma-ray flashes caused by intense electric fields produced above or inside thunderstorms.

Biotransformation technology in Plastics

- It is a novel approach to processing plastics efficiently and breaking them down (Biodegradable).
- Plastics made using this technology are given a **pre-programmed time** during which they look and feel like conventional plastics without compromising on quality.
- Once the product expires and is exposed to the external environment, it **self-destructs and bio transforms into bioavailable wax**.
- This wax is then consumed by microorganisms, converting waste into water, CO₂, and biomass.

API (Application Programming Interface)

- It is a set of mechanisms that enable two software components to talk or communicate with each other by using certain protocols and definitions.
- Every time we use a rideshare app, send a mobile payment, or change the thermostat temperature from your phone, we're using an API.
- API's structure is usually made up of clients and servers.
- The application that is sending the request is known as the client & the application sending the response is known as the server.



Matua Maha Mela

- Matua Dharma Maha Mela was recently organised to celebrate the 212th birth anniversary of Shri Shri Harichand Thakur - **the founder of the Matua sect.**
- The mela, organised by the All India Matua Mahasangha, has been estimated to be visited by around 45 lakh people during the week.

Harichand Thakur

- He was **born in 1812 in Orakandi in Bangladesh** in a peasant farmer family of the Thakur community (SC community).
- Thakur, whose family were Vaishnavite Hindus, founded a sect of Vaishnavite Hinduism called Matua.
- This was adopted by members of the **Namasudra community**, who were then also known by the common derogatory name of **Chandalas** and considered untouchable.
- The sect, opposed to caste oppression, later attracted adherents from other communities marginalised by the upper castes, including Malis and Telis.
- Harichand Thakur devoted his life to the cause of betterment of the oppressed, downtrodden and deprived people in undivided Bengal during the pre-independence era.
- Thakur's followers consider him God (hence called him Thakur) and an avatar of Vishnu or Krishna. Thus, he came to be known as Sri Sri Harichand Thakur.

Matuas

- Originally from East Pakistan, the Matuas migrated to India during partition and after the creation of Bangladesh.
- However, a sizable number are **yet to get Indian citizenship**. Getting citizenship is one of the long-standing demands of this refugee community.
- The Namasudras (with the Matuas as its biggest group) form one of the largest chunks of SCs in Bengal, comprising 17.4% of the population, behind Rajbanshis (18.4%), as per 2001 Census data.
- **Matua Mahasangha** is a religious reformation movement that originated, around 1860 AD, in modern-day Bangladesh.

Bumchu Festival

- The Bumchu festival was recently held in Sikkim. The festival is celebrated at **Tashiding Monastery** on the 15th day of the first month of the Lunar calendar corresponding to the month of February/March.
- The Bumchu festival commemorates a supernatural occurrence that took place in the 18th century under **Chogyal Chakdor Namgyal**.
- The word 'Bhumchu' means '**sacred pot of water**'. The opening of the vessel containing the holy water is the major highlight of the festival. The level of water in this vessel is believed to be a sign of the fortunes of the coming year.
- If the water level is higher or lower then it signifies ill fortune such as droughts, diseases and natural calamities. But if the water is filled to the brim, then the entire year will be peaceful and prosperous.
- The sacred pot is filled with water from the **River Rathong Chu** and sealed after revealing the state's destiny. And it is opened again next year on the day of the festival.
- The celebrations feature complex rituals, colourful processions, and traditional music and dance displays.

Significance of Tashiding Monastery

- The Tashiding Monastery is believed to be one of the holiest monasteries in Sikkim. Also, it is the centre of the four sacred caves which are Dechenphug, Sharchog Beyphug, Lhari Nyingphug and Khandozangphu.
- Many pilgrims from Sikkim, Bhutan and Nepal come to visit this sacred ceremony and receive the holy water.

Pritzker Architecture Prize

- British architect and urban planner Sir David Chipperfield was recently awarded the 2023 Pritzker Architecture Prize.
- The prize is in recognition of his four-decade practice in Europe, North America, and Asia.
- Mindful of the way architecture contributes to climate change and social inequality, Chipperfield has been an advocate of transforming spaces and reinvigorating cities.
- His famous projects include - the 2012 Architecture Venice Biennale, The Neues Museum in Berlin and Procuratie Vecchie in Venice's iconic St Mark's Square.

Pritzker prize

- The **Pritzker Architecture Prize** is an international architecture award presented annually to honour a living architect or architects.
- Their work should have produced consistent and significant contributions to humanity and built environment through the art of architecture.
- It is the highest international honour for architects and often referred to as the Nobel Prize of Architecture.

Vedic Heritage Portal

- The Vedic Heritage Portal of the **Indira Gandhi National Centre for the Arts (IGNCA)** was recently launched. **Kala Vaibhav, a virtual museum**, built by the IGNCA was also launched at the same event.
- The portal aims to map the Vedic heritage of the country and is a repository of Vedic knowledge and traditions from across the country.
- It is an effort to preserve and promote the 'Vedas', which are an intangible heritage of humanity as per the United Nations Educational, Scientific and Cultural Organization (UNESCO).
- It gives detailed information about oral traditions, textual tradition in form of published books/manuscripts, or implements (yajna-related objects).
- Research articles and lectures on scientific subjects explaining the relevance of 'Vedic knowledge' in the perspective of modern science are also documented.
- Over 550 hours of audio-visual content of more than 18,000 Vedic mantras have been uploaded on the website, prepared in conjunction with people who know Vedas, Vedic research institutes, Vedapathi families and experts from all over the world.
- It is a one-stop solution for researchers who would like to search any information regarding the Vedic heritage. It will also help common people to have a general understanding about the Vedas.

IGNCA

- Established in **1987**, IGNCA is a premier government-funded arts organization in India. It is an autonomous institute under the **Ministry of Culture**.
- It is visualised as a centre encompassing the study and experience of all the arts.

ASI Discovers 1300-Year-Old Buddhist Stupa

- The Archaeological Survey of India (ASI) has discovered a 1,300-year-old stupa in the middle of a mining site in Odisha's Jajpur district, where Khondalite stones are mined.
- The archaeological asset was found at Parabhadi which is situated near **Lalitagiri**, a major Buddhist complex, having many stupas and monasteries.
- The stupa could be 4.5-metre tall and initial assessment showed it may belong to the 7th or 8th century.
- The newly discovered stupa was possibly disfigured in an earlier period. The ASI would now attempt to fully retrieve the structure's archaeological heritage, restore it to original form and undertake protection of the site.

Khondalite Stones

- Khondalite is a foliated **metamorphic rock**, found in the Eastern Ghats between Vijaywada and Cuttack in India. In India, it is also called Bezwada Gneiss and Kailasa Gneiss.
- It was named after the Khond of Odisha and Andhra Pradesh because well-formed examples of the rock were found in the inhabited hills of these regions.
- Khondalite stones were widely used in ancient temple complexes.
- They have been proposed to be used widely to maintain aesthetic value of some projects such as heritage security zone, Jagannath Ballav pilgrim centre, Puri lake development project, Atharnala heritage project and Matha Development Initiative.