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SC Reserves Verdict on Age Cap for Surrogacy

The Supreme Court of India has reserved its verdict on multiple petitions challenging the age restrictions imposed by **the Surrogacy (Regulation) Act, 2021** and **Assisted Reproductive Technology (Regulation) Act, 2021**, especially where the surrogacy process was initiated before the enactment of these laws.

Background - Legal Framework Governing Surrogacy in India

- **The Surrogacy and ART Regulation Acts (2021):**
  - **Objective**: Ban commercial surrogacy and promote altruistic surrogacy only.
  - **Key provisions:**
    - Age limit for intending couples -
      - ✓ Woman: 23–50 years
      - ✓ Man: 26–55 years
    - **For single women**: Only widows/divorcees aged 35–45 eligible.
    - Requirement of **certificate of essentiality**, including proof of infertility, parentage order, surrogate insurance.
- **Purpose of the law:**
  - To prevent commodification of reproductive services.
  - Ensure surrogacy is used only when medically necessary.
  - Based on expert medical advice to safeguard child and mother's health.

The Case Before the Supreme Court

- **Petitioners' arguments:**
  - Couples began fertility procedures before law came into force (Jan 2022).
  - The age bar retroactively disqualifies them mid-process. **For example**, a couple aged 62 and 56 lost their child in 2018; failed embryo transfer in 2022; disqualified due to a new age cap.
  - **Violation of Article 14** (Right to Equality) – arbitrary classification.
  - **Violation of Article 21** – infringement on reproductive autonomy and personal liberty.
  - **No grandfather clause** for transitional protection in law.
- **Broader issues raised:**
  - **Exclusion** of unmarried single women from eligibility is arbitrary.
  - The law's **narrow definition** of "single women" is under constitutional challenge, though not part of current petitions.

Supreme Court's Observations and Government's Stand

- **Government's Defence:**
  - Age limits based on natural reproductive timelines and medical safety.
  - Advanced parental age poses risks to child's health and parenting longevity.
  - Aligns with international best practices.
- **Court's counterpoints:**
  - "Why bar surrogacy when natural geriatric pregnancies are allowed?" (Justice Nagarathna)
  - The court -
    - Questioned the **rational nexus** of age cap with the intent of the Act.
    - Emphasised **lack of compassion** in the law - "Stop, no children! Look how harsh it is."
    - Stressed that the law aims to regulate commercial surrogacy, not to deny genuine parenthood.

Key Constitutional and Ethical Dimensions Involved in the Case:

- **Article 14**: Right to Equality — challenge to arbitrary age-based discrimination.
- **Article 21**: Right to Life and Personal Liberty — includes reproductive rights.
- **State vs. individual autonomy**: Balancing medical regulation and individual choice.
- **Judicial activism**: SC's proactive role in interpreting personal liberty and family rights.
- **Lack of grandfather clause**: Raises concerns on legislative foresight and transitional justice.

Conclusion:

- The Supreme Court's forthcoming verdict will be crucial in determining how laws regulating assisted reproduction balance medical ethics, legislative intent, and individual reproductive rights.
- It may also set a **precedent for future legal treatment** of transitional scenarios and personal autonomy in health-related legislation.

Carriage of Goods by Sea Act, 2025

The President recently gave her assent to the Carriage of Goods by Sea Act, 2025 which seeks to replace a Century-old Law 'the Indian Carriage of Goods by Sea Act, 1925'.

Need for the Act

- **Replaces a Century-old Law:**-The 1925 Act was born in a world where cargo traveled in burlap sacks and wooden crates, ports relied on paper ledgers, and steamships ruled the seas. It was based on colonial-era thinking, focusing on the needs of the early 20th-century British Empire.
  - ➢ Over the decades, global shipping transformed—containerization, electronic documentation, mega-ports, advanced logistics tracking
- **Alignment with Global Practices:** The 1925 Act was based on the *Hague Rules* (1924) and later amendments (*Hague-Visby Rules*, 1968 & 1979). The new Act retains these principles but updates and simplifies them.
  - **Hague Rules were formally titled as** "International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading."
  - Many European and Asian nations adopted newer frameworks like the ***Hamburg Rules (1978)*** or the ***Rotterdam Rules (2008).***
- **Future-ready Provisions:** Simplify and rationalize maritime trade law, improve *ease of doing business* and reduce litigation and make laws "future-ready" and compatible with modern trade agreements (e.g. **Comprehensive Economic and Trade Agreement -** CETA with the UK).

Scope of the Act

It governs carriage of goods by sea **from any port in India to any other port (within or outside India)** and covers contracts evidenced by a **bill of lading** (or similar document of title).

- **Bill of Lading** is a document issued by the freight carrier to the shipper containing details such as type, quantity, condition, and destination of goods. It acts as a proof of receipt and a contract of carriage.

Key Provisions of the Carriage of Goods by Sea Act, 2025

- **Article I (Definitions):** Defines "carrier," "contract of carriage," "goods," "ship," and "carriage of goods."
- **Article II (Risks):** Subjects carriers to liabilities and rights under the rules.
- **Adoption of Hague Rules (amended by 1979 Visby Rules):** A globally accepted maritime standard also followed by countries like the United Kingdom to ensure clarity in rights, responsibilities, and liabilities of carriers and shippers.
- **Responsibilities of the Carrier (Article III):** Before and at the commencement of a voyage, the carrier must exercise due diligence to make the ship seaworthy, properly *man, equip, and supply* the ship, ensure that cargo

spaces are fit for the goods, handle, stow, carry, and deliver the goods properly, and issue accurate bills of lading, remaining liable for any loss or damage except in specified exempted cases.

- **Rights & Immunities of the Carrier (Article IV):** A carrier is not liable for loss or damage arising from crew navigational errors, fire (unless due to the carrier's fault), perils of the sea, acts of God, war, public enemies, quarantine restrictions, strikes, riots, inherent defects in goods, inadequate packing or marking, and other causes beyond their control, with the burden of proof on the carrier.
    - Liability is limited to 666.67 SDR (Special Drawing Rights) per package or 2 SDR per kg of gross weight, whichever is higher, unless the damage was caused intentionally or recklessly.

➢ **Special Rules**: For bulk cargo, the carrier is not liable for recorded weight certified by a third party; undisclosed dangerous goods may be destroyed or discharged without compensation; and special agreements may be made for non-standard shipments using non-negotiable receipts instead of bills of lading.

➢ **Powers of the Central Government:** It may issue directions for implementation, amend the schedule through notifications laid before Parliament, and remove operational difficulties within two years of the Act's commencement.

➢ **Repeal and Savings:** Repeals the 1925 Act, preserves rights, obligations, and actions under the old law and references to the old Act in other laws now read as references to the new Act.

Significance of the Act	Concerns Raised
✓ **Trade facilitation:** Simplified rules to reduce disputes and delays. ✓ **Global competitiveness:** Brings India's shipping law in line with international norms. ✓ **Investor confidence:** Clearer liability rules encourage participation in maritime trade. ✓ **Modernization:** Eliminates obsolete provisions, aligns with current shipping practices. ✓ **Digital Trade Readiness:** Supports shift to e-commerce and digital documentation in logistics, (e.g., e-bills of lading)	• **Maritime Security Risks:** There is fear that updated shipping laws might not be enough to prevent threats to national security at sea. • **Smuggling Risks:** the possibility of misuse of shipping channels for illegal trade and the need for strong preventive measures. • **International Harmonization:** Balancing with conventions like Hamburg Rules (1978) or Rotterdam Rules (2008), which India hasn't fully adopted.

Telecommunications (Telecom Cyber Security) Amendment Rules, 2025

The draft Telecommunications (Telecom Cyber Security) Amendment Rules, 2025 from the Department of Telecommunications (DoT) have raised concerns among tech firms over regulatory overreach and the high compliance costs they could incur.

About Draft Telecommunications (Telecom Cyber Security) Amendment Rules, 2025

The draft rules propose changes to the **Telecom Cyber Security Rules, 2024** to curb fraud and strengthen security involving mobile numbers.

- The 2024 Rules primarily targeted licensed telecom entities, mandating incident reporting within six hours and compliance with **standards like ISO/IEC 27001.**

Objectives

- **Combat digital fraud** and impersonation using mobile numbers.
- **Enable secure validation** of mobile numbers through a centralized **Mobile Number Verification (MNV) platform** run by licensed telecom operators or authorized entities.
- **Extend cyber security safeguards** beyond telecom operators to entities heavily dependent on mobile numbers for service delivery.
- **Create a shared fraud prevention infrastructure** for public and private sector organization.

Key Provisions

- **Telecommunication Identifier User Entity (TIUE):** The rules define a TIUE as any person or organization (except licensed telecom operators and authorized telecom service providers) that uses telecom identifiers (like mobile numbers, SIM IDs, IMEIs (International Mobile Equipment Identity)) to identify or authenticate customers or deliver services.

✓**Creation of Mobile Number Verification (MNV) Platform (Rule 7A)**: by the government or its authorized agency to validate telecom identifiers for cyber security purposes. TIUEs, authorized entities, and government bodies may use it voluntarily or when directed, by paying prescribed fees. Validation requests will be routed to licensed operators, who will confirm whether the identifiers match user records. All parties are required to follow applicable data protection laws.

- **Pricing Model for MNV:** The rules exempt government departments and statutory bodies from charges. TIUEs validating numbers under government direction pay ₹1.50 per request (₹1 to the validating entity, ₹0.50 to the government). Private TIUEs making independent requests pay ₹3 per request (₹2 to the validating entity, ₹1 to the government).
- **Powers to Suspend or Restrict Telecom Identifiers:** In urgent public interest cases, the government may order

Potential Benefits	Concerns Raised Regarding the Rules
• **Stronger Fraud Prevention:** MNV could significantly reduce SIM swap fraud, use of spoofed or non-existent numbers in banking/UPI and fake accounts on e-commerce and social platforms. IMEI checks could curb stolen or cloned device circulation. • **Enhanced Law Enforcement Capability:** with broader power to trace fraudulent identifiers across telecom and non-telecom domains and faster cross-sector information sharing to block fraud at multiple points (bank, telecom, e-commerce). • **Safer Digital Ecosystem:** Mandatory validation could build trust in digital transactions, encouraging wider adoption of UPI, online banking, and e-governance. • **Deterrence Effect**: Fraudsters knowing that every number is traceable and linked to verified KYC may avoid targeting Indian platforms. • **Consumer Protection:** It may prevent new SIM holders from being penalized for the past fraudulent use of recycled numbers, as the history of deactivated numbers is deleted after 90 days.	○ **Regulatory Overreach & Jurisdiction Issues:** The broad definition of TIUE covers almost all digital platforms, even non-telecom entities exceeding DoT's mandate under the Telecommunications Act, 2023. This creates potential jurisdictional overlaps with regulators like MeitY, RBI, IRDAI, SEBI, and TRAI, risking conflicting compliance requirements. ○ **Cost burden: Per-request fees** may appear small but can **accumulate to millions annually** for large-volume platforms like banks, e-commerce firms, and payment apps. Smaller firms like **MSMEs & Startups** with limited margins could face disproportionate costs, forcing them to pass expenses to customers or cut services. • Example: A delivery platform with 1 crore number validations annually could face an additional **₹30 crore cost**. ○ **Disruption to User Experience:** Many Indian households, low-income families, and migrant workers share mobile numbers. MNV may flag such cases as "suspicious," blocking access to banking, welfare, or healthcare services. Banks or apps may start insisting on "one number per account" to avoid repeated fees, breaking shared-access models (e.g., a child using a parent's phone for school apps). ○ **Privacy & Data Protection Concerns**: Power to demand detailed customer-identifier data from TIUEs and even non-telecom entities could lead to **over-collection** and misuse of personal data. The scope for "fishing expeditions" exists since the rules don't strictly limit requests to targeted investigations. ○ **Risk of Wrongful Blocking**: MNV's reliance on telecom databases may incorrectly flag numbers as fraudulent due to database errors, recycled numbers, or outdated KYC records. As per officials, once flagged, numbers can be suspended for **90 days**, disrupting critical services for genuine users. ○ **IMEI Database Concerns:** Mandatory checks before selling/buying used devices may slow down the secondary market.

International Perspective

India's 2025 rules draw from global standards but lag in some areas:

✓ **Comparison with Standards**: India refers to ISO/IEC 27001 for security practices, similar to EU's NIS2 Directive, which mandates incident reporting and risk management for critical sectors. However, India's lack of mandatory judicial oversight contrasts with GDPR's (General Data Protection Regulation) privacy-by-design approach.

Way Forward

- **Narrow the TIUE Definition:** Limit the scope to high-risk sectors (like fintech and e-governance) rather than covering all digital platforms, to avoid unnecessary compliance for low-risk entities.
- **Clarify Jurisdiction & Coordination:** Establish clear boundaries between DoT, MeitY, RBI, IRDAI, SEBI, and TRAI to prevent regulatory overlap and conflicting mandates.
- **Cost Mitigation for Businesses:** Introduce caps, tiered pricing, or subsidies for startups, MSMEs, and high-volume platforms to reduce operational burdens.
- **Data Privacy & Security Safeguards:** Include explicit provisions for encryption, limited data retention, and independent audits to protect user information in line with the Digital Personal Data Protection Act.
- **Optional Adoption with Gradual Expansion:** Begin with voluntary adoption in select sectors, monitor impact, and phase in mandatory use based on risk assessment.
- **Public Awareness & Digital Inclusion:** Launch awareness campaigns and provide low-cost or shared mobile solutions to prevent exclusion of low-income, rural, and digitally dependent households.
- **Robust Grievance Redressal:** Create a quick-response mechanism for wrongly flagged or deactivated numbers to minimize disruption to essential services.

telecom entities and TIUEs to immediately suspend use of a specific telecom identifier without prior notice, recording its reasons for doing so. The government can also modify the order to permanently disconnect or restrict its use for customer identification or service delivery.

- **Data Sharing and Compliance Obligations:** TIUEs must provide, on government direction, data related to telecom identifiers in digital form for processing and storage. This data may include transaction history linked to the number, verification logs and linked user identity information. Power extends to authorized agencies and law enforcement to obtain transaction details from non-telecom entities.
- **Database for IMEI Number Security**: The rules empower the government to direct telecom equipment makers to assist in cases of tampered IMEIs and prevent reuse of existing IMEIs on new devices. A centralized database of tampered/restricted IMEIs has also been proposed requiring buyers and sellers of used telecom equipment to verify IMEIs online for a ₹10 fee before sale or purchase.

National Anti-Doping Amendment Bill 2025

The Parliament passed the National Anti-Doping (Amendment) Bill, 2025.

What is the National Anti-Doping (Amendment) Bill, 2025?

The 2025 bill seeks to amend the **National Anti-Doping Act, 2022**, which had established the **National Anti-Doping Agency (NADA)** and the ***National Board for Anti-Doping in Sports*** to implement India's obligations under the **UNESCO International Convention against Doping in Sport**. The law prohibits doping, provides a legal framework for testing, enforcement, and adjudication, and aligns India's anti-doping regime with the **World Anti-Doping Code (WADA Code)**.

- ✓ Doping refers to the use of certain **prohibited substances or methods** by athletes to enhance their performance.
- ✓ WADA Code is the core document that **harmonizes anti-doping policies, rules and regulations** within sport organizations.

Objectives of the 2025 Bill

- ✓**Enhance institutional and operational independence** of NADA and the Appeal Panel.
- ✓**Strengthen compliance** with the WADA Code and its International Standards.
- ✓**Transfer certain powers to the central government** for efficiency and to meet WADA requirements.
- ✓**Improve procedural clarity** in appeals, testing, and result management.
- ✓**Mandate global standards** for dope testing laboratories.

NADA (under Ministry of Youth Affairs & Sports) is a statutory body established under the National Anti-Doping Act, 2022 for regulating anti-doping activities in sports. Headquartered in New Delhi, NADA is headed by a Director General appointed by the Central Government (for a 3-year term which is extendable).

Key Amendments Proposed in the Bill Compared to the 2022 Act

Provision	Amendment
Definitions	**2022 Act**: Did not define terms such as "Anti-Doping Organization", "marker", or "metabolite". **2025 Amendment Bill**: Adds definitions for "Anti-Doping Organization" (including NADA and other national/international agencies), "marker" (biological indicator of doping), and "metabolite" (any substance produced by a biotransformation process). • Expands/updates definitions of "doping control", "out-of-competition testing", and broadens "athlete support personnel" to include parents.

Application of WADA Code	**2022 Act**: contained its own list of definitions, anti-doping rule violations, and procedural rules; it did not directly incorporate the **WADA Code**. **2025 Amendment Bill:** Specific provisions of the **WADA Code-** including definitions like "whereabouts failure by an athlete" and the full list of anti-doping rule violations- are now incorporated into a **Schedule** of the Act with **statutory force**. • The Central Government is empowered to update this Schedule to reflect amendments to the Code, ensuring automatic alignment with global standards.
Appeal Panel Constitution	**2022 Act**: The **National Board for Anti-Doping in Sports** had the authority to constitute the **Appeal Panel**, which hears appeals against the decisions of the Disciplinary Panel. The Board also determined the manner and procedure for filing and hearing appeals through its regulations. **2025 Amendment Bill:** The **power to constitute the Appeal Panel** and **prescribe appeal procedures** is transferred *from the National Board to the* ***Central Government***. This centralizes authority over appeal mechanisms, aligning with WADA's emphasis on independence and uniformity. • **Appeal Panel is composed of a Chairperson (**Retired High Court Judge), **Vice-Chairperson (**Legal expert with ≥10 years' practice) and four members- ✓Two doctors (≥10 years' practice) and two retired eminent athletes/sports administrators (≥10 years' experience). ✓**Appointment** is for a 2-year term; reappointment is allowed.
Autonomy of Anti-Doping Bodies	**2022 Act**: The National Board could require information from the Disciplinary Panel and Appeal Panel regarding their operations and issue directions to ensure effective functioning. **2025 Amendment Bill:** The Board's powers to seek operational information or issue directions to these panels have been **removed**. The **Director General** of NADA and its staff are granted **full operational independence** from national/international sports federations; Olympic/Paralympic Committees; government departments, and any other sports or anti-doping agency. This is intended to reduce external interference.
Terminology Changes	**2022 Act:** The law used the term **"Therapeutic Exemption"** for permission to use a prohibited substance for medical reasons. **2025 Amendment Bill**: Updated to **"Therapeutic Use Exemption (TUE)"** to match the terminology used in the WADA Code and its International Standard for Therapeutic Use Exemptions.
Procedural Law Reference	**2022 Act**: References investigation powers under the **Code of Criminal Procedure, 1973 (CrPC)**. **2025 Amendment Bill**: Updates references to the **Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS)**, in line with India's new criminal law framework.
Sample Collection Powers	**2022 Act**: NADA could direct an athlete to submit a sample if it believed an anti-doping violation had occurred, *generally within certain procedural limits*. **2025 Amendment Bill**: It clarifies that NADA may **require an athlete to submit samples at any time and at any location** if it has reason to believe a violation has occurred, increasing flexibility for out-of-competition and surprise testing.
Result Review Standards	**2022 Act:** NADA reviewed adverse analytical findings primarily to check for valid therapeutic exemptions or procedural irregularities. **2025 Amendment Bill**: NADA must now verify during result management whether: • the adverse finding was caused by **departure from WADA International Standards** for labs/testing/investigations, • the substance entered the body via a **permitted route**, or

	• there were **other procedural lapses** that could invalidate the result.
Redefined Anti-Doping Rule Violations (ADRVs)	**2022 Act:** Section 4 of the Act listed ADRVs such as the presence of prohibited substances, use/attempted use, possession, and whereabouts failures. **2025 Amendment Bill**: The Bill directly links ADRVs to **Article 2 of the WADA Code**. These now explicitly include: • presence of a prohibited substance, its metabolites, or markers; • use or attempted use of prohibited substance/method; • evasion/refusal/failure to submit to sample collection; • whereabouts failures as per WADA Code; • tampering; possession; trafficking; administration; complicity; prohibited association; and retaliation against whistleblowers.
Right to Appeal to CAS	**2022 Act**: Any person dissatisfied with an Appeal Panel decision could file an appeal to the **Court of Arbitration for Sport (CAS)** in Switzerland. **2025 Amendment Bill**: The right to appeal to CAS is restricted to **specified entities**: **WADA**, the **International Olympic Committee (IOC)**, the **International Paralympic Committee (IPC)**, and the relevant **International Sports Federation**. This limits individual direct access to CAS, focusing on institutional appeals.
Direct Appeal in International Cases	**2022 Act**: The Act did not **explicitly** allow direct appeals to CAS from Disciplinary Panel decisions in international cases. **2025 Amendment Bill**: In cases involving **international-level athletes or events**, direct appeals to CAS are permitted from **Disciplinary Panel** decisions by the affected athlete, NADA, relevant International Federation, WADA, IOC, and IPC. • WADA may also file a direct appeal to CAS against a final NADA decision if no other party has appealed domestically.
Lab Accreditation	**2022 Act**: The Central Government could recognize labs in India for doping control purposes; labs "may" obtain WADA accreditation if required. **2025 Amendment Bill**: All dope testing labs **must** obtain and maintain **WADA accreditation** and comply with the **International Standard for Laboratories**.
Disciplinary Panel Composition	**2022 Act**: Disciplinary Panel required 5 members to be sports administrators with at least **five years' experience** or retired eminent athletes. **2025 Amendment Bill**: Expands eligibility to include those who **have been** sports administrators or athletes, even if not currently active, thus widening the talent pool for panel appointments.

Expected Benefits	Concerns Raised
✓ **Global Compliance:** It aligns India's anti-doping system fully with the **WADA Code** and **International Standards**, and meeting UNESCO Convention obligations. ✓ **Increased Autonomy:** It grants NADA and its panels **operational independence** from sports federations, Olympic bodies, government departments, and other agencies. ✓ **Legal Clarity:** It codifies WADA Code provisions (including anti-doping rule violations) into the **Schedule with force of law**, reducing	• **Centralization of Power:** Transfer of Appeal Panel constitution powers to the **Central Government** could compromise adjudication independence without strong safeguards. • **Restricted CAS Access:** Limits appeals to CAS to specific sports bodies (WADA, IOC, IPC, International Federations), potentially excluding individual athletes from direct recourse. • **Implementation Burden:** Smaller/new laboratories may face difficulty in achieving and maintaining **mandatory**

interpretational ambiguity and strengthening enforcement. ✓ **Better Appeals Structure:** It clearly defines eligible parties for CAS appeals, leading to faster, more consistent dispute resolution. ✓ **Mandatory WADA accreditation** for all Indian dope testing labs ensures globally recognized accuracy, reliability, and credibility of results.	**WADA accreditation**, potentially reducing short-term testing capacity. • **Operational Challenges:** Increased autonomy for NADA requires strong internal governance and accountability mechanisms to avoid misuse or arbitrary decisions. • **Potential Delays in Schedule Updates:** Delays in updating the WADA Code provisions in the Indian Schedule could cause **temporary non-compliance** with global standards, risking disputes or athlete eligibility issues.

Indian Ports Act, 2025

The President recently gave her assent to the Indian Ports Act, 2025.

About Indian Ports Bill, 2025

The act seeks to **repeal the colonial-era Indian Ports Act, 1908** and replace it with a modern framework for port governance by consolidating laws relating to ports, ensuring integrated development, strengthening environmental and safety provisions, and providing clear dispute resolution mechanisms.

Objectives of the Act	Need for the Act
○ Promote **integrated port development** and optimum use of India's coastline. ○ Facilitate **ease of doing business** and investment in the maritime sector. ○ Provide **statutory recognition** to State Maritime Boards (SMBs) and the Maritime State Development Council (MSDC). ○ Strengthen provisions for **safety, navigation, security, and environmental sustainability**. ○ Ensure compliance with **international maritime conventions** (MARPOL, Ballast Water Management, etc.). ○ Establish structured **dispute resolution mechanisms** to reduce litigation. ○ Reposition India's ports sector for **21st-century trade competitiveness**.	• It covers **both major ports** and **non-major ports** while promoting **cooperative federalism** in maritime governance. ○ **Major Ports-** administered by the Centre under the *Major Port Authorities Act, 2021*. ○ **Non-Major Ports-** administered by coastal states. • As of 2023-24, India had **12 major ports** and **217 non-major ports**. Major ports carried **53%** of maritime cargo, while **non-major ports handled 47%-** with Mundra and Sikka alone accounting for **19%** ➢ India is handling 95% of trade by volume and 70% by value through 12 major and 200+ minor ports on key global shipping routes.

Key Provisions of the Act

✓ **Environmental and Safety Provisions**: Ports must follow **MARPOL** and the **Ballast Water Convention**. They are required to provide **waste reception facilities**, prepare **pollution control and disaster management plans**, and undergo **central government audits**. The Act also strengthens rules on **fire safety, vessel navigation, defence cooperation**, and gives explicit powers to manage **oil spills, pollution response, and emergencies**.

✓ "MARPOL Convention" means the International Convention for the Prevention of Pollution from Ships, 1973, including its Protocol of 1978.

✓ "Ballast Water Management Convention" means the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004.

✓ "Water reception facility" means any facility which is fixed, floating or mobile and capable of providing the service of receiving the waste from vessels.

✓**Port Operations & Tariffs:** Tariffs at **major ports** are set by Major Port Authorities, while at **non-major ports** they are set by State Maritime Boards (SMBs) or authorized concessionaires. The **Maritime State Development Council (MSDC)** ensures transparency in tariff setting.

Institutional Framework: The Act provides for the establishment of-

Maritime State Development Council	State Maritime Boards	Dispute Resolution Committee
(MSDC): A statutory apex advisory body, chaired by the Union Minister of Ports, Shipping and Waterways (MoPSW) will be established by the Central Government. **Members**: Coastal state ministers, Navy & Coast Guard officials, Secretary of MoPSW. **Functions**: • Advise on a National Perspective Plan **(NPP)** for ports. • Issue guidelines on port tariffs, transparency, and data management. • Recommend on legal reforms, port efficiency, and connectivity. • Ensure Centre–State coordination and cooperative federalism.	**(SMBs)**: Statutory recognition to SMBs (all coastal states must establish them within 6 months). **Functions**: ○ Develop and regulate non-major ports, ○ License and supervise port infrastructure, ○ Fix tariffs and ensure compliance with safety, security, and environmental norms, ○ Balance ecological and social safeguards with development.	**(DRC):** Every State Government must set up a DRC with at least three members to: ✓ Resolve disputes involving non-major ports, concessionaires, port users, and service providers- unless the parties choose arbitration or another mechanism under their agreement. • Orders are appealable only to the High Court. Civil courts barred from jurisdiction. ✓ Ensure quicker resolution compared to traditional litigation.

✓**Regulation, Security and officers:** Ports need government notification to operate; inactive ports (10+ years) or those posing security risks can be shut. Any change in ownership requires **central clearance**. Key officers include the **Conservator**, who manages vessel movement, anchorage, fire-safety, and *penalties*, and the **Health Officer**, who inspects ships and helps prevent contagious diseases.

✓**Penalties & Offences:** Many offences are decriminalized and attract **monetary fines (₹10,000–₹2 lakh)**, while serious violations may lead to **up to 6 months' imprisonment**. Offences include **endangering vessel safety, unauthorized operations, not reporting pollution, and disobeying DRC orders**.

✓**Miscellaneous Provisions:** Ports must have **emergency response plans** and provide **welfare services for seafarers**. A **Port Community System and Vessel Traffic Services** will be implemented electronically. The Act introduces the **Mega Ports** concept with unclear criteria and ensures compliance with **international conventions**.

Comparison with Indian Ports Act, 1908

Aspect	1908 Act	2025 Act
Scope	All ports and parts of navigable rivers leading to the ports.	Expanded to include all aircrafts, while on water, making use of any part of port.
Bodies	None	MSDC & SMBs established
Port Tariffs	Centre (major) & States (minor)	Same, but with transparency guidelines
Safety	Basic	Expanded to include **environment, security, disaster management**
Disputes	Courts	State-level DRCs
Pollution Control	Limited	Full compliance with **global conventions**
Offences	Mostly criminal	Largely **monetary penalties**, selective imprisonment.

Significance of the Act	Concerns Raised
• **Modernization:** Replaces 117-year-old colonial law with a contemporary legal framework. • **Cooperative federalism:** Balances Centre's strategic role with States' operational control. • **Global alignment:** Brings India in line with **international maritime conventions**. • **Investment friendly:** Enhances transparency, reduces litigation, and encourages PPP investment. • **Environmental sustainability:** Introduces strong provisions for pollution control and disaster preparedness. • **Government emphasis:** "Global green norms" and "disaster readiness" are explicit policy thrusts.	• **Lack of appeal mechanism** against penalties imposed by the conservator (could lead to misuse). • **Conflict of interest:** Conservator may have to penalize supervising authorities. • **Excessive powers of port officers** (entry, inspection) without procedural safeguards under BNSS (risk of misuse). ➢ Port officers such as the conservator and the health officer are granted powers of entry and inspection. • **Unclear criteria for "Mega Ports":** could create confusion. • **State concerns on autonomy:** Fear of **erosion of control over non-major ports**, despite consultation provisions. • **High penalties & imprisonment** may discourage smaller players and fishermen communities.

Draft Energy Conservation (Compliance Enforcement) Rules, 2025

The Ministry of Power released draft Energy Conservation (Compliance Enforcement) Rules, 2025 to enable enforcement of Corporate Average Fuel Efficiency (CAFE) and carbon trading norms notified under the Energy Conservation (Amendment) Act, 2022.

About Energy Conservation (Amendment) Act, 2022

This Act amended the Energy Conservation (EC) Act, 2001 to strengthen India's legal framework for energy efficiency and climate action.

- ✓ The original Energy Conservation Act 2001 ***established the Bureau of Energy Efficiency (BEE)*** as a statutory body under the Ministry of Power to regulate energy consumption, set efficiency standards for appliances, vehicles, industrial units, and buildings.

Objectives of the Act:

- To align with COP-26 climate goals and accelerate India's decarbonization.
- To promote non-fossil fuel energy use and create a legal framework for carbon credit trading.
- To expand the scope of the 2001 Act to cover vehicles, vessels, and green buildings.
- To strengthen the role of the Bureau of Energy Efficiency (BEE) and State agencies.

Key Provisions of the Act:

- **Carbon Credit Trading:** Central Government empowered to notify a Carbon Credit Trading Scheme **(CCTS-in line with *Article 6 of the Paris Agreement*)**; issue and trading of carbon credit certificates authorized.
- **Non-Fossil Energy Obligation:** Designated consumers (industries, transport, commercial buildings) must meet a minimum share of energy use from non-fossil sources.
- **Green Building Code:** Introduced the Energy Conservation and Sustainable Building Code **(ECBC Code)**, covering energy efficiency, renewable energy use, and green standards.
- **Vehicles & Vessels:** Efficiency standards extended to vehicles (under Motor Vehicles Act-**MVA**) and vessels (ships, boats, etc.).
- **Buildings coverage widened:** Energy codes now extend to offices & residential buildings *above 100 kW connected load (or 120 kVA contract demand)*; enables notification of an Energy Conservation & Sustainable Building Code.
- **BEE Council Expansion:** Governing council members increased from 20-26 → 31-37, adding key ministries (transport, steel, civil aviation, etc.).
- **Residential code (Eco-Niwas Samhita, now ENS-2024 consolidated):** integrates building envelope + electro-mechanical + RE systems with broader sustainability features (enabled by the 2022 amendment)
- **Penalties Strengthened:**
  - ₹25,000 per vehicle (if shortfall ≤ 0.2 litre/100 km).
  - ₹50,000 per vehicle (if shortfall > 0.2 litre/100 km).
  - Industries/vessels → penalty up to twice the cost of excess energy used.
- **State Role:** Mandated State Energy Conservation Funds; State Electricity Regulatory Commissions (SERCs) empowered to frame regulations for enforcement of the act.

Draft Energy Conservation (Compliance Enforcement) Rules, 2025

These rules lay down the **legal mechanism** to ensure that manufacturers, importers, industries, and designated consumers comply with **energy efficiency standards** (like appliance star ratings, vehicle fuel efficiency norms, carbon credit obligations, and non-fossil fuel usage) under the EC (Amendment) Act, 2022.

Objectives

- **Strengthen enforcement** of the Energy Conservation Act, 2001.
- **Empower BEE** beyond data collection.
- **Provide clear jurisdiction** for adjudication of non-compliance (appliances, vehicles, industries, non-fossil obligations).
- **Streamline penalty collection and sharing**.
- **Support India's climate goals** by making energy efficiency compliance **legally binding**.

Key Rules

- **Applicability:** The draft rules apply to a wide range of entities: persons covered under **Section 13A** (obligated entities), manufacturers or importers of appliances, equipment, and vehicles and **Designated Consumers (DCs)** such as energy-intensive industries, large establishments under Section 14, and those bound by non-fossil fuel consumption obligations under the EC (Amendment) Act, 2022.
- **Role of BEE**: It will serve as the central authority for compliance enforcement and can act against automakers failing CAFE II norms and enforce other schemes like the CCTS.
- **Norms and Standards:** Compliance will be judged only against the **Central Government's prescribed standards**. In cases of shortfall (termed "underachievement"), only central norms will apply; state standards under SERCs will not be added cumulatively, ensuring uniformity across the country.
- **Reporting & Verification:** All covered entities must periodically **submit compliance reports** to BEE which will then **verify, assess, and certify** the information through the Central Government, forming the basis for identifying violations.
- **Jurisdiction for Adjudication:** Adjudication depends on the entity type and location i.e.:
  - **For Appliances and Vehicles-** Adjudicating Officer of the State Commission where the manufacturer/importer's head office is based;
  - **For Industries-** Adjudicating Officer of the State Commission where the establishment is located;
  - **For Non-fossil Fuel Obligations-** Adjudicating Officer of the State Commission where the industry/establishment is located, or the head office if compliance is handled at the holding company level.
- **Penalties & Fund Allocation:** All penalties will be deposited into the **Central Energy Conservation Fund**. Of this, **90% will go to the concerned State's Consolidated Fund** and **10% will be retained by the Centre**. In case of vehicles or appliances, the state share is distributed proportionately based on sales in each state.
- **Penalty Procedure:** BEE (directly or through agencies) will verify compliance, issue notices to violators, and authorize representatives to present cases before the Adjudicating Officer appointed by the SERC who will then conduct proceedings and impose penalties under **Section 26 of the EC (Amendment) Act, 2022**.

Significance of the Rules	Concerns Raised
• **Legal Enforcement of Efficiency Targets:** moves from policy guidance to enforceable law. • **Greater Role for States:** financial incentive (90% penalty share) motivates stricter local enforcement. • **Transparency & Accountability:** clear process of detection, verification, adjudication. • **Industry Compliance Pressure:** automakers, appliance makers, and large industries face real financial penalties for shortfalls.	• **Industry Pushback:** Automakers contest huge penalties (₹7,000+ crore) and unfair application of norms retroactively. • **High Penalty Burden:** Heavy fines (₹25,000-50,000 per vehicle + daily charges) may hurt industry and raise prices. • **Jurisdictional Complexities:** Multiple SERCs risk uneven enforcement and disputes over Headquarters vs. factory jurisdiction. • **Implementation Capacity:** BEE and states may lack adequate infrastructure and manpower for effective enforcement.

• **Climate Commitments:** supports India's **Net Zero 2070** pathway and energy transition. • **Consumer Protection:** ensures products sold meet declared efficiency standards.	• **Data Accuracy Issues:** Over-reliance on company-submitted reports risks misreporting and manipulation. • **Delay in Reporting:** Past delays (e.g., FY 2022-23 CAFE report) raise doubts over timeliness and transparency.

Promotion & Regulation of Online Gaming Act, 2025

The President gave her assent to the Promotion and Regulation of Online Gaming Act, 2025.

Promotion and Regulation of Online Gaming Act, 2025

The new act seeks to protect citizens from the harms of online money games while guiding the digital economy towards safe growth by imposing a **blanket nationwide ban** on **Real Money Gaming (RMG)** platforms like Dream11. At the same time, it **promotes and regulates E-Sports and Online Social Games**.

- **Esports**: refers to competitive digital sports where teams or individuals participate in organized tournaments and success requires strategy, coordination, and advanced decision-making skills. Eg: League of Legends, or PUBG Mobile.
- **Online Social Games**: are primarily skill-based and designed for entertainment, learning, or social interaction. Such games are generally considered safe and do not cause negative social consequences. Eg: Ludo King.
- **Online Money Games or RMG**: are the ones involving financial stakes, often linked to addiction, losses, and social risks. They are based on chance, skill, or a combination of both. Eg: Rummy Circle, Dream11.

Why Was an Online Gaming Bill Needed?

- **Addiction & Financial Loss**: Online money games like Rummy Circle promote compulsive play, causing huge monetary losses and family distress.
- **Deteriorating Mental Health & Suicides**: due to financial stress from these games. According to a report cited by Electronics and Information Technology Minister, 32 suicides have been reported in the past 31 months due to online money gaming.
- **Fraud & Money Laundering**: Platforms have been misused to launder money and carry out illegal activities. **Illegal market growth of online games** is estimated at **₹8.2 lakh crore**, with offshore betting platforms receiving **1.6 billion Indian visits** in 3 months.
- **National Security Threat**: Some platforms were linked hawala networks, mule accounts, crypto wallets, terror financing and illegal communication.
- **Legal Loopholes**: **Inadequate & fragmented state laws**; courts' "game of skill" rulings allowed RMG firms to operate. The act addresses this gap.
- **Promoting Healthy Alternatives**: It encourages e-sports, skill-based social games, and educational games for safe digital engagement.
- **Global Recognition**: WHO classifies gaming disorder as a health condition, highlighting the need for regulation.

Key Provisions of the Act

- **Applicability**: Covers all of India and any online gaming services targeting Indian users, including those operated from abroad.
- **E-sports Promotion**: The Central Government will recognize e-sports as a legitimate sport in India and promote it through setting guidelines and standards for e-sports events, establishing training centers, providing incentives, conducting awareness programs, coordination with states & federations etc.

- **Recognition & Promotion of Online Social Games**: The Central Government will recognize, register, and promote online social games for recreational and educational purposes by creating registration mechanisms, supporting development platforms, ensuring safe access, running awareness programs, coordinating with states and institutions, and taking other necessary measures.
- **Ban on Online Money Games**: It is prohibited for anyone to offer, promote, or engage in online money games (skill, chance or both) (*Section 5)*.
  - Advertising or inducing participation in such games is banned *(Section 6).*
  - Banks & financial institutions must not facilitate any transactions for online money gaming *(Section 7).*
- **Online Gaming Authority**: The Central Government may set up an Authority to regulate online games, classify them, and handle complaints. All game providers must follow its guidelines, and the Government will define its structure, powers, and procedures.
- **Offences & Penalties**:
  - **Offering/operating/participating in RMG**: *For first offence,* up to **3 years' imprisonment or ₹1 crore fine** (or both) and for r*epeat offence,* up to **5 years' imprisonment** + **₹2 crore fine**.
  - **Advertising & promotion** (by influencers, celebrities, platforms, etc.): Up to **2 years' imprisonment** or **₹50 lakh fine or both**.
  - **Financial facilitation (banks, wallets, payment gateways)**: Up to **3 years imprisonment or ₹1 crore fine or both.**
  - **Civil penalties**: Govt. may impose **up to ₹10 lakh** for non-compliance with rules/directions, in addition to criminal liability.
  - **Offences under Section 5 and 7 are cognizable & non-bailable** means police can arrest without a warrant and bail is not a right.
  - Failure to follow directions/orders from the Government or Authority can lead to fines up to ₹10 lakh, suspension/cancellation of registration, or prohibition from offering games, after giving a chance to be heard.
- **Corporate Liability**: Companies and responsible officers can be held liable if offences occur with their consent or negligence, except *independent/non-executive directors not involved in decisions*.
- **Blocking of Online Money Gaming Content:** If sections 5, 6, or 7 are violated, any related online content can be blocked from public access under the IT Act, 2000 (Section 69A).
- **Investigation & Enforcement Powers**: The Central Government can authorize officers to investigate offences, enter physical or digital spaces, search, arrest suspects without a warrant and access electronic records or digital spaces, overriding security if needed.
  - ✓ Arrested individuals must be promptly presented to a magistrate or police.
  - ✓ The **Bharatiya Nagarik Suraksha Sanhita (BNSS) 2023 Act** applies, as far as relevant, to entries, searches, and arrests under this section.
- **Protection from Legal Action:** The Central Government, the Authority, and their officers are protected from legal proceedings for actions taken in good faith under this Act or its rules.
- **Rule-Making Powers**: The Central Government can make rules to implement the Act, covering promotion of e-sports and online social gaming, registration of games, Authority powers, and other necessary matters. All rules must be presented before Parliament, and modifications or annulments by both Houses take effect without affecting prior actions under the rule.

Benefits of the Act	Concerns Raised
• **Boosts the Creative Economy:** by encouraging e-sports and safe online games, generating jobs, encouraging development	• **Overregulation Concerns:** Strict regulations might stifle innovation in the gaming sector and burden small developers with compliance requirements.

of new gaming technologies and platforms and boosting startups. • **Empowers Youth:** by providing safe, skill-building opportunities, fostering confidence, discipline, teamwork, and potential career pathways in gaming. • **Creates a Safer Digital Space:** by protecting families from predatory online money games, reducing addiction, financial loss, ethical practices and social distress. • **Strengthens Global Leadership:** by positioning India as a model for responsible gaming and digital policy, balancing innovation with social protection.	• **Federalism and Legal Overreach Concerns:** Gambling is a ***State Subject***, so central regulation may overstep constitutional limits. Its broad approach could conflict with Supreme Court rulings that classify games like rummy and fantasy sports as skill-based, not gambling. • **Ambiguity in Definitions:** The distinction between skill-based games, e-sports, and money games may remain unclear, leading to confusion and potential misuse. • **Enforcement Challenges:** Monitoring online platforms, especially those based outside India, could be difficult, limiting the effectiveness of the law. • **Privacy and Surveillance Issues:** Provisions allowing authorities to access digital spaces and override security could raise concerns about data privacy and misuse.

Extra Mile: Notable Government Initiatives to Counter Online Gaming Risks

- **Information Technology (IT) Act, 2000 & The IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021:** Online gaming platforms must prevent illegal content, register money games with self-regulatory bodies, and comply with Section 69A for blocking illegal sites. Over 1,500 betting sites/apps were blocked between 2022–2025.
- **Bharatiya Nyaya Sanhita (BNS), 2023:** Penalizes unauthorized betting and cybercrimes with imprisonment (1–7 years) and fines.
- **Integrated Goods and Services Tax Act, 2017 (IGST Act):** Regulates illegal/offshore gaming platforms, ensures registration, and allows blocking of non-compliant platforms while enforcing taxation rules.
- **Consumer Protection Act, 2019:** Prevents misleading or surrogate ads; Central Consumer Protection Authority (CCPA) can investigate, penalize, and restrict celebrity endorsements of betting platforms.
- **Ministry Advisories:** Ministry of Information and Broadcasting (MIB) and Education Ministry have issued guidelines on safe gaming, media reporting, and responsible use by children.
- **Cybercrime Reporting:** National portal (cybercrime.gov.in) and toll-free helpline (1930) enable reporting of online scams and fraud.

Constitution (130th Amendment) Bill, 2025

The Constitution (One Hundred and Thirtieth Amendment) Bill, 2025 recently introduced in the Lok Sabha (LS) was referred to a **Joint Parliamentary Committee (JPC)** for detailed scrutiny along with the Union Territories (Amendment) Bill, 2025, and the Jammu and Kashmir Reorganization (Amendment) Bill, 2025.

✓ A JPC is a parliamentary panel with members from both Houses chosen by LS Speaker and the Rajya Sabha (RS) Chairman, set up for detailed scrutiny of a Bill or subject. It is dissolved after completing its task. For the 130th Amendment Bill, a 31-member JPC has been formed to report before the next session. Its recommendations are persuasive but not binding on the government.

About Constitution (130th Amendment) Bill, 2025

The bill aims to ensure **political integrity** by preventing individuals who are arrested and are in custody from continuing to hold positions as **Prime Minister (PM), Chief Ministers (CMs), or Ministers in the Union or State Governments.**

- ✓ The Union Territories (Amendment) Bill, 2025, and the Jammu and Kashmir Reorganization (Amendment) Bill, 2025 also seek to provide for removal of the CM or any other Minister in the Union Territory and Jammu and Kashmir (J&K) government respectively if arrested and detained in custody on account of serious criminal offences.
- ✓ Currently, the **Constitution of India** has **no provision** that prohibits a Minister or the PM from holding office while in jail.
- ✓ Articles 102 and 191 of the Constitution deal with the disqualification of Members of Parliament (MP) and Members of Legislative Assemblies (MLAs).

Objectives of the Bill

- **Prevent Governance from Jail**
- **Promote Ethical Standards:** To improve moral integrity in public office, reflecting the public's expectation of clean politics.
- **Legislative Clarity:** To codify judicial principles relating to ministerial morality and accountability into constitutional law.
- **Automatic Accountability:** To create a legal mechanism that mandates resignation or removal after **30 consecutive days in custody** for serious criminal offences.

Key Provisions of the Bill

- **Grounds for Removal:** apply to the Prime Minister, Chief Ministers, Union and State Ministers, as well as the Delhi Government. A minister or chief executive will be subject to removal if they are **arrested and detained in custody for 30 consecutive days** in connection with any criminal offence that carries a **punishment of five years or more imprisonment**.
- **Procedure for Removal:**
  - **Union Ministers:** Removed by the President on the advice of the PM by the 31st day of detention. If advice is not given, automatic cessation occurs the next day.
  - **State Ministers:** Removed by the Governor on the advice of the CM under the same mechanism as for Union Ministers.
  - **PM & CMs:** Must resign by the 31st day; failure results in automatic cessation.
- **Re-appointment:** Ministers or chief executives who are released from custody may be **reappointed** to their positions.
- **Territorial Applicability:** The Bill also extends provisions to the **Union Territories** of Delhi, Puducherry, and Jammu & Kashmir through separate, complementary bills.
- **Amends Constitutional Articles:** The Bill seeks to amend following articles to allow for automatic cessation of office under specific circumstances-
  - **Articles 75** (appointment of the PM and Union Ministers) to add Article 75(5A);
  - **Article 164** (appointment of the CM and Ministers to his council) to add Article 164(4A); and
  - **Article 239AA** (pertains to the Union Territory of Delhi) to add Article 239AA(4A).

Potential Benefits	Concerns and Criticisms
• **Codification of judicial principles:** Reinforces Supreme Court (SC) judgments that	• **Presumption of innocence:** Representatives can lose office based on arrest alone, before trial. Arrest does not equate to guilt; This violates their right to life and liberty under **Article 21**.

underscore accountability and constitutional morality. ○ **S.R. Bommai vs Union of India, 1994-** SC stressed that constitutional morality requires integrity and accountability in democratic institutions. ○ **Manoj Narula vs Union of India, 2014:** SC held that ministers facing serious criminal charges should not hold executive power, signaling that morality is central to governance, though it did not mandate automatic removal.	✓ The **Representation of the People Act (RPA), 1951- Section 8** disqualifies anyone convicted and sentenced to **2+ years** from being an MP or MLA for the duration of the sentence plus six years. Existing law applies only to legislators, not ministers. ✓ In the RPA, the yardstick for disqualification is conviction by a court and not mere arrest. • **Executive discretion and politicization:** The removal process could be misused for political gain, with ruling parties shielding allies or targeting opposition leaders through arrests. ✓ The arrest of Jharkhand CM Hemant Soren in 2024 for alleged money laundering sparked debates about politically motivated detentions. • **Inconsistency with legislators:** MPs and MLAs are disqualified only upon conviction, but Ministers face consequences for mere arrest, creating a constitutional asymmetry. ✓ The **Law Commission (1999 & 2014)** and the **Election Commission (2004)** recommended disqualifying a legislator **only after formal court charges**, as only police charges are insufficient, and premature removal violates natural justice principle. • **Revolving door effect:** Ministers can be reappointed after release, creating cycles of instability and uncertainty in governance. • **Broad scope:** Any offense with 5 years or more imprisonment qualifies, which may include relatively minor crimes, risking overreach. • **Constitutional Concerns:** Critics argue the Bill is unconstitutional, anti-federal, undermines separation of powers, and risks creating a "super-Emergency." • **Judicial Caution:** Previous SC rulings has cautioned against using arrests as tools of harassment, warning that prolonged detention should not become punishment, especially amid rising arrests of opposition leaders. ○ *Arnesh Kumar vs State of Bihar, 2014: SC* observed that arrest causes humiliation, curtails freedom, and leaves lasting scars. ○ *Arnab Goswami vs Union of India*, 2020: SC stressed on balancing law enforcement with protection against harassment, noting that even a single day's loss of liberty is too many. ○ *Arvind Kejriwal Vs Directorate of Enforcement, 2024:* SC, while granting bail, referred to a larger Bench questions on whether "need and necessity to arrest" under Prevention of Money Laundering Act, 2002 can be an independent ground to challenge arrests and the parameters for courts to assess it.

Way Forward

- **Link removal to framing of charges** by a competent court, not mere arrest, to filter out frivolous or politically motivated cases.
- **Set up an independent review mechanism** (tribunal/judicial panel) to decide on removal, preventing executive misuse.
- **Provide for interim suspension** of ministerial functions during trial, ensuring governance continues.
- **Narrow the scope of offences** to those involving moral turpitude and corruption, avoiding blanket application to all 5-year offences.
- **Incorporate due process and checks** through JPC review to balance ethical governance with democratic fairness.

Extra Mile: Criminal Cases Against Lawmakers (As of 2024)

- **Prevalence:** 31% of MPs and 29% of MLAs have declared serious criminal charges (offences with 5+ years' imprisonment or non-bailable).
- **Trend:** Share of MPs with serious cases doubled from 14% in 2009 to 31% in 2024.
- **State highlights:** Telangana had the highest share of MPs with cases (71%); Andhra Pradesh had the highest share of MLAs (56%). Uttar Pradesh recorded the highest absolute numbers (34 MPs, 154 MLAs).
- **Party-wise:** BJP had the most MPs with serious cases (63) and 436 MLAs; Congress had 32 MPs and 194 MLAs; smaller parties like RJD and TDP had higher proportions of members with cases (100% of RJD MPs; 61-62% of TDP/RJD MLAs).

Visit of PM of Fiji to India

Prime Minister of Fiji, Sitiveni Rabuka, paid an official visit to India. This was his first visit in his current capacity.

Outcomes of Fiji PM Sitiveni Rabuka's Visit to India

- The leaders celebrated the deep-rooted people-to-people ties, acknowledging the role of over 60,000 Girmitiyas in shaping Fiji's society and economy.
- **Defence & Security**
  - MoU on Defence Cooperation (2017) strengthened → focus on UN peacekeeping, military medicine, maritime security.
  - Defence Wing in Suva to be set up.
  - Cyber Security Training Cell (CSTC) in Fiji.
  - Indian Naval Ship port call planned; ambulances gifted to Fijian Military Forces.
- **Healthcare & Development**
  - MoU for 100-bed Super Specialty Hospital in Suva (largest Indian grant project in Pacific).
  - Expansion of Jan Aushadhi Kendras in Fiji.
  - e-Sanjeevani telemedicine to link India–Fiji.
  - Heal in India: advanced treatment for 10 Fijians annually.
  - 2nd Jaipur Foot Camp to be held in Fiji providing artificial limbs
  - Quick Impact Projects: Tubalevu Village Ground Water Project for clean drinking water.
- **Trade, Economy & Agriculture**
  - MoUs signed: NABARD–Fiji Development Bank, CII–FCEF, BIS–DNTMS, NIELIT–Pacific Polytechnic.
  - Indian ghee gets Fijian market access.
  - Support for sugar sector: **12 agri drones, 2 soil-testing labs**, ITEC expert deputation, training programmes.
  - Supply of 5 MT cowpea seeds for food security.
- **Climate & Energy**
  - Shared commitment to Mission LiFE & Fiji's Blue Pacific 2050 Strategy.
  - Collaboration under ISA, CDRI, GBA.
  - STAR-Centre to be set up at Fiji National University.
  - Focus on scaling biofuels, solar, resilience projects.
- **Culture, Education & People-to-People Ties**
  - Declaration on Migration & Mobility to ease movement of students/professionals.
  - Hindi–Sanskrit teacher deputed to University of Fiji.
  - Training for Fijian Pundits in India; joint celebration of International Geeta Mahotsav 2025.

- Exchange visits: Parliamentary delegation & Great Council of Chiefs (2026).
- Land handover for Indian Chancery in Suva; reciprocal plot for Fiji in New Delhi.

- **Regional & Global Cooperation**
  - Fiji joins Indo-Pacific Oceans Initiative (IPOI), supporting regional maritime security.
    - IPOI was launched by India in November 2019 at the ASEAN-led East Asia Summit (EAS) in Bangkok.
  - Fiji supports India's UNSC permanent membership & candidature (2028–29).
  - Shared voice for Global South → active role in Voice of Global South Summits and DAKSHIN Centre of Excellence.
- **Diplomatic Statement**:
  - India-Fiji Joint Statement on partnership in the spirit of ***Veilomani Dosti***.

Visit of Foreign Minister of China to India

- Chinese Foreign Minister Wang Yi's visit to New Delhi marks the first ministerial-level engagement from China since the two countries agreed in October 2024 to disengage at the border.
- During his meeting with PM Modi, Wang acknowledged that India–China relations have seen "ups and downs", stressing that the lessons learned from past experiences are worth remembering.

Wang Yi's Visit Amid Global Shifts and Renewed Outreach

- In the wake of Donald Trump's election as U.S. President, China braced for potential hostilities, signalling readiness for both friendship or confrontation.
- As Washington imposed tariffs on China, and later on India, Beijing sought to strengthen ties with New Delhi.

- This thaw led to the revival of the **Kailash Mansarovar Yatra** and resumption of **visa issuance to Chinese nationals**.
- Against this backdrop, Chinese Foreign Minister **Wang Yi visited India**, marking a significant gesture of outreach before PM Modi's upcoming visit to Tianjin for the **Shanghai Cooperation Organisation (SCO) summit**.
- Unlike in 2022, Wang secured a meeting with PM Modi during this trip, signalling improved diplomatic engagement between the two Asian giants.

Addressing Trust Deficit in India–China Relations

- The trust deficit between India and China remains a major obstacle despite recent efforts at engagement.
- **Border Tensions -** Repeated Chinese incursions — Depsang (2013), Chumar (2014), Doklam (2017), and the ongoing Ladakh standoff — have eroded confidence.
    - Over 50,000 troops remain deployed in eastern Ladakh, making a time-bound roadmap for de-escalation and de-induction essential.
- **China–Pakistan Nexus** - China's military cooperation with Pakistan, including weapons supply and live intelligence during Operation Sindoor, has deepened Indian security concerns.
- **Water Security Risks** - China's construction of a mega dam on the Yarlung Tsangpo (Brahmaputra) threatens downstream states, raising alarm for India as a lower riparian country.
- **Terrorism Concerns** - India reiterated its strong opposition to cross-border terrorism, recalling that combating terrorism was a core objective of the SCO.
- **Economic Vulnerabilities** - China's export restrictions on rare earths, tunnel boring machines, and fertilisers directly impact India's industrial growth and food security.

Extra Mile: PM Modi's Bilateral Meeting with Chinese President Xi Jinping

- PM Modi met Chinese President Xi Jinping on the sidelines of the **SCO Summit 2025 in Tianjin**, marking Modi's first visit to China in seven years

- Both leaders welcomed the positive momentum since their October 2024 meeting in Kazan and reaffirmed that India and China are development partners, not rivals.
- The meeting came soon after the US imposed 50% tariffs on Indian goods due to India's purchase of Russian oil.
- PM Modi also invited Xi to the 2026 BRICS Summit in India, which Xi welcomed while expressing support for India's BRICS leadership.
- President Xi proposed four suggestions: **strengthen strategic communication & deepen trust, expand cooperation, ensure mutual benefit, and enhance multilateral cooperation**.

State Visit of the President of Philippines to India

- Ferdinand R. Marcos Jr., the President of Philippines, paid a State Visit to India. This was his first visit to India, since assumption of office of the President of the Philippines.
- Coinciding with the visit, India and the Philippines conducted their **first joint sail and naval exercises** in the **disputed South China Sea**, within the Philippines' **exclusive economic zone**.

Key Highlights of the Visit

- **Strategic Partnership Formalised**: India and the Philippines officially elevated their ties to a Strategic Partnership, signalling long-term cooperation in strategic sectors.
- **Plan of Action (2025-2029):** The India-Philippines Strategic Partnership is guided by the Plan of Action (2025-2029) adopted by the two countries.
- **Maritime Security and Defence Dialogue**: Both sides agreed to institutionalise a **Ministerial Defence Dialogue** and enhance defence industry cooperation.
- **BrahMos Expansion and Joint Production**: The Philippines reaffirmed its interest in expanding the BrahMos missile deal and exploring **joint production and co-development**.
- **Philippines' Sovereign Data Cloud Infrastructure**: India to extend support on a pilot project for setting up of Philippines' Sovereign Data Cloud Infrastructure.

- **e-Tourist Visa Facility:** Gratis(free) e-tourist visa facility extended to Filipino nationals for a period of one year (from August 2025)
- **Regional Cooperation in the Indo-Pacific**: India reiterated its support for ASEAN centrality and upheld the 2016 **Arbitral Tribunal ruling on the South China Sea**, aligning with the Philippines' territorial position.
- **Trade and Economic Commitments**: Both leaders pledged to double bilateral trade by 2030 and signed MOUs in pharmaceuticals, digital payments, and green energy.
  - **People-to-People Engagement**: India announced additional ITEC scholarships for Filipino professionals and new youth exchange programs.
  - **Issuance of commemorative stamp**: Joint issuance of commemorative stamp to mark the 75th anniversary of the establishment of India-Philippines Diplomatic Relations.

India – Philippines Bilateral Relation

Background

India and the Philippines established diplomatic relations in 1949.

Over the decades, their engagement has evolved steadily, shaped by shared democratic values, anti-colonial legacies, and an increasing convergence in geopolitical interests.

India's "**Look East**" and now "**Act East**" policy has progressively deepened engagement with Southeast Asian countries, with the Philippines playing an increasingly central role.

Trade and Economic Ties

India and the Philippines signed a Trade Agreement in 1979, but significant bilateral trade growth began after the late 1990s, spurred by India's Look East Policy and the 2009 **India-ASEAN Trade in Goods Agreement**.

Bilateral trade crossed the **USD 3 billion mark for the first time in 2022-23** and reached **USD 3.53 billion in 2023-24**, with India enjoying a trade surplus.

Major Indian exports include **engineering goods, pharmaceuticals, chemicals, automotive parts, and rice**, while key imports from the Philippines include **semiconductors, electrical machinery, ores, and food industry residues**.

The Philippines accounts for nearly **20% of Indian pharma exports to ASEAN**.

Development Cooperation

India has offered several capacity-building and training programmes to the Philippines under the **Indian Technical and Economic Cooperation (ITEC) Programme**.

Both countries cooperate in areas such as disaster relief, humanitarian assistance, and now increasingly in digital infrastructure.

Defence and Maritime Cooperation

In recent years, defence cooperation has emerged as the most dynamic pillar of India-Philippines relations.

In 2022, India secured a landmark **USD 375 million deal to supply BrahMos supersonic cruise missiles** to the Philippine Navy, making it India's first major defence export in Southeast Asia.

India and the Philippines have held joint naval exercises and regular dialogues on maritime security, defense logistics, and military training.

The growing alignment comes amid shared concerns over China's assertiveness in the **South China Sea** and the need for a **rules-based maritime order**.

EDITOR'S CUT

PM Modi's Visit to Japan

- PM Modi paid an official visit to Japan in order to attend for the 15th India-Japan Annual Summit.
- This marks PM Modi's eighth Japan visit. He last attended the Annual Summit in 2018, though he visited Japan for multilateral events like the G20 Osaka (2019) and G7 Hiroshima (2023).

Key Outcome of the Visit

- During the visit, **21 pacts** were concluded, including **six agreements**, **seven MoUs**, and **eight announcements**.
- **Six Key Outcomes**
  - **Investment Target of $68 Billion**
    - Japan will invest 10 trillion Yen (~₹5.96 lakh crore / $68 billion) in India over the next decade.

- ♣ Special focus on linking SMEs and start-ups from both countries.

- o **AI, Semiconductors and Digital Partnership 2.0**
  - ♣ Launch of Economic Security Cooperation Initiative in strategic technologies.
  - ♣ Cooperation prioritises AI, semiconductors, and rare earth minerals.
  - ♣ Implementation of **India–Japan Digital Partnership 2.0** to boost innovation and technology exchange.
- o **Defence and Maritime Security Cooperation**
  - ♣ New Joint Declaration on Security Cooperation provides a framework for deeper defence ties.
  - ♣ Focus on defence industry collaboration and innovation.
  - ♣ Establishment of **first-ever institutionalised dialogue between National Security Advisers (NSAs)** of both countries.
- o **Chandrayaan-5 Space Collaboration**
  - ♣ Agreement signed between ISRO and JAXA to collaborate on the Chandrayaan-5 mission.

- o **Green and Energy Partnerships:** Launch of:
  - ♣ **Joint Credit Mechanism (JCM) for carbon credits** - Under JCM, Japan will invest in low-carbon technologies in India. The resulting emission savings generate carbon credits, which Japan can count toward its national climate goals.

- ♣ Sustainable Fuel Initiative.
- ♣ Battery Supply Chain Partnership.

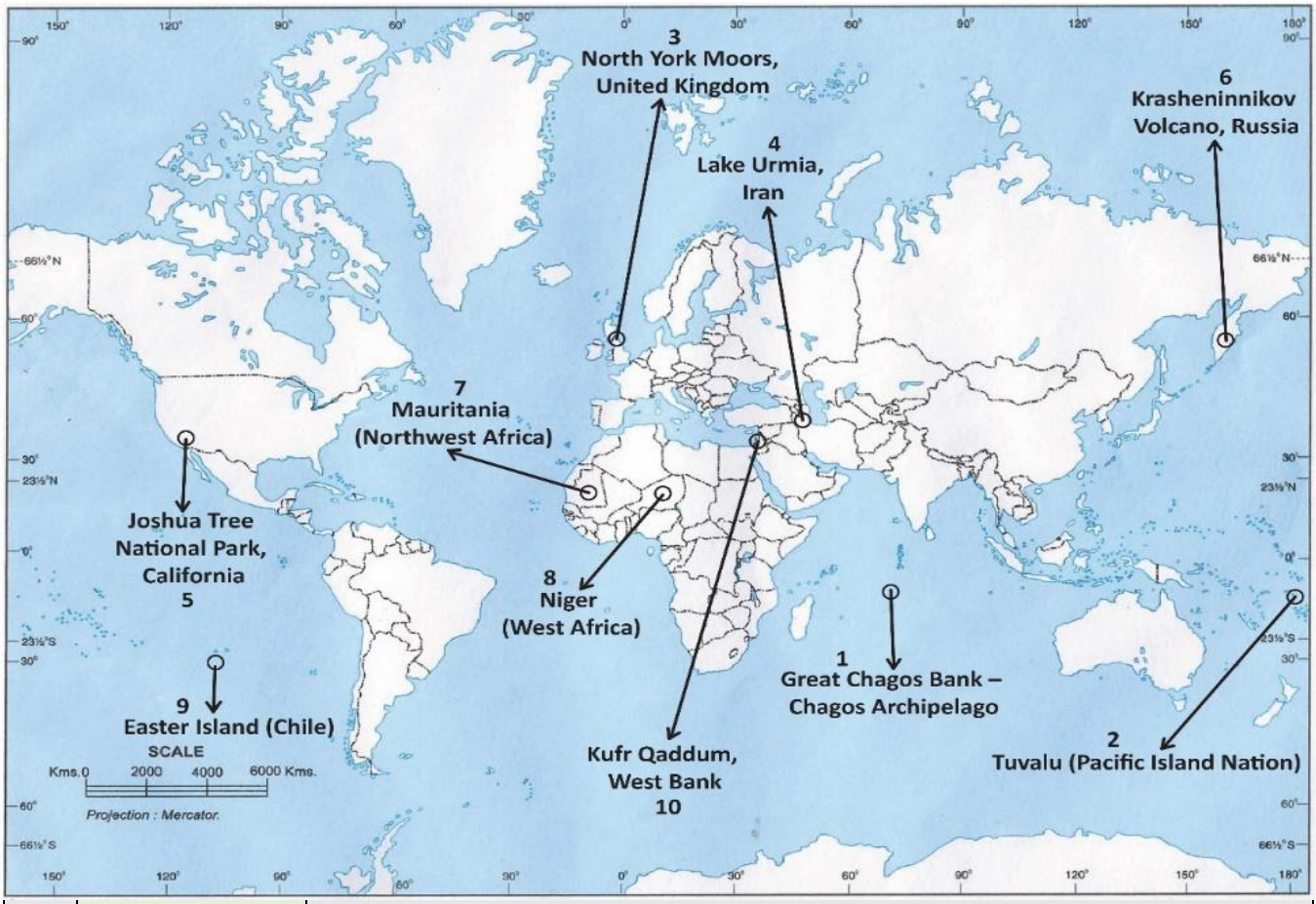
o **Human Resource and People-to-People Exchange**

- ♣ 5 lakh people from both countries to participate in exchange programmes over the next five years.
- ♣ Includes 50,000 skilled Indian workers contributing to Japan's economy.
- ♣ Aims to deepen ties in trade, tourism, education, and culture.

- **Other Agreements**
  - o India-Japan joint vision for the next decade.
  - o Joint declaration of intent on clean Hydrogen and Ammonia

MAPS: PLACES IN NEWS

International Places in News

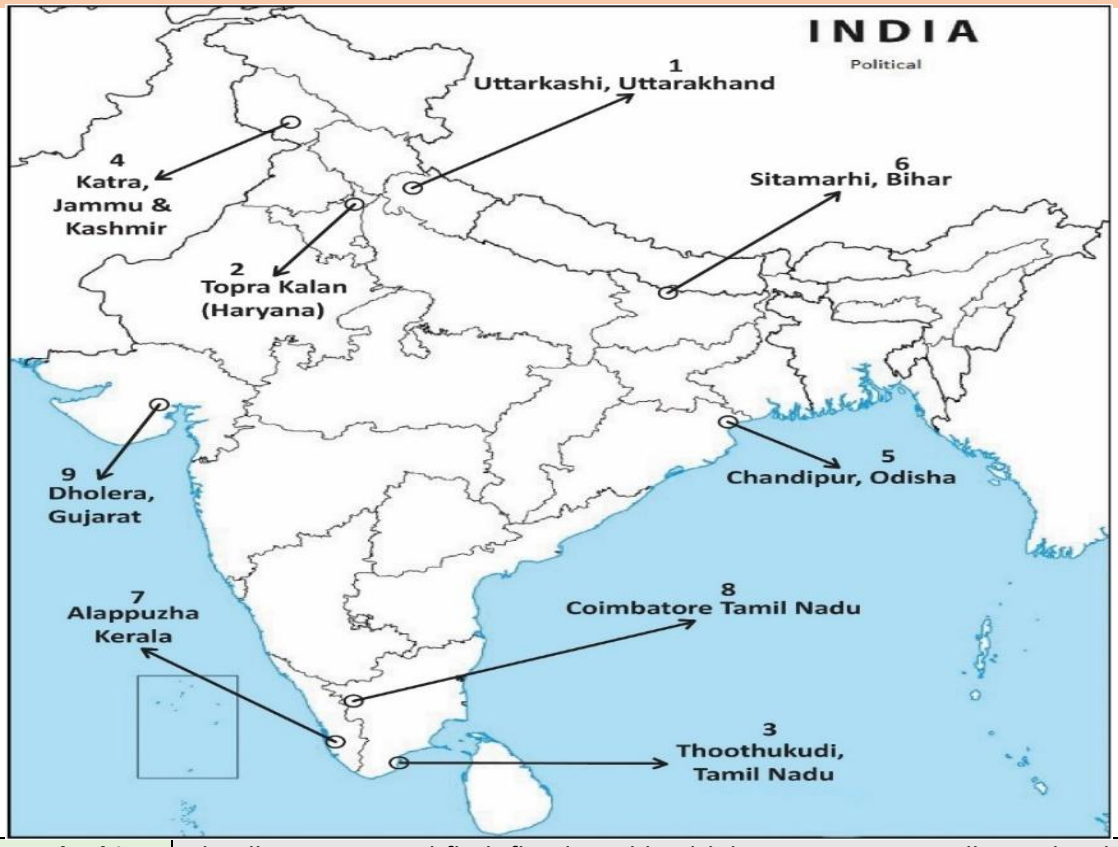


1	**Great Chagos Bank – Chagos Archipelago**	For the first time sliteye shark has been recorded in deepwater seagrass meadows. • **Location:** Central Indian Ocean, part of the Chagos Archipelago, a British Indian Ocean Territory (BIOT). Lies south of Maldives and north of Mauritius. • **Physical Feature**: World's largest atoll structure (in terms of total area) • **Political Status**: Administered by the UK as BIOT since 1965.Mauritius claims sovereignty; In 2019, the International Court of Justice (ICJ) issued an advisory opinion that the UK's administration of the archipelago was not lawful. Following this, the UK and Mauritius signed an agreement in May 2025 to transfer sovereignty of the Chagos Islands to Mauritius, with the UK retaining control of the military base on Diego Garcia for a specified period.
2	**Tuvalu (Pacific Island Nation)**	Australia has initiated ***world-first "climate visas" program***, in which 80% of Tuvalu's population applied. • **Location:** Small island country in the Pacific Ocean, midway between Hawaii and Australia. Consists of 9 islands • Formerly known as the Ellice Islands. • Its neighbours include Kiribati, to the north, and Fiji, to the south.
3	**North York Moors, United Kingdom**	A wildfire devastated 25 km² of moorland near Fylingdales, linked to rising temperatures. • **Location**: North Yorkshire, England (near the North Sea coast).

		• **Status**: Designated as a *National Park in 1952* (one of the first in the UK).
4	**Lake Urmia, Iran**	Historic drought caused significant shrinkage of Lake Urmia, exacerbating water scarcity in the Middle East. (Symbol of Iran's environmental crisis.) • **Type: *Salt lake*** (endorheic basin – no outlet to the sea). • **Hydrology**: Fed ***mainly by rivers*** (e.g., Zarrineh Roud, Simineh Roud). High salinity levels.
5	**Joshua Tree National Park, California**	California approved a protection plan for Joshua trees to combat climate change threats. • Named after ***the Joshua Tree*** – a plant of the agave family, adapted to desert conditions. (Declared a National Park in 1994) • Lies at the meeting point of **two distinct deserts**: 1) ***Mojave Desert*** (higher elevation, Joshua trees dominate) &2) ***Colorado Desert*** (lower, hotter, with cacti, creosote bush)
6	**Krasheninnikov Volcano, Russia**	The Krasheninnikov Volcano in Kamchatka (far eastern Russia) has erupted for the first time in more than 500 years. • **Location:** part of the Pacific ***"Ring of Fire"*** • **Type**: Compound stratovolcano (two overlapping cones inside a larger caldera).
7	**Mauritania (Northwest Africa)**	A migrant boat sank off Mauritania's coast, leaving at least 49 people dead and around 100 missing. • **Location**: borders Atlantic Ocean (west), Western Sahara (northwest), Algeria (northeast), Mali (east & southeast), Senegal (south). • **Geography**: Predominantly ***Sahara Desert & Sahel region***. **Features:** sand dunes, plateaus, mountains. • **Natural Resources**: Rich in ***iron ore, gold, copper, gypsum, and offshore oil & ga***s. Also important fisheries in Atlantic waters.
8	**Niger (West Africa)**	Auction at New York of a large Martian meteorite discovered in Niger for $3.5 million sparked ownership debates. • **Location**: Landlocked country in West Africa. Borders: Algeria & Libya (north), Chad (east), Nigeria (south), Benin & Burkina Faso (southwest), Mali (west). • **Major river**: Niger River (lifeline for agriculture & settlements). • **Economy**: *Uranium mining* (major global exporter; key resource). Uranium exports crucial for France's nuclear power sector.
9	**Easter Island (Chile)**	A study warned that rising seas could endanger Easter Island's iconic moai statues by 2080. • **Location**: In Southeastern Pacific Ocean, to the west of Chile. Locally known as Rapa Nui. • **Famous For: *Moai statues***: ~900 giant stone statues carved by Rapa Nui people between 13th–16th centuries. UNESCO World Heritage Site (***Rapa Nui National Park***).
10	**Kufr Qaddum, West Bank**	West Bank farmers, including those ***in Kufr Qaddum***, faced restricted access to olive groves due to conflict. • **Location**: Palestinian village in the ***northern West Bank***, under Qalqilya Governorate.

		• **Historical Importance**: Dates back to ***Roman and Byzantine periods*** (archaeological remains, old olive presses, ruins). Traditional reliance on olive cultivation.

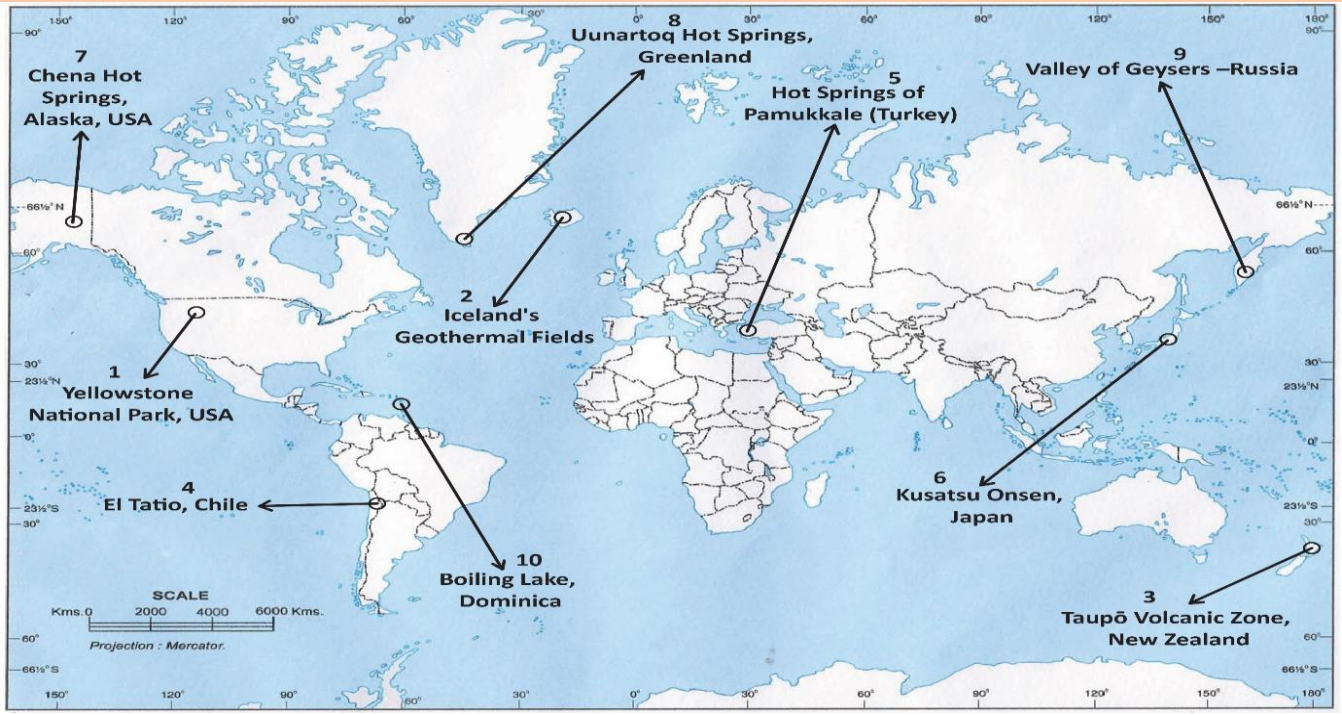
National Places in News



1	**Uttarkashi, Uttarakhand**	Cloudburst-triggered flash floods and landslides swept away a village. The cloudburst led to the formation of a lake (stretching over a kilometre) at Tel Gad in Harsil (Uttarkashi). • **Location:** Town and district headquarters in Garhwal region of Uttarakhand; lies on the banks ***of Bhagirathi River***. • **Geography**: Known as the ***"Kashi of the North"***. • **Ecologically fragile** Himalayan zone prone to landslides, floods, earthquakes.
2	**Topra Kalan (Haryana)**	Recent archaeological work using Ground Penetrating Radar in Topra Kalan, Haryana uncovered a 1,500 BCE settlement with Mauryan-era cultural materials, including Painted Grey Ware (PGW), and a potential Buddhist stupa. • The site, associated with the Ashokan pillar, shows ***signs of continuous habitation and Buddhist presence***, with subsurface structures like walls and room-like enclosures ***found at 4-5 meters deep***. • **Material Culture**: Painted Grey Ware (PGW), stamped pottery, ***moulded bricks***, and other pottery types were discovered, indicating a connection to the ***transition from the Bronze Age to the Iron Age in India***.
3	**Thoothukudi, Tamil Nadu**	VinFast recently inaugurated a $500M EV factory in Thoothukudi (Tuticorin). • **Location & Geography**: Coastal city in southern Tamil Nadu, along the Gulf of Mannar (Bay of Bengal). Known as the **"Pearl City"** due to historic pearl fishing.

		• ***Major hub for salt production*** (over 30% of India's salt). Part of the Gulf of Mannar Biosphere Reserve. • VOC Port in Thoothukudi is being transformed into ***India's first carbon-neutral port***, with green methanol and hydrogen initiatives underway.
4	**Katra, Jammu & Kashmir**	Heavy rains triggered a massive landslide near the Vaishno Devi shrine in Katra. • **Location & Geography**: Small town in Reasi district, situated in the foothills of the *Trikuta Mountains*; Lies on the banks of the Banganga River. • Famous as the *base camp for the Vaishno Devi Shrine*
5	**Chandipur, Odisha**	Intermediate Range Ballistic Missile 'Agni 5' was successfully test-fired from the Integrated Test Range, Chandipur in Odisha. • ***Known as the "Vanishing Sea***" – the sea water recedes up to 5 km during low tide and returns at high tide. • Home to the ***Integrated Test Range (ITR) of DRDO at Abdul Kalam Island (formerly Wheeler Island).*** • Missiles like Agni, Prithvi, Akash, BrahMos, and Shaurya have been tested here.
6	**Sitamarhi, Bihar**	The Government laid the foundation stone for the redevelopment of Janki Mata Temple at Punaura Dham in Sitamarhi in Bihar. • Sitamarhi lies on the ***western bank of the Lakhandei River*** • It features flat alluvial plains ***prone to flooding*** from rivers like Baghmati, Burhi Gandak, and Gandak, originating in Nepal. • The town was devastated by the 1934 Bihar earthquake. It was part of the *ancient Mithila Kingdom and later saw rule by Mauryas, Mughals, and Senas*.
7	**Alappuzha Kerala**	71st edition of the annual Nehru Trophy Boat Race was held on Punnamada Lake in Alappuzha. • Known as the **"Venice of the East"** for its extensive **backwaters, canals, lagoons, and houseboats**. • Part of **Kuttanad region** – called the **"Rice Bowl of Kerala"**, famous for **below sea-level farming (polders)**. • **Alappuzha port** was among the earliest trade centers of Kerala (Dutch, Portuguese influence). • Part of the **National Waterway-3**, enhancing inland water transport.
8	**Coimbatore Tamil Nadu**	Coimbatore hosted the WAREMAT 2025 and TOPRINT EXPO 2025 at its trade fair complex. • Known as the **"Manchester of South India"** → hub of **textile industries** (cotton-based). • The city hosted ***India's first textile research institute*** (SITRA, 1956) and expanded into IT and manufacturing.
9	**Dholera, Gujarat**	Dholera is being built as **India's first Greenfield Smart Industrial City** under the Delhi–Mumbai Industrial Corridor (DMIC). • Historically an ***ancient port city*** dating back to the Harappan civilization (around 2500 BCE), it served as a trade hub during the Gujarat Sultanate, Mughal era, and British colonial period.

Major Geothermal Wonders of the World



1	**Yellowstone National Park, USA**	• **Located in Wyoming**, ***Old Faithful Geyser,*** *it* is one of the most famous geysers in the world, erupting approximately every 90 minutes with jets of hot water and steam. • Yellowstone sits atop of a supervolcano, with its geothermal activity driven by a massive magma chamber. • **Grand Prismatic Spring**: The largest hot spring in the U.S., located in the Midway Geyser Basin of Yellowstone National Park is famous for its vivid, rainbow-like colors caused by thermophilic bacteria thriving in its different temperature zones.
2	**Iceland's Geothermal Fields**	• Often called the ***"Land of Fire and Ice,"*** Iceland is a geothermal hotspot due to its location on the Mid-Atlantic Ridge. • **The Golden Circle**: This popular tourist route includes the ***Geysir Geothermal Area***, home to the original Geysir, which gave its name to all geysers, and ***Strokkur, a reliably erupting geyser***. • **Blue Lagoon**: A stunning geothermal spa with ***milky-blue, mineral-rich waters*** that are a byproduct of a nearby geothermal power plant.
3	**Taupō Volcanic Zone, New Zealand**	• This area on the North Island is one of the ***world's most active volcanic zones*** and is rich with geothermal features. • **Wai-O-Tapu Thermal Wonderland**: Known for its vibrantly colored geothermal pools and the erupting Lady Knox Geyser. • **The Champagne Pool** is a popular attraction, with a large, bubbling crater and orange-coloured mineral deposits.
4	**El Tatio, Chile**	• Situated in ***the Andes*** it is ***one of the world's highest geyser fields.*** • The geysers release **steam and hot water** in a stark desert landscape, most spectacular at sunrise due to cold air enhancing steam visibility.

5	**Hot Springs of Pamukkale, Turkey**	• ***Pamukkale, meaning "cotton castle***," features terraced, snow-white travertine pools formed by *calcium-rich geothermal springs* cascading down a hillside. • The warm waters, averaging 35°C (95°F), have been used since *ancient Roman times for their healing properties*, with the nearby ***ancient city of Hierapolis*** adding historical context. • A UNESCO World Heritage Site, it combines stunning geological formations with cultural history, showcasing geothermal processes in a **Mediterranean climate**
6	**Kusatsu Onsen, Japan**	• One of ***Japan's most famous hot spring resorts***, Kusatsu Onsen in Gunma Prefecture produces highly acidic, mineral-rich waters • ***The Yubatake*** is a central geothermal feature channeling hot water for public baths.
7	**Chena Hot Springs, Alaska, USA**	• It's a hot spring resort in the Fairbanks (North Star Borough) • Natural pools (40°C) with northern lights views; geologically from granite intrusions; A natural geothermal spring in a permafrost-dominated region. • **Significant for year-round access**; tourism includes ice museum and aurora watching; environmentally powers resort via geothermal plant; supports Arctic research • ***Home to the first geothermal power plant*** in Alaska.
8	**Uunartoq Hot Springs, Greenland**	• Natural geothermal springs heated by geothermal activity under Greenland's crust. • Water temperature remains ***34–38°C year-round, even in freezing Arctic climate***. • Surrounded by **icebergs, mountains, and fjords** – rare warm oasis in polar region.
9	**Valley of Geysers –Russia**	• Remote **UNESCO site**; ***second-largest geyser concentration*** (90+) with hot springs and mud pots (after Yellowstone, USA) • **Lies along the Pacific Ring of Fire** – one of the world's most active volcanic belts.
10	**Boiling Lake, Dominica**	• Situated in ***Morne Trois Pitons National Park, Dominica***. Heated by magma beneath the surface • ***World's 2nd largest hot lake*** (after Frying Pan Lake, New Zealand). • Supports unique microbial life in extreme geothermal conditions.

SOCIAL ISSUES

Tamil Nadu's State Education Policy 2025

Tamil Nadu has launched its **State Education Policy 2025** as an alternative to the NEP (National Education Policy 2020), emphasising state-specific priorities in school and higher education.

About the State Education Policy 2025

- The SEP 2025 was drafted by a high-level expert committee chaired by retired Chief Justice of the Delhi High Court, **Justice D. Murugesan**, after extensive consultations with educators, students, civil society, and subject experts.

NEP 2020	Tamil Nadu SEP 2025
• Three-language formula (including Hindi)	• Two-language policy (Tamil + English)
• NEET and other centralised entrance exams encouraged	• Opposes NEET; state-based admission system
• Uniform curriculum model	• Locally relevant curriculum design
• Common national regulatory structure	• State-level autonomy in regulation

- **Key Principles:**
  - **Equity and Inclusivity:** Ensuring access to quality education regardless of caste, gender, language, or socio-economic status.
  - **State Autonomy:** Crafting education strategies that align with Tamil Nadu's socio-cultural and economic needs rather than following a uniform national template.
  - **Employment-Readiness:** Integrating skill development and vocational training from the school level.

School Education Reforms

- **Two-Language Policy:** Tamil and English will remain the medium of instruction, rejecting the NEP's three-language recommendation.
- **Foundational Literacy and Numeracy:** Strengthened focus on early learning in Classes 1-3, with continuous assessment instead of high-stakes exams.
- **Digital Infrastructure:** Expansion of smart classrooms, ICT tools, and teacher training in digital pedagogy.
- **Social Justice Measures:** Continuation and strengthening of welfare schemes such as free textbooks, uniforms, and the **noon-meal programme.**

Higher Education Framework

- **Autonomous Curriculum Design:** State universities will have greater flexibility in designing syllabi suited to local industries and employment needs.
- **Multiple Entry-Exit System:** Students will have the option to pause and resume studies without losing academic credits, similar to NEP's flexibility but tailored for Tamil Nadu's academic calendar.
- **Research and Innovation Hubs:** Investment in domain-specific research centres, especially in agriculture, renewable energy, and healthcare.
- **Opposition to Common Entrance Tests:** Admissions to professional courses will continue to follow the *state's reservation policies and entrance examination*

Vocational and Skill Development Focus

- Collaboration with industries to update vocational curricula in polytechnic and ITI institutions.
- Introduction of skill-based courses in secondary schools covering AI, robotics, agritech, and entrepreneurship.
- Partnerships with MSMEs to offer internships and apprenticeships for final-year students.

Teacher Training and Capacity Building

- **Revised Teacher Education Modules** integrating technology and inclusive pedagogy.
- **Continuous Professional Development (CPD)** programmes for educators in both school and higher education.
- Creation of an online teacher resource portal in Tamil and English.

Significance of the SEP 2025

The SEP 2025 underscores Tamil Nadu's federal stance that education should remain a **Concurrent List subject** with adequate space for states to address their unique contexts.

Future Outlook

- The success of the SEP 2025 will depend on its implementation, funding allocation, and coordination between the state education department, universities, and private institutions.
- As Tamil Nadu seeks to position itself as an education hub, the policy could also serve as a model for other states asserting autonomy over education governance.

New Rules Notified for Organ Transplant Allocation

The Union Government has revised the organ transplant allocation policy, giving priority to **women patients** and **relatives of deceased donors** to address gender disparity and boost donations.

National Organ & Tissue Transplant Organisation (NOTTO) has issued a new 10-point advisory aimed at improving transparency, equity, and inclusivity in India's organ transplant system.

Organ Transplant Allocation in India

- Organ allocation in India is governed by guidelines formulated by NOTTO under the Ministry of Health and Family Welfare. The allocation criteria already prioritise recipients based on:
  - **Medical urgency** (severity of illness)
  - **Duration of wait time** on the transplant list
  - **Matching parameters** such as blood group, organ size, and age
  - **Special cases**, such as children or patients whose living donor had previously donated an organ but now requires a transplant themselves
  - **Geographical proximity** for optimal organ viability
- The allocation system ensures that organs are distributed fairly and transparently, with the goal of achieving the best medical outcomes.

New Priority Criteria for Women and Donor Families

- The revised guidelines introduce "**additional points in allocation criteria**" for:
  - **Women patients** on the national waiting list
  - **Immediate relatives of deceased donors**
- **Rationale**
  - **Gender Disparity**: Historically, women have had lower representation among organ transplant recipients, often due to socio-economic and cultural factors that lead to delayed diagnosis or treatment.
  - **Encouraging Donations**: By offering priority to donor families, the policy aims to increase deceased organ donations, addressing the chronic shortage of organs in India.

National Registry and Data Compliance

- NOTTO maintains a **digital national registry** of both donors and recipients. Hospitals performing transplants must register patients through this system.
- **Key compliance measures:**
  - All transplant centres must **mandatorily submit data** for each donor and recipient to the national registry.
  - Non-compliance could result in **legal action** against hospitals.

Organ Donation Milestones in India

- India has seen a remarkable growth in organ donation and transplant numbers:
  - **2023**: Launch of Aadhaar-based NOTTO online pledge portal.
  - **2024**: Over **3.3 lakh citizens pledged** to donate their organs.
  - **2024**: A record **18,900 organ transplants** were performed, a sharp rise from fewer than 5,000 in 2013.

- These figures indicate growing public participation and improved medical infrastructure.

Strengthening Transplant Infrastructure

- The advisory also calls for:
  - **Permanent posts for transplant coordinators** in hospitals performing organ retrieval and transplantation.
  - Development of **organ retrieval centres** in all trauma centres and registration of these facilities with NOTTO.
  - Encouraging **medical colleges** to develop retrieval facilities in a phased manner.
  - **Training emergency responders and ambulance staff** to identify potential deceased donors early, especially in cases of road accidents or strokes.

Broader Impact and Future Outlook: In the long term, these changes are expected to:

Increase deceased organ donations	**Improve gender balance** in transplants	**Enhance trust** in the allocation process	**Strengthen national transplant capacity**

Kerala's Digital Literacy Feat

Chief Minister Pinarayi Vijayan **declared Kerala as the first fully digitally literate State** in India after completing the first phase of the *Digi Kerala* programme.

The initiative, implemented through local self-government bodies, aimed to bridge the digital divide.

As part of the effort, 21.87 lakh people identified as digitally illiterate were trained and successfully cleared evaluations, marking a milestone in grassroots digital empowerment. Trainees unfamiliar with digital devices learned to make voice and video calls on smartphones, use WhatsApp and social media, access government services, and perform digital transactions.

Origins of Kerala's Digital Literacy Drive

- Kerala's **Digi Kerala programme** stemmed from a local initiative in **Pullampara panchayat**, Thiruvananthapuram, in 2021.
- Officials noticed long queues outside banks, where daily-wage and MGNREGS labourers often lost a day's income just to check balances.
- This hardship inspired the idea of teaching basic digital skills to reduce dependency on physical banking.
- **Launch of Digi Pullampara**
  - The panchayat launched the **Digi Pullampara project**, surveying wards to identify 3,917 digitally illiterate residents.
  - Of these, 3,300 were trained, while bedridden individuals were excluded.
  - The training included **15 activities in three modules**, covering essential digital tasks.
- **Role of Volunteers and Training Methods**
  - Volunteers, including **students from NSS units**, Kudumbashree members, SC/ST promoters, and library council members, conducted the training.
  - Sessions were held at MGNREGS worksites, Kudumbashree neighbourhood groups, and even in households for senior citizens.
  - After training, evaluations tested whether participants could perform at least **six out of 15 tasks**; retraining was offered to those who failed.
- **Success and Statewide Expansion**
  - Pullampara achieved **96.18% success**, becoming Kerala's first fully digitally literate panchayat in September 2022.
  - Encouraged by this, Chief Minister Pinarayi Vijayan announced the **expansion of the initiative across the State**, ultimately shaping Kerala's digital literacy revolution.

Scaling Up the Pullampara Model Statewide

- To expand the **Digi Pullampara model**, the government brought Pullampara's core team to the **Kerala Institute of Local Administration** to train master trainers.
- These trainers, in turn, prepared **2.57 lakh volunteers** across the State.
- **Survey and Training Process**
  - Following the model of the **Total Literacy Campaign of the 1980s**, surveys covered **1.51 crore people across 83.45 lakh households**, identifying **21.88 lakh digitally illiterate individuals**.
  - Training followed a structured process, and the **Economics and Statistics Department** conducted third-party evaluations.
  - Out of those trained, **21.87 lakh passed**. Panchayats with more than **10% failures were provided re-training**.
- **Inclusivity Beyond Guidelines**
  - Unlike the **National Digital Literacy Mission**, which mandates training only up to 60 years of age, Kerala included **all age groups**, even those over 100.
- **Wide Participation Across Communities**
  - The programme saw participation from **over 13 lakh women, eight lakh men, and 1,644 transgender persons**, showcasing its inclusive approach.

Digi Kerala 2.0: Expanding the Mission

- At the **Digi Kerala declaration**, the Chief Minister launched **Digi Kerala 2.0**, which will go beyond basic digital skills.
- It will include awareness classes on cyber fraud, training to identify and reject fake news, and intensive sessions on accessing government services digitally.
- **Smartphone-Centric Approach**
  - Unlike the **national digital literacy programmes** that focus mainly on computer use, Kerala has **prioritised smartphones** as the key tool for navigating daily life.
- **Integration with Broader Projects**
  - The initiative forms part of Kerala's larger digital vision, integrated with:
    - **Kerala Fibre Optic Network (KFON):** Ensures universal Internet access, offering **free connectivity to BPL families**
    - **K-SMART Project:** Aims to bring all local self-government services onto a **single digital platform**, enhancing accessibility and governance efficiency.
- This roadmap positions Kerala not only as India's first **fully digitally literate state**, but also as a model for **bridging the digital divide** comprehensively.

NITI Aayog Proposes Model Framework for Homestays

NITI Aayog has released a report titled "***Rethinking Homestays: Navigating Policy Pathways"***.

The report provides a framework for States to harmonise regulations and build an inclusive homestay ecosystem. It highlights the vast economic potential of alternative accommodations like **homestays and Bed and Breakfast (BnB)** in driving sustainable tourism growth.

State of Travel and Tourism in India

- India's travel and tourism sector has shown remarkable post-pandemic recovery, driven largely by domestic tourism.
- According to WTTC's 2024 Economic Impact Research, the **sector contributed ₹21.15 lakh crore to the economy in 2024**, marking a 21% rise from 2019, and is projected to reach ₹43.25 lakh crore by 2034, accounting for 7.6% of GDP.

- It currently employs **4.325 crore people**—one in every eleven jobs in India—with employment expected to grow to 6.3 crore by 2034.
- Domestic tourist spending in 2024 stood at ₹16 lakh crore, 25% higher than 2019, and may nearly double by 2034, while international tourist spending reached ₹2.85 lakh crore and is expected to touch ₹4.07 lakh crore.
- The **Draft National Tourism Policy 2022** envisions **India as a top five global destination by 2030**, with goals to boost tourist arrivals, foreign exchange earnings, and employment.
- To support this, the government has raised the Ministry of Tourism's budget to ₹2,541 crore and is focusing on developing 50 top destinations, promoting PPP projects, supporting homestays through MUDRA loans, and incentivising hotel investments under the Harmonised Master List.

NITI Aayog's Report on Homestays: Rethinking Homestays – Navigating Policy Pathways

- **Key Insights and Objectives**
  - **Economic Potential**: Homestays can promote sustainable growth, generate local employment, and foster entrepreneurship, especially in rural and semi-urban areas.
  - **Cultural Value**: They offer travellers culturally immersive experiences, blending authenticity with livelihood creation.
  - **Policy Goal**: To provide a strategic roadmap for States to strengthen homestays as an integral part of India's tourism landscape & calling for harmonised state policies
- **Core Recommendations**
  - **Light-Touch Regulatory Framework**
    - Regulations should remain simple, transparent, and flexible.
    - Focus on **safety, heritage protection, and inclusivity**.
  - **Digital Empowerment**
    - Creation of a centralised digital portal for registration, compliance, renewals, and policy updates.
    - Ensures convenience for hosts and improves consumer trust.
    - Use of digital platforms to expand outreach and strengthen credibility.
  - **Capacity Building and Local Empowerment**
    - Training and skill development for hosts.
  - **Financial Incentives**
    - Move from focusing on individual amenities to **destination-level incentives.**
    - Promote tourism in underserved regions through tiered incentive structures.

Nyaya Bandhu (NB) Legal Aid Programme

The Rajya Sabha was informed that nearly 14,888 women beneficiaries have registered under the Nyaya Bandhu app as of June 2025 and to expand its reach in remote areas, the programme actively engages Pro Bono Clubs in law schools to provide legal aid and awareness at the grassroots level.

What is the Nyaya Bandhu (NB) Programme?

- It is Government's flagship '***Pro Bono Legal Services'*** initiative *(launched in 2017)* under the "**Designing Innovative Solutions for Holistic Access to Justice" (DISHA) scheme** which is being implemented by the Department of Justice (DoJ- under the Ministry of Law and Justice).
- The Pro Bono Club Scheme was introduced as an extension of NB Programme to instill a pro bono culture among law students and young lawyers.
- The programme aims to provide **free legal aid** by leveraging mobile technology to connect **pro bono advocates** with **marginalized beneficiaries** entitled to legal aid under **Section 12 of the Legal Services Authorities Act, 1987**.
- By 2021, Nyaya Bandhu was integrated into the broader **"DISHA" scheme**, which consolidates multiple legal aid initiatives under the '***Pan India Legal***

Key Components of NB Programme:

- **Nyaya Bandhu Mobile Application:** Available on **Android, iOS**, and the **UMANG platform**, the app facilitates seamless registration of both **advocates** and **beneficiaries** and allows beneficiaries to seek legal help on issues such as family and matrimonial disputes domestic violence, property disputes, workplace harassment, women and child safety and other civil and criminal matters.
- **Integration with Legal Services Authorities:** Helps coordinate with National Legal Services Authority (NALSA) and State/District Legal Services Authorities (SLSA/DLSA).
- **Pro Bono Panels in High Courts:** Panels have been constituted in **23 High Courts**. Advocates practicing in these courts are invited to volunteer and offer legal services to the underprivileged. Each High Court has its own **web-based registration portal** integrated into the national Nyaya Bandhu system. Advocates on the panel must also register on the Nyaya Bandhu app.
- **Pro Bono Clubs:** have been established in **109 law colleges** (and **89 law schools** across 30 states/UTs as of Aug 2024). They engage students in **community legal care** and **awareness initiatives**, especially in **rural and remote areas** and encourage a long-term commitment to legal service among future legal professionals.

Outreach and Integration:

- ✔ To expand its reach a multilingual **NB portal** is available in **22 scheduled Indian languages**: www.probono-doj.in.
- ✔ Extensive **IEC (Information, Education, and Communication)** initiatives include printed and digital material for citizens and advocates; TV broadcasts and public displays (hoardings, pamphlets, district courts, petrol pumps, convenience centres).
- ✔ The Nyaya Bandhu platform is integrated with the **Tele-Law App** to provide **pre-litigation advice**. Beneficiaries can consult **panel lawyers** before proceeding with pro bono advocates. **Village Level Entrepreneurs (VLEs)** and **Common Service Centres (CSCs)** assist in promoting the programme.
- ✔ Awareness is enhanced via the **Toll-free Helpline 14454** and support in regional languages.

Significance of the NB Scheme	Challenges Faced by the NB Scheme
1. **Promotes Access to Justice:** Ensures compliance with Article 39A of the Constitution, which mandates equal justice and free legal aid.	• **Awareness and Outreach Limitations:** Many potential beneficiaries, especially in remote and tribal areas, are unaware of the scheme or how to access it.
2. **Harnesses Volunteerism in the Legal Sector:** As of 2025, over 9,000 advocates have volunteered their services, supporting a growing culture of service in the legal community.	• **Digital Divide:** Limited internet connectivity and digital literacy in remote regions hampers effective use of the platform.
3. **Encourages Youth Participation:** By establishing Pro Bono Clubs in law colleges. It instills a sense of public service and responsibility among future legal professionals.	• **Advocate Participation and Sustainability:** Lack of incentives, time constraints, and workload may deter long-term commitment from busy lawyers.
4. **Leverages Technology for Outreach:** Through the Nyaya Bandhu mobile app (iOS/Android/UMANG), it bridges the gap between legal aid seekers and providers and creates a holistic legal support ecosystem.	• **Quality and Timeliness of Legal Aid:** Ensuring consistent, high-quality legal advice across all states is difficult. • **Monitoring and Evaluation:** Absence of a robust mechanism to track outcomes, monitor quality, and ensure accountability of services rendered. There is also lack of data on case resolutions or beneficiary satisfaction.

Literacy & Legal Awareness Programme' (2021-2026).

- DISHA Scheme was launched in 2021 with a five-year tenure (2021–2026) to ensure **accessible, affordable, and citizen-centric legal services** across India. It operates through three key initiatives:
  - **Tele-Law** (pre-litigation legal advice);
  - **Nyaya Bandhu** (Pro Bono Legal Services); and
  - **Legal Literacy and Awareness Programmes**.

Apna Ghar Initiative

In line with the Government's vision to enhance truckers' safety and well-being, the Ministry of Petroleum and Natural Gas recently launched the 'Apna Ghar' initiative.

What is Apna Ghar Initiative?

It is a welfare initiative implemented by Public Sector Oil Marketing Companies (OMCs) to provide safe and hygienic resting facilities for truckers at fuel retail outlets along national highways.

- As of July 2025, 368 'Apna Ghar' with 4611 beds besides other facilities, have been set up along Highways across the country.

Objective of Apna Ghar Initiative:

- To enhance the safety, comfort, and well-being of truck drivers during long-haul journeys.
- **Enhance Road Safety:** Reduce accidents caused by driver fatigue.

Facilities Provided:

- Dormitories (10–30 beds); Restaurants/Dhabas; Self-cooking areas; Clean toilets; Dedicated bathing areas; and Purified drinking water.
  - ✓ Contribute to Sustainable Development Goal (SDG) 8 (Decent Work and Economic Growth).
- **Technology Integration**: A dedicated **Apna Ghar mobile application** enables drivers to:
  - ✓ Locate and book rest facilities.
  - ✓ Register as users and provide feedback.
  - ✓ Access real-time information on availability and amenities.

National Career Service (NCS) Portal

Minister of State for Labour and Employment (MoLE) informed the Lok Sabha that more than **48 lakh** employers have been registered on the NCS portal by July 2025.

About NCS Portal

- **Launched:** 2015 as a Five-year Mission Mode Project (continuously upgraded).
- **Implementing Agency:** Directorate General of Employment, Ministry of Labour & Employment.
- **Objective:** One-stop digital platform to bridge the gap between jobseekers and employers.

Key Services Provided	Technology & Features
• **Employment:** Job listings from **government, private, and public sector** organizations. • **Career Guidance:** Online/offline counselling & vocational guidance. • **Skill Development:** Information on training programmes and employability enhancement. • **Job Fairs:** Information on online/offline job fairs. • **Local Services:** Listings for household service providers (e.g., drivers, plumbers).	✓ICT-based **NCS Portal** (www.ncs.gov.in) ✓**AI-based tools:** Resume building, job matching. ✓**Robust verification** & **feedback** mechanisms. ✓**Multilingual support** and toll-free helpdesk **1514** in 7 languages. ✓**Multiple access points:** Computers, mobiles, CSCs, Career Centres, Post Offices. ✓**Free services** - no registration fees.

Scale & Achievements

- **Vacancies mobilized:** 6.43 crore+
- **Career Counsellors onboarded:** 1,182+
- **Guidance sessions conducted:** 41 lakh+ (online & offline)
- **Integration with Other Portals:** Linked with Skill India Portal, Udyam Portal (MSME), e-Shram, EPFO, ESIC, and private platforms like Monster.com, Freshersworld, and HireMee.
- **MoUs signed:** 25+ with TCS iON (a strategic unit of Tata Consultancy Services Ltd), Quikr, Foundit (Monster), APNA, Swiggy, Rapido, Amazon etc.
- Microsoft India **(Digisaksham initiative)** for employability training in Hindi and English.

Sikkim Launches Sabbatical Leave Scheme for Government Staff

Sikkim became the first state in the country to introduce a formal Sabbatical Leave scheme (initially launched in 2023) for its government staff.

Objective

To give government employees (regular and temporary) extended, partially paid leave for personal growth, skill development, entrepreneurship, or other pursuits, while preserving seniority and promoting work-life balance.

Eligibility & Duration

- Regular employees with at least 5 years' continuous service can take leave from 365 days (1 year) up to a maximum of 1,080 days (3 years), receiving 50% of basic pay, with service continuity and seniority preserved.
  Recall clause: The government can recall employees with one month's notice.
- Temporary employees with 6 months' continuous service are also eligible under the same provisions.

Approval Process: Heads of Departments can approve leave for Group C & D (including temporary staff), while Group A & B require Personnel Department Secretary approval.

Impact of the Scheme: Hundreds have used the scheme to start businesses or pursue personal projects, increasing flexibility and productivity in the workforce.

Why is Northeast on Edge About Assam Evictions?

Assam recently launched an eviction drive to clear 11,000 bighas of encroached forest land near the Nagaland border, prompting neighbouring States to tighten measures to prevent evictees from crossing over.

- The eviction drives in Assam initially began in 2016 following a Gauhati High Court (HC) order to clear encroached forestlands, starting near Kaziranga National Park.
- According to the state government, 15,288.52 bighas of Satra land and 3,620.9 sq km of forest area in Assam were under encroachment by March 2024, largely by people of doubtful citizenship.

How Are Border Disputes Linked to Evictions?

- **Historical Roots**: Arunachal Pradesh, Meghalaya, Mizoram, and Nagaland were carved out of Assam

Background of the Issue:

- Evictions from forest, wetland, and government lands in Assam have long existed, but under the BJP government, they gained prominence amid accusations that the earlier Congress regime enabled encroachment by 'Bangladeshi' or 'Miya' Muslims for votes.
  - Assam Chief Minister has pledged to make Assam encroachment-free within 10 years, exempting pre-2005 tribal settlers under the Forest Rights Act, 2006.
- These Muslims, with roots in present-day Bangladesh, have been central to Assam's polarized politics since the Assam Agitation (1979-85), which culminated in the Assam Accord fixing March 24, 1971, as the cut-off date for identifying and deporting illegal immigrants.

Impact of the Eviction Drive: It has affected both Muslims and non-Muslims. In July 2025, 1,080 families were evicted from 135 hectares of Paikan Reserve Forest in Goalpara. However, actions against migrant Muslims draw more attention due to their scale and intensity, with at least five deaths since 2016.

Why Are Assam's Neighbouring States Alarmed by the Eviction Drives?

- Evictions near interstate borders, such as in Golaghat district's Uriamghat, have raised fears of evicted "illegal Bangladeshi immigrants" moving into neighbouring states.
- In Nagaland, NGOs and extremist groups have accused Assam of trying to settle migrants on "ancestral Naga lands"; state police have turned back 200 vehicles of suspected migrants.
- Manipur, Meghalaya, Arunachal Pradesh, and Mizoram have also tightened border vigilance and made inner-line permit rules stricter to block entry of evicted people.

(1963–1972), leaving unresolved boundary disputes.

- **Encroachment Issue**: Assam claims these states occupy ~83,000 hectares of its land.
- **Mutual Accusations**: Neighbouring states accuse Assam of settling "illegal immigrants" along borders to claim disputed areas and have at times pushed migrant Muslims back into Assam.
- **Recent Development**: In its July 2025 ruling, the Gauhati HC had ordered all five states to form a high-level committee to coordinate clearing illegal forest settlements.

Mines & Minerals (Development and Regulation) Amendment Act 2025

The President gave her assent to the Mines and Minerals (Development & Regulation) Amendment Act, 2025.

Key Provisions

- **Inclusion of Other Minerals in Mining Lease:** The Act allows lease holders to apply to state governments for adding other minerals to an existing lease. No additional payment is required for critical and strategic minerals such as lithium, cobalt, nickel, graphite, gold, and silver, while other minerals attract royalty. In auctioned mines, the auction premium also applies.
  - Royalty is set by the state when adding minor minerals to a major lease, while the Centre lays down conditions when adding major minerals to a minor lease. Atomic minerals can be included only with central approval and if below the specified threshold grade.
- **Expansion of National Mineral Exploration Trust (NMET):** The NMET has been renamed the **National Mineral Exploration and Development Trust (NMEDT)**, with its scope expanded to fund both exploration and development of mines within India, offshore areas, and even abroad. Lessees' contributions have been raised from 2% to 3% of royalty, and the Trust will play a central role in financing the NCMM.
- **Removal of 50% Sale Limit for Captive Mines**: Captive mine lessees can now sell 100% of minerals after meeting end-use requirements. States can also permit sale of old mineral dumps stacked in leased areas, subject to central govt notification.
- **Extension of Contiguous Area for Deep-Seated Minerals:** The Act permits leaseholders of deep-seated minerals, found at depths greater than 200 metres, to apply for a one-time extension of their lease area- up to 10% for a mining lease and up to 30% for a composite license covering both prospecting and mining. This provision is aimed at ensuring the optimal extraction of deep-seated deposits that may not be economically viable under a separate lease.

What is the Mines and Minerals (Development & Regulation) Amendment Act, 2025?

- The Act seeks to amend the **Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act)** to accelerate exploration and mining of **critical, strategic, and deep-seated minerals**, improve domestic mineral security, and promote transparency and efficiency in the mineral market.
- It is aligned with the **National Critical Mineral Mission (NCMM)** to reduce India's reliance on imports of critical minerals.

About NCMM

- The NCMM launched in 2025, aims to make India self-reliant in critical minerals essential for clean energy, EVs, electronics, defence and national security.
- Of the 30 critical minerals identified (by a committee formed by the Ministry of Mines in 2022), 24 are now under the Centre's exclusive control for auctioning leases under the MMDR Act, 1957.
- The Geological Survey of India will undertake 1,200 exploration projects (2024-2031), and a **Centre of Excellence on Critical Minerals** will guide strategy.

Objectives:

- To **support the NCMM** by enabling faster exploration and production of critical minerals (like lithium, cobalt, nickel, rare earths).
- To **expand domestic mineral production** and reduce dependence on imports.
- To **introduce flexibility** in mining leases so multiple minerals can be mined together.
- To **optimize deep-seated mineral extraction** through lease extensions.
- To **create a regulated market mechanism** via mineral exchanges.
- To **increase funding** for mineral exploration and development.

- **Establishment of Mineral Exchanges:** The Act provides for setting up an authority to regulate and register mineral exchanges, which are electronic trading platforms for minerals, concentrates, and processed metals. The rules will cover registration and fees, trading oversight, maintenance of a data bank, prevention of unfair practices like insider trading or cartelization, and grievance redressal.

Significance	Concerns Raised
• **Boosts Critical Mineral Security:** Supports EV, renewable, semiconductor, and defence industries. • **Increases Transparency:** Through auctions, regulated exchanges, and clear rules. • **Promotes Investment**: Attracts private and foreign investment in exploration & mining. • **Enhances Revenue**: Additional royalties, dump sales, and expanded mining. • **Employment & Regional Development**: Mining hubs to see more jobs and infrastructure growth. • **Supports Self-Reliance**: Reduces dependence on imports (especially from China) and strengthens supply chains. • **Sustainable Mining**: Emphasis on zero-waste mining and safety in dump clearance.	• **Environmental Risks**: Expansion of leases and sale of dumps may increase ecological degradation if not regulated. • **State vs. Centre Powers**: Greater central control (especially over critical/strategic minerals) may reduce state autonomy. • **Corporate Concentration:** Big private players may dominate mineral exchanges and leases. • **Implementation Challenges**: Monitoring compliance, ensuring fair trade, and preventing cartelization require strong oversight. • **Increased Burden on Lessees**: Higher payments to NMEDT (3% royalty) may impact smaller mining companies. • **Local Community** fear displacement and limited benefit-sharing if regulation is weak.

SabhaSaar AI Tool

The Ministry of Panchayati Raj (MoPR) launched **SabhaSaar AI Tool.**

What is SabhaSaar?

It is an **Artificial Intelligence (AI) powered meeting summarization tool that uses Natural Language Processing (NLP) technologies and automatically generates structured Minutes of Meetings (MoM)** from **Gram Sabha and Panchayat meetings' audio/video recordings**.

✓ It was first rolled out in **Tripura on 15th August 2025** and later extended to all states.

How It Works?

- **Upload Media:** Panchayat officials upload meeting **videos or audio (MP4, WAV, MP3, MPEG4)** via their **e-GramSwaraj login**.
- **AI Processing:**
  - **Transcription** of speech into text.
  - **Multilingual translation** using **Bhashini** (launched in 2022, it is an AI powered language translation platform developed under the National Language Translation Mission, bridging literacy, language, and digital divides)
  - **Context understanding** to identify **decisions, issues, and action points**.
- **Minutes Generated:** Automatically produces **structured, uniform MoM** in multiple formats.

Key Features	Significance
• **Uniformity**: Brings consistency in MoM across 2.55 lakh+ Gram Panchayats. • **Inclusivity**: Supports major Indian languages (Hindi, Bengali, Tamil, Telugu, Marathi, Gujarati, etc.). • **Transparency**: Reduces manual errors, ensures accountability. • **Efficiency**: Saves time and effort in documentation → more focus on governance. • **Integration**: Linked with Panchayat NIRNAY portal for real-time monitoring of meetings.	• Strengthens participatory democracy at the grassroots. • Enhances citizen participation. • Boosts digital governance in rural India. • Helps Panchayat functionaries access reliable and multilingual documentation.

SC Modifies its Suo-Motu Directive on Stray Dogs

The Supreme Court (SC) recently modified its earlier order mandating confinement of all strays in shelters. A 3-judge bench clarified that stray dogs, once dewormed and vaccinated, can now be released back into their original localities, keeping the earlier prohibition on release in abeyance.

Related Legal & Policy Framework

- **Prevention of Cruelty to Animals Act, 1960**: aims to prevent the infliction of unnecessary pain or suffering on animals".
- **Animal Birth Control (ABC) Rules, 2023** is the core national policy on stray management. It mandates:
  - **CVR approach: C**apture → **V**accination (**S**terilization) → **R**elease **back to same locality**.
  - Prohibits relocation or culling (except in case of rabid (dogs with rabies)/dangerous dogs).
  - Empowers municipal bodies to implement sterilization drives.
  - The rules also cover **stray cats**, introduce a **three-tier monitoring system**, and reclassify strays as **"community animals"**, affirming they **cannot be displaced** and must be allowed **community feeding**.
- **AWBI Advisory, 2022:** The Animal Welfare Board of India (AWBI) advised Resident Welfare Associations (RWAs) and citizens **not to harass dog feeders or relocate/poison stray dogs**, stressing that such actions are **illegal under the Prevention of Cruelty to Animals Act, 1960**.

Case Background

- **Media Trigger & Suo Motu Cognizance**: In July 2025, a *Times of India* report on child deaths from stray dog attacks in Delhi prompted the SC (Justices J.K. Maheshwari & K.V. Viswanathan) to take Suo motu cognizance, declaring it a public safety emergency.
- **Key Directions Issued by 2-Judge Bench:**
  - **Removal and Relocation of Stray Dogs** to designated shelters. New shelters (capacity: **5,000 dogs each**) to be established within **8 weeks**.
  - **Mandatory Medical Measures** for every relocated dog which included **sterilization, vaccination, and deworming**.
  - **Shelter Monitoring through CCTV cameras** along with adequate staff, food and medical care.
  - **Ban on Release of Picked up Stray Dogs Back to Streets** (directly contradicting the **ABC Rules, 2023)**.
  - **Helpline and Rapid Response System** to be created within **one week** for reporting dog-bite incidents.
  - Civic authorities must **capture offending dogs within four hours** of a complaint and **publish monthly data** on rabies vaccination and treatment for public accountability.
  - Any individual, NGO, or group obstructing this process will face **strict legal action**.
- **Statistics & Justification:** Dog-bite cases surged sharply- Delhi: 6,691 (2022) → 25,210 (2024); India: 1.5 mn (2019) → 3.7 mn (2024), with several child fatalities. Delhi has ~8 lakh strays (2025) and India ~6.2 crore, but sterilization coverage remains under 30% and shelters are lacking. Citing this public health crisis, the Court stressed protecting citizens' fundamental right to life under Article 21.
- **Relisting & Larger Bench:** Due to strong stakeholder opposition highlighting infrastructure gaps, humane concerns, and conflict with the ABC Rules (which mandate release of sterilized dogs), CJI Gavai referred the matter to a three-judge Bench of Justices Vikram Nath, Sandeep Mehta, and N.V. Anjaria for re-examination.

Previous Judicial Precedents on Stray Dogs

- **High Court (HC) Orders (Conflicting Views)**

Kerala HC (2011): Local authorities cannot kill stray dogs; must follow the 1960 Act and 2001 ABC Rules.	**Bombay, Himachal Pradesh, Karnataka HCs**: Local authorities have discretionary power to cull stray dogs under municipal regulations.

- **SC Division Bench (2015- Justices Dipak Misra & Shiva Kirti Singh):** Held that municipal authorities must comply with **1960 Act and its rules** and emphasized **balance between compassion for dogs and human safety**, stating both can **harmoniously co-exist**.
- **SC Bench (2022- Justices U.U. Lalit, S. Ravindra Bhat, Sudhanshu Dhulia):** Upheld Delhi HC (Justice J.R. Midha) ruling recognizing **street dogs have right to food;** Citizens have **right to feed them;** Dogs are territorial and should be fed within their territories. It emphasized **moral duty to protect sentient animals**.
- **SC Division Bench (2024- Justices J.K. Maheshwari & Sanjay Karol):** Closed multiple stray dog cases, leaving **local issues to HCs or other forums**. It mandated **compliance with ABC Rules, 2023** to prevent unnecessary pain and suffering to animals.
- **Recent Observations (Justice Pardiwala, 2025):** The court criticized returning sterilized dogs to same locality as **"absurd"**, highlighting conflict between **public safety and ABC policy**.

Jan Vishwas (Amendment of Provisions) Bill, 2025

The Jan Vishwas (Amendment of Provisions) Bill, 2025 presented in the Lok Sabha during the monsoon session was referred to as Select Committee.

What is the Jan Vishwas (Amendment of Provisions) Bill, 2025?

Building on the Jan Vishwas Act, 2023, this bill shifts from a "penalize on first detection" framework to an "inform–rectify–penalize" model with the aim to decriminalize and streamline offences across 16 Central Acts covering 355 provisions- decriminalizing 288 provisions and rationalizing 67 provisions.

Objectives:

- **Ease of Doing Business & Ease of Living** by reducing fear of imprisonment for minor lapses.
- **Decriminalization of Minor Offences** by *replacing jail terms with monetary penalties/warnings*.
- **Proportionality** by ensuring punishments are in line with the seriousness of offences.
- **Trust-based Governance** by encouraging voluntary compliance through warnings and improvement notices.

Acts Amended

1. Reserve Bank of India Act, 1934	**2. Electricity Act, 2003**
3. Drugs & Cosmetics Act, 1940	**4. Legal Metrology Act, 2009**
5. Central Silk Board Act, 1948	**6. MSME Development Act, 2006**
7. Road Transport Corporations Act, 1950	**8. New Delhi Municipal Council Act, 1994**
9. Tea Act, 1953	**10. Motor Vehicles Act, 1988**
11. Coir Industry Act, 1953	**12. Agricultural & Processed Food Products Export Development Authority Act (APEDA), 1985**
13. Textiles Committee Act, 1963	**14. Handlooms (Reservation of Articles for Production) Act, 1985**
15. Apprentices Act, 1961	**16. Delhi Municipal Corporation Act, 1957**

Mechanisms Introduced

- **Warnings / Improvement Notices**: For first-time offenders (76 offences under 10 Acts).
- **Adjudicating Officers**: Empowered to impose penalties.
- **Appellate Authorities**: *Created for appeals against penalties.*
- **Automatic Escalation of Fines**: 10% increase every 3 years (unless otherwise prescribed).

Significance of the Bill

- **For Citizens:** No jail for small mistakes (e.g., delay in filing returns, technical breaches). Reduces harassment by enforcement agencies.
- **For Businesses and Economy:** Clear, proportionate penalties instead of criminal liability encourage entrepreneurship, and reduces compliance burden and regulatory risks.

- **For Judiciary & Governance**: It will help reduce criminal case pendency in courts, help focus on serious crimes instead of regulatory lapses and will establish trust-based, corrective governance model.

Who Decides Nominations to Union Territory Assemblies?

The Union Home Ministry told the Jammu & Kashmir (J&K) and Ladakh High Court (HC) that the Lieutenant Governor (LG) can nominate five Legislative Assembly members independently, without the Council of Ministers' advice to the Legislative Assembly of J&K Union Territory (UT).

Nominated Members in Union Territories-

Related Constitutional Provisions:	Related Court Rulings:
UT Assemblies are governed by specific Acts of Parliament: • **Delhi**: 70 elected MLAs; no nominated members (as per Government of NCT of Delhi Act, 1991). • **Puducherry**: 30 elected MLAs; Union government can nominate up to 3 members (as per Government of Union Territories Act, 1963). • **J&K**: 90 elected MLAs; LG can nominate up to 5 members- 2 women, 2 Kashmiri migrants, 1 displaced person from Pakistan-occupied Kashmir (as per J&K Reorganization Act, 2019, amended in 2023).	• **Puducherry (Madras HC, 2018)**: Union can nominate 3 MLAs without UT Council's advice; Supreme Court (SC) later set aside procedural recommendations. • **Delhi (SC, 2023)**: LG must follow the Council of Ministers' advice in matters where the Assembly has legislative powers, based on the 'triple chain of command'- civil servants accountable to ministers, ministers to legislature, legislature to the people. This reasoning may apply to MLA nominations.

When Can Courts Order a Recount of Votes?

The Supreme Court (SC) recently overturned the November 2022 sarpanch election in Buana Lakhu village, Haryana, after recounting all Electronic Voting Machine (EVM) votes in New Delhi. Mohit Kumar, who had lost earlier, was declared winner by 51 votes over Kuldeep Singh, alleging vote tampering. This is believed to be the first SC-ordered EVM recount.

Legal Framework for Challenging an Election:

- **Where to File the Petition?** For Parliamentary, Assembly, or State Council elections in State High Court and for local government elections in District-level civil courts.
- **Who Can File the Petition?** Only a candidate or an elector connected to the election.
- **Time Limit for filing the Petition:** Within 45 days of result declaration.
- **Contents of Petition:** It must state all **material facts** supporting the challenge and allegations of **corrupt practices** must include names, dates, and locations.
- **Standard of Proof:** Corrupt practice claims are quasi-criminal; vague or unsubstantiated petitions can be dismissed.

What Are the Grounds for Invalidating an Election?

- **Bribery or Undue Influence:** Includes failure to disclose criminal antecedents or promoting social enmity.
- **Candidate Ineligibility:** Winning candidate was unqualified or disqualified on election day.
- **Nomination Irregularities:** Improper rejection or acceptance of a candidate's nomination paper.
- **Voting Irregularities:** Improper reception or rejection of votes, if it materially affected the outcome.
- **Legal/Constitutional Violations:** Non-compliance with the Constitution or election laws that materially impacted the result.

When Can the Courts Order a Recount of Votes?

Courts can order a vote recount only in exceptional cases, as it can compromise ballot secrecy. The petitioner must provide specific, material facts and evidence showing a probable counting error, establishing a prima facie

case that a recount is necessary. Usually, recounts take place at the original polling location, though exceptions, like the Panipat sarpanch case, can occur.

Government Tightens Rules Governing OCI

The Ministry of Home Affairs (MHA) recently tightened Overseas Citizens of India (OCI) rules.

Launched in August 2005, the OCI scheme lets foreign nationals of Indian origin travel to India visa-free, with long-term residency and multiple-entry benefits. It is available to individuals who were citizens of India on or after January 26, 1950, or were eligible to become citizens on that date.

What is the new Rule?

The OCI registration will be cancelled if a person is sentenced to ≥2 years' imprisonment or charged with an offence punishable by ≥7 years.

Applicability: The provision applies to all OCI cardholders irrespective of whether the conviction occurred in India or abroad, provided the offence is recognized under Indian law.

Significance of this Move: The new OCI rules strengthen legal oversight, allowing cancellation of OCI status for serious offences in India or abroad. They reinforce that OCI is a privilege, deter misuse, and help maintain the integrity of the scheme.

Collusive Litigation

The Supreme Court (SC) has Suo motu taken notice of collusive litigation by Bengaluru Development Authority (BDA) officials and ordered a petition to review actions on 3 acres 33 guntas of land.

What is meant by Collusive Litigation?

- It is a lawsuit where parties are not real adversaries but secretly cooperate to secure a favourable outcome or to test a law's validity.
- Such cases are not genuine disputes; they are essentially ***sham proceedings***.

Key Concerns Raised Regarding Collusive Litigation:

- **Abuse of process:** It is used to manipulate the judicial system for private gain.
  - ✓ **Example**: In land acquisition disputes, fake litigation can be used to obtain inflated compensation or fraudulent land titles.
- **Weakens adversarial system:** Courts decide cases without a genuine dispute.
- **Bypassing legislation:** Can be misused to achieve results outside normal democratic processes.

Legal Position of Collusive Litigation in India:

- **Collusive decrees** can be set aside if challenged by a third party who proves fraud or collusion.
- **High Courts (HCs)** can intervene under **Article 227 (**superintendence of HCs over all courts and tribunals**)** when collusion is established.
- **Parties to the collusion** cannot later seek to nullify the decree.
- **Burden of proof** lies on the party alleging collusion.
- Courts may set aside a collusive decree even without an explicit prayer, if justice demands.

Are the Rohingya 'Refugees'?

The Supreme Court (SC) will decide whether Rohingya in India are "refugees" entitled to rights and protections, or "illegal entrants" liable for deportation. The case highlights the legal vacuum as the Citizenship Act, 1955, defines an "illegal immigrant" but there is no definition of a "refugee" or their rights in Indian law.

✓ The Rohingya, termed by the United Nations (UN) as "the most persecuted minority in the world" are stateless people from Myanmar's Rakhine state, driven out by violence and military crackdowns, with most now in refugee camps in Bangladesh.

The UN defines refugees as people forced to flee their country due to a well-founded fear of persecution based on identity or beliefs.

- ✓ The 1951 UN Refugee Convention (signed and ratified by 149 UN member states) obliges states to protect refugees and ensure minimum care.
- ✓ India is **not a signatory** to the 1951 UN Refugee Convention **and its 1967 Protocol,** yet it continues to host refugees on humanitarian grounds.

Status of Refugees in India

- **Refugee Presence:** India hosts over **2,09,000 refugees** from Sri Lanka, Tibet, Myanmar, and Afghanistan as per National Human Rights Commission (NHRC) 2024 report.
- **Legal Position of Refugees in India:** There is **no national refugee law**, so refugees are not legally distinguished from other foreign nationals. Their treatment depends on **political considerations**, not a uniform legal framework.
- **Refugee Groups in India:** include-
  - **Tibetans (since 1959):** Allowed to form a government-in-exile, settle in India, and receive government aid under the Tibetan Government-in-Exile at Dharamshala.
  - **Sri Lankans:** 58,600 refugees living in 104 camps across 26 districts in Tamil Nadu
  - **Rohingya & Chin (Myanmar) and Afghans:** Over 30,000 Rohingya and Chin from Myanmar and about 14,500 Afghans in India hold only temporary UN High Commission for Refugees (UNHCR) refugee certificates, though their actual numbers may be higher.

How does Indian Law Treat Refugees under the Immigration and Foreigners Act, 2025 and the Citizenship Act?

Under the Immigration and Foreigners Act, 2025	Under the Citizenship Act, 1955
• This Act replaces four colonial-era laws (Foreigners Act, 1946; Passport Entry Act, 1920; Registration of Foreigners Act 1939; Immigration (Carriers' Liability) Act, 2000) to modernize immigration regulation with structured categories for foreigners- including refugees and asylum seekers- each with specific visa and stay norms. • All non-citizens under the act, including refugees, are treated as foreigners, like tourists or economic immigrants. • Entry and stay require valid travel documents such as a passport and visa. • Violations include: o Entering without documents punishable with up to 5 years imprisonment or ₹5 lakh fine. o Overstaying visa punishable with up to 3 years imprisonment or ₹3 lakh fine. • No special exemptions exist for refugees, who may lack these documents. • **Standard Operating Procedure (2011)**: o Allowed long-term visas for those fleeing persecution. o Those denied visas could be detained or deported.	• Defines illegal immigrants as foreigners entering without documents or overstaying visas. • Illegal immigrants cannot apply for Indian citizenship. • The Citizenship (Amendment) Act, 2019 excludes certain religious groups and includes Hindus, Sikhs, Buddhists, Jains, Parsis, Christians from Afghanistan, Bangladesh, and Pakistan who entered the country before Dec 31, 2014. • Rohingya are considered illegal migrants and remain ineligible for citizenship.

Challenges being Faced by Refugees in India	Way Forward
• **Legal Challenges:** Refugees lack a national legal framework in India, leaving them vulnerable. Many, like the Rohingya, do not have valid travel documents, making them liable for detention or deportation under the Immigration and Foreigners Act, 2025. They are also ineligible for Indian citizenship under the Citizenship Act, 1955.	• **National Refugee Law**: Define refugees, their rights, and responsibilities for uniform treatment.

• **Socio-Economic Challenges**: Without proper documentation, refugees face limited access to employment, education, and government healthcare. Most depend on informal jobs, NGOs, or UNHCR assistance, which restricts economic stability and upward mobility. • **Housing and Living Conditions**: Refugees often live in temporary shelters or overcrowded camps, with poor sanitation and limited resources. Urban refugees face high rental costs and insecure living arrangements. **Security and Social Challenges:** Refugees risk detention, deportation, and social discrimination. Groups like the Rohingya face societal suspicion, xenophobia, and political marginalization.	• **Legal Protection**: Provide residence permits and identity documents to prevent detention. • **Access to Services**: Ensure education, healthcare, and employment opportunities. • **Balance Security & Humanity**: Policies should safeguard national security while upholding humanitarian obligations. **International Cooperation**: Work with UNHCR and other countries on refugee management and resettlement.

SC Directs Telangana Speaker on Anti-Defection Cases

The Supreme Court (SC) recently directed the **Speaker of the Telangana Assembly** to decide, within **three months**, disqualification petitions against **10 Bharat Rashtra Samithi (BRS) MLAs** who joined Congress after the 2023 elections.

Case Background

- **Trigger**: In 2024, 10 BRS MLAs elected in the 2023 Telangana Assembly elections switched allegiance to Congress.
- **Disqualification Petitions**: BRS filed petitions before the Telangana Assembly Speaker in 2024 seeking their disqualification under the Tenth Schedule (anti-defection law).
- **Delays**: The Speaker did not issue notices for over seven months. Only after Supreme Court (SC) intervention were proceedings initiated.
- **High Court (HC) Actions**: Telangana HC's single-judge bench asked the Speaker to schedule hearings within four weeks. A division bench later set aside this order, prompting SC review.

Key Observations by SC

- **Purpose of Entrusting the Speaker:** Parliament entrusted **Speakers/Chairman** to adjudicate disqualification petitions to avoid court delays and ensure quick resolution. The SC questioned whether this mechanism is fulfilling its intended purpose of curbing political defections.
- **Delays in Disqualification Proceedings:** In Telangana, the Speaker **issued notices only after seven months**, following SC intervention. Such delays risk the petitions dying a "natural death" and undermine the **anti-defection law**.
- **Parliament's Role:** The SC emphasized that Parliament must **reconsider whether the current mechanism effectively combats defections**. It stressed the importance of safeguarding democratic principles and preventing misuse of office by incumbents.
- **Judicial Oversight:** The SC clarified that Speakers, even while acting as a tribunal under the Tenth Schedule, **do not enjoy immunity from judicial review**. Courts can intervene if there are undue delays or procedural lapses.
- **Instructions to Telangana Speaker:** The court directed him to **decide the petitions within three months**. Draw **adverse inference** against any MLA attempting to delay proceedings. Ensure **expeditious and impartial** resolution, reflecting the spirit of the anti-defection law.

Kaleshwaram Lift Irrigation Project

The **Kaleshwaram Lift Irrigation Project (KLIP)**, once touted as Telangana's lifeline, is now mired in controversy after key barrages developed damages and cracks within a few years, raising allegations of poor planning, faulty execution, and colossal waste of public money.

About KLIP:

It is a multi-purpose irrigation project on **Godavari river**, Telangana; world's largest multi-stage lift irrigation project; **~1,800 km canals.**

Aim: Irrigate **16 lakh acres in 13 districts**; drinking water to **Hyderabad & villages**; support industries.

Allocation: **169 TMC ft irrigation**, **30 TMC ft Hyderabad drinking**, **16 TMC ft industry**, **10 TMC ft villages**.

Cost: Escalated from **₹71,000 cr to ₹1 lakh+ cr**.

Structures: Barrages at **Medigadda, Annaram, Sundilla, Ramadugu**.

Controversies:

- Site shifted from **Tummidihatti to Medigadda** (despite clearance & ₹11,000 cr work at Tummidihatti).
- **Weak foundations:** Sundilla piers sank; cracks in Annaram & Sundilla.
- Decisions allegedly taken by chief minister **KCR alone**, bypassing Cabinet.

Inquiry: **Justice P.C. Ghose Commission (Congress Govt)** probed lapses and found serious **technical & financial irregularities. The report was submitted recently in July 2025.**

Section 436-A Code of Criminal Procedure (CrPC), 1973

Christian James Michel, accused in the AgustaWestland chopper scam, argued in a Delhi court for his release under Section 436-A Code of Criminal Procedure (CrPC), 1973 after exceeding the offence's maximum jail term, but his plea was rejected.

Case Background:

- In 2010, India signed a ₹3,726 crore deal with AgustaWestland (a Finmeccanica subsidiary) for 12 VVIP helicopters. A 2011 Italian probe alleged that bribes were paid to tweak tender conditions, implicating former Indian Air Force (IAF) chief S.P. Tyagi and middlemen, including Christian James Michel.
- In India, both the Central Bureau of Investigation (CBI- under Dept. of Personnel, Ministry of Personnel, Pension & Public Grievances) and Enforcement Directorate (ED- under Department of Revenue, Ministry of Finance) are investigating Christian James Michel for corruption and money laundering. Though granted bail in both cases, Michel has remained in **Tihar Jail since 2018** as he refuses to furnish bail bonds.

About Section 436-A CrPC (Maximum period of detention for undertrials):

- **Provision:** An undertrial **cannot be detained beyond the maximum punishment** prescribed for the alleged offence. If an undertrial has spent **half of the maximum sentence** (except in offences punishable with death), the court *may* release him on bail after hearing the prosecutor.
  - ✓ This provision was inserted in **2006** to curb excessive detention of undertrials.
  - ✓ **Introduced by Criminal Law (Amendment) Act, 2005** inspired by the principles laid down by the Supreme Court (SC) judgment in **Hussainara Khatoon v. State of Bihar (1979),** which emphasized the right to speedy trial under Article 21 of the Constitution.

What was Michel's Argument in the Court and the Court's decision?

Michel claimed entitlement to release under Section 436-A, having spent over 7 years- the maximum punishment for corruption charges (CBI case). But CBI pointed to **Section 467 Indian Penal Code (IPC) (forgery)**, punishable with life imprisonment, making him ineligible. The court rejected his plea, ruling that since **467 IPC applies**, Michel cannot be released under Section 436-A.

Why is Reform Needed in Section 436-A?	Way Forward
• **Life imprisonment bar:** Over 70 IPC offences carry life imprisonment, where undertrials cannot seek automatic release under Section 436-A. • **Over-criminalization:** Many non-heinous acts (e.g., forged records, counterfeit stamps/coins) attract life terms. • **Beyond core crimes:** *Vidhi's State of the System* notes 75% of crimes arise from laws outside core criminal justice (like shipping, taxation, municipal governance). • **Excessive punishments:** 73% of crimes carry jail terms ranging from **1 day to 20 years**, showing the need to rationalize sentencing and decriminalize minor offences.	• **Rationalize Sentencing**: Revisit provisions where relatively minor offences carry life imprisonment. • **Decriminalization**: Remove criminal penalties for regulatory and administrative violations; use civil or monetary penalties instead. • **Judicial Discretion**: Expand scope of Section 436-A to ensure fair release of undertrials, especially in non-heinous cases. • **Prison Reforms:** Strengthen legal aid, fast-track trials, and periodic review of undertrial detention. • **Policy Review**: Regularly update criminal laws in line with proportionality, justice, and global best practices.

Section 152 of Bharatiya Nyaya Sanhita (BNS)

The Supreme Court (SC) issued notice on a plea challenging Section 152 of the Bharatiya Nyaya Sanhita (BNS), with the petitioner arguing that it effectively reintroduces the colonial-era sedition law.

- ✓ The plea by Retired Army officer argues that Section 152 of the BNS revives the colonial sedition law (IPC 124A) under a new name, criminalizing vague expressions like "subversive activity" and "separatist feelings," with even broader scope (includes secessionist activities, electronic communication, and financial means- unlike the older Section 124A IPC.)
- ✓ **Colonial Legacy:** Section 124A IPC, introduced in 1870, targeted "disaffection" against the government, used against freedom fighters like Bal Gangadhar Tilak and Mahatma Gandhi.

Section 152 of BNS (2023) criminalizes an act- "Whoever, ***purposely or knowingly***, by words, either spoken or written, **electronic**, financial, or otherwise that excites or attempts to excite secession, armed rebellion, subversive activities, encourages separatist feelings, or endangers India's sovereignty, unity, and integrity". Punishment under this section involves **life imprisonment or up to 7 years imprisonment plus fine**.

Recent Cases (2024-2025):

- **Abhisar Sharma Case (August 2025)**: SC granted interim protection to journalist from arrest in an FIR under Section 152 for alleged provocative reporting; refused to quash FIR but emphasized free speech.
- **Tejender Pal Singh vs. State of Rajasthan (2024)**: Rajasthan HC quashed FIR for a social media post (sympathy for a pro-Khalistani leader via a Facebook video), ruling mere dissent without incitement to rebellion doesn't qualify.
  - ✓ Held Section 152 must remain a ***"shield for national security,"*** not a "sword against dissent."

ECONOMY

AI Based Agri Advisory Services

- The International Crops Research Institute for the Semi-Arid Tropics **(ICRISAT) and Indian Council of Agricultural Research (ICAR)**, has launched personalised and real-time climate advisory services, powered by Artificial Intelligence (AI) and Machine Learning (ML).
- The project, **AI-powered Context-Specific Agromet Advisory Services for Climate-Resilient Agriculture at Scale**, is supported under the Government of India's **Monsoon Mission III**.
- The Central Research Institute for Dryland Agriculture (CRIDA-ICAR), the International Livestock Research Institute (ILRI), the Indian Institute of Tropical Meteorology (IITM), and Indian Meteorological Department (IMD) have also joined the initiative.
- It aims to equip smallholder farmers with **hyper-local, actionable weather and climate insights**, enabling them to make **informed decisions for sowing, irrigation and pest management amid increasing climate variability**.
- These advisories will be **delivered through user-friendly digital channels**, including an AI-powered WhatsApp bot, ensuring easy access even in remote farming communities.
- The project will **first be implemented in Maharashtra**, through ICAR's Agro-Meteorological Field Units (AMFUs) to reach smallholder farmers. Insights from this phase will inform a national rollout and serve as a model for South-South expansion.
- The **Intelligent Systems Advisory Tool (iSAT)**, a digital platform developed and piloted by ICRISAT and partners during Monsoon Mission II, was initially designed to transform complex climate and agronomic data into personalised, science-based advisories.
    - iSAT is now being upgraded into a fully functional AI-powered tool under this new initiative.

PAN 2.0 Project

- The Income Tax (IT) Department has awarded the contract for the PAN 2.0 project to LTIMindtree Limited, at a bid value of Rs 792 crore. The project is expected to go live in 18 months.
- The project aims to simplify the PAN/TAN processes for better quality of service to the public, faster service delivery and improve grievance redressal mechanisms by utilising latest technologies.

PAN	TAN
• PAN acts as an identifier for the person with the tax department and remains the same once allotted. Of the 78 crore PAN cards issued, 98% belong to individuals. • PAN enables the I-T Department to link transactions such as tax payments, Tax Deducted at Source (TDS)/Tax Collected at Source (TCS) credits and income returns with the Department. • With PAN already linked to Aadhaar, it is expected to become a strong source of identification and information for authorities.	• TAN stands for **Tax Deduction and Collection Account Number**, a 10-digit alphanumeric number issued by the I-T Department. • TAN has to be obtained by people **responsible for deducting or collecting tax at source**. It is compulsory to quote TAN in TDS/TCS return, any TDS/TCS payment challan and TDS/TCS certificates.

- The project will **handle matters related to PAN and TAN**, *including allotment, updates/corrections, Aadhaar-PAN linking, re-issuance requests, online PAN validation (OPV) etc. as a **one-stop platform**.*
- Currently, PAN-related services are spread across three platforms: the e-filing portal, the UTIITSL portal, and the Protean e-Gov portal. These services will now be integrated into a single, **unified portal.**
- Under it, the 10-digit alphanumeric Permanent Account Number (PAN) issued by the IT department will have a **few upgrades**:
    - Enhancement of the QR code feature for new and old cards;

- A completely online application process; and
- A merger of all existing identification numbers to make PAN as the common identifier for businesses.
- The QR code feature, which began in 2017-18, helps validate the PAN.

- Additionally, a **PAN data vault system** will be created for all entities using PAN data, for **data protection and cybersecurity purposes**.
- Existing PAN cards will continue to be valid under PAN 2.0. Existing PAN holders need not mandatorily apply for the new card but could upgrade their PAN free of cost. The number or PAN would remain the same.

Saksham Niveshak

- The Investor Education and Protection Fund Authority (IEPFA) has launched a 100-day campaign titled Saksham Niveshak.
- This national drive is aimed at empowering shareholders by **creating awareness about unclaimed dividends held by companies** and guiding them through the process of updating their KYC and nomination details to reclaim their rightful dividend.
- The campaign encourages companies to proactively reach out to their shareholders, helping them recover unclaimed dividends and resume the regular receipt of dividends by updating essential records.
- Timely action by shareholders will ensure that their dividends and underlying shares are not transferred to IEPFA.

IEPFA

- The IEPFA was established in 2016 as per the provisions of **Companies Act, 2013** under the **Ministry of Corporate Affairs**. It is committed to promoting financial literacy, safeguarding investor interests, and protecting unclaimed dividends and shares.
- Through initiatives like Niveshak Didi (in collaboration with India Post Payments Bank (IPPB)), Niveshak Panchayat, and Niveshak Shivir, IEPFA aims to build a financially informed and empowered investor base across the country.

Pradhan Mantri Kisan Sampada Yojana

- The Union Cabinet raised budgetary outlay for the flagship scheme Pradhan Mantri Kisan Sampada Yojana (PMKSY) by Rs 1,920 crore to Rs 6,520 crore to boost the food processing sector.
- The enhanced funds will be utilised for 50 multi-product food irradiation units and 100 food testing labs.
- These facilities would help strengthen food safety mechanisms and ensure the availability of safe, quality-compliant food products in the market.
- **Launched in 2017** as a **Central Sector Scheme**, PMKSY is a comprehensive package of component schemes, which aimed at creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet.
- The components under the scheme are:
  - Mega Food Parks
  - Integrated Cold Chain and Value Addition Infrastructure
  - Creation /Expansion of Food Processing & Preservation Capacities
  - Infrastructure for Agro-Processing Clusters
  - Creation of Backward and Forward Linkages
  - Food Safety and Quality Assurance Infrastructure
  - Human Resources and Institutions

Grant in Aid to National Cooperative Development Corporation

- The Union Cabinet has approved the **Central Sector Scheme** *Grant in aid to National Cooperative Development Corporation (**NCDC**).*

- It has an **outlay of Rs. 2000 crore for a period of 4 years** starting from 2025-26 (Rs.500 crore each year).
- On the basis of grant in aid of Rs. 2000 crore, NCDC will be able to raise Rs. 20,000 crore from open market over a span of four years.
- These funds will be utilized by NCDC for granting loans to Cooperatives for setting up new projects, technology upgradation, expansion of plants and loan for meeting the working capital requirements.

Background

- Cooperatives play a vital role in socio-economic upliftment, infrastructure development, and job creation in the rural sector.
- India has more than **8.25 lakh cooperatives with more than 29 crore members and 94% farmers** are associated with cooperatives in some form or the other.
- Cooperatives in India cover a wide array of activities, including credit and banking, fertilizer, sugar, dairy, marketing, consumer goods, handloom, handicraft, fisheries, housing, etc. and contribute substantially to the Indian economy.
- Due to their important socio-economic contribution to the rural economy, it is essential to support the weaker sectors like dairy, poultry & livestock, fisheries, sugar, textile etc. by granting them long term and working capital loans.

Implementation Strategy

- **NCDC will be the executing agency** for this scheme for the purpose of disbursement, follow up, monitoring of implementation of project, and *recovery of loan* disbursed out of the fund.
- NCDC will provide loans to cooperatives either through state government or directly.
- Cooperatives, which are meeting the criteria of direct funding guidelines of NCDC would be considered for financial assistance directly against admissible security or state government guarantee.

National Cooperative Development Corporation (NCDC)

NCDC, a **statutory organisation** under the **Ministry of Cooperation**, was established in 1963

Functions

- Planning, promoting and financing programmes for production, processing, marketing, storage, export and import of agricultural produce, food stuffs, certain other notified commodities.
- Loans and grants are advanced to State Governments for financing primary and secondary level cooperative societies and direct to the national level and other societies having objects extending beyond one State.

Schemes under NCDC

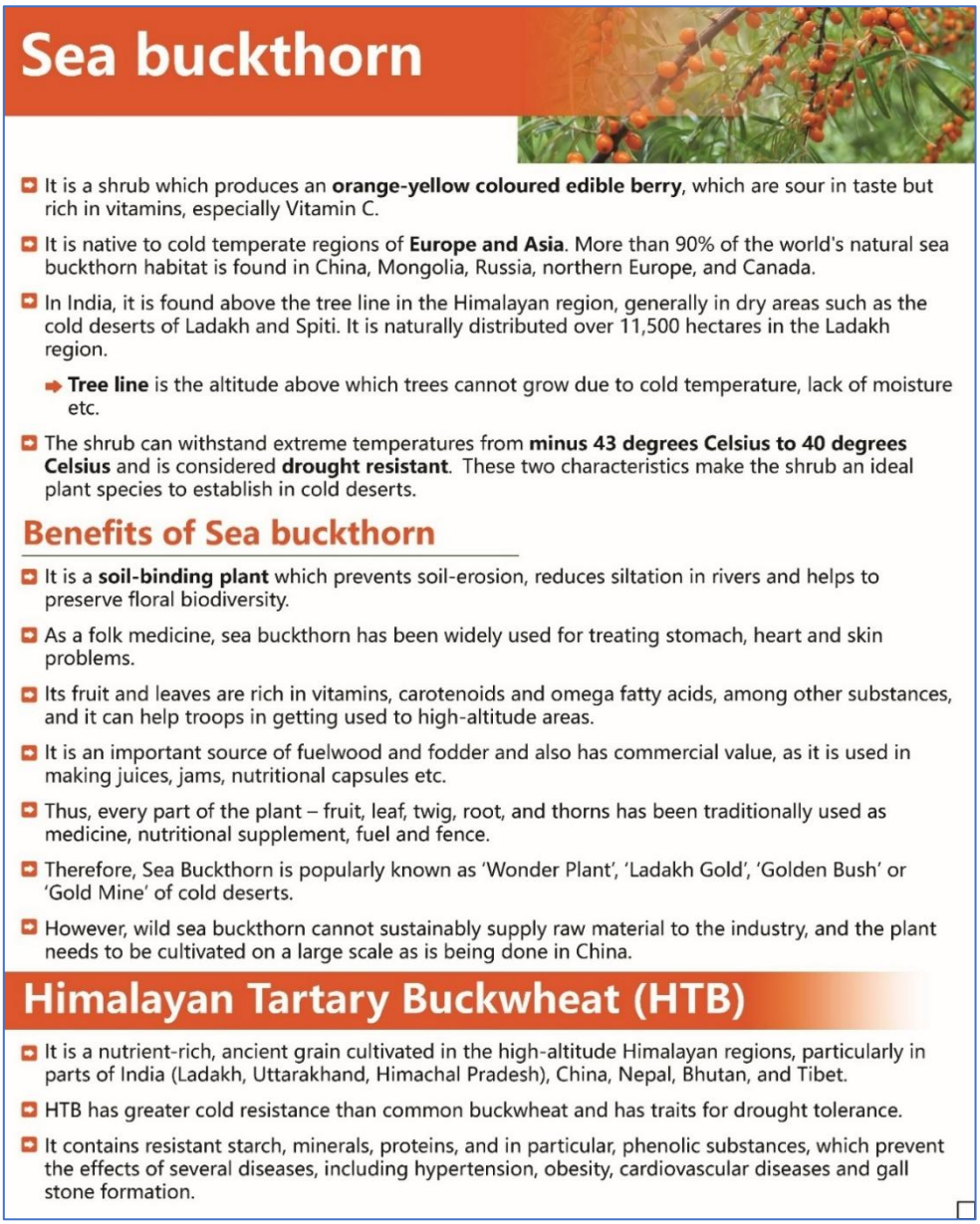
- **Yuva Sahakar:** It aims at encouraging newly formed cooperative societies with new or innovative ideas.
- **Ayushman Sahakar:** It covers hospitals, healthcare, medical education, nursing education, paramedical education, health insurance and holistic health systems such as AYUSH.
- **Nandini Sahakar:** It aims to improve the socio-economic status of women and supports the entrepreneurial initiatives of women through women's cooperatives.
- **Dairy Sahakar:** It is a cooperative dairy business focused framework of financial assistance for encouraging cooperatives to achieve higher outcomes in ESG (environmental, social, governance) linked activities.
- **Swayam Shakti Sahakar Yojana:** Scheme for providing NCDC's financial assistance to Agricultural Credit Cooperatives for providing loan/advances to Women Self Help Groups (SHGs)
- **Deerghavadhi Krishak Punji Sahakar Yojana:** Scheme for extending NCDC's long-term financial assistance to Agricultural Credit Cooperatives towards their onward lending of **long-term** loans/advances for activities under the NCDC.

Impact

- Funds provided will lead to creation of income generating capital assets and provide cooperatives with much needed liquidity in the form of working capital.
- In addition to economic benefits, cooperatives through their **principles of democracy, equality and community concerns** are an essential tool to bridge the socio-economic gap and increase participation of women in the workforce.
- Additionally, term loans for the infrastructure development also create widespread employment opportunities across different skill levels.

Sea Buckthorn and Himalayan Buckwheat

- Seeds of sea buckthorn and Himalayan buckwheat from Ladakh have been sent for experiments to the International Space Station by **NASA's Crew-11 mission.**
- Seeds procured from 11 nations across five continents are part of the study led by U.S.-based bioastronautics firm Jaguar Space, which plans to expose the seeds to microgravity conditions for a week.
- The World Seeds study examines how seeds react to the unique stresses of the space environment before they begin to grow.
- The experiment explores the potential of previously unexamined species to contribute to future space agriculture initiatives.



Banking Laws (Amendment) Act, 2025

- The Key Provisions of the Banking Laws (Amendment) Act, 2025 have come into effect from 1st August 2025.
- It contains a total of **19 amendments across five legislations**—the Reserve Bank of India Act, 1934, Banking Regulation Act, 1949, State Bank of India Act, 1955 and Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970 and 1980.
- The Act seeks to improve governance standards in the banking sector, ensure enhanced protection for depositors and investors and improve audit quality in public sector banks.
- The implementation of these provisions marks a significant step towards strengthening the legal, regulatory, and governance framework of the Indian banking sector.

Key Amendments

- **Substantial interest threshold:** The threshold for "substantial interest," which determines eligibility for directorship, has been increased from Rs 5 lakh to **Rs 2 crore,** revising a limit that has remained unchanged since 1968.

- **Director tenure:** Align director tenures in cooperative banks with the 97th Constitutional Amendment by increasing the maximum tenure from 8 years to 10 years (excluding the chairperson and whole-time director).
- **IEPF transfer:** Public sector banks (PSBs) will now be permitted to transfer unclaimed shares, interest, and bond redemption amounts to the **Investor Education and Protection Fund (IEPF)**, similar to practices under Companies Act.
- **Auditor remuneration:** The amendments also empower PSBs to offer **remuneration to statutory auditors**, facilitating the engagement of high-quality audit professionals and enhancing audit standards.

National Waterway 57 Operationalised

- In a historic step towards the revival of Assam's river-based trade and sustainable logistics, **National Waterway-57 (River Kopili)** was operationalised.
- The movement marks the resumption of intra-state waterborne freight transport in Assam after more than a decade.
- The Inland Waterways Authority of India (IWAI), under the Ministry of Ports, Shipping and Waterways, has been proactively working on unlocking the navigational potential of rivers across the Northeast.
- With this development, more than 1168 kms of National Waterways in Assam, on **Brahmaputra (NW 2), Barak (NW 16), Dhansiri (NW31) & Kopili (NW 57)**, have become operational.
- The operationalisation of this route is in line with the Maritime India Vision 2030 and PM Gati Shakti, which aim to establish sustainable, integrated, and efficient transport infrastructure across the country.
- Shifting freight movement from road to waterways, will reduce emissions, ease road congestion, and lower logistics costs.
- It will also bring economies of scale for many riverine communities in Assam.

Mega Tinkering Day

- The Atal Innovation Mission hosted Mega Tinkering Day, bringing together students from all 35 states and UTs.
- Held virtually and simultaneously in schools nationwide, the event saw participation of over 4,73,000 students.
- MTD served as a launchpad for the upcoming academic year's tinkering activities and a rallying moment for students, teachers, mentors, higher education institutions, and industry partners across India.
- The event captures AIM's vision to nurture creative thinkers, innovators, and entrepreneurs who are making India future ready.

Atal Innovation Mission (AIM)

- AIM is a flagship initiative **launched by the NITI Aayog in 2016** to promote innovation and entrepreneurship across the country.

- Since its inception, AIM has established over 10,000 ATLs in schools that offer students access to tools like 3D printers, robotics kits, IoT devices etc.
- These labs provide middle- to high-school students with hands-on exposure to modern technologies and facilitate real-world problem-solving skills.
- AIM 1.0 involved implementing programs that built new innovation infrastructure to strengthen India's then nascent ecosystem. It had the following programs:
    - Atal Tinkering Labs
    - Atal Incubation Centres
    - Atal New India Challenges and Atal Grand Challenges
    - Industry, Academia, Government and Global Collaborations
- AIM 2.0 involves piloting new initiatives designed to fill gaps in the ecosystem and scaling successes through central and state governments, industry, academia and community.

Programs for increasing input to the ecosystem

- **Language Inclusive Program of Innovation (LIPI):** 30 Vernacular Innovation Centers supporting 22 scheduled languages to be established in existing incubators.
- **Frontier Program**: It will create customized templates for the innovation and entrepreneurship ecosystems of Jammu and Kashmir (J&K), Ladakh, the North Eastern states (NE), Aspirational Districts and blocks where 15% of India's citizens live.

Programs for improving the throughput of the ecosystem

- **Human Capital Development Program:** To create a system for producing professionals (managers, teachers, trainers) to build, operate, and maintain India's innovation and entrepreneurship ecosystem.
- **Deeptech Reactor:** To create a research sandbox for testing ways of commercializing research-based deep tech startups that require significantly longer time and deeper investment to get to market.
- **State Innovation Mission (SIM):** It will assist states/UTs with building a strong innovation and entrepreneurship ecosystem that focuses on their areas of strength.
- **International Innovation Collaborations program:** It will take India's innovation and entrepreneurship ecosystem international. Four areas of intervention are identified:
    - An Annual Global Tinkering Olympiad.
    - Creation of 10 bi-lateral, multilateral engagements with advanced nations.
    - As a knowledge partner, helping the United Nation's World Intellectual Property Organization (WIPO) spread the models of AIM and its programs (ATL, AIC) to the countries of the global south.
    - Anchoring the Startup20 Engagement Group of the G20 for India.

Programs for improving the quality of output

- **Industrial Accelerator program:** It will increase industry involvement in scaling-up advanced startups. Minimum 10 Industry Accelerators in critical sectors will be created in Public Private Partnership (PPP) mode.
- **Atal Sectoral Innovation Launchpads (ASIL):** It will build iDEX (Innovations for defence excellence) like platforms in central ministries for integrating and procuring from startups in key industry sectors. Minimum 10 launchpads will be built across key ministries.

- It is designed to strengthen India's innovation and entrepreneurship ecosystem in three ways:
    - By increasing **input** (i.e., ushering more innovators and entrepreneurs);
    - By improving the **success rate or 'throughput'** (i.e., helping more startups succeed); and
    - By improving the quality of **'output'** (i.e., producing better jobs, products and services).

India's 1st Sustainable Aviation Fuel Plant

- The country's largest refiner and fuel retailer Indian Oil Corporation (IOC) will start producing sustainable aviation fuel (SAF) on commercial scale.
- This comes after **IOC became the first company in India to receive the ISCC CORSIA certification for SAF production** at its Panipat refinery.
- IOC will have the capacity to produce 35,000 tonnes per year of SAF from **used cooking oil,** which will be sourced from large hotel chains, and sweets and snacks majors like Haldiram's, which normally discard cooking oil after single use.

Sustainable Aviation Fuel

- Aircraft emit water vapour, soot, sulfur aerosols, nitrogen oxides (NO_x), which contribute to the formation of contrails – clouds that form when water vapour condenses and freezes around small particles (aerosols) in aircraft exhaust.

- All of these factors have additional warming effects on the atmosphere. In this context, SAF has emerged as a credible alternative with the **potential to reduce aviation-related emissions**.
- SAF, also known as aviation biofuel, is a biofuel that is produced from sustainable feedstocks and has chemistry similar to conventional aviation turbine fuel (ATF) or jet fuel, which is derived from crude oil.
- It is a **drop in fuel**, meaning it **can be blended with ATF** without requiring any change in the existing machinery of aircraft.
- SAF can be **derived from** a range of materials, including:
  - Oils and fats such as Used Cooking Oil (UCO), oil-rich seeds from plants, algae oils, animal fats.
  - Municipal Solid Waste (MSW)
  - Agricultural and forestry residues such as wood waste, sugarcane bagasse, corn stover, husks and straw, sugars and starches.
- There are various methods to produce SAF, with each using different combinations of raw materials.

Benefits of SAF	Barriers to widespread adoption of SAF
• The primary advantage is SAF's ability to **significantly reduce emissions** and its compatibility with the current global aircraft fleet. It means SAF can be used without modifications to existing planes, engines, or fuelling infrastructure. • It is estimated that SAF has the **potential to reduce GHG emissions** in air travel by up to 80% compared to conventional jet fuel. • Diversification of fuel sources in the aviation sector can help **reduce import dependence** and protect the sector from global oil price volatility. • This, in turn, could lead to a more stable aviation sector, possibly making air travel accessible to larger sections of society. • Moreover, SAF adoption will also **generate employment opportunities in the sustainability sector**.	• The **cost of producing** these biofuels, which is **more than double that of conventional fuels**, makes its large-scale adoption difficult for airlines without passing the burden onto consumers. • The production, storage, blending, and transportation of SAF **require the development of new infrastructure**, which would add significantly to the initial cost of adoption. • Another issue is the **availability and sustainability of feedstock** required for SAF production.

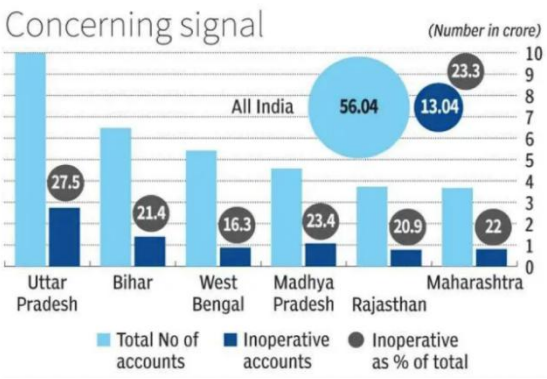
International Sustainability and Carbon Certification (ISCC) CORSIA

- ISCC CORSIA is a certification system for compliance with the **Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)** criteria for SAF. It is a **prerequisite for commercial SAF production**.
- CORSIA, which applies to international flights, would require airlines globally to offset any growth in carbon dioxide emissions beyond the 2020 levels.
- The **mandatory phase** of CORSIA will start in **2027**. India, too, will have to comply with the mandatory phase.
- In line with the CORSIA framework, India's National Biofuel Coordination Committee (NBCC) has set the initial indicative targets for blending of SAF with jet fuel 2027 onwards, starting with international flights.
- The **indicative targets** are: 1% blending in 2027 and 2% in 2028. The government is expected to announce SAF blending mandates for domestic flights in India as well, but only after blending for international flights begins 2027 onwards.

- However, for SAF to be truly sustainable, it is important that the <u>feedstock used in its production does not compete with food production, cause deforestation, or harm biodiversity</u>.

Inoperative PMJDY Accounts

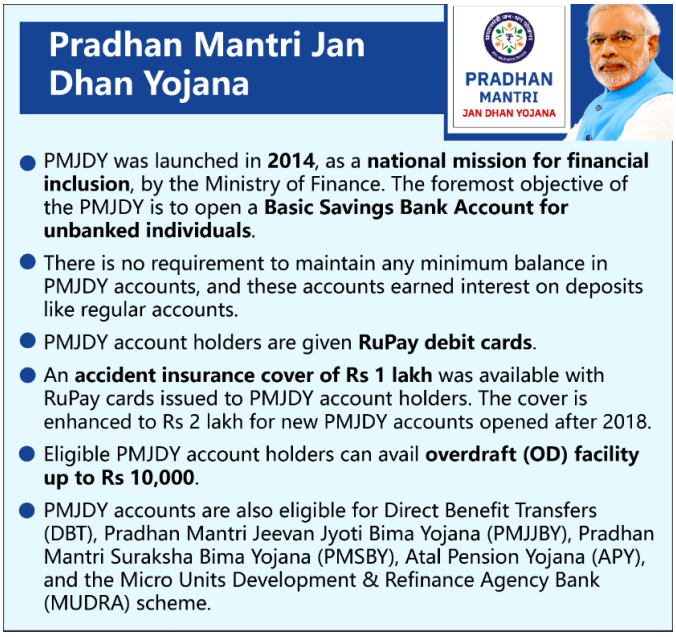
- The Ministry of Finance shared that around **23% accounts** under Pradhan Mantri Jan Dhan Yojana (PMJDY) **are inoperative**.
- Out of **56.03 crore PMJDY accounts** at the end of July, 2025, **13.04 crore such accounts are inoperative**. **Uttar Pradesh** has the **highest number of inoperative accounts** with 2.75 crore accounts.
- As per the RBI guidelines, a savings account should be treated as **inoperative/dormant** if there are **no transactions in the account for over a period of two years**.



- Recently, a Gram Panchayat level Saturation Campaign has been launched from July 2025 to September 2025, across the country wherein Re-KYC of inactive PMJDY accounts is one of the key focus activities.

Stats related to the Scheme

- As per the World Bank's Findex database, 78% of Indian adults (population with 15 years or more of age) had a bank account in 2021 as compared to 53% in 2014.
- **More than half** the PMJDY accounts (29.56 crore) are **in the names of women**.
- The **average deposit balance** in PMJDY also saw steady increase indicating steady flow of savings into the accounts. Average balance increased from Rs 1,065 in March 2015 to Rs 4,476 in March 2024, nearly **quadrupling in the last decade**.
- The largest share of PMJDY accounts is with public sector banks, followed by Regional Rural Banks, private sector banks, and Rural Cooperative Banks.



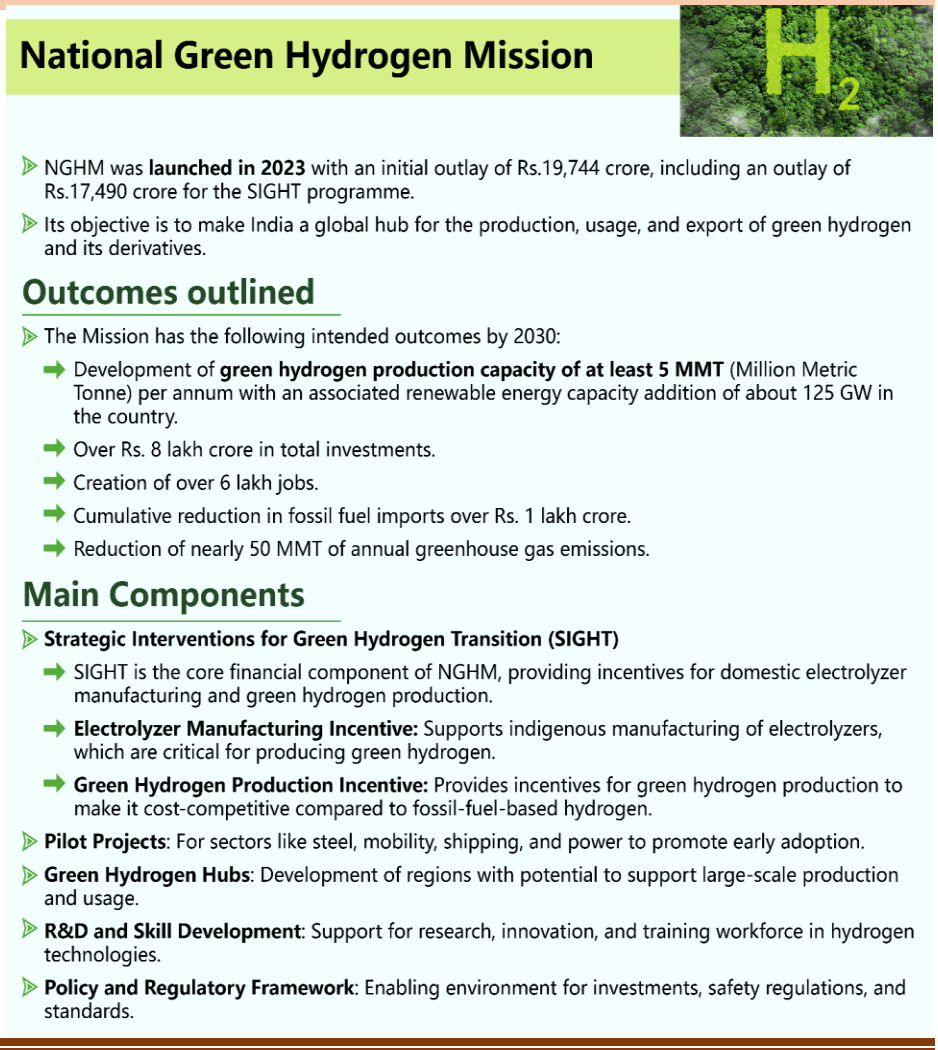
- A state-wise analysis shows the most accounts have been opened in Uttar Pradesh, the most populous state (9.45 crore), and the fewest in Lakshadweep (only 9,256 accounts). There are 15 states apart from UP with more than 1 crore PMJDY bank accounts.

First Auction Of Green Ammonia

In a landmark development under the National Green Hydrogen Mission (NGHM), Solar Energy Corporation of India (SECI) has conducted its first ever auction for the procurement of **Green Ammonia** under the SIGHT Scheme.

Green Ammonia

- **Green ammonia** is ammonia (NH_3) produced using **renewable energy sources** instead of fossil fuels. Traditionally, ammonia is produced through the **Haber–Bosch process** using natural gas or coal, which emits large amounts of CO_2.
- In contrast, green ammonia is generated by **combining green hydrogen** (produced via electrolysis of water using renewable energy like solar/wind) **with nitrogen from the air**.



Applications of Green Ammonia

- **Fetilizers:** It is a sustainable alternative to conventional ammonia-based fetilizers.
- **Energy carrier:** It can be used as a carrier for green hydrogen, storing renewable energy in a liquid form, which is easier to transport than gaseous hydrogen.
- **Power generation:** It can be burned directly in gas turbines or used in fuel cells.
- **Sustainable fuel:** It is a potential carbon-neutral fuel for the shipping industry and other sectors.

Supply & Use Tables

- The Ministry of Statistics and Programme Implementation (MoSPI) has released the **Supply and Use Tables (SUTs) of 2020-21 and 2021-22**.
- The SUTs for 2020–21 and 2021–22 have been compiled using the estimates of macroeconomic aggregates published in the National Accounts Statistics (NAS) 2024, which provides the Final Revised Estimates for 2020-21 and for 2021-22.
- SUTs represent a detailed snapshot of all economic activities taking place in the economy. They are analytical tools that present the structure of an economy as well as interlinkages among the various economic actors.

Purpose of SUT

- SUTs offer a comprehensive framework that **integrates the three approaches to measuring Gross Domestic Product (GDP)**—production, income, and expenditure within a unified structure.
- Compilation of product-wise value of output by different industries, net product taxes, trade and transport margin, import on supply side, and intermediate consumption by different industries, final use, export by products make the SUT more data demanding. These detailed product-level information by industry enables policymakers, researchers, and academicians to undertake granular analysis of the structure, composition and dynamics of the economy.

SUT Framework

SUTs are presented as two interlinked matrices: the Supply Table and the Use Table, structured in a **product-by-industry matrix**.

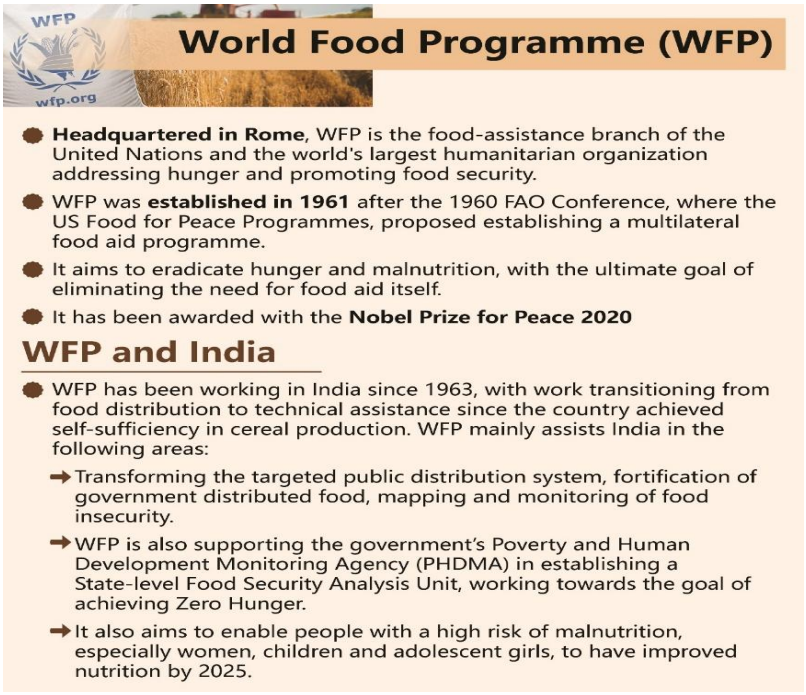
- The **Supply Table** captures the total supply of goods and services, both from domestic production by industry and imports.
- In contrast, the Use Table records the utilization of these products across various components—intermediate consumption by industries, final consumption, gross capital formation, and exports.
- The total supply of a product (from domestic production and imports) must equal its total use. This ensures that all economic flows are accounted for, and thus, SUTs facilitate a coherent and balanced representation of the economy.

Export Promotion Mission

- In response to global trade challenges and rising tariffs, India is set to launch its Export Promotion Mission (EPM).
- The total outlay for EPM is **Rs 25,000 crore for six year till 2030-31** with annual allocation going up each passing year as the various components of the mission get operationalised.
- The proposal has been submitted to the finance ministry for its review and approval, and it will be launched after receiving a nod from the Union Cabinet.
- The proposed mission seeks to enable broad-based, inclusive, and sustainable export growth, by exploring approaches beyond conventional mechanisms to address key bottlenecks faced by Indian exporters, especially MSMEs.
- The strategy includes promoting exports, diversifying both markets and the export basket to reduce future risks, and encouraging exporters to improve the exportability of Indian products.
- EPM has a **collaborative framework**, involving the Department of Commerce, Ministry of MSME, Ministry of Finance, and other line ministries and stakeholders, including Exim Bank, ECGC (export credit guarantee corporation), CGTMSE (Credit Guarantee Fund Trust for Micro and Small Enterprises), NCGTC (National Credit Guarantee Trustee Company Ltd), export promotion councils, commodity boards, industry associations, and state governments.
- The mission is proposed to be implemented through **two sub-schemes** - **Niryat Protsahan (over Rs 10,000 crore) and Niryat Disha (over Rs 14,500 crore)**.
- Main elements under the **Niryat Protsahan** scheme include:
    - Interest equalisation support worth over Rs 5,000 crore for six financial years (2025-2031);

- Support for alternative trade finance instruments;
- A credit card for e-commerce exporters; and
- Other financing mechanisms to bridge liquidity gaps faced by exporters.

- The components under **Niryat Disha** are:
  - Support for export quality compliance (about Rs 4,000 crore);
  - Overseas market development (over Rs 4,000 crore);
  - Branding, export warehousing and logistics; and
  - Capacity building to integrate more Indian enterprises into global value chains.



India & World Food Programme Partnership

- The Government of India and the World Food Programme (WFP) have signed a Letter of Intent (LoI) aimed at addressing the global hunger crisis.
- Under it, the Department of Food and Public Distribution (DFPD), will supply fortified rice from India, to fulfil the food and nutritional requirements of the most vulnerable populations in crisis zones globally.

Project Aarohan

- **National Highways Authority of India (NHAI)** has launched Project Aarohan to provide scholarships and mentorship to children of toll plaza employees.
- The initiative aims to remove financial barriers, bridge socio-economic divides and provide equal access to *quality education for students from economically weaker sections, SCs, STs, OBCs, and minority groups.*
- The project is aimed at nurturing the talent of the students, who will power the growth of the country. It aims to cover **500 students from Class 11 to the final year of graduation**, each receiving an annual scholarship of **Rs 12,000** during FY 2025-26.
- Additionally, **50 bright students** aspiring for **postgraduate and higher studies** will be supported with scholarships of **Rs 50,000 each**.
- The program combines financial aid with structured mentorship, skill-building workshops, and career guidance to holistically prepare students for higher education, employment and entrepreneurship.

Restructuring and Extension of PM SVANidhi

- The Union Cabinet has approved the restructuring and extension of Prime Minister Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi) Scheme, extending it till March 31, 2030.
- **Launched in 2020**, PM SVANidhi is a **Central Sector Scheme** that facilitates **affordable collateral-free loans to street vendors**.
- The restructured scheme aims to benefit **1.15 crore beneficiaries** including 50 lakh new beneficiaries, with an **outlay of Rs 7,332 crore**.

- Implementation of the scheme would be the joint responsibility of **Ministry of Housing & Urban Affairs (MoHUA) and Department of Financial Services (DFS)**.

Achievements

- As of July 2025, over **96 lakh loans amounting to Rs 13,797 crore** have been disbursed to more than 68 lakh street vendors.
- ~47 lakh digitally active beneficiaries have conducted over 557 crore digital transactions worth Rs 6.09 lakh crore, earning a total cashback of Rs 241 crore.
- Under the 'SVANidhi se Samriddhi' initiative, 46 lakh beneficiaries across 3,564 Urban Local Bodies (ULBs) have been profiled, leading to over 1.38 crore scheme sanctions.
- The scheme won the **Prime Minister's Award for Excellence in Public Administration (2023) for Innovation** (Central Level) for its outstanding contribution to boosting the economy, promoting livelihoods, advancing financial inclusion, and driving digital empowerment.
- It also won the **Silver Award for Excellence in Government Process Re-engineering for Digital Transformation (2022)**.

Key features

- The scheme's coverage is being **expanded beyond statutory towns to census towns, peri-urban areas** etc. in graded manner.
- In the restructured scheme, the **first tranche** of loan has been increased from **Rs 10,000 to Rs 15,000** and the **second tranche** from **Rs 20,000 to Rs 25,000**, while the third tranche remains unchanged at Rs 50,000.
- A **UPI-linked RUPAY Credit Card** will be provided to beneficiaries who have repaid the second loan. The card would provide immediate access of credit to the street vendors in order to meet any emergent business and personal requirements.
- Further, in order to give boost to digital adoption, the street vendors can avail **cashback incentives** upto Rs 1,600 on making retail & wholesale transactions.
- It also focuses on building the capacity of the street vendors with a **focus on entrepreneurship, financial literacy, digital skills, and marketing**.
- Standard hygiene and food safety trainings would be conducted for street food vendors, in partnership with FSSAI.
- In order to ensure holistic welfare & development of the street vendors and their families, the 'SVANidhi se Samriddhi' component will be further strengthened, through monthly Lok Kalyan Melas.

Women Led Economic Growth For Viksit Bharat 2047

- Women empowerment is a key driver for national progress, and today India is witnessing a transformative shift on this front. Women are no longer just participants but the backbone of India's economic growth.
- One of the key pillars for achieving the vision of Viksit Bharat by 2047 is ensuring 70% women workforce participation in the country.
- Initiatives on education, skill development, entrepreneurship, and equal workforce opportunities are efforts to further strengthen this empowerment journey.

Shift from Women Development to Women – Led Development

- At the National level, **70 central schemes across 15 Ministries** and more than **400 State-level schemes** focus on supporting female entrepreneurship.
- PLFS data shows that **female self-employment grew by 30% -** from 51.9% in 2017-18 to 67.4% in 2023-24.

Surge in Female Workforce Participation

- **Periodic Labour Force Survey (PLFS)** data shows that the **women's employment rate (WPR) grew from 22% in 2017-18 to 40.3% in 2023-24**, while the **unemployment rate (UR) dropped from 5.6% in 2017-18 to 3.2% in 2023-24**.
- This shift is even more significant in **rural India,** where **female employment has grown by 96%**, while **urban areas** have seen an **increase of 43% in the same period**.
- The **employability of female graduates** has also increased from **42% in 2013 to 47.53% in 2024**.
- The employment rate (WPR) among women with postgraduate education and above has risen from 34.5% in 2017-18 to 40% in 2023-24.
- As per EPFO payroll data, over the past seven years, 1.56 crore women have joined the formal workforce.
- Meanwhile, as of August 2025, **e-Shram portal has recorded over 16.69 crore women unorganized workers'** registration, providing them access to various social welfare schemes of the government.

- **Gender budgets** have increased by **429% in the last decade**, rising from Rs 0.85 lakh crore in FY 2013-14 to Rs. 4.49 lakh crore in FY 2025-26.
- This reflects a paradigm shift from women's development to women-led development, with a strong focus on employment, employability, entrepreneurship, and welfare.
- Program like Startup India have facilitated a thriving ecosystem, with **nearly 50% of DPIIT registered startups having at least one-woman director** i.e., 74,410 out of over 1.54 lakh. Around two crore women have become Lakhpati Didi.
- The PM Mudra Yojana, which is playing a crucial role in financial inclusion, with **women receiving 68% of the total MUDRA loans** - (over 35.38 crore loans worth ₹14.72 lakh crore).

Skill Impact Bond

- As India eyes its goal of becoming a $30-trillion economy by 2047, innovative models like Skill Impact Bond (SIB) are being utilised to address the challenges of skilling an unemployment.
- **Launched in 2021**, SIB is India's first **Development Impact Bond (DIB)** dedicated to skills training and job placement, with a special emphasis on women and marginalized communities.
- SIB is a **performance-based financing model** where private investors bear the initial risk. Investors are repaid, only if agreed-upon outcomes, are achieved.
- Unlike traditional schemes that often measure success by the number of participants enrolled, SIB rewards **placement and retention**.
- A third-party evaluator verifies every milestone, ensuring accountability and transparency.
- SIB's **objective** is to **skill 50,000 youth 60% of them women from rural or disadvantaged backgrounds**—and ensure **at least 30,150 retain jobs for over three months**.
- It is led by **National Skill Development Corporation (NCDC)** under **Ministry of Skill Development and Entrepreneurship (MSDE)**.

SIB 2025 report findings

- Jharkhand leads the enrolment tally with 27%, followed by Uttar Pradesh, Maharashtra, Odisha, and Telangana.
- Women dominate enrolment, particularly in apparel, but are also making inroads into retail, IT-enabled services (ITeS), and Banking Financial Services and Insurance (BFSI). Men are shifting away from construction and exploring automotive and telecom sectors.
- Out of 23,700+ trainees, over 72% are women from vulnerable backgrounds. The female certification rate has touched 92%, and job placement stands at 81%.
- Self-employment among women has increased from 6% to 14%. Overall, 75% of all trainees secured jobs, with 60% staying employed beyond three months.
- Female employment rates have jumped from 35% to 48%. However, the gender pay gap remains a challenge. Men earn between Rs 12,400–15,700, while women earn Rs 11,500–13,000, despite similar job outcomes.

Challenges holding back skilling in India

- India's skill development efforts are constrained by infrastructure and quality gaps, particularly in rural ITIs that lack trained instructors and modern equipment.
- There is a disconnect between industry needs and training curricula, with sectors like AI, green energy, and cybersecurity still underserved.
- Private sector participation is limited, often hindered by regulatory hurdles, low incentives, and weak academia-industry linkages.
- Despite platforms like the Skill India Digital Hub (SIDH), skilling remains urban-centric, leaving rural India, home to 90% of the informal workforce—largely underserved. Only 10% of rural workers receive formal skill training.

Public Accounts Committee on Toll Collection

- The Public Accounts Committee (PAC) under the chairmanship K.C. Venugopal has submitted a report.
- The report expressed concerns over the current tolling system, highlighting that charges are often levied indefinitely irrespective of road quality, traffic volume, user affordability or recovery of project cost.
- The committee said the practice was formalised by a **2008 amendment to the Fee Rules** allowing for **perpetual tolling** even after project costs are recovered.

- This provision was further codified through the **2023 amendment** to the Fee Rules, which explicitly permits tolling to continue beyond the end of the concession period.
- After a Build Operate Toll project's concession ends, the asset transfers to the National Highways Authority of India (NHAI) and operates as a publicly funded toll plaza, with revenues going to the Consolidated Fund of India.
- While toll rates are revised annually based on a **fixed 3% increment and Wholesale Price Index (WPI) adjustments**, there is no independent mechanism to assess if these charges are justified by actual operation and maintenance costs.

Recommendations of the committee

- The PAC recommended that the MoRTH should establish a tariff authority, on the lines of the Airports Economic Regulatory Authority (AERA) in the civil aviation sector, to ensure transparency and fairness in toll fixation, collection, and regulation.
- Toll collection on any highway stretch must be rationalised and substantially reduced once capital and routine maintenance costs have been recovered.
- Any continuation of tolls beyond this point should be permitted only if clearly justified and approved by the proposed independent oversight authority.
- Further, all existing contracts and publicly funded toll plazas allowing tolling beyond cost recovery must be reviewed to safeguard user interest and uphold the principle of equity in public infrastructure usage.
- MoRTH and National Highways Authority of India (NHAI) should establish a system for automatic toll refund or waiver in cases where the highway is incomplete, unfit, or unavailable fully or under maintenance for use.
- The Committee also questioned the practice of **subcontracting** in National Highway projects.
  - Subcontracting leads to reduction in accountability and limits the ability to enforce quality standards or timely delivery.
- The Committee also recommended a third-party audit of NHAI's workings, evaluating the effectiveness of its organisational structure, its functioning its internal controls and its compliance with statutory and regulatory frameworks.

- The Ministry of Road Transport and Highways (MoRTH) has acknowledged this, and has initiated a study with NITI Aayog to revise the user fee determination framework, including base rates, inflation indexing, and concession structures.

Income-Tax (No.2) Bill, 2025

- The Parliament passed **The Income-Tax (No.2) Bill, 2025**, to **replace the six-decade old Income Tax Act,1961**.
- The Bill retains most of the provisions of the 1961 Act. It primarily aims to **simplify the language and remove redundant provisions**.
- Tax rates and regimes for individuals and corporations remain unchanged. Moreover, there are no changes in offences and penalties.

Key Provisions

- The Bill introduces the **concept of tax year**, which has been defined as the **12-month period beginning April 1**.
- Taxpayers who do not have any I-T liability can obtain **a nil-TDS certificate**.
- There will be nil Tax Collected at Source (TCS) on Liberalised Remittance Scheme (LRS) remittances for education purposes financed by any financial institution.
- **Power to frame schemes:** The Act provides for faceless collection of information and assessment of tax cases. The Bill retains these provisions.
  - The Act also has specific provisions for faceless mechanism for areas such as inquiry or valuation; revision of orders; and collection and recovery of tax.
  - The Bill replaces these provisions with general powers for the central government to frame new schemes for greater efficiency, transparency, and accountability.

- **Virtual digital space:** The Act allows income tax authorities to enter and search buildings and break open locks. The Act also empowers the authorities to inspect electronic documents.
    - The Bill retains these provisions and also allows authorities to gain access of a virtual digital space during search and seizure proceedings.
    - Virtual digital space is defined as an environment or area that is constructed and experienced through computer technology. It includes email servers, social media accounts, online investment and trading accounts, and websites for storing details of asset ownership.
- **Interpretation of tax treaties:** The Act allows the central government to enter into agreements with other countries to provide relief in cases of double taxation.
    - The Bill retains these provisions and adds that if a term in a treaty is not defined in the treaty/ the Act/ or a notification by the central government, its meaning will be as assigned in any other central law.
- **Dispute resolution panel:** The Act allows certain eligible assesses to refer draft orders passed by assessing officers to a dispute resolution panel. These assesses include persons engaged in transfer pricing cases, non-residents, or foreign companies.
    - The Bill retains these provisions and adds that the panel must issue directions along with the points of determination and the reasons for arriving at the decision.

Shortfall In Cess Transfer

- As of 2023-24, the Central Government has failed to transfer Rs 3.69 lakh crore worth of cess collections to the relevant funds, the Comptroller and Auditor General (CAG) has found.
- The CAG found such shortfalls in transfers relating to funds created for investor education and protection, monetisation of national highways, development of the oil industry, and the development of health and education in the country.
- The single-largest source of this shortfall in transfers was to the Oil Industry Development Board (OIDB).
    - Oil Industry (Development) Act, 1974 had provided for the setting up of the OIDB for the development of oil industry. For that purpose, a cess was imposed on crude oil and natural gas.

Cess

- It is a form of tax charged over and above the base tax. A cess is usually imposed additionally when the state or the central government looks to raise funds for specific purposes.
- For example, the government imposes an education cess to generate additional revenue for funding education.
- The revenue from taxes like income tax, GST etc. is kept in the Consolidate Fund of India (CFI) and the government can use it for any public purpose.
- Revenue from cess is first credited into the CFI but unlike normal taxes, they are meant to be used for a specific designated purpose.
- To ensure the funds are used correctly, the government may later transfer the cess revenue from the CFI to specific, dedicated reserve funds created for that purpose.

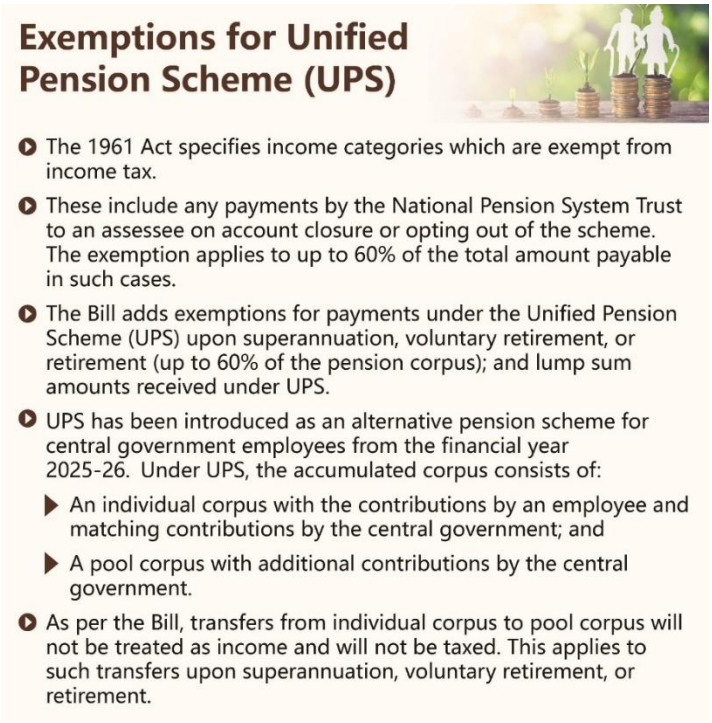
Taxation Laws (Amendment) Bill, 2025

- The Taxation Laws (Amendment) Bill, 2025 was passed in the Parliament. The Bill seeks to amend the Income-Tax Act, 1961 and the Finance Act, 2025.
- The 1961 Act provides for the framework to levy income tax on individuals and companies. The 2025 Act gives effect to the tax proposals of central government for the financial year 2025-26.

Key provisions of the Bill

Exemptions for the Public Investment Fund of Saudi Arabia

- The Act provides tax exemptions on certain income from investments made in India by:
  - A wholly owned subsidiary of the Abu Dhabi Investment Authority, which is a resident of UAE, and invests funds owned by the Abu Dhabi government;
  - A sovereign wealth fund that is wholly owned, controlled, and regulated by a foreign government with no benefit to private persons, and
  - A pension fund that is created under the law of a foreign country, and is exempt from tax or not taxed in that country.
- The Bill extends this exemption to income from investments made by:
  - The Public Investment Fund of the Government of Saudi Arabia; and
  - Its wholly owned subsidiary, which is a resident of Saudi Arabia, and invests funds owned by the government of Saudi Arabia.



Block Assessment

- Additionally, the Bill refines provisions related to block *assessments in income tax search cases*, aiming to streamline the treatment of pending assessments and reassessments during search operations.

S&P Upgrades India's Sovereign Ratings

S&P Global has raised India's long-term sovereign credit rating to BBB from BBB-. This marks the country's first rating upgrade by S&P in **18 years**, the previous one being in 2007.

The Rating Scale

- Ratings are divided into two rough classes: **investment and speculative grades**.
- Entities, including countries, in the former class are worth investing in, while repayment of loans taken by those in the latter is more difficult to predict. But even within the investment grade, there are levels, and BBB is the lowest.
- A BBB rating indicates "adequate capacity to meet financial commitments, but more subject to adverse economic conditions".

- The next step is A, then AA, and finally, AAA, which signifies “extremely strong capacity to meet financial commitments”.

Impact of the Upgrade

- The improved rating is expected to reduce sovereign borrowing costs and strengthen investor confidence, leading to higher inflows of foreign capital.
- This, in turn, will create a more stable environment for financing public and private sector investments, thereby supporting infrastructure development, employment generation, and broad-based economic growth in the years ahead.

Green Hydrogen Plant At Kandla

- Deendayal Port Authority (DPA) has commissioned the country's first 1 MW green hydrogen plant, at Kandla. The plant is completely indigenous.
- This is the first phase of a planned 10MW facility and is the first such development at an Indian port.The development is a pivotal step in maritime decarbonization

Kandla Port

- Also known as Deendayal Port, Kandla port is in Kutch district. It is one of the 13 major ports of India and is located in **Kandla Creek** near the **Gulf of Kutch**.
- It was constructed in the 1950s as the chief seaport serving western India. It was renamed as Deendayal Port in 2017 under the Indian Ports Act, 1908.
- The port infrastructure is located at three different locations along the Gulf of Kutch, which are Kandla Creek, Tuna Tekra and Vadinar.

Special Rupee Vostro Accounts

- RBI has made it easier for banks to open Special Rupee Vostro Accounts (SRVAs), a key step to promote international trade in Indian Rupee.
- Authorised Dealer (AD) banks no longer need prior approval from the RBI to open SRVAs for their overseas correspondent banks.
- This move aims to speed up the opening and use of these accounts, making it easier to operationalise trade settlements in rupees.
- This step is part of the RBI’s broader goal to internationalise the Indian Rupee and reduce reliance on hard currencies such as the US dollar in bilateral trade.
- Further, the RBI has allowed non-residents maintaining SRVAs to invest their surplus balance in this account in Central Government Securities (including Treasury Bills).
- The SRVA mechanism was introduced in 2022 to enable exporters and importers to **invoice and settle trade in Indian Rupees**.
- Under this, exporters and importers can use a SRVA linked to the correspondent bank of the partner country for receipts and payments denominated in rupees.
- A **Vostro account** is one opened by a bank in its home country on behalf of a foreign bank. The funds in the rupee account can be used by the export partner for trading with anyone who accepts rupees.

RBI’s 7 Sutras

- A committee set up by the RBI to develop a Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI) in the financial sector has recommended several measures.
- The committee has developed **7 sutras** *(given in the figure)* to serve as the foundational principles for AI adoption.

- Guided by the 7 sutras, the committee has recommended a forward-looking approach, containing 26 actionable recommendations under **six strategic pillars** – infrastructure, policy, capacity, governance, protection and assurance.
- Under **innovation enablement**, the focus is on *Infrastructure, Policy and Capacity* and for **risk mitigation**, the focus is on *Governance, Protection and Assurance.*

Recommendations

- A high-quality financial sector data infrastructure should be established, as a digital public infrastructure, to help **build trustworthy AI models** for the financial sector.
- This may be integrated with the AI Kosh – India Datasets Platform, established under the IndiaAI Mission.
- An **AI innovation sandbox** for the financial sector should be established to enable Regulated Entities (REs), fintechs and other innovators to develop AI-driven solutions.
- Appropriate **incentive structures and infrastructure** should be in place to encourage inclusive and equitable AI usage among smaller entities.
- Formulation of an **AI policy** to provide necessary regulatory guidance and institutional capacity building at all levels.
- To **mitigate AI risks**, it recommended for the expansion of product approval processes, consumer protection frameworks and audits to include AI related aspects and the augmentation of cybersecurity practices and incident reporting frameworks.
- Besides, it has prescribed the establishment of robust governance frameworks across the AI lifecycle and making consumers aware when they are dealing with AI.

Trump Raises U.S. tariffs on Indian imports to 50%

- The US has imposed an additional 25% tariff on Indian imports, citing India's Russian energy purchases, raising total tariffs to 50%—the highest for any nation.
- India condemned the move as "unfair, unjustified and unreasonable." Experts warn it could reduce India's annual GDP by over 0.5 percentage points.

India's Response to US Tariff Hike and Pressure from Trump

- Despite doubling tariffs on India to 50%, New Delhi remains calm and adopted a strategy of "quiet non-submission" — resisting without public confrontation.
- India has drawn clear red lines:
  - **Sovereignty is non-negotiable** — US cannot dictate India's ties with Russia or its participation in BRICS.
  - **Agriculture and dairy sectors** will remain protected due to their importance for poor farmers.
- India's approach differs from both **conceding nations** (e.g., Bangladesh, Pakistan) and **openly confrontational ones** (e.g., China, Canada), instead choosing a **measured, firm stance** without public criticism.

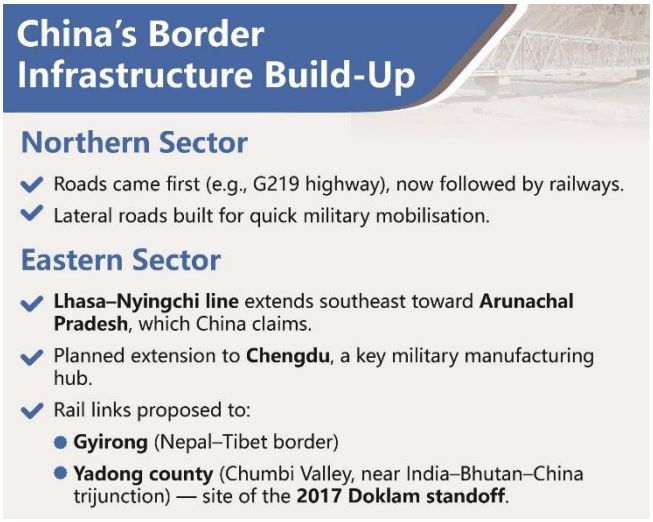
Way Forward

- In the short term, India must focus on **minimising losses through trade negotiations**.
- Over the long term, it needs urgent **domestic reforms** to boost manufacturing, skill development, infrastructure quality, logistics efficiency, and ease of doing business.
- **Tax relief**, a national human resource policy, and leveraging its young population are essential.

- Global trade rewards strength, and India must address structural weaknesses to avoid economic exploitation and punitive measures.

China To Build Xinjiang-Tibet Rail Link 'Near' LAC

- China plans to construct the Tibet–Xinjiang railway through Aksai Chin, near the Line of Actual Control (LAC) with India.
- Project will link Shigatse (Tibet) to Hotan (Xinjiang), running along the Nepal border and cutting north through Aksai Chin.
- **Strategic Concerns for India**
  - **Aksai Chin**: Indian territory under Chinese occupation since 1950.
  - The rail line's proximity to the LAC could enable **faster Chinese troop deployment** and **rapid mobilisation of defence equipment** to border areas.
  - Parallels with the **G219 Xinjiang–Tibet highway** construction in the 1950s, which was a **trigger for the 1962 India-China War**.



Mail-in Voting System in US

- President Donald Trump plans to use his office to try to get rid of **mail-in ballots** ahead of the 2026 elections for the House of Representatives and Senate.
- He has long claimed, without proof, that he lost the 2020 election due to voter fraud perpetrated through mail-in ballots and voting machines.

About Mail-in Voting

- Mail-in voting lets voters fill out ballots at home and send them in by mail or dropbox, instead of voting in person.
  - Some 34 countries, allow some kind of mail-in voting *(postal voting*), according to the International Institute for Democracy and Electoral Assistance.
  - Of those, 12 countries, including Canada, Germany and South Korea, allow all voters to vote by mail in their elections.
- **Where It's Used**
  - **All-mail elections**: 8 states + Washington, D.C. (e.g., California, Colorado, Hawaii, Nevada, Oregon, Utah, Vermont, Washington).
  - **Other states**: Voters can request absentee ballots for at-home voting.
- **Trends**
  - Became highly popular in 2020 during the pandemic → 43% of votes were cast by mail.
  - Declined to 30% in 2024.

Can the US President Change Voting Laws?

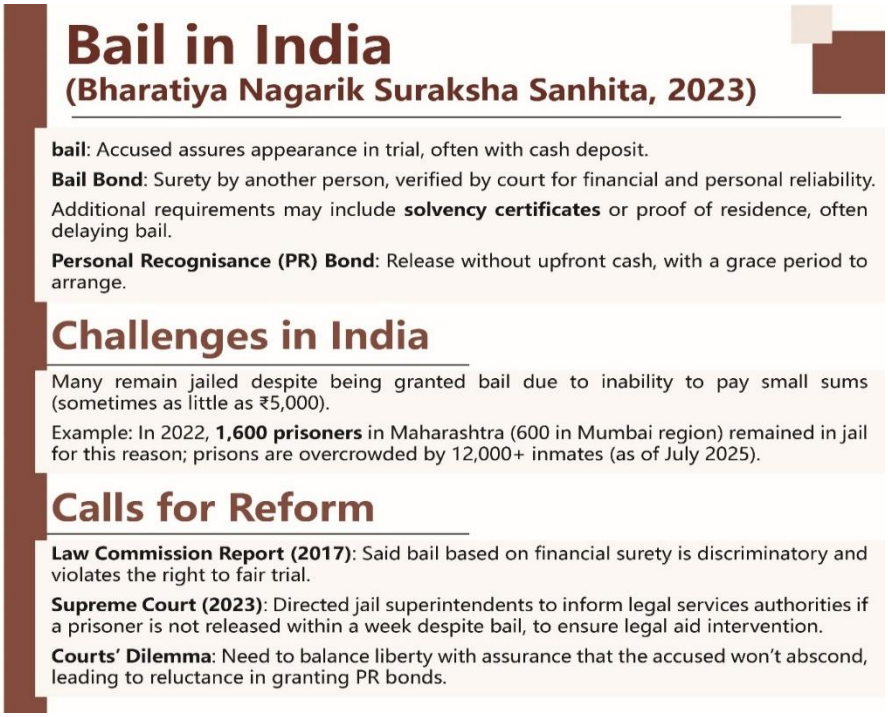
- No. The US Constitution gives power over the "times, places, and manner" of elections to state legislatures, with Congress able to make or alter such rules. The President has no role.
- **Limits**:
  - Congress can regulate **federal elections** (presidential, congressional).
  - States control their **own elections** (e.g., governor, state legislature).

Bail and Cashless Bail: US and India

President **Donald Trump** signed an order cutting federal funds to jurisdictions allowing cashless bail. He argued the practice fuels crime, with repeat arrests of "dangerous criminals."

Cashless Bail in the US

- **Traditional bail**: Cash deposit to ensure appearance at trial; inability to pay means jail until trial.
- **Problem**: Disadvantages the poor; keeps innocents in prison for minor offences.
- Many US states adopted **cashless bail** to reduce such inequities.



US-China Trade Truce

- US President Donald Trump has extended his trade truce with China until November 10, 2025, **delaying the imposition of a 145% tariff on Chinese goods** and maintaining it at 30% as per a previous order.
  - This pause kept US tariffs on Chinese imports at 30%, while China maintained a 10% duty on US goods.
- This pause follows Beijing's countermeasures, which included initially imposing a 125% tariff on US imports (later reduced to 10%) and **restricting exports of rare-earth metals** crucial for US industries like automotive, aerospace, defence, and semiconductors.
- **China has also leveraged its agricultural imports**, drastically reducing purchases of US farm produce — from $13.1 billion in January–June 2024 to $6.4 billion in the same period of 2025, continuing a multi-year decline from a peak of $40.7 billion in 2022.
  - As the world's top importer of key agri-commodities, China now sources much of its soyabean, barley, and corn from Brazil, Argentina, Canada, and others, bypassing US suppliers.
- Alongside its dominance in rare-earth elements, China's buying power in the global agri-market is a potent tool to pressure the US administration into maintaining trade talks and avoiding tariff escalation.

End of Duty-Free Imports in the US

- Postal and courier services worldwide are bracing for logistics disruptions as the **USA has ended duty-free imports** for low-value goods (under $800 per person per day).
- This means items like clothes, toys, cosmetics, and small electronics will now face tariffs depending on where they come from.
- **What Was the De Minimis Rule?**
  - De minimis exemption — Latin for "too small to be trifled with" – originated in the **1930 Tariff Act** so tourists could send home souvenirs tax-free.
  - In the 1990s, it was expanded to cut costs for businesses and consumers.
  - In 2016, the limit was raised from $200 to $800, covering even more goods.

- By 2024, 1.36 billion parcels entered the US duty-free, many from Chinese e-commerce firms like Shein and Temu.

- **Why Was It Removed?**
  - The Trump administration said it wanted to: Reduce the **trade deficit**; Stop **IP theft** and **fake goods**; Protect American businesses from being undercut by cheap imports.
  - Critics argue ending it will hurt poorer Americans and reduce overall welfare by **$11–13 billion**.

H-1B Visa Changes

- Recently, US Commerce Secretary Howard Lutnick labelled the H-1B visa program a "scam," arguing it allows foreign workers to take jobs that should go to Americans.
- His remarks align with the Trump administration's stance who oppose the program for allegedly undercutting domestic workers.
- However, the H-1B continues to have strong supporters, including Elon Musk and Vivek Ramaswamy, who highlight its role in bringing global talent to the US.
- The program remains particularly significant for Indians, who accounted for over 72% of approved H-1B petitions in 2023.
  - India far outnumbers Chinese applicants, who remain around 12–13%.

Defence of the Program

- Despite criticism, industry leaders emphasize that H-1B visas remain essential for addressing the US skills gap.
- They argue that wages are market-driven, and global competition for STEM talent is fierce.
- With China (3.57 million) and India (2.55 million) producing far more STEM graduates than the US (820,000), Indian and Chinese professionals continue to dominate the high-skilled workforce.

Overview of the H-1B Visa Program

The H-1B is a **temporary, non-immigrant visa** that enables US employers to hire foreign workers in specialized fields like technology, engineering, and finance.

Launched in 1990, it allows US employers to **hire skilled foreign professionals** in jobs requiring at least a bachelor's degree.

➔ It was designed to help businesses access skills unavailable in the domestic workforce by permitting **temporary employment** of qualified immigrants.

The visa can be granted for up to six years, after which holders must either leave the US for at least 12 months or obtain permanent residency (Green Card).

H-1B Visa Caps and Exemptions

➔ Currently, there is an annual cap of 65,000 visas, with an additional 20,000 for individuals holding master's degree or higher from US universities.

➔ However, not all petitions fall under this cap — exemptions apply for continuing employment, higher education institutions, and nonprofit or government research organisations. As a result, approvals far exceed the cap.

Immigration Politics and Criticism of H-1B Visas in the US

Immigration remains one of the most divisive issues in US politics, with concern over it rising sharply in recent years.

Trump's campaign rhetoric has often targeted immigration, blaming it for job losses, wage stagnation, inflation, and economic distress faced by the working class.

While earlier criticism centred on low-skilled migrants, the H-1B visa program has now come under fire for allegedly displacing American workers from high-paying jobs.

➔ US tech companies misuse the H-1B program to fill low-to-mid-level positions at salaries below what Americans would demand.

This narrative, often intertwined with racial undertones, frames **immigration as a threat to American livelihoods** and fuels political attacks on skilled migration programs like H-1B.

UK Expands 'Deport Now, Appeal Later' Policy to Include India

- The UK government has expanded its **'deport now, appeal later'** policy from 8 to **23 countries**, including India, allowing the deportation of foreign nationals with active asylum or human rights appeals before adjudication.
- Under the new rules, they can pursue appeals remotely via video link from their home countries.
- A parallel policy will permit the **immediate deportation of many foreign nationals after conviction**, eliminating the current requirement to serve **30% of their sentence** in UK prisons.
- Those convicted of serious crimes like terrorism and murder are excluded.
- The move aims to address **prison overcrowding**. As of June 30, 2025, **320 Indian citizens** were imprisoned in England and Wales, with Indians comprising part of the **12% foreign national prison population** in the UK.

- These changes will help "swiftly return" foreign criminals while ensuring appeals can be made from abroad. The new law will take effect in **September 2025**.

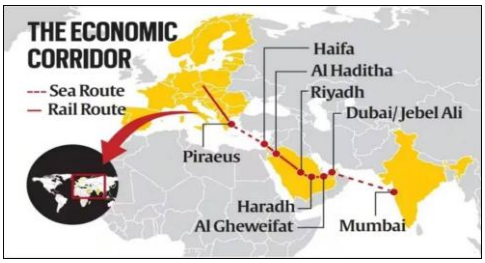
India–US 2+2 Dialogue

- Amid tensions over India's purchase of Russian oil and the US move to impose additional tariffs, New Delhi and Washington held the **India–US 2+2 Intersessional Dialogue** virtually.
- The two sides discussed energy security and focused on expanding defence cooperation, including:
  - A proposed 10-year Framework for the India–US Major Defense Partnership.
  - Collaboration in defence industry, science and technology, operational coordination, regional cooperation, and information-sharing.

3rd India–Singapore Ministerial Roundtable (ISMR)

- The **3rd India–Singapore Ministerial Roundtable (ISMR)** was held in New Delhi.
  - ISMR was previously held in September 2022 (New Delhi), and August 2024 (Singapore).
- Around 10 pacts finalised covering: Connectivity; Digitalisation; Healthcare and medicine; Skills development; Advanced technology.
- Discussions also included an ambitious **undersea cable project** to carry *solar energy and data connectivity* from India to Singapore.
- Both sides reviewed and discussed cooperation under six key pillars:

Future Of IMEC in Doubt



India's National Security Council Secretariat recently hosted officials from the U.S., UAE, Saudi Arabia, France, Italy, Germany, Israel, Jordan, and the EU to review progress on the India-Middle East-Europe Economic Corridor (IMEC).

Gaza War Turns IMEC's Challenges into Fundamental Obstacles

- While the IMEC's economic rationale remains strong, its hurdles have shifted from manageable to fundamental due to Israel's ongoing war on Gaza, which has strained regional ties.
- The corridor's key Middle East-Europe link depends on Jordan-Israel cooperation, now at a low point amid tensions over Palestinian displacement.
- Prospects for **Saudi-Israel normalisation have also diminished**, with Riyadh demanding Palestinian concessions that Israel is unwilling to make.
- The war's expansion into Lebanon, Yemen, Syria, Iraq, and tensions with Iran heightens insurance costs for regional trade, further complicating implementation.
- Ironically, despite hindering progress, Israel sees the IMEC as crucial to deepening its economic integration with the Arab world, excluding Palestine.
    - Prime Minister Netanyahu has termed the project as a geopolitical blessing for participating states.

About IMEC

Announced at the 2023 G20 Summit in **New Delhi**, the IMEC aims to boost economic development through enhanced connectivity between Asia, the Arabian Gulf, and Europe.

It consists of two segments:

- **India-Gulf corridor**, linking India's western ports to the UAE and then via high-speed freight rail through Saudi Arabia and Jordan to Haifa (Israel); and
- **Gulf-Europe corridor**, connecting Haifa to Greece and Italy by sea, followed by onward transport through Europe's rail networks.

Expected to reduce India-Europe shipping times by about 40% compared to the Red Sea route, the project has seen limited progress since its launch.

Origin and IMEC's Promise

- IMEC was conceived during India's G20 Presidency in September 2023, at a rare moment of Middle East stability following years of regional rivalries.
- **Arab normalisation with Israel**, created conditions for India, Middle Eastern states, U.S., and Europe to envision a corridor connecting India to Europe.
- The **economic case** was strong — EU is India's largest trading partner for goods, with FY 2023-24 bilateral trade in goods at $137.41 billion, and non-oil trade with the UAE and Saudi Arabia rising significantly.
- Planned as more than a trade route, IMEC aimed to integrate electricity and digital connectivity cables, clean hydrogen pipelines, and measures to boost efficiency, reduce costs, create jobs, and cut emissions.
- It sought to address persistent trade challenges, including lack of tariff standardisation, low financial integration, limited corridor-wide insurance, and varying port capacities.
- Although these were considered manageable through investment and cooperation, the project stalled when, less than a month later, the region was plunged into ongoing conflict, preventing the first stakeholder meeting from taking place.

Future of IMEC

- While the IMEC's western leg faces uncertainty, India's strong strategic and economic ties with the UAE and Saudi Arabia keep prospects for its eastern leg alive.
- Initiatives like UPI integration enhance digital connectivity potential, but **intra-Gulf economic rivalries**, such as Saudi measures to counter Emirati dominance, hinder unified corridor planning.
- For the IMEC to match its 2023 vision, the regional stability that enabled its conception must be restored — a goal tied to resolving the Palestinian statehood issue.
- Growing global recognition of the need to end Israel's Gaza war, reflected in actions like Germany halting certain arms shipments to Israel, underscores this reality.
- Until lasting peace is achieved, IMEC remains a "day-after" project, with current efforts limited to planning and trade facilitation.

US-Russia Alaska Summit

The US-Russia Alaska Summit, aimed at **exploring ways to end the ongoing war in Ukraine**, involves two leading nuclear powers, with **implications for global security**, NATO relations, and the Ukraine conflict.

Key Highlights of the US-Russia Alaska Summit

- **Productive engagement but no agreement:**
  - Trump described discussions as "**extremely productive**", while noting that a final deal is yet to be reached.
  - Both leaders acknowledged **progress on many issues** (specifics were not disclosed), and highlighted a possible trilateral meeting (US-Russia-Ukraine) under discussion.
- **Nuclear powers and geopolitics:**
  - Trump emphasized the importance of US-Russia relations as the **world's top two nuclear powers.**
  - The summit reflects an effort to **reduce hostilities** and explore a peace settlement in Ukraine.

Conclusion

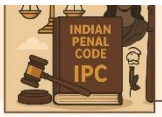
- The US-Russia Alaska Summit **represents a tentative but crucial step** toward peace negotiations in Ukraine.
- While progress was acknowledged, the lack of concrete details highlights the **fragility of diplomacy in conflict resolution.**
- The summit may have given Putin symbolic legitimacy, but l**eft India in a zone of strategic and economic uncertainty**.
- **New Delhi must navigate the dual challenge** of securing energy supplies from Russia while mitigating the risks of US secondary tariffs, all against the backdrop of a shifting global order shaped by the Ukraine conflict.

MILMEDICON-2025

- Union Minister of State for Defence inaugurated MILMEDICON-2025, an **international conference on physical and mental trauma in military settings**, at the Manekshaw Centre, New Delhi.
- Organiser: Directorate General of Medical Services (Army).
- Focus: Innovations, challenges, international cooperation and reforms in military medicine, aligned with the Indian Army's 'Year of Reforms'.
- Commemoration: Centenary of the Military Nursing Service, celebrating a century of women's contributions to combat medical care and 'Nari Shakti'.
- MILMEDICON-2025 is a **global forum** showcasing India's leadership in **military medicine**.

UN Confirms Famine in Gaza

- UN-backed Integrated Food Security Phase Classification (IPC) declared a famine (IPC Phase 5) in Gaza Governorate, including Gaza City—**the first officially confirmed famine in West Asia**.
- **Scale of Crisis**
  - Over 500,000 people already face catastrophic hunger; numbers expected to rise to 641,000 (one-third of Gaza's population) by September.
  - Famine projected to spread to Deir el-Balah and Khan Yunis, covering two-thirds of Gaza.
  - Local food system collapse: 98% of cropland destroyed/inaccessible, livestock decimated, fishing banned.
  - Severe shortages of food, medicine, fuel, clean water, and healthcare.
- **Driven by:**
  - Armed conflict and displacement.
  - Severe restrictions on humanitarian access imposed by Israeli forces.
- UN agencies stressed that political decisions, not supply availability, determine whether food and medicine reach those in need.



About IPC

The **Integrated Food Security Phase Classification (IPC)**, created in **2004** during Somalia's food crisis, is the leading international authority on famine and hunger crises.

It is coordinated by the **UN FAO** with input from **UN agencies, governments, and aid groups**.

While IPC provides the classification, the **UN, governments, and high-level representatives formally** declare famine.

IPC Famine Criteria (All Three Met)

Food Access: ≥20% of households face extreme lack of food.

Malnutrition: ≥30% of children under 5 years are acutely malnourished.

Mortality: Crude death rate ≥2/10,000 people/day, or under-five death rate ≥4/10,000/day.

Causes: Famine is human-made, not due to global food shortages.

Problem with Africa's Representation on Maps

- The **African Union (AU)** has endorsed the ***Correct the Map*** campaign, calling for the replacement of the **Mercator projection** with alternatives like the **Equal Earth map**.
- The Mercator projection, still widely used in schools and media, distorts geography by **shrinking Africa and inflating Europe, North America, and Greenland**.
- The AU argues this has perpetuated symbolic marginalisation for centuries and believes adopting a fairer projection will restore geographical accuracy and dignity.
  - For instance, Africa (30 million sq. km) is shown as nearly the same size as Greenland, which is actually 14 times smaller.
  - Similarly, Europe appears comparable to Africa, despite being only one-third its size.
- Over centuries, the Mercator map became the default in classrooms, offices, and digital platforms, **reinforcing a Eurocentric view of the world**.
- Critics argue that these distortions have subtly shaped perceptions of power and importance, diminishing Africa, South America, and Asia while inflating Europe, Russia, and North America.

Mercator Projection

The **Mercator projection**, created in 1569 to aid navigation, allowed sailors to follow straight rhumb lines across seas, revolutionising European exploration and colonial expansion.

- ✔ A **rhumb line** (also called a **loxodrome**) is a line on the Earth's surface that crosses all meridians at the same angle.
- ✔ It represents a constant compass direction (e.g., always going northwest at 45°). On a globe, this path is a spiralling curve toward the poles.

On the Mercator map projection, rhumb lines appear as straight lines, which is why the Mercator map was so useful for sailors in the Age of Exploration.

Equal Earth projection

In contrast, the Equal Earth projection maintains the relative sizes of continents and countries more accurately, but introduces curved or stretched shapes.

Equal Earth projection was introduced in 2018 by cartographers Bojan Šavrič, Tom Patterson, and Bernhard Jenny.

It minimises distortion of landmass sizes; Africa and other equatorial regions shown proportionally.

Money Laundering

- The Finance Ministry has informed Rajya Sabha that the Enforcement Directorate (ED) took up 5,892 cases under the Prevention of Money Laundering Act (**PMLA**) since 2015 and secured the conviction of 15 people from these cases during the period.
- These figures raise two important concerns. First, that the number of convictions vis-a-vis total cases is not satisfactory and secondly, money laundering cases have been rising.

Laundromat

- The term laundromat is said to have originated from the use of laundromats by organised crime syndicates in the U.S. as cover for their crimes.
- A laundromat is an **all-purpose financial vehicle**. It may be set up by a bank or any other company engaged in providing financial services.
- However, it can also help clients launder the proceeds of crime, hide ownership of assets, embezzle funds from companies, evade taxes or currency restrictions and move money offshore.

Money Laundering

- It is the illegal process of converting money earned from illegal activities (such as drug trafficking) into "clean" money.
- The process of money laundering, "launders" (cleans) it to make it look clean.
- Hawala, bulk cash smuggling, fictional loans, shell companies and trusts, real estate, gambling, and fake invoicing are some of the common methods of money laundering.

Key Provisions of the PMLA

- A notable aspect of the Act is that **it shifts the burden of proof onto the accused**.
- Additionally, an Enforcement Case Information Report (ECIR) is sufficient to initiate proceedings, without the necessity of a First Information Report (FIR).
    - This was upheld by the Supreme Court in *Vir Bhadra Singh vs. ED (2017)*.
- The only prerequisite is the commission of a **scheduled offence**, considered an offence against the state.

Addressing Implementation Challenges and Misuse of PMLA

- The Supreme Court, in ***Vijay Madanlal Chaudhury vs. Union of India*** *(2022)*, clarified that while prosecution under Section 3 requires a *registered scheduled offence*, authorities can attach properties under Section 5 without a pre-registered case.
- This loophole has often been exploited for politically motivated actions.
- To curb such misuse, authorities must adhere to the Financial Action Task Force (FATF) guidelines and handle cases with greater diligence and transparency.

- Additionally, India's Double Taxation Avoidance Agreements (DTAA) with around 85 countries facilitate international cooperation in tackling money laundering, but stronger efforts are needed to ensure their effective utilization.

Decline of Maoists in Red Corridor

Maoist insurgency, once dominant across the Red Corridor, is now limited to 18 districts.

Decline of Maoist Influence in India

- Once a formidable internal security threat, the Maoist insurgency has shrunk from nearly 180 districts in the late 2000s to just 18 today.
- Incidents of Left-Wing Extremism have fallen by over 50% between 2004–14 and 2014–23, with fatalities dropping nearly 70%.
- Naxal violence peaked in 2010 with 1,936 incidents and 1,005 deaths but declined to 374 incidents and 150 deaths by 2024.

Mission Sudarshan Chakra

- Modi announced **Mission Sudarshan Chakra**, a multi-layered defence framework designed to protect citizens and infrastructure from enemy strikes, including missiles, terrorism, and cyber threats.
- The initiative is aimed at neutralising enemy infiltrations and enhancing offensive and deterrent capabilities with rapid, precise, and powerful responses.
- **Concept and Inspiration**
  - The system is envisioned as India's version of Israel's Iron Dome and the US's proposed Golden Dome.
  - Named after the mythological Sudarshan Chakra of Lord Krishna, symbolising protection and precision.
  - It aims to be more than a missile shield—**integrating surveillance, cyber protection, and physical safeguards**.
- **Features and Objectives**
  - **Comprehensive Defence**: Incorporates missile interception, precision counterstrike capabilities, and anti-cyber warfare measures against hacking and phishing.
  - **Indigenisation**: To be researched, developed, and manufactured fully in India under the Aatmanirbhar Bharat initiative.
  - **Collaboration**: Will involve defence research agencies, the armed forces, and private innovators.
  - **Timeline:** Expansion, strengthening, and modernisation targeted by 2035.

UNSC to End UNIFIL Mission in Lebanon

- The **UN Security Council** voted unanimously to **terminate the UN Interim Force in Lebanon (UNIFIL)** after nearly five decades.
- The peacekeeping mission will end on **Dec. 31, 2026**, giving the force **16 months to withdraw** its 10,800 personnel and equipment.
- UNIFIL was created in 1978 to **oversee Israel's withdrawal from southern Lebanon**, later expanded after the 2006 Israel–Hezbollah war.
- Its mandate was to monitor the Israel–Lebanon border (the Blue Line) and support stability in the region.
- Now, the Lebanese government is to become the **sole provider of security** north of the Blue Line.

Army to Deploy Drones at Battalion Level

- The Indian Army is planning a major organisational overhaul that will integrate Unmanned Aerial Vehicles (**UAVs) and counter-UAV systems as standard battalion-level assets across** infantry, armoured, and artillery units.
    - Currently, **drones are used as secondary assets**, operated by personnel diverted from primary roles.
- The new structure will create dedicated UAV operating teams within each unit, ensuring focused training and deployment.
- The restructuring will also include the formation of light commando battalions, integrated brigades, and specialised artillery regiments and batteries, aimed at enhancing operational capabilities for future warfare scenarios.

Formation of Bhairav Light Commando Battalions

The Army plans to raise 30 light commando battalions, called Bhairav, each comprising 250 specially trained soldiers.

These units will have mission-specific roles and will be deployed under various commands to enhance rapid strike capabilities. The first battalions are expected to be operational within a month.

Creation of Integrated Rudra Brigades

To enhance battlefield autonomy, the Army will restructure existing brigades into **Rudra Brigades** — integrated formations combining infantry, armour, artillery, UAVs, and logistics elements.

These brigades will be capable of **independent operations across diverse terrains** and tailored for both conventional and hybrid warfare scenarios.

Artillery Modernisation: Drone Batteries and Divyastra Units

Artillery regiments will see the establishment of two expanded gun batteries and a third drone battery equipped with surveillance and combat drones.

New Divyastra artillery batteries will be formed, integrating long-range guns, loitering munitions, and anti-drone systems for deep-strike capabilities and area defence.

Enhancements in Armoured, Mechanised Infantry and Engineers

- The reorganisation will include upgrading Reconnaissance Platoons in armoured and mechanised infantry units with surveillance and strike drones.
- Discussions are ongoing to convert one company per battalion into a drone-centric unit.
- Engineer regiments will integrate drone sections for mine detection, area mapping, and reconnaissance.

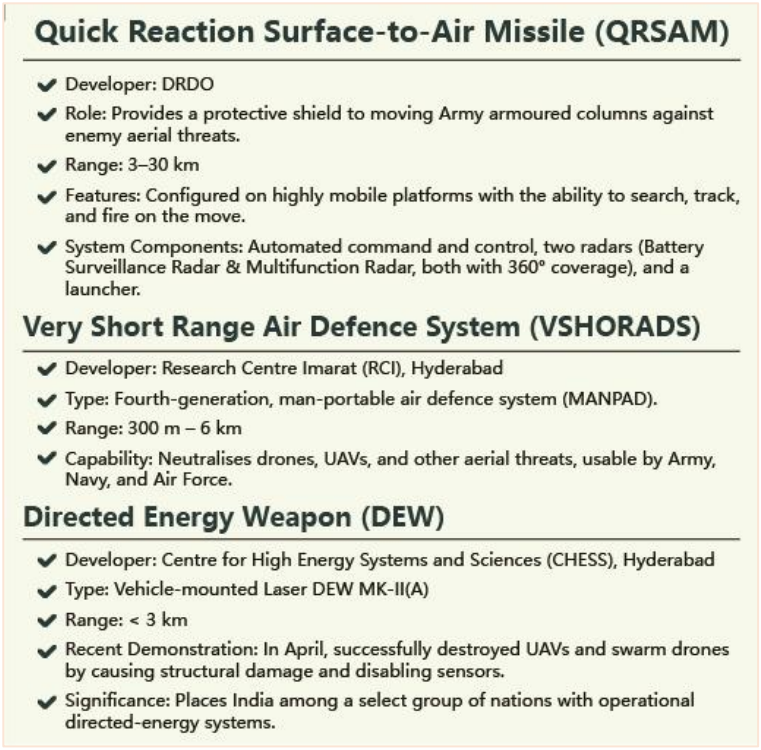
IONS Emerging Leaders Panel in Kochi

- The Indian Ocean Naval Symposium (IONS) Emerging Leaders Panel was held at Southern Naval Command, Kochi, with participation from 19 member countries.
- **Thematic Sessions**:
    - *Strategic Importance of the IOR (Indian Ocean Region)*: Addressed maritime trade security, climate change, and geopolitical challenges.
    - *Emerging Technologies in Maritime Security*: Focused on AI, unmanned platforms, cybersecurity, reconnaissance, and space-based surveillance.
    - *Future Role of IONS*: Emphasised interoperability, joint exercises, and professional exchanges.
    - *Harnessing Training Capabilities*: Discussed pooling resources, common frameworks, and stronger training linkages.
- **Outcomes**
    - Consensus on enhancing **maritime domain awareness**, advancing **technological cooperation**, and expanding **training initiatives**.

- Reaffirmed IONS's role as an **inclusive forum for collective maritime security**, dedicated to ensuring **peace, prosperity, and stability** in the IOR.

DRDO Tests Indigenous Air Defence System

- The Ministry of Defence announced that the DRDO successfully carried out the first flight-tests of the Integrated Air Defence Weapon System (IADWS).
- Conducted off the coast of Odisha, the system demonstrated its capability by simultaneously destroying three targets at varying ranges and altitudes, marking a significant milestone in India's indigenous defence technology.
- Officials view the test as both a strategic leap in indigenous defence capability and a stepping stone towards Mission Sudarshan Chakra.



Integrated Air Defence Weapon System (IADWS)

- IADWS is a **multi-layered defence system** comprising **3 key components**:
  - Quick Reaction Surface-to-Air Missiles (QRSAMs);
  - The advanced Very Short Range Air Defence System (VSHORADS) missiles;
  - A laser-based Directed Energy Weapon (DEW).
- These 3 advanced weapon systems are controlled by a Centralised Command and Control Centre developed by DRDL, Hyderabad.

Women's Representation in Indian Armed Forces

- At a meeting of the **Parliamentary Consultative Committee on Defence**, chaired by **Defence Minister**, members were briefed on women's representation in the armed forces.
- **Current Representation (2024 Data)**
  - **Indian Air Force (IAF)**: 13.4% (highest % among the three services) → 1,614 women.
  - **Army**: 6.85% → 1,735 women.
  - **Navy**: 6% → 674 women.
  - **Comparison with 2005**: Army (767), Navy (154), Air Force (574).
- **Branch Access**
  - **Army**: 12 branches open to women, including combat roles.
  - **Navy**: All branches open except **submarines**.
  - **Air Force**: All branches open to women.

INS Himgiri Delivered to Indian Navy

- Recently, Himgiri (3rd Nilgiri-class (Project 17A) frigate and the first built by GRSE, Kolkata), was delivered to the Indian Navy.

- **Key Features**
  - **Reincarnation of INS Himgiri**: Named after the Leander-class frigate decommissioned in 2005.
  - **Design & Build**: By **Warship Design Bureau (WDB)**, built with **Integrated Construction** philosophy, ensuring modularity, stealth, survivability, and automation.
  - **Propulsion**: **CODOG system** (Combined diesel or gas turbine) with Controllable Pitch Propeller and advanced **Integrated Platform Management System**.
- **Weapon & Sensor Suite** includes supersonic Surface-to-Surface Missiles as well as Medium-Range Surface-to-Air Missiles.
- **Significance**
  - 75% indigenous content, involving 200+ MSMEs.
  - Generated employment for ~4,000 direct and 10,000 indirect workers.
  - Symbolises Aatmanirbharta (self-reliance) and marks a generational leap from the earlier Shivalik-class (P17) frigates.

MiG-21 Fighter Jets

- The Indian Air Force (IAF) will retire its MiG-21 fighter jets in September 2025, marking the end of their six-decade service.
- This will reduce IAF's fighter strength to 29 squadrons, well below the sanctioned 42.
  - The IAF is awaiting delayed deliveries of the Light Combat Aircraft (LCA)-Mk1A to replenish its fleet.
- The MiG-21 is a single-engine, **single-seater multi-role fighter** and ground attack aircraft.
- First inducted in 1963 as an interceptor, the aircraft was progressively upgraded for various combat roles, including ground attacks.
  - It was inducted after the 1962 war with China.
- India has procured over 700 MiG-21s across different variants such as Type-77, Type-96, and BIS, with the latest being the Bison, upgraded with advanced avionics, missiles, and radars.

Deception Techniques in Modern Warfare

- Deception techniques in warfare are in the news as India and other nations increasingly deploy AI-enabled aerial, land, and naval decoys to counter modern precision weapons.
- During Operation Sindoor, the Indian Air Force reportedly deployed the **X-Guard Fibre-Optic Towed Decoy (FOTD) system** developed by Israel.
- These AI-enabled decoys trailed behind Rafale fighter jets, mimicking their radar cross-section, velocity, and spectral signature.
- The X-Guard decoy, weighing only 30 kg, integrates seamlessly with the Rafale's **SPECTRA** (*Self-Protection Equipment Countering Threats to Rafale Aircraft)* electronic warfare suite.
- While SPECTRA detects and blocks threats, the X-Guard provides a trailing expendable shield, emitting jamming signals across multiple radar bands. Together, they form a multi-layered defensive system.

Exercise Achook Prahar

- Recently, troops of the Indian Army's Spear Corps and the Indo-Tibetan Border Police (ITBP) conducted Exercise Achook Prahar in central Arunachal Pradesh.
- The exercise simulated battlefield conditions, tested operational preparedness. It served as a joint validation of preparedness and synergy between Army and ITBP.

India Successfully Test-Fires Agni-5 Missile

- India successfully **test-fired its Agni-5 intermediate-range ballistic missile** from the **Integrated Test Range, Chandipur (Odisha)**.
- It was Conducted under the **Strategic Forces Command**, validating all operational and technical parameters.
- The missile is a variant of the **indigenously developed Agni-5 ICBM** with a range of **5,000 km**, designed by **DRDO** for long-term security needs.
- The last trial in March 2024, featured **MIRV (Multiple Independently Targetable Re-entry Vehicle) technology**, enabling strikes on multiple targets with a single launch.

ENVIRONMENT AND GEOGRAPHY

District Flood Severity Index (DFSI)

Researchers from IIT Delhi and IIT Gandhinagar have come up with a District Flood Severity Index (DFSI).

About District Flood Severity Index (DFSI)

- Despite initiatives by bodies such as the India Meteorological Department (IMD), Central Water Commission (CWC), and National Disaster Management Authority (NDMA), there has been ***a lack of a granular, district-level index*** that incorporates **human impacts**.
- The DFSI emerges as a response to this lacuna, leveraging districts as the primary administrative units for disaster planning and implementation under the ***Disaster Management Act, 2005***.
- It promotes India's commitments under the ***Sendai Framework for Disaster Risk Reduction (2015-2030)*** and ***SDG 13*** *on climate action*.

Parameters used

- Mean duration in days of all flooding events in a district.
- Percentage of area that is historically flooded
- Total number of deaths, number of people injured
- Population in the district

Data Sources for DFSI

- India Flood Inventory with Impacts (IFI-Impacts): A curated database (1967-2023) digitized from IMD's "**Disastrous Weather Events**" reports.
- **Indian Land Data Assimilation System (ILDAS)**: Supplies historical flooded area data (1981-2021) through hydrologic-hydrodynamic modeling, using IMD rainfall and ***MERRA-2 reanalysis***.

Key Findings: Regional Patterns and Most Affected Districts

Analysis using DFSI reveals stark regional disparities. The Indo-Gangetic Plain dominates vulnerability, with 17 of the top 30 high-DFSI districts in the Ganga basin and 3 in the Brahmaputra basin. Key insights include:

- **Highest DFSI Districts**: Patna (Bihar) tops at 19.37, followed by Murshidabad (West Bengal, 19.01), Thane (Maharashtra, 18.88)
- **Flood Frequency**: Thiruvananthapuram (Kerala) recorded over 231 events (averaging >4 per year), but ranks lower in DFSI due to fewer casualties.
  - ✓ Assam saw over 800 events in 56 years (averaging 14 annually), with districts like Dhemaji, Kamrup, and Nagaon highly affected.
- **Spatial and Temporal Trends**: Average flooded areas are highest in Assam, Bihar, eastern Uttar Pradesh, and coastal regions. Fatalities have stabilized at ~1,000 annually despite population growth, indicating some mitigation progress, but exposure remains high in riverside districts.

National Designated Authority (NDA) for Carbon Markets

The Ministry of Environment, Forest and Climate Change (MoEFCC) has constituted a 21-member *National Designated Authority (NDA)* to operationalize India's carbon market.

- Within the ***Paris Agreement, Article 6*** defines the contours under which such an emissions trading regime, or a market, can take shape.
- Article 6 introduced voluntary cooperation mechanisms:
  - Bilateral/multilateral transfers of Internationally Transferred Mitigation Outcomes (**ITMOs**) under **Article 6.2**,
  - UN-supervised mechanism under **Article 6.4 (successor to Kyoto Protocol's CDM-Clean Development Mechanism**), and

- ***non-market approaches*** *under* ***Article 6.8***.

- Article 6 was passed at *COP29 in Baku* last year.

Key Features of the National Designated Authority

- **Structure and Composition**: A 21-member committee chaired by the MoEFCC Secretary, with members from ministries like Power, Finance, External Affairs, Steel, Civil Aviation, and Petroleum; NITI Aayog; Central Pollution Control Board (CPCB); and experts.
  - ✓ This body serves as the nodal agency to regulate, approve, and monitor international carbon trading mechanisms.
- **Roles and Functions**:
  - ✓ Issue host country authorizations for mitigation activities and ITMOs.
  - ✓ **International Role:** Represent India in Article 6 frameworks, facilitating credit transfers with other nations.
    - Approve and recommend projects for Article 6.4 registration to the UN Supervisory Body
    - Facilitate bilateral/multilateral cooperation under Article 6.2.
  - ✓ Integrate with domestic CCTS (Carbon Credit Trading Scheme) for seamless voluntary and compliance markets.
- **Comparison with Global Models**: Similar to EU's Emissions Trading System (ETS) or China's national ETS (launched 2021) but tailored for India's developing status—focusing on voluntary participation initially and hard-to-abate sectors like steel and cement.
  - ✓ Unlike *CDM's project-based focus*, Article 6 allows economy-wide approaches.

Extra Mile: Background and Evolution India's carbon market

- India's carbon market journey began with the *Clean Development Mechanism (CDM)* under the Kyoto Protocol (1997), where MoEFCC acted as the *Designated National Authority (DNA)* for approving projects generating Certified Emission Reductions (CERs).
- *Post-Paris Agreement*, Article 6 introduced voluntary cooperation mechanisms.

Domestic Developments:

- *The Energy Conservation (Amendment) Act, 2022* empowered the government to establish carbon markets.
- The CCTS was notified by the Ministry of Power in June 2023, creating a compliance market for obligated entities (e.g., industries exceeding emission thresholds) to trade ***Carbon Credit Certificates (CCCs).***
- The Bureau of Energy Efficiency (***BEE***) administers CCTS, with the Central Electricity Regulatory Commission (CERC) as regulator and Grid-India as registry.
- ***The National Steering Committee for Indian Carbon Market (NSCICM)***, formed in 2023, oversees overall implementation under CCTS

International Push:

- At COP26 (2021), rules for Article 6 were finalized, prompting India to align.
- In July 2024, detailed CCTS regulations were adopted, setting the stage for compliance markets.
- The NDA's finalization in August 2025 expands the existing DNA framework to handle Article 6.4's supervisory body interactions, project approvals, and ITMO transfers.

This follows India's bilateral agreements, such as with Japan (2023) for Joint Crediting Mechanisms.

State Energy Efficiency Index (SEEI)

Bureau of Energy Efficiency (BEE- Ministry of Power), released the State Energy Efficiency Index (SEEI) 2024 in collaboration with the Alliance for an Energy Efficient Economy (AEEE).

About State Energy Efficiency Index 2024 (Sixth edition)

- The index assesses the energy efficiency performance of 36 States and UTs for FY 2023-24.
- This index has been focused with ***66 indicators across seven key demand sectors:*** Buildings; Industry; Transport; Agriculture; Municipal Services; Electricity Distribution Companies (DISCOMs) and Cross-Sector Initiatives.
- **New Framework Features:** Incorporating evolving priorities like the Energy Service Companies (ESCO) model, star rating for buildings, MSME cluster profiling, PAT scheme expansion, and EV demand-side incentives.
- **States are classified into four performance categories:** Front Runners (>60%), Achievers (50-60%), Contenders (30-50%), and Aspirants (<30%).

Key Findings of SEEI 2024

- **The top performers include**: Maharashtra (Group 1: >15 MToE), Andhra Pradesh (Group 2: 5–15 MToE), Assam (Group 3: 1–5 MToE) Tripura (Group 4: <1 MToE).
  - ✓ States are classified based on total final energy consumption (in **million tonnes of oil equivalent, MToE)**
- The report highlights sectoral progress: 24 states have notified ECBC 2017(*Energy Conservation Building Code*); 10 states have MSME energy efficiency policies; 31 states have adopted electric mobility policies; and 13 states are promoting solar-powered agricultural pumps, with Kerala achieving 74% adoption
- **Front Runner States**: Reduced from seven in 2023 to five in 2024: Andhra Pradesh, Karnataka, Maharashtra, Telangana, and Tamil Nadu.
- **Achievers:** Assam and Kerala
- **Contenders**: Haryana, Punjab, Rajasthan, Odisha, and Uttar Pradesh.

Haryana's New 'Dictionary Meaning Of Forest'

The Haryana government officially defined the "dictionary meaning of forest".

Context of Haryana's Decision

- The Haryana government's notification came after the Supreme Court in March 2025 *directed all States and Union Territories* ***to define what constitutes a "forest"*** and commence surveys to identify forest areas in their respective jurisdictions.
  - ✓ These directives were made in the challenge to the 2023 amendment to the FCA (***Ashok Kumar Sharma & Ors. vs. Union of India***) that the apex court is currently hearing.
  - ✓ *Forest (Conservation) Amendment Act, 2023 (FCAA)*, ***which narrowed the definition by exempting certain lands*** (e.g., up to 10 ha for security/strategic projects, lands not recorded as forests post-1980).
- The court said that States and UTs must constitute expert committees within one month to identify **"forest-like areas", "unclassified forest lands", and "community forest lands"**, and that these committees must complete *their mapping of forest lands and submit a report to the Centre within six months*.
  - ✓ SC clarified "forest" includes ***both recorded and dictionary meanings***, rejecting rigid thresholds.
- ***Chief Secretaries*** of States and Administrators of UTs who fail to comply will be held ***"personally accountable for any non-compliance*** [with the court's directives]

Criteria for "Forest as per Dictionary Meaning"

Parameter	Requirement
Minimum Area	5 hectares (if isolated); 2 hectares (if contiguous to notified forests or other deemed forests).
Canopy Density	At least 40% (0.4).

	Predominantly trees;
Vegetation	**Exclusion**: "all linear/compact/agro-forestry plantations and orchards situated outside the government notified forests shall not be treated as forests under the definition"
Additional	Must be a "*large area of land thickly covered with trees*" (Oxford Dictionary reference).

Extra Mile: Legal Framework and Evolution of Forest Definition in India

In India, ***forests are a concurrent subject*** (Entry 17A, List III, Seventh Schedule of the Constitution), allowing both Centre and states to legislate, but there is central dominance via Forest Conservation Act (FCA), 1980 which requires prior approval for non-forest use of forest land.

✓ Forests were transferred ***from the State List to the Concurrent List*** by the 42nd Amendment, 1976.

National Definition and Key Judgments:

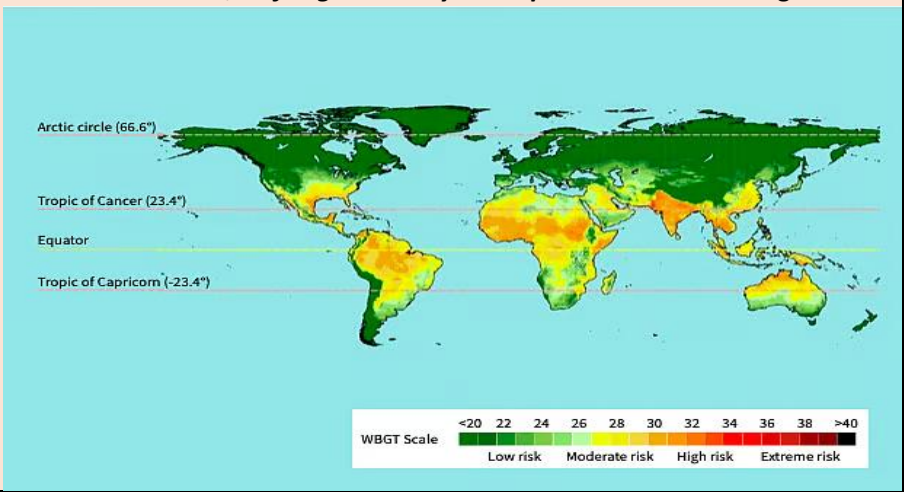
- **The Indian Forest Act, 1927** classifies *forests into three categories*: Reserved Forests, Protected Forests, and Village Forests, but lacks a comprehensive definition.
- **The FCA of 1980** restricted "the dereservation of forests or use of forest land for non-forest purpose". The Act barred the diversion of forest land for non-forest purposes without the prior approval of the Centre.
- **The landmark T.N. Godavarman Thirumulpad vs. Union of India (1996)** SC judgment expanded the scope: Forests include not just notified areas, but any land recorded as forest in government records or fitting the "dictionary meaning" (large tracts covered with trees and undergrowth, regardless of ownership).
  - ✓ This aimed to prevent deforestation by applying FCA broadly.
  - ✓ This was a landmark order: effectively, any parcel of forested land, regardless of size, official status or ownership, could be deemed a forest.
- **Lafarge Umiam Mining Pvt. Ltd. vs. Union of India (2011):** mandating a GIS-based decision-support database that includes — district-wise plots that may qualify as "forest" under the Forest (Conservation) Act, 1980 (FCA); Core, buffer, and eco-sensitive zones of protected areas; important wildlife migratory corridors; lands diverted from forest use in the past; and supporting Forest Survey of India maps.
- **Recent SC Directive in Ashok Kumar Sharma vs. Union of India):** Ordered all states to define and identify "forests" based on the Godavarman ruling, including unclassed forests. The SC stayed parts of FCAA, reaffirming the 1996 broad definition.

WHO–WMO Report: Climate Change and Workplace Heat Stress (2025)

WHO-WMO joint report titled "Climate Change and Workplace Heat Stress: Technical Report and Guidance" was released to mark the first global guidance on this issue in over 50 years.

Background and Evolution of the First Ever Report on Workplace Heat Stress

- Climate change has intensified extreme heat events, ***shifting them beyond equatorial zones*** to regions like Europe (e.g., 2025 heatwave).
- Historically, occupational heat stress has been addressed through frameworks like the International Labour Organization (*ILO) conventions on occupational safety* (e.g., Convention no. 155, 1981), but this is the ***first joint WHO-WMO effort since the 1970s*** to



integrate meteorological data with health impacts.

Triggers for 2025 Report:

- Rising heat-related incidents (e.g., thousands of heatstroke deaths in India during 2023-2024 summers) and economic losses prompted this collaboration.
- It ***builds on COP28 (2023) commitments to health in climate action*** and aligns with the UN's New Collective *Quantified Goal on climate finance*.

Key Findings

Aspect	Key Data
Environmental Trend	2024 was confirmed the hottest year on record, with daytime temperatures frequently exceeding 40 °C, occasionally surpassing 50 °C, increasing hazards for both outdoor and indoor workers.
Global Exposure	Over 2.4 billion workers (70% of workforce) exposed to excessive heat, leading to ~22.85 million injuries and ~19,000 deaths yearly.
Productivity Loss	2-3% decline per degree Celsius above 20°C; could result in $2.4 trillion annual global economic losses by 2030 (ILO estimate).
Health Risks	Heatstroke, dehydration, chronic kidney disease, neurological impairments
Vulnerable Sectors	Agriculture (e.g., farmworkers), construction, fisheries, mining; both outdoor and indoor (e.g., factories without cooling).

Dibru-Saikhowa National Park (DSNP)

Dibru-Saikhowa National Park (DSNP) in Assam is witnessing significant ecological changes due to native and invasive plant species.

Ecological Changes in DSNP

Land Use & Land Cover Changes (2000–2024): Conversion of Grasslands and semi-evergreen forests to shrubland and degraded forests reducing habitat for endemic and grassland-dependent species like Bengal florican, Hog deer, and Swamp grass babbler, and threatening endemic feral horses (around 200 individuals left.

Impact of Native Plant Species	Threat of Invasive Plant Species
• **Shifting Vegetation Patterns**: Frequent flooding and sediment deposition alter the growth of native species like elephant grass and Simul tree, affecting habitat suitability for wildlife. • **Over-Dominance of Certain Species**: Species like *Saccharum* grasses can dominate floodplains, reducing habitat diversity and affecting grazing grounds for herbivores. • **Climate-Induced Stress**: Rising temperatures and erratic monsoons impact the phenology (flowering and fruiting cycles) of native plants, disrupting pollinators and seed dispersal mechanisms.	• **Siam weed:** A fast-spreading weed that forms dense thickets, reducing sunlight for native plants and altering soil chemistry. • *Mikania micrantha* **(Mile-a-minute weed)**: Climbs over native vegetation, smothering trees and shrubs, and reducing habitat for birds and insects. • ***Lantana camara***: Competes with native grasses, affecting herbivore grazing patterns and increasing fire risks due to its dry biomass. • ***Parthenium hysterophorus***: A toxic weed that inhibits native plant growth and poses health risks to humans and animals

Dibru-Saikhowa National Park (DSNP)

- **Location:** Tinsukia & Dibrugarh districts, Assam (Northeast India).
- **Establishment:** Declared a Wildlife Sanctuary in 1986, upgraded to a National Park in 1999.

- **Status:** A **Biosphere Reserve** under UNESCO's Man and Biosphere (MAB) Programme.
- **River Systems:** Bounded by **Brahmaputra & Lohit rivers (north)**, with Dibru river flowing inside (south)→ floodplain ecosystem.
- Known for its **"Feral Horses"** (wild descendants of abandoned domestic horses).
- **Dolphin Census 2023–24:** Assam conducted a survey → Dibru-Saikhowa noted as one of the prime habitats for Gangetic dolphin.
- Situated in the **Eastern Himalaya–Indo-Burma Global Biodiversity Hotspot.**

Palmyra Palm Tree

The Palmyra palm tree has gained attention (in Odisha) for its dual role in reducing lightning-related deaths and serving as a food source for elephants during lean seasons.

About Palmyra Palm Tree

Geographical Profile of Palmyra palm tree

- The Palmyra palm tree, commonly referred to as ***toddy palm or tala*** *in Odisha,* ***Taal*** *(Bengali),* ***Tari*** *(Hindi),* ***Nungu*** *(Tamil),* ***Taati chettu*** *(Telugu),* ***Munjal mara*** *(Kannada).*
  - ✓ Declared the State Tree of Tamil Nadu.
- **Rainfall**: suited for semi-arid regions with an annual rainfall of less than 750 mm.
- It is a native of tropical Africa but cultivated and naturalized throughout India.
  - ✓ **Adaptability**: It is highly *drought-resistant and tolerates salinity*, which is why it is prevalent in India's Deccan Plateau, coastal belts, and islands like the Andaman and Nicobar.
- **Life Cycle:** It is **dioecious** (separate male and female trees), with male trees producing flowers for pollination and female trees bearing fruits. The tree matures in 15-20 years and can live up to 100 years, making it a long-term ecological asset.

Multi-faceted Benefits and significance of Palmyra Tree

- **Lightning Mitigation:** Palmyra palms, due to their tall, sturdy structure and fan-like leaves, act as natural lightning conductors.
- **Odisha Context**: Odisha is one of India's most lightning-prone states, with over 300 lightning-related deaths annually (as per data up to 2024).
- The palm's ability to absorb and ground lightning strikes is ***attributed to its deep root system*** and high-water content, which conducts electricity safely into the ground.
- **Food Source for Elephants:** During lean seasons (dry months), when food is scarce, elephants in Odisha's forests feed on the Palmyra palm's fruits, sap, and tender shoots. This reduces human-elephant conflict by providing an alternative food source.
- **Soil Conservation**: The deep root system of Palmyra palms prevents soil erosion, particularly in Odisha's coastal and riverine areas prone to cyclones and flooding.
- **Toddy Tapping:** The sap of the Palmyra palm is used to produce toddy (a traditional alcoholic beverage), neera (a non-alcoholic drink), and jaggery. This provides income for rural communities.
- **Literature:** Ancient manuscripts in India & Southeast Asia were written on Palmyra palm leaves (esp. in Tamil, Sanskrit, Pali, Prakrit).

Pathaneer

- In Thoothukudi district of **Tamil Nadu** Palmyra climbers harvest **Pathaneer (palm nectar)**, the sap extracted from the flower clusters of the trees. **Palmyra is the State tree of Tamil Nadu**.
- The sap makes for a refreshing drink and can also be processed to make panangkarkandu (palm candy) and karupatti (palm jaggery).
- The sap is collected in mud pots, coated with lime to prevent it from becoming toddy.

- Pathaneer is not fermented to make toddy as its sale is prohibited in Tamil Nadu.
- Traditionally, the ***Indian 'Nadar' community*** are the people who make their living from this tree using its wood, fruits, sap, stems, petioles and leaves.

Air Quality Life Index (AQLI)

Air Quality Life Index (AQLI) 2024, published by the *Energy Policy Institute at the University of Chicago (EPIC)*, revealed that India's average PM2.5 levels are approximately eight times higher than the WHO's safe limit of 5 µg/m³.

Overview of AQLI Study

- **Health Impact:** Exposure to high PM2.5 levels reduces average life expectancy in India by about 3.5 years, with regions like Delhi facing losses up to 8.2 years.
- **Worst-affected areas:** ***Indo-Gangetic Plain*** (e.g., Delhi, Uttar Pradesh, Bihar, Haryana), where PM2.5 levels often exceed 100 µg/m³ during winter.
- **Nearly half of India's population** (46%) lives in areas that exceed India's own annual PM2.5 standard of 40 micrograms per cubic metre.

Landslide in Vaishno Devi

A major landslide occurred near the Vaishno Devi Shrine in Jammu & Kashmir, triggered by torrential rains.

About Landslides

Dimension	Key Information
Definition	Downslope movement of rock, soil, debris, or earth material under the influence of gravity. Classified as a **mass wasting process** in geomorphology.
Types of Landslides	1. **Falls** – sudden free fall of material (e.g., rockfalls). 2. **Topples** – tilting of blocks due to gravity. 3. **Slides** – translational (planar surface) or rotational (curved slip surface). 4. **Flows** – debris flow, earth flow, mudflow, lahar (volcanic). 5. **Creep** – very slow downslope movement of soil/rock.
Monitoring & Early Warning	◊ **National Remote Sensing Centre (NRSC)** – satellite-based monitoring. ◊ **IMD** – rainfall alerts. ◊ **GSI's Landslide Hazard Zonation Mapping (LHZM)**. ◊ **ISRO's Bhuvan Portal** – real-time monitoring.
Institutional Framework (India)	• **NIDM** (National Institute of Disaster Management). • **NDMA Guidelines (2009)** for Landslides & Snow Avalanches. • **GSI (Geological Survey of India)** – nodal agency for landslide studies. • **Border Roads Organisation (BRO)** – slope stabilization in border areas.
Mitigation Measures	◊ **Structural**: retaining walls, rock bolts, gabion walls, slope terracing, check dams, afforestation. ◊ **Non-Structural**: hazard zonation, land-use planning, relocation, insurance.
Government Initiatives	• **Landslide Hazard Zonation Atlas (GSI)**. • **National Landslide Susceptibility Mapping (NLSM)** – covers >85% of India's landslide-prone areas. • **Common Alert Protocol (CAP)** for disaster alerts. • **Sendai Framework 2015-2030** – risk reduction.

International Dimension	◊ **UNDRR** (United Nations Office for Disaster Risk Reduction). ◊ **International Consortium on Landslides (ICL, Kyoto, Japan)**. ◊ **World Landslide Forum (WLF)**.

Species in News

Sliteye Shark **(a small-bodied shark species)**	For the first time, scientists have recorded the sliteye shark in the Great Chagos Bank (world's largest coral atoll) in the Indian Ocean. • **Physical Features:** Grows up to 95 cm in length with a slender body and long, narrow face. Distinctive ***slit-like eyes*** with vertical pupils, enhancing vision in low-light conditions. • **Habitat and Distribution:** Typically found in inshore waters of the Indo-West Pacific, including coastal regions of India, Sri Lanka, Indonesia, and Australia. • Classified as '***Near Threatened'*** by the IUCN Red List
Mycetia Malayana 	Researchers documented this plant species, previously known only from Southeast Asia, for the first time in India, specifically in the Sepahijala Wildlife Sanctuary, Tripura. • **Physical Characteristics:** A perennial shrub with slender stems and opposite leaves. Features ***small, tubular flowers and berries***, typical of the Rubiaceae family. • **Biodiversity Contribution:** Mycetia malayana ***supports pollinators and seed dispersers***, enhancing ecosystem diversity. • **Indo-Burma Hotspot:** Tripura lies within the Indo-Burma biodiversity hotspot, one of the world's 36 hotspots, known for high endemism and species diversity.

SCIENCE AND TECHNOLOGY

Human Outer Planet Exploration (HOPE)

Bengaluru-based space tech company Protoplanet, along with ISRO, has developed the analogue station, called the Human Outer Planet Exploration (HOPE) station in Ladakh's Tso Kar valley **(14,500 ft altitude)**.

What is HOPE?

It is a **space analogue research station** chosen for its **cold desert terrain** that closely mimics the **Moon and Mars environment**.

- An **analogue research station** is a site on Earth with conditions similar to another planet (topography, environment, etc.). It serves as a **testing ground for technologies**, improves **technology readiness**, supports **engineering integration**, and enables **human adaptability studies, crew training, and research** on geology, habitability, and life detection. Eg: **BIOS-3 in Russia**, **HERA at the US' Johnson Space Centre.**

Significance for India

- **First-of-its-kind analogue station in India**
- It advances India's capacity for manned lunar/Mars missions and supports the **Bharatiya Antariksh Station (2035)** goal.
- Strengthens **public-private partnership** in space research (Protoplanet + ISRO) and positions India alongside global leaders in **analogue space science**.

Liver Cirrhosis

A team of scientists from Institute of Liver and Biliary Sciences (ILBS) New Delhi, and National Institute of Pharmaceutical Education and Research (NIPER) Guwahati found a new approach Vascular endothelial growth factor-C (VEGF-C) to treat of liver cirrhosis.

What is Liver Cirrhosis?

It is an end-stage scarring of liver due to long-term inflammation in liver caused by alcohol, hepatitis B/C, NASH (**Non-Alcoholic Steatohepatitis**), autoimmune & genetic disorders.

Effects: Distorts blood & lymph vessels → portal hypertension, poor drainage → ascites (fluid in the abdomen), jaundice, bleeding.

Symptoms: No symptoms until liver damage is serious later symptoms include fatigue, loss of appetite, edema (swelling in the legs, feet or ankles).

Treatment: Irreversible but progression can be slowed (by alcohol abstinence, hepatitis treatment, weight control, meds for complications). **Liver transplant = definitive cure.**

New Research (India): VEGF-C nanocarriers improved lymph drainage, reduced ascites & portal pressure in cirrhosis models → potential future therapy.

CLOVES Syndrome

Researchers believe that CLOVES Syndrome is caused by mutations in a gene called PIK3CA and less than 200 cases are believed to have been reported worldwide.

What is CLOVES Syndrome?

It is a very rare genetic disorder marked by **Congenital Lipomatous (*fatty lump*) Overgrowth, Vascular malformations, Epidermal nevi, and Spinal/skeletal anomalies**.

Cause: It is caused by mutations in a **gene called PIK3CA** which makes one of the proteins in an enzyme called **PI3K**, which is involved in many important functions in a cell. Mutations in the PIK3CA gene may cause the PI3K enzyme to become overactive, which may cause cancer cells to grow.

Symptoms: Fatty tissue overgrowth, vascular malformations (risk of clots), large/wide hands/feet, scoliosis/spinal defects, skin bumps, and sometimes kidney or intestinal problems.
Treatment: No cure; managed with medications (to slow abnormal growth), sclerotherapy/embolization (for vessels), surgeries (debulking/orthopaedic/neuro), and rehabilitation therapy.

Leap-1 Mission

A budding space tech startup **Dhruva Space** from India, is set to launch its **first commercial satellite mission called LEAP-1.**

What is Leap-1 Mission?

It is built on **Dhruva's indigenous P-30 platform** (tested on PSLV-C58 in 2024)**, which is carrying payloads for AI and Earth observation.**
Collaboration: India (Dhruva), Australia (Akula Tech, Esper), with US support.

Payloads:

- ***Nexus-01*** (AI module with onboard processing & Machine Learning re-training).
- ***Esper Satellites' OTR-2 mission*** (hyperspectral imager for rich Earth observation).

Uses: Defense, disaster response, agriculture, mining, environment.
Significance for India: Marks India's entry into **global commercial payload hosting** and strengthens **Indo-Australian-US space ties**.

Hepatitis D

Recently, the World Health Organization (WHO) announced the reclassification of hepatitis D as cancerous, emphasizing the urgency for preventing viral hepatitis, which is a growing public health crisis.

What is Hepatitis D?

It is a **serious liver infection** caused by the **hepatitis D virus** (HDV).
Cause: HDV is a defective virus that **requires Hepatitis B (HBV)** to replicate; occurs only in people with HBV.
Impact: HBV + HDV co-infection causes **more severe disease**, with a **2-6 times higher risk of cirrhosis and liver cancer** compared to HBV alone. WHO now classifies HDV as **carcinogenic**.

- **All types of hepatitis** are associated with acute liver infection; however, only **hepatitis B, C, and D can lead to chronic infections** with a higher risk of liver cirrhosis, failure or cancer.

Transmission: Same as HBV/HCV- **blood transfusion, unsafe injections/needle sharing, mother-to-child, and sexual contact**.
Diagnosis: **Blood test (HDV-RNA/antibodies)**.
Prevention: **Universal HBV vaccination** (birth + scheduled doses; adults: 0, 1, 6 months schedule).
Current Status: No highly effective treatment. Prevalence in India is low overall but higher in **high-risk groups** (IV drug users, chronic HBV).

CATCH Grant Program

Recently, IndiaAI Independent Business Division (IBD), in collaboration with the National Cancer Grid (NCG), has announced the launch of the Cancer AI & Technology Challenge (CATCH) Grant Program.

- IndiaAI is an independent business division under **Digital India Corporation (MeitY).** It implements the **IndiaAI Mission** to democratize AI, promote global leadership, foster tech self-reliance, and ensure **ethical AI use**.

Objective of CATCH Grant Program: To support the **development and deployment of innovative Artificial Intelligence** (AI) solutions to **strengthen cancer screening**, diagnostics, treatment support, and healthcare operations across India.

Funding: Up to **₹50 lakh per project** (co-funded by **IndiaAI** & **National Cancer Grid-NCG**). Additional **₹1 crore scale-up grant** possible for successful pilots.
Deployment: Focus on **pilot projects within NCG hospitals**, with potential for **national scale-up** if proven effective.

Focus Areas: AI in **screening, diagnostics, clinical decision support, patient engagement, operational efficiency, research, and data curation**.

- A total of up to **10 proposals will be selected for piloting** based on technical maturity, feasibility, and alignment with healthcare delivery needs.

Eligibility: Startups, health-tech companies, academic institutions, public/private hospitals. Joint applications from Clinical Leads (hospitals or clinicians) and Technical Leads (technology developers) are encouraged. Emphasis will be on **responsible AI, clinical validation, and deployment readiness**.

Human African Trypanosomiasis

Recently, the World Health Organization (WHO) certified Kenya as having eliminated human African trypanosomiasis, also known as sleeping sickness.

What is Human African Trypanosomiasis (Sleeping Sickness)?

It is a Vector-borne parasitic disease caused by *Trypanosoma brucei (T.b.)*, transmitted by **tsetse flies.** It is endemic in sub-Saharan Africa.

Types:

1. T. b. gambiense (West/Central Africa) → **chronic**, slow, 92% cases.
2. T. b. rhodesiense (East/Southern Africa) → **acute**, rapid, 8% cases.

Symptoms: Early- fever, headache, joint pain; Late- confusion, behaviour changes, disturbed sleep; it may be fatal if untreated.
Risk: Mostly rural communities (farmers, hunters, herders).
Treatment: Stage-specific drugs (Pentamidine, Suramin, Eflornithine, NECT, Fexinidazole, Melarsoprol).
Progress: Cases reduced by 97% in 20 yrs; WHO certified **Kenya (2025)** as HAT-free, 10th country to achieve elimination.

Pneumococcal Disease

Drug firm Pfizer recently introduced its next-generation 20-valent pneumococcal conjugate vaccine (PCV20) for **adults** in India, offering protection against 20 serotypes responsible for most pneumococcal diseases.

What is Pneumococcal Disease?

Pneumococcal disease refers to a **range of illnesses** that **affect various parts of the body** and are **caused by** infection with the **bacterium Streptococcus pneumoniae,** commonly known as **pneumococcus** (encapsulated bacteria, ~90 serotypes).

Types:

- *Non-invasive*: otitis media, sinusitis, bronchitis.
- *Invasive*: pneumonia, meningitis, bacteremia, sepsis.

Transmission: Via respiratory droplets from patients/healthy carriers.
High-risk groups: Children <2 yrs, elderly >65 yrs, immunocompromised, chronic diseases, smokers.

Global burden: ~1 million child deaths annually (major public health issue).
Treatment: Antibiotics (But Pneumococcal resistance to antimicrobials is increasing rapidly).

Prevention: Vaccination (children, elderly, high-risk groups). But people can get reinfected as vaccines doesn't provide 100% protection.

Orbiting Carbon Observatories (OCO) Program

Recently, Trump administration asked to shut down NASA's Orbiting Carbon Observatories (OCO) program.

What is OCO?

It is a NASA program of Earth-observing satellites dedicated to monitoring atmospheric CO_2 from space. It is a part of NASA's Earth System Science Pathfinder (ESSP) program.

Objective: To provide precise, global measurements of CO_2 sources and sinks to help improve understanding of climate change and global carbon cycle.

Timeline of Missions

- **OCO-1 (2009):** Failed launch (Taurus XL rocket fairing did not separate).
- **OCO-2 (2014):** Successfully launched; first functional mission; provided high-resolution CO_2 data.
- **OCO-3 (2019):** Installed on **International Space Station (ISS)** to continue & expand monitoring.

Key Achievements and Significance:

- Data used for:
  - **Creating High-resolution maps of plant growth** (photosynthesis, vegetation health)
  - **Agriculture-** crop yield forecasts and forest mapping.
  - **Climate science-** identified Amazon rainforest as a net **CO_2 emitter**; boreal forests as unexpected **carbon sinks**.
  - **Food security-** monitoring droughts & predicting shortages (linked to unrest & famine).
- More **accurate & sensitive** than any other CO_2 monitoring system worldwide.

Escherichia coli

Researchers have shown in a new study that genetically engineered Escherichia coli (E. coli) bacteria can be turned into self-powered chemical sensors that interface directly with electronics.

What is E. Coli?

E. coli is a **rod-shaped bacterium**, found in the intestines of humans and animals. Most strains are harmless/beneficial, but some (like **Shiga toxin-producing E. coli, STEC**) cause serious foodborne illness.

Transmission: It can be **transmitted to humans through contaminated food**, water, or contact with fecal matter from infected individuals or animals.

Treatment: Most E. coli infections are self-limiting and resolve on their own without treatment. However, it's essential to stay hydrated during the course of the illness.

Sakura Science Programme

A group of thirty-four students from government schools in India are set to visit Japan under the Sakura Science Programme 2025.

About Sakura Science Programme (SSP)

- **Launched:** 2014, by **Japan Science and Technology Agency (JST), India is a participant since 2016.**
- **Nature:** Prestigious **Japan-Asia & Africa Youth Exchange Program in Science**.
- **Opportunities:** Short-term visits to Japan; Exposure to **cutting-edge science & technology;**
- **Recent Developments**: For the upcoming Sakura Programme 2025, JST has invited participants from six other countries Egypt, Ghana, Kenya, Nigeria, South Africa and Zambia.

Charge-Coupled Device

A charge-coupled device (CCD) is a remarkable electronic component whose invention marked a significant milestone in technology and influenced many fields.

What is a Charge-Coupled Device (CCD)?

A CCD captures images by converting light into electrical signals, using an array of small capacitors called pixels. It revolutionized imaging in photography, astronomy, medicine, and scientific research.

Inventors: Willard Boyle & George Smith, 1969. They stored and transferred charges in capacitors ("charge coupling"), initially for memory devices.

Structure: CCDs consist of a grid of pixels, each acting as a light sensor.

Working

- **Light detection:** Photons strike the semiconductor beneath each pixel, generating electron-hole pairs proportional to light intensity.
- **Charge storage:** Each pixel holds these electrons as electric charges.
- **Charge transfer:** A sequential voltage moves charges from pixel to pixel ("charge coupling") to a readout register.
- **Signal conversion:** Charges are converted into voltage, then digitized to form a digital image.

Analogy: Like passing buckets of water along a line, charges are transferred sequentially across the device.

Applications: Consumer Electronics (Digital cameras, webcams, CCTV), **Medical Imaging (**X-rays, CT scans, endoscopy), **Scientific Research (**Microscopes, spectrometers, particle detectors), **Astronomy (**Capturing faint celestial objects for galaxy mapping and exoplanet detection).

Lewy Body Dementia (LBD)

Jackie Bezos, mother of Jeff Bezos and an early Amazon investor, passed away in Miami recently due to Lewy Body Dementia (LBD).

What is LBD?

It is a progressive brain disorder due to abnormal protein deposits (alpha-synuclein / Lewy bodies) in brain nerve cells. It is 2nd most common dementia after Alzheimer's.

Types: (i) Dementia with Lewy bodies (DLB), (ii) Parkinson's disease dementia (PDD).

Risk Factors: People with Age >60, affects more men than women, family history (LBD/Parkinson's).

Key Symptoms:

- Cognitive decline (confusion, poor attention, memory loss).
- Visual hallucinations (seeing people/animals not present).
- Parkinson-like features (rigidity, tremors, slow movement).
- Autonomic dysfunction (BP fluctuations, dizziness, bladder/bowel issues).

Average survival: 5–7 years after diagnosis

Treatment: No cure. Symptom management with drugs (cholinesterase inhibitors, Parkinson's meds, antidepressants), therapies (physio, counseling), and supportive care.

Bioactive Peptides (BAPs)

A study of population-specific responses to fermented food shows that the health effect of the bioactive peptides they contain, differ across populations and can personalize nutrition for India's diverse population.

What are Bioactive Peptides (BAPs)?

BAPs are **short chains** of amino acids, naturally present or released from parent proteins through **enzymatic processes**. They are generally inactive when part of a larger parent protein.

Function: They exert beneficial physiological effects by influencing various systems of the body such as digestive, immune, cardiovascular, nervous, and endocrine functions, and are therefore regarded as important health-promoting compounds.

Benefits: BAPs are **new generation of biologically active regulators**; they can **prevent oxidation and microbial degradation in foods** and **improve the treatment of various diseases and disorders.**

Sources: Mainly derived from plants and animals- found in milk, cheese, fermented foods (pickles, vegetables), egg, fish, meat, soybean products; some are chemically synthesized.

Peptides vs. Proteins

Similarity: Both are chains of amino acids linked by peptide bonds.

Difference: Peptides are shorter chains (usually <100 amino acids), less structurally complex whereas Proteins are longer chains (>100 amino acids) with complex secondary, tertiary, and quaternary structures.

Rubella

The WHO recently announced Nepal has eliminated rubella as a public health problem.

What is Rubella? It is a contagious viral infection best known by its **distinctive red rash** caused by the rubella virus (RNA virus), also called *German measles* or *three-day measles*. It is milder and less infectious than measles.

Transmission: Spreads via cough, sneeze, contaminated surfaces, and from pregnant women to fetuses. A person can be contagious even without symptoms.

Symptoms: Often mild or absent; main sign is a red rash starting on the face/behind ears and spreading across the body (appears 2–3 weeks after infection). It can be dangerous in pregnancy resulting in fetal death or *Congenital Rubella Syndrome (CRS)* leading to hearing loss, eye/heart defects, or lifelong disabilities.

Prevention: Measles-Mumps-Rubella (MMR) vaccine gives safe, lifelong protection.

Treatment: No specific cure; mild symptoms managed with rest and fever medication.

Huntington's Disease

The union and state governments are yet to include Huntington's disease in the rare category under the National Policy for Rare Diseases, a demand raised by patients and caregivers in 2024.

What is Huntington's (Htt) Disease? It is a rare inherited genetic disorder causing progressive death of brain cells, especially in regions controlling movement, memory, and thinking.

Cause: Mutation in the **HTT gene**, leads to *abnormal huntingtin protein* that damages neurons in the basal ganglia (movement) and cortex (thinking, memory).

- The HTT gene provides instructions for making the huntingtin protein, which is crucial for normal nerve cell function, particularly in the brain.

Inheritance: If one parent has HD, there is a **50% chance** of passing it to children.

Prevalence: Affects ~3–7 per 100,000 people, mostly of European ancestry.

Symptoms:

- Uncontrollable dance-like movements, abnormal posture, tremors.
- Cognitive decline, memory loss, poor decision-making.
- Personality, emotional, and behavioral changes.
- Symptoms worsen over time; death usually occurs within 15–20 years of onset.

Treatment: No cure; medicines only help manage symptoms.

LUPEX Mission

Recently, the Prime Minister of India welcomed the agreement between the ISRO and the Japan Aerospace Exploration Agency (JAXA) for the Chandrayaan-5 mission under the **Lunar Polar Exploration (LUPEX)** programme.

What is LUPEX Mission?

It is a joint project of **ISRO (lander)** and **JAXA (rover)** planned for launch in **2025** using Japan's **H3 rocket** under India's **Chandrayaan-5 programme**.

Objective: Its main goal is to **explore the Moon's South Pole**, especially permanently shadowed regions, to detect **water-ice** and assess resource potential for future lunar bases.

Key Features:

- The rover, carrying instruments from **ISRO, JAXA, NASA, and ESA**, will drive autonomously, drill and sample soil, and analyze regolith (lunar sand) for **water content, dust dynamics, and thermal properties**.
- Proposed Indian payloads include **PRATHIMA** (detects/quantifies water-ice) and **LEDEX** (studies charged lunar dust).

Significance: LUPEX deepens **India-Japan space cooperation**, aids global understanding of lunar resources, and is a key step towards **India's goal of a human Moon mission by 2040**.

Glanders

Department of Animal Husbandry & Dairying (DAHD) under the Ministry of Fisheries, Animal Husbandry & Dairying has issued the Revised National Action Plan on Glanders.

What is Glanders?

Glanders is a contagious zoonotic disease of equines (horses, mules, donkeys) caused by bacterium *Burkholderia mallei*, characterized by respiratory and skin lesions with potential transmission to humans and other animals.

Transmission: Contaminated food/water with nasal discharge from infected (carrier) animals, contact with secretions/equipment, infected meat, skin abrasions.

Human Risk: Rare but fatal if untreated; septicemia (blood poisoning) mortality 40–95%.

Control: No vaccine/treatment in animals includes surveillance, culling, quarantine, disinfection.

Current Status: **World Organisation for Animal Health (WOAH)** listed, notifiable under **Prevention and Control of Infectious and Contagious Diseases in Animals (PCICDA) Act, 2009**; eradicated in many regions but persists in parts of Asia, Africa, Middle East, South America.

Bloom Syndrome

Recently, a 12-year-old girl diagnosed with the Bloom Syndrome, underwent a bone marrow transplant using stem cells from her younger brother at a private hospital in Chennai.

What is Bloom Syndrome (BSyn)?

Also known as **Bloom-Torre-Machacek syndrome, BSyn** is a **rare autosomal recessive genetic disorder** caused by mutations in the **BLM gene (a protein coding gene involved** in maintaining the structure of DNA**)**, ***which impairs DNA repair.***

- **Autosomal recessive disorder** is caused when a child inherits two faulty **BLM genes** (one from each parent). It is seen most commonly in the **Ashkenazi Jewish population**.

Symptoms: Poor growth, sun-sensitive skin, frequent infections, endocrine issues, infertility.

Complication: Very high **cancer risk** (150–300×, often before 40).

Management: No cure → supportive care (sun protection, antibiotics, immune therapy, cancer screening).

Diatoms

A team of Indian and international researchers discovered a new species of diatom, named Climaconeis heteropolaris.

What are Diatoms?

Diatoms are photosynthetic, single-celled microscopic algae (a major group of phytoplankton) with silica cell walls, forming the base of aquatic food chains and producing much of Earth's oxygen.

Habitat: Found in almost all aquatic habitats. They are often free-floating (planktonic) or surface-attached (benthic/periphyton).

Unique Feature: Like other algae, **diatoms lack leaves, stems, roots, or flowers, but their cells contain chlorophyll for photosynthesis.** They are the only organisms with cell walls (frustules) made of transparent opaline silica, with intricate patterns.

Functions:

- Base of aquatic food chain; food for zooplankton, molluscs, fish.
- Photosynthesize- produce oxygen, absorb CO_2.
- Contribute **20- 50% of global oxygen production**.
- Excellent indicators of water quality due to sensitivity to chemical changes.

Hand, Foot, and Mouth Disease (HFMD)

The national capital is experiencing a significant rise in Hand, Foot, and Mouth Disease (HFMD) cases, especially among children.

What is Hand, Foot, and Mouth Disease (HFMD)?

It is a common **viral illness** caused by enteroviruses primarily **Coxsackie virus A16** that usually affects infants and children but can affect adults.

Transmission: It is highly contagious, spreads quickly in **daycares and schools**. Adults are usually protected by stronger immunity, but immunocompromised are at risk.

Symptoms: **Sores in the mouth** and **rash on hands and feet**. Mild fever, sore throat, and sometimes loss of appetite.

Differentiation: It is not related to **foot-and-mouth disease** in animals (different virus).

Treatment & Recovery: **There is no specific treatment**; supportive care only. Illness usually resolves in **7–10 days**.

Bluebird Satellite

The ISRO is hoping to soon launch the Block 2 BlueBird communications satellite.

What is Bluebird Satellite?

It is a next-gen communication satellite that will revolutionize mobile connectivity by enabling direct calls and broadband access from space using ordinary smartphones, marking a major step in global space-telecom integration.

Developer: U.S.-based **AST SpaceMobile**

Type: Advanced American **communications satellite**; **Weight**: ~6,000–6,500 kg; **Orbit**: Low Earth Orbit (LEO)

Key Features:

- Equipped with a **64 m² antenna** for powerful signal reception.
- Enables **direct satellite-to-smartphone connectivity** without ground towers.
- Supports **voice calls and broadband internet** access from space.
- Provides up to **40 MHz capacity** and **120 Mbps peak speeds**.

Significance

- Expands cellular coverage in remote and underserved areas.
- Strengthens Indo-US collaboration in advanced space missions.

Ionic Liquids

Scientists have found life can exist on rocky super-earths with volcanic activity and little water thanks to ionic liquids.

What are Ionic Liquids (ILs)?

Ionic liquids (ILs) are salts that remain liquid below 100°C, often at room temperature. Unlike ordinary liquids (made of neutral molecules), ILs are composed entirely of ions (cations + anions). Examples: Choline acetate, Tetrabutylammonium nitrite.

Properties of ILs: Non-volatile, non-flammable, stable at high temp, tunable (hydrophilic/hydrophobic), good electrolytes.

Advantages of ILs: *Green, recyclable & safer than organic solvents*, dissolve wide range of compounds.

Uses of ILs: Green chemistry, catalysis, electrochemistry, extractions, biotechnology, material science.

Primary Amoebic Meningoencephalitis (PAM)

PAM cases were reported in Kerala, causing the death of a 9-year-old and infecting a 3-month-old.

What is PAM?

It is a rare, often fatal brain infection caused by the amoeba *Naegleria fowleri* ("brain-eating amoeba"), which enters the body through the nose and destroys brain tissue.

Cause: *Naegleria fowleri*, a free-living amoeba found in warm freshwater and soil. It can thrive in temperatures up to 46°C and is often linked to poorly maintained or minimally chlorinated water sources.

Infection route: Enters through the nose while swimming; not spread by drinking water or person-to-person.

Symptoms: Start with headache, fever, nausea, and vomiting; later confusion, seizures, hallucinations, coma, and death (usually within 1–18 days).

Treatment: No proven cure; doctors use drug combinations (e.g., amphotericin B, azithromycin, miltefosine). Survival is extremely rare.

LVM3 Launch Vehicle

ISRO is aiming for a 2027 launch for its first LVM3 launch vehicle equipped with a semi-cryogenic propulsion stage.

What is LVM3?

Launch Vehicle Mark-3 (also called GSLV Mk-III) is India's heaviest and most powerful rocket developed by **ISRO** to carry **heavier communication satellites** and for **deep space missions**. It was first launched in 2014 (experimental) and is operational from 2017.

Key Features:

- **Payload capacity:** ~4 tonnes to **GTO (Geosynchronous Transfer Orbit)** and ~8 tonnes to **LEO (Low Earth Orbit)**.
- **Stages**:
  - **Booster Stage**: S200 solid motors (HTPB fuel).
  - **Core Stage**: L110 liquid stage (Vikas engines→ Unsymmetrical Dimethylhydrazine (UDMH) + N_2O_4).
  - **Upper Stage**: CE-25 cryogenic engine (LOX (liquid Oxygen) + LH_2).
- **Upgradation (Target 2027):** Replacement of **L110 core stage** with **SE2000 semi-cryogenic engine** (200 t thrust, kerosene + LOX). Cryogenic stage propellant loading increased from **28 t to 32 t**. Payload to GTO will rise from **4200 kg to 5200 kg**; launch cost reduced by ~25%.

Major Achievements	Significance
• Launched Chandrayaan-2 (2019) and Chandrayaan-3 (2023). • Gaganyaan mission (India's human spaceflight programme).	• Provides heavy-lift capability for advanced and deep-space missions, including human spaceflight. • Ensures strategic autonomy and self-reliance in launching heavy satellites.

• Successful OneWeb satellite launches (2022–23).	• Boosts India's commercial launch market and global competitiveness. • Demonstrates mastery of cryogenic and semi-cryogenic propulsion technologies.

India Semiconductor Mission (ISM)

The government approved four additional semiconductor manufacturing projects in the states of Odisha, Punjab, and Andhra Pradesh under the India Semiconductor Mission (ISM).

About ISM

- **Launched**: **2021; Outlay**: **₹76,000 crore; Nodal Agency**: **Ministry of Electronics & IT (MeitY).**
- **Aim:** To provide financial support for **semiconductor fabrication units (Fabs), display fabs, and chip design;** reduce import dependence; and position India as a **global hub for semiconductor manufacturing & design (which is expected to reach $63 billion market value by 2026).**

Objectives of ISM	ISM Schemes
• Build **sustainable manufacturing facilities** and design ecosystem. • Develop a **trusted semiconductor supply chain** (raw materials, equipment, gases, chemicals). • Support startups with **Electronic Design Automation (EDA) tools, foundry services**. • Encourage **indigenous Intellectual Property (IP) generation** and **Transfer of Technology (ToT)**. • Promote **R&D and Centres of Excellence (CoEs)**. • Establish **global & national collaborations** for research, innovation, and skill development.	✓**Semiconductor Fabs Scheme:** 50% support for semiconductor wafer fabrication (fab) units in India. ✓**Display Fabs Scheme:** 50% financial assistance of project cost to set up display fabrication units (AMOLED/LCD) in India. ✓**Compound Semiconductors & ATMP/OSAT Scheme:** 50% financial supports for setting up units of compound semiconductors, silicon photonics, MEMS/sensors, and discrete semiconductors, including ATMP (assembly, testing, marking & packaging) /OSAT (Outsourced Semiconductor Assembly and Test) ✓**Design Linked Incentive (DLI):** ₹1000 cr scheme to support semiconductor design startups/MSMEs with R&D reimbursement, design tools, and incentives up to ₹15 cr per company.

Recent Developments under ISM

- Investments by Micron, Tata, Foxconn-HCL, CG Power, Kaynes (plants in Gujarat, Assam, UP, Odisha, Punjab).
- India's **first indigenous semiconductor chip** production expected to start in 2025.
- SEMICON India, a flagship event under ISM with SEMI (Semiconductor Equipment and Materials International) is being held annually since 2022 to promote investment, global collaboration, research, and skills, showcasing India's rising role in the semiconductor ecosystem.
  - ✓ Its 4th edition will be held in September 2025 in Delhi

CULTURE

Kakori Train Robbery

- The Prime Minister recently paid tributes to the revolutionaries of Kakori train robbery on the occasion of 100 years of the incident.
- The incident took place on **August 9, 1925**, when **members of the Hindustan Republic Association (HRA)** attacked a train on the Saharanpur–Lucknow line near Kakori railway station in Uttar Pradesh.
- The train was carrying government treasury funds, which the revolutionaries seized to finance their armed struggle against British rule.
- The British government responded with a massive crackdown — many of the participants were arrested, tried, and given severe punishments.
- **Ram Prasad Bismil, Ashfaqulla Khan, Rajendra Lahiri, and Roshan Singh** were executed in 1927, while others received long prison sentences. Chandrashekhar Azad managed to evade capture and continued the struggle until his death in 1931.

Vithalbhai Patel

- The All India Speakers' Conference was held at the Delhi Assembly to commemorate the 100th anniversary of Vithalbhai Patel becoming the first elected Indian President (Speaker) of the Central Legislative Assembly, Parliament's equivalent under British rule.
- Vithalbhai Patel (1873-1933) was an **Indian freedom fighter, legislator, and political leader**, remembered for his pioneering role in India's parliamentary history. He was the **elder brother of Sardar Vallabhbhai Patel**.
- Vithalbhai was **elected to the Bombay Legislative Council in 1912** and to the **Imperial Legislative Council in 1918**.
- In 1924, he was elected **member of the Central Legislative Assembly from Bombay city**, and rose to become its first Indian president in 1925
- Along with other senior Congress leaders, Vithalbhai had opposed Mahatma Gandhi's decision to suspend the Non-Cooperation Movement against the British after the Chauri Chaura incident.
- These leaders, including Motilal Nehru, Chittaranjan Das, among others, **founded the Swaraj Party** in 1923.
- Vithalbhai also set up an independent **Parliament Secretariat**, with the officials in it reporting to only the president. This was to ensure that the staff advising the president were serving independently.

Dhirio

- The legislators in the Goa state Assembly demanded to legalise bull fighting, locally referred to as Dhirio or Dhiri.
- Unlike Spanish bullfighting, dhirio does not involve a matador or the ritual killing of the animal. The fight ends when one bull is pushed out of the arena or runs away.
- The sport is considered an important part of Goan cultural heritage, historically linked to agrarian festivals and church feasts.
- Though officially banned since a 1997 High Court ruling, the practice continues in some parts of Goa, especially in rural, coastal villages.
- The tradition of dhirio dates back to the Portuguese colonial era.

Pingali Venkayya

- The Prime Minister paid tribute to Shri Pingali Venkayya ji on his birth anniversary.

- Born on 2nd August 1876, Pingali Venkayya was a freedom fighter and the designer of India's National Flag. He worked as a teacher, author, agriculturist and linguist.
- He had enrolled in the British Army and was deployed to South Africa during the **Second Boer War (1899-1902)**.
- It was during the war when the soldiers had to salute the Union Jack, the national flag of Britain, that Venkayya realised the need for having a flag for Indians.
- In 1916, he even published a book **Bharatha Deshaniki Oka Jatiya Patakam** (National flag of India).
- The draft presented to Gandhi by Venkayya had two colour bands - red and green to symbolise the two major communities in India - Hindus and Muslims.
- But Gandhi suggested adding a white colour band to represent peace and harmony between communities along with a spinning wheel to represent progress of the country.

National Flag of India

- The present form of the flag was adopted by the Constituent Assembly of India on 22 July, 1947.
- The National flag of India is rectangular in shape and consists of three colors – saffron, white and green.
- At the center of the white stripe is a depiction of Ashok Chakra in navy blue. It is round hollow wheel and has 24 spokes radiating from the center.
- This chakra depicts the Dharma Chakra - the "wheel of the law" in the Sarnath Lion Capital made by the 3rd-century BC Mauryan Emperor Ashoka. The chakra intends to show that there is life in movement and death in stagnation.
- The dimension of the flag should be of 2:3 ratio, i.e. the length should be 1.5 times the breadth.

Equator Initiative Award 2025

- The Bibi Fatima Women's Self-Help Group from a village in Dharwad district (Karnataka) has bagged the Equator Initiative Award given by the United Nations Development Programme (UNDP).
- The SHG is the sole group from India to win the award and is among the 10 winners of the award this year.
- The SHG has made remarkable achievements in areas of implementing eco-friendly farming practices in rainfed lands, managing community seed banks, ensuring food and nutrition security.
- The group has revived millet based mixed cropping systems through natural farming methods in around 30 villages.

Equator Initiative Award

- The Equator Initiative Award was **launched in 2002** by the **UNDP**. It is also referred to as the **Nobel Prize for Biodiversity Conservation**.
- The award is presented annually to honour nature-based solutions led by indigenous people and local communities that promote sustainable development and ecological resilience.
- This year's award selection was based on the **theme** Women and Youth Leadership for Nature-Based Climate Action.
- The award includes a cash prize of $10,000.

Khelo India Water Sports Festival

- The first-ever Khelo India Water Sports Festival (KIWSF) was held at the **Dal Lake in Jammu & Kashmir.**
- Over 400 top athletes from 36 states and Union Territories compete for 24 gold medals in rowing, kayaking, and canoeing.
- KIWSF was organised jointly by the Sports Authority of India (SAI) and the Jammu & Kashmir Sports Council.
- KIWSF is part of the Khelo India initiative launched in 2017-18 to promote grassroots sports, with 2025 also featuring the Khelo India Beach Games held in Diu in May.
- KIWSF's **mascot is Himalayan Kingfisher** and the **logo** of the games is a **Shikara on Dal Lake**.

National Anubhav Awards 2025

- The National Anubhav Awards 2025 were recently awarded, marking a decade of the awards.
- The **Anubhav portal** was **launched in 2015 by the Department of Pension & Pensioners' Welfare (DoPPW)** as a platform to highlight and recognise the contributions of retiring government officials.
- The portal encourages retiring civil servants to document their experiences and insights gained during their years of service.
- The **primary aim** is to create a rich repository of knowledge and wisdom that can serve as a foundation stone for future administrative reforms and good governance practices.
- To further motivate retiring government employees to share their experiences, an annual **Anubhav Awards was started in 2016**. It consists of 5 **Anubhav Awards and 10 Jury Certificates**.
- The award includes the following **categories**: Administrative Work, Good Governance, Research, Simplification of Procedures, Accounts, Field Work Contributions, and Constructive Feedback for Work Improvement.

Guinness Record for Pariksha pe Charcha

- Pariksha Pe Charcha (PPC) has been conferred with the Guinness World Record for the 'Most people registered on a Citizen Engagement Platform in one month', with 3.53 crore registrations during the 8th edition of the programme, hosted on the MyGov platform.
- **Launched in 2018**, PPC is organised by the **Ministry of Education** in collaboration with **MyGov**.
- It is a unique platform conceptualised and led by the Prime Minister, wherein he directly interacts with students, teachers, and parents.
- PPC is part of the larger movement, **Exam Warriors,** to create a stress-free atmosphere for youngsters.

M.S. Swaminathan Centenary Conference

- The M.S. Swaminathan Centenary International Conference was held in New Delhi.
- The conference is organised by M.S. Swaminathan Research Foundation (MSSRF) in collaboration with the Ministry of Agriculture and Farmers Welfare, Indian Council of Agricultural Research (ICAR), and National Academy of Agricultural Sciences (NAAS).
- The theme of the conference was "Evergreen Revolution, The Pathway to Biohappiness" reflecting Prof. Swaminathan's lifelong dedication to ensuring food for all.
- Hailed as the **father of India's Green Revolution**, M.S.Swaminathan has been conferred the **Bharat Ratna** posthumously.
- He is also recognised as **Father of Economic Ecology** by the **United Nations Environment Programme**.
- Swaminathan also worked in mangrove restoration and preservation of coastal land in Kendrapara district of Odisha for around 12 years since 1994.
- He introduced the concept of trusteeship management of biosphere reserves. He implemented the Gulf of Mannar Biosphere Reserve Trust with financial support from the Global Environment Facility (GEF).

International Olympiad on Astronomy and Astrophysics

- The 18th International Olympiad on Astronomy and Astrophysics (IOAA) was held in Mumbai with more than 300 high school students from 64 countries participating.
- This is the second time that India is hosting the IOAA, after the **2016 edition in Bhubaneswar**.
- The event was hosted by the **Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research**.
- IOAA was conceived in 2006 to meet the growing global interest in astronomy among high school students, with the **first IOAA held in Chiang Mai, Thailand, in 2007**.

Bronco Test

- The Board of Control for Cricket in India (BCCI) has introduced the Bronco fitness test for Indian players to ensure high fitness standards.
- It is a widely used aerobic fitness test, especially in sports like rugby, football, and athletics, to measure an athlete's endurance, speed, and recovery capacity.
- The test involves continuous shuttle running with a 20-metre shuttle run, followed by a 40m run, and a 60m run, which constitutes one set.
- A player is required to do 5 such sets which adds up to 1,200 meters without taking a break.